A comparative study on conceptualisation, institutionalisation and evaluation of Universities' Third Mission in Europe

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Abstract

Besides the traditional missions of teaching and research, universities also develop activities with a focus on the interaction with the civic, economic, and social actors, which are usually defined as universities' Third Mission. Recognizing the importance of such fruitful interaction some countries launched processes to institutionalise and evaluate Third Mission. In recent years, the Third Mission has skyrocketed to the top of policy and academic agendas to the point that the importance of developing a joint strategy at the European level has arisen and is actively discussed. This growing emphasis reflects the need for a more cohesive approach that transcends national boundaries, ensuring that universities across Europe can effectively contribute to societal challenges, innovation, and economic development. Such coordination would align with other policies fostering greater collaboration and the overall impact of the Third Mission on a European scale. A comparative research approach is essential for identifying differences and understanding how distinct national contexts influence the implementation of the Third Mission. This thesis examines the Third Mission in Sweden, Germany, Italy and Portugal. Acknowledging that its conceptualization, institutionalization, and evaluation differ across national contexts, despite European common policy foundations and shared goals, this thesis delves into the factors that determine how traditions, cultural values, economic conditions, and regional needs shape the unique ways universities approach the Third Mission. It also identifies critical barriers, such as fragmented policies, unequal access to resources, and inconsistencies in evaluation mechanisms. It explores and compares the pivotal role of evaluation in driving institutional practices and aligning universities with national priorities, for example contributing to the institutionalization of the Third Mission itself. This research employs a mixed methods approach, utilizing the combination of four country case studies and 67 interviews with a diverse range of stakeholders at national and international levels to gather data. The analysis, carried out through a mix of techniques inspired to Grounded Theory, employs a multidimensional approach by interweaving the correlations between the mega (European), macro (national/federal), meta (regional), meso (institutional), and micro (individual) levels. The rich data collection and articulated multilevel and multidimensional analysis allow this thesis to contribute to the understanding of the universities' evolving roles by offering an in-depth representation of the Third Mission in its complexity. By presenting specific examples of how contextual factors condition the outcomes of common policy initiatives, this research contributes to scholarly discussions surrounding changes in the European higher education systems. It emphasises the need to consider the

intertwined and variegated relationships between national and European contexts to understand and contextualize the evolution of universities' Third Mission in Europe.

Key words: Third Mission, institutionalisation, evaluation, impact, public engagement, higher education, case-study, comparative analysis, qualitative research.

Index

ABSTRACT	l
INDEX	II
LIST OF TABLES	V
LIST OF FIGURES	VII
GLOSSARY	VIII
ACKNOWLEDGEMENT	XI
AUTHOR'S DECLARATION	XIII
ETHIC APPROVAL	XIII
CHAPTER 1 – THE FRAMEWORK	1
1.1 Introduction	1
1.2 The research context	3
1.3 THE RESEARCH PROBLEM	5
1.4 The argument	7
1.6 The thesis' structure	8
CHAPTER 2 - LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Sources	11
2.3 Searches	12
2.4 Conceptualisation of Third Mission	13
2.4.1 The conceptualisation timeline	
2.4.2 Contextualising the raise of Third Mission	
2.4.3 Conceptualisation of Third Mission dimensions	21
2.4.4 Critical conceptualisation voices	23
2.4.5 Country specific conceptualisation	25
2.5 Institutionalisation of Third Mission	28
2.6 EVALUATION OF THIRD MISSION	31

	2.6.1 Foundations	31
	2.6.2 Contextualising the rise of Third Mission evaluation	34
	The constellation of Third Mission evaluation related themes	36
	Third Mission evaluation	39
	Hidden tensions of Third Mission evaluation	41
	2.6.3 Third Mission evaluation in country-specific literature	42
	Literature on Third Mission evaluation in Germany	42
	Literature on Third Mission evaluation in Sweden	44
	Literature on Third Mission evaluation in Portugal	
	Literature on Third Mission evaluation in Italy	
	Third Mission's evaluation in comparisons	
	2.7 Third Mission in the European Agenda	49
	2.8 THIRD MISSION: CHANGES AND EFFECTS	51
	2.9 EXPECTED CONTRIBUTIONS OF THIS THESIS	54
	2.10 SUMMARY OF CHAPTER 2	55
С	HAPTER 3 - METHODOLOGY	56
	3.1 Introduction	56
	3.2 PHILOSOPHICAL STANCE.	
	3.3 FOUNDATIONS OF THE METHODOLOGY	
	3.4 RESEARCH DESIGN	
	3.4.1 Data sources	
	3.5 THE COMPARISON FRAMEWORK	
	3.6 THE CASE STUDY DESIGN	
	3.6.1 The 4 selected case-studies	67
	3.6.2 The Tertiary Education systems in numbers	68
	3.7 Interviews	71
	3.7.1 Interviews sampling	71
	3.7.2 Saturation	<i>7</i> 3
	3.7.3 Interviewees profiling	74
	3.7.4 The interviews' design	93
	3.7.6 Conducting the interviews	99
	3.8 Data analysis	100
	3.8.1 Multilinguality	
	3.9 ETHICAL CONSIDERATIONS	
С	HAPTER 4 - RESULTS	. 110
	INTRODUCING THE COUNTRIES' SPECIFIC ANALYSIS	110
	A 1 THE CONCEPTION IS ATION OF THIRD MISSION: COMPARING THE FOUR COUNTRIES	117

	4.1.1 Exploring contextual definitions of Third Mission through interviews	118
	4.1.2 Sweden's approach to Third Mission	120
	4.1.3 German's approach to Third Mission	124
	Dichotomies in the German case study	127
	4.1.4 Portugal's approach to Third Mission	128
	4.1.5 Italy's approach to Third Mission	132
	4.1.6 Third Mission conceptualisation in cross-country comparison	135
	4.1.7 Third Mission evolution: comparing the four countries	137
	4.1.7 What is the Third Mission?	141
	4.1.8 What Third Mission is not	144
	4.1.9 Third Mission and impact	152
	4.1.10 Third Mission and public engagement	155
	Summary of Section 4.1	
4.	2 Institutionalisation of Third Mission	
	4.2.1 Contextualising the institutionalisation of Third Mission	160
	4.2.2 Policy drivers	
	The Bologna process	
	Financial instruments	165
	4.2.3 Influencing factors	169
	The geo-contextualisation of Third Mission institutionalisation	169
	National factors: The glocal contextualisation of Third Mission	170
	National factors: the cultural values	173
	National factors: influences on policies	
	The international aspirations	
	Summary of Section 4.2	181
4.	3 Evaluation of Third Mission	.182
	4.3.1 National contexts in comparison	182
	4.3.2 National culture of evaluation	183
	4.3.3 National evaluation in higher education	187
	National accreditations	190
	National Research evaluation frameworks	
	National contexts in comparison	
	How Third Mission is evaluated - in comparison	
	4.3.4 Third Mission evaluation in Germany	
	4.3.5 Third Mission evaluation in Sweden	
	4.3.6 Third Mission evaluation in Portugal	213
	4.3.7 Third Mission evaluation in Italy	218
	4.3.8 Third Mission evaluation in a cross-country comparison	222
	4.3.9 Furopean impact vs British RFF	233

4.3.10 The nudging power in Third Mission evaluation	234
4.3.11 The grimpact of evaluating Third Mission	236
Evaluation Costs	238
Evaluation vs Ranking	239
Political interventions	240
The quest for flexibility	242
Summary of Section 4.3	245
4.4 NATIONAL INSTANCES WITHIN EU ONGOING DISCUSSIONS	.246
Summary of Section 4.4	255
4.5 EFFECTS OF THIRD MISSION AND ITS EVALUATION	.255
4.5.1 MICRO: Individual challenges and tensions	256
Evaluation skills and professionalisation	260
4.5.2 MESO: Blurring of institutional boundaries	266
A paradigmatic cultural shift	267
Summary of Section 4.5	269
CHAPTER 5 - DISCUSSION	. 270
Introduction	.270
5.1 DISCUSSION OF RESEARCH QUESTIONS	.272
5.1.1 RQ 1 - How is Third Mission conceptualised in the specificities of each country context?	272
5.1.2 RQ 2 - How is Third Mission institutionalised in the specificities of each country context?	276
5.1.3 RQ 3 - How evaluation of Third Mission develops within the specificities of each country	
context?	281
5.1.4 RQ 4 - How do country-specific evolution and evaluation of Third Mission relate to the	
European broader perspective?	286
5.1.5 RQ 5 - How is Third Mission and its evaluation impacting on key stakeholders?	. 291
Summary of Chapter 5	293
CHAPTER 6 - CONCLUSIONS	. 295
6.1 Key considerations	205
6.2 STUDY LIMITATIONS AND FUTURE RESEARCH DIRECTIONS	
6.3 SURPRISES	29/
BIBLIOGRAPHIC REFERENCES	. 299
APPENDIX – QUESTIONNAIRE	. 346

List of Tables

TABLE 1 KEY POLITICAL DEVELOPMENTS IN EUROPEAN UNIVERSITY	17
Table 2 Aggregation of key themes surrounding evaluation of TM	37
Table 4 Features determining case study selection	67
Table 5 Core themes surrounding Third Mission in each case study country	68
Table 6 HE institutions in each country case study	70
Table 7 List of interviewees	91
Table 8 Example of rephrasing to adapt questions lists to each target group	94
Table 9 Structure of the interviews' questionnaire	97
Table 10 Nvivo interface (multilingual coding)	102
Table 11 How the research design supports the contribution towards research questions	105
TABLE 12 POLICY TIMELINE	115
TABLE 13 COMPARISON OF NATIONAL SPECIFIC THEMES IN LITERATURE	117
Table 14 Conceptualisation of Third Mission in comparison	136
TABLE 15 POLITICAL INPUTS TOWARDS THIRD MISSION	138
Table 16 Third Mission comparison of operationalisation	149
Table 17 Definitions of 'Impact' in cross-country comparison	153
TABLE 18 CRITICISM ON THIRD MISSION'S DEDICATED FINANCIAL RESOURCES	168
Table 19 Local factors affecting Third Mission operationalisation	173
Table 20 Cultural value affecting TM	174
Table 21 National factors influencing Third Mission policies	177
Table 22 Internationalisation of Third Mission	181
Table 23 National contexts in comparison	203
TABLE 24 THIRD MISSION EVALUATION IN CROSS-COUNTRY COMPARISON	225
Table 25 Four juxtaposing evaluation models	227
TABLE 26 CRITICISMS ON NATIONAL APPROACHES	232
TABLE 27 GRIMPACT OF THIRD MISSION EVALUATION POLICIES	237
Table 28 Manifestation of policy interventions in the four case-study countries	238
TABLE 29 TEN KEY POINTS EMERGED FROM NATIONAL INTERVIEWS	246
Table 30 Comparing policy objectives with instances emerging from interviews	254
TABLE 31 MICRO LEVEL RELATED THEMES	257
Table 32 Research Question 1 - a synthesis	276
Table 33 Research Question 2 - a synthesis	281
Table 34 Research Question 3 - a synthesis	285
Table 35 Research Question 4 - a synthesis	291
Table 36 Research Question 5 - a synthesis	293

List of Figures

FIGURE 1 STRUCTURE OF THE KEY WORDS AND KEY THEMES SEARCHES	13
FIGURE 2 CONCEPTUALISATION TIMELINE	15
FIGURE 3 KEY FACTORS OF CHANGES IN HES	19
FIGURE 4 MULTISOURCE OF DATA	64
FIGURE 5 THE COMPARISON FRAMEWORK	65
FIGURE 6: INTERVIEWEES RECRUITMENT	73
FIGURE 7 INTERVIEWEES COVERAGE OF TARGETED KEY AREAS OF EXPERTISE	93
FIGURE 9 NODES DEVELOPMENT & LINKAGES	103
FIGURE 10 NODES DEVELOPMENT (EMERGEANCE OF NODES HERARCHIES PART 1)	104
FIGURE 11 NODES HIERARCHIES (EMERGEANCE OF NODES HERARCHIES PART 2)	104
FIGURE 11 MULTILINGUALITY STATS	107
FIGURE 12 THE WORD TREE STEMMING FROM INTERVIEWS	119
FIGURE 13 FRAMING THIRD MISSION	148
FIGURE 14 PUBLIC ENGAGEMENT DEFINITIONS IN COMPARISON	157
FIGURE 15 PATHS TOWARDS THE INSTITUTIONALISATION OF TM	161
FIGURE 16 INTERVIEWS' QUANTITATIVE ANALYSIS	162
Figure 17 Institutionalisation Logic	163
FIGURE 18 PRIORITIES FOR EU-LEVEL DISCUSSIONS	250

Glossary

Acronym / Term	Full Name	Description as relevant to this thesis		
A3ES	Agency for Assessment and Accreditation of Higher Education	Portuguese agency for the evaluation and accreditation of higher education institutions.		
ACEEU	Accreditation Council for Entrepreneurial and Engaged Universities	International organisation accrediting entrepreneurial and engaged universities.		
AKä	Accreditation Agency (Germany)	German higher education accreditation agency, varies depending on regional/disciplinary scope.		
ANVUR	National Agency for the Evaluation of Universities and Research Institutes	Italian national body for quality evaluation in higher education and research.		
BMBF	Federal Ministry of Education and Research	German federal ministry responsible for education and research policy.		
CS	Case Studies	Qualitative research methodology based on in-depth analysis of specific cases.		
CEDEFOP	European Centre for the Development of Vocational Training	EU agency for vocational training development.		
CETM	Commission of Experts for the Third Mission	Italian commission established to evaluate Third Mission activities in universities.		
CETM-A	Commission of Experts for the Third Mission – Arts & Culture Area	CETM subcommittee focusing on arts and cultural activities.		
CHERE	Centre for Health Economics Research and Evaluation	Australian research centre specialising in health economics and evaluation.		
EC	European Commission	Executive branch of the European Union.		

Acronym / Term	Full Name	Description as relevant to this thesis		
EP	European Parliament	Legislative body of the European Union.		
EURYDICE	European Education Information Network	EU network providing information on education systems and policies.		
FCT	Foundation for Science and Technology	Portuguese national funding agency for science, research, and technology.		
BMBF	German Federal Ministry of Education and Research	The German Federal Ministry of Education and Research (BMBF) shapes national higher education policy, funds research and innovation, and promotes excellence and access across the German HE system		
GT	Grounded Theory	Qualitative methodology for developing theories grounded in data.		
* HE	Higher Education	The higher education sector encompasses all institutions, organisations, and activities involved in delivering tertiary education, conducting research, and fostering innovation and societal engagement at the post-secondary level.		
* HEI	Higher Education Institutions	Higher Education Institutions (HEIs) are organisations, such as universities and colleges, that provide tertiary education, conduct research, and contribute to societal development through teaching, innovation, and engagement.		
HORIZON	Horizon Europe	EU Framework Programme for research and innovation.		
* Intra-muros * Extra-muros	Referred to research	Activities carried out inside (intra-muros) or outside (extra-muros) the institution.		
JNICT	Science and Technology Mobilisation Programme Junta Nacional de Investigação Científica e Tecnológica	Predecessor of FCT; Portuguese programme to mobilise science and technology.		
K Mode 2 and 3	Referred to Knowledge	Theories of knowledge production: Mode 2 (context-driven, transdisciplinary, application-oriented) and Mode 3 (interaction of multiple knowledge modes).		
LERU	League of European Research Universities	Network of leading European research universities.		

Acronym / Term	Full Name	Description as relevant to this thesis	
Multilingualism		Use and presence of multiple languages, particularly in higher education and research contexts.	
OECD	Organisation for Economic Co- operation and Development	International organisation promoting social and economic policies.	
PE	Public Engagement	Active involvement of the public in the work of universities and research institutions.	
*R&D	Research and Development	Percentage of a country's GDP invested in research and development.	
*GDP	Gross Domestic Product	In relation to research refers to the share of a country's total economic output invested in research and development (R&D), used as an indicator of national commitment to innovation and scientific advancement.	
*FTEs	Research full-time equivalents	Measure of research staff expressed in full-time equivalent units.	
ROARS	Return on Academic Research Systems (or Italian portal ROARS)	Platform and network for discussion on university and research policy in Italy.	
ТМ	Third Mission	University mission additional to/integrating research and teaching with societal, cultural, and economic impact activities.	
VINNOVA	Swedish Innovation Agency	Swedish governmental agency for innovation.	

All terms indicated with * are part of a technical vocabulary that is globally recognized and standardized according to the *Frascati Manual* and the *Oslo Manual* developed by the Organisation for Economic Co-operation and Development (OECD). The *Frascati Manual* provides the internationally accepted methodology for collecting and using data on research and experimental development (R&D). The *Oslo Manual* offers guidelines for collecting and interpreting data on innovation, including its types, activities, and impacts within firms and institutions. Both aim to ensure consistency and comparability across countries and institutions.

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the fulfilment of striving. This PhD course could have been easier, could have been quicker, could have been better... looking backwards it has been a long journey of sacrifices and waivers for both of us. To my husband: thank you for having shared with me all the good and bad times.

Author's declaration

I declare that this thesis is the result of my personal work and has not been submitted in the same form for the award of a higher degree elsewhere.

None of the sections of the thesis has been published or submitted for a higher degree elsewhere.

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Ethic approval

The Faculty of Arts and Social Sciences and Lancaster Management School Research Ethics Committee have granted approval for this project (REC reference number FL16166).

Chapter 1 – The framework

1.1 Introduction

This research adopts a perspective that views the Third Mission as the dimension of university activity extending beyond teaching and research, encompassing a broad spectrum of engagements with society aimed at generating social, cultural, and economic value. This understanding is shaped primarily by the researcher's extensive professional experience in the field of higher education policy and evaluation, particularly through work conducted for national and international institutions such as the European Commission, European agencies, and national evaluation bodies. In particular, the participation in the national commission that undertook the first evaluation of Third Mission activities in Italy (CETM) provided direct insight into the practical challenges of defining, implementing, and assessing Third Mission across diverse institutional contexts. These experiences have highlighted both the potential of the Third Mission to foster meaningful societal contributions, and the inherent complexities involved in integrating engagement into universities' core missions. Rather than being conceived solely as a collection of activities or outputs of the other missions (research and teaching), the Third Mission is approached here as a transformative force capable of reflecting and reshaping the relationship between higher education institutions and their societal contexts. This conceptual standpoint underpins the analysis of how different national systems conceptualise, institutionalise, and evaluate the Third Mission. It also guides how these processes influence academic work, institutional strategies, and overarching policy objectives. This thesis addresses the challenge of fostering a cohesive, European-wide understanding of Third Mission, despite the varied political, systemic, and sociocultural factors in each country. While existing literature provides valuable insights into specific aspects of Third Mission, what is yet to be provided is a comprehensive overview of Third Mission's evolution across Europe, namely a holistic view that synthesises these fragmented perspectives. By exploring the differences between the Third Mission evolution in four case-study countries (Sweden, Germany, Portugal and Italy) and their implications, this research aims to contribute to the body of knowledge

surrounding Third Mission in higher education, offering a more integrated and overarching understanding of how universities h

ave implemented Third Mission, This includes examining the diverse approaches to conceptualise Third Mission, the various pathways towards the institutionalisation of Third Mission, the varied strategies for measuring and monitoring the engagement activities, and the distinct outcomes at different levels that have resulted from the integration of Third Mission into universities' core missions. Without this broader, integrated perspective, understanding how Third Mission has evolved at the continental level becomes challenging, as does recognising how its diverse forms of implementation align with or deviate from overarching European policy goals. Additionally, the potential for a collective contribution of universities to societal advancement across the European Higher Education Area remains unclear. From the early phase of this thesis has emerged that there is a need for a more unified and comparative approach to reveal the underlying dynamics of Third Mission 's development and its implications on universities across Europe.

1.2 The research context

With Europe facing immense challenges, universities have been increasingly asked to act as engine for societal and economic growth. Their role as key producers of knowledge and sources of innovation, has become critical to the future of a knowledge-driven society. In recent years, has emerged a pressing need to ascertain the possibility for European-wide actions to support and enhance the Third Mission across the continent in a more cohesive and coordinated manner, ensuring that universities 'collectively' contribute to social, cultural, and economic development effectively (EUA, 2021). The new centrality has also determined an increased responsibility that universities are expected to take on (Kruss and Gastrow, 2017) besides the traditional 'civic' responsibility to contribute to the public good (Marginson, 2011; Goddard, 2018). In this context, universities' activities with a focus on the interaction with the civic, economic, and social actors, although always existent, are seen under a new light. During the last decades after 2010 the rise of a Third Mission has been formalised beside the traditional missions of teaching and research (Benneworth and Jongbloed, 2009; Zomer and Benneworth, 2011). As societies transitioned into "knowledge societies", there was growing recognition of the importance of fostering meaningful interactions between universities and society (Kwiek, 2012; EC, 2017; Epuran et al., 2016). In response to this, European policies

and strategies were introduced around the turn of the century, aiming to create a cohesive framework for cooperation in higher education and research. One significant outcome of these efforts has been the implementation and institutionalisation of the Third Mission in Europe. This process has been supported by ongoing initiatives such as the Bologna Process, which has played a crucial role in shaping the landscape of higher education and reinforcing the importance of societal engagement by academic institutions (Garcia, 2009; Keeling, 2006; Abdo et al., 2022). Consequently, Member States have started working to achieve their collective vision for a European Education Area (EEA) and a European Research Area (ERA) with the ambition to create a single, borderless market for research, innovation, and technology across the EU (EC, 2018, 2020, and 2021). To support these ambitions the European Union has implemented a supranational framework (Beukel, 2001) with common strategies, policies, and financial resources to boost cooperation in both research and education. With the expansion and multiplication of collaborations the range of universities' relevant stakeholders has enlarged continuously in number and typology (Amaral and Magalhaes, 2002; Benneworth and Jongbloed, 2010; Wilson et al., 2023) and the forces affecting universities have grown in complexity, scope, and scale (EUA, 2021). This has required that universities develop new capabilities in dealing and managing the new forces and the diverse and ever-growing stakeholders' expectations (Berbegal-Mirabent et al., 2022). The need for accurate accountability together with the great prominence that 'quality assurance' gained through the Bologna Process (Lima et al., 2008; Ellen, 2016) has determined a rapid increase in importance of measurements of all universities' activities and missions, including Third Mission, In the last fifteen years 'quality' has become a key word that pervades knowledge-related policies and educational reforms, especially when evaluation is at issue (Pacheco, 2014). Although its definition is debated, and context driven. So, Third Mission would, reasonably, be expected to be the same (Laredo, 2007; Pinheiro et al., 2015a; Derrick, 2018). Thus, Third Mission evaluation has occupied its own relevant space in both policy and scholar discourses during the decade between 2014 and 2024 (Frondizi, 2019). Since most competences for higher education and research lie at national and regional level, member states have implemented EU inputs and translated them within the specificity of each HE system (Karlsen and Larrea, 2019). Thus, the significance of Third Mission itself, its institutionalisation paths and consequently its evaluation differ in each country (Ochsner et al., 2018). However, developments regarding

cooperation in research, education, innovation, and culture at European level are becoming increasingly important. Since 2014 attention has growingly been paid to the development of evaluation systems (Glaser et al., 2014; Segerholm, 2020). Each country has faced important challenges in defining and implementing quality assurance frameworks (Karakhanyan and Stensaker, 2020). For this reason, among others, the quest for comparisons between countries has become urgent (Compagnucci and Spigarelli, 2020).

1.3 The research problem

The European Union is vehiculating through different channels (policies and strategies) the request to universities to contribute in generating solutions to socioeconomic problems and grand societal challenges. The vision for the European Education Area and the European Research Area and, the strategies sustaining Open Sciences, the European University Alliance are all European Union instruments falling under the common umbrella framework to produce knowledge with and for the society (EC, 2014 and 2020). However, at the launch of the initiative 'European University Alliance' (EUCO 19/1/17), there were in Europe disparate understandings of the universities' Third Mission, despite being object of policy and research considerations over an extended period. Stakeholders are calling for a common Third Mission strategy as a fundamental requirement for the achievement of the European ambitions (Hochstein et al., 2022). There is a need for contributing to reaching a common understanding of Third Mission. The study situates the Third Mission within its sociohistorical context, acknowledging, as Dahler-Larsen (2012) suggests, that organizational models, such as those required to accommodate the institutionalization and evaluation of the Third Mission, are shaped by evolving values, norms, and the broader cultural fabric of society. By recognizing this dual nature, the research seeks to capture the deeper rationales behind the evolution of the Third Mission in continental Europe, exploring its complexities and the ways in which changing societal factors influence its institutionalization and evaluation over time. Existing studies mostly focus on specific aspects and perspective of Third Mission (Compagnucci and Spigarelli, 2020). The corpus of existent literature on Third Mission is truly conspicuous, but it appears overly specialised and fragmented (Fia et al., 2022). There are systematic approaches to Third Mission explorations, which however, have the

form of literature review (e.g., Arbo and Benneworth, 2007; Geuna and Muscio, 2009; de Rijcke and Wouters et al., 2016; Rubens and Spigarelli, 2017; Fia et al., 2022; Taliento, 2022). There is a need for more comprehensive and overarching understanding of this multifaceted topic (Trierweiller et al., 2021). Using a single point of view, this research explores the myriads of elements that characterise Third Mission in individual country contexts. To explore cultural and political ratios underpinning the diverse frameworks (Bonaccorsi, 2015), the intertwined relationships between political, systemic, and socio-cultural factors affecting Third Mission must be explored within a single analytical framework. The aim is to illustrate a comprehensive outlook that let emerge, in a systematic way, the cohesive links and divergent correlations that nurture Third Mission evolution in Europe.

What has become apparent since the early stages of this thesis, is that several subsidiary questions must be addressed before evaluating the potential for European-wide actions surrounding Third Mission. The first question relates to the common definition and understanding of what constitutes the "Third Mission" across different countries and contexts. The second question addresses whether and how institutions have assimilated the Third Mission and what this represents for the institutions themselves. The third question concerns the availability of evaluative measures to accurately assess the outcomes and impacts of Third Mission activities and how these are context related. The fourth question examines how the relationship between the country-specific evolution of the Third Mission and the broader European perspective has developed. The fifth question investigates the effects that the evolution of the Third Mission and its evaluation have generated in higher education and whether these effects are generalisable or context specific.

- 1. How is Third Mission conceptualised in the specificities of each country context?
- 2. How is Third Mission institutionalised in the specificities of each country context?
- 3. How evaluation of Third Mission develops within the specificities of each country context?
- 4. How do country-specific evolution and evaluation of Third Mission relate to the European broader perspective?
- 5. How is Third Mission and its evaluation impacting on key stakeholders?

Answering these prior questions is essential before inquiring whether there is room for coordinated interventions.

1.4 The argument

The foundation of this thesis roots on the premise that to determine whether Europewide actions can effectively support the continent's broad objectives and ambitions to develop a university Third Mission that has a meaningful impact on a continental scale, it is essential to understand the differences between individual countries. The central argument is that by gaining a deeper understanding of the unique characteristics within each country, it is possible to contribute to the development of a more integrated and coherent approach to the Third Mission across Europe. This thesis investigates how varying governance models, funding mechanisms, and regulatory frameworks influence universities' engagement with their communities and industries. Additionally, it considers the role of cultural, social, and economic factors in shaping the implementation and outcomes of Third Mission activities. By acknowledging these variations, this thesis contends that more integrated and impactful policies can be developed, ultimately enhancing the role of higher education in addressing societal challenges across Europe. This thesis contributes to the broader discourse on the role of higher education in society, emphasising the importance of policy and institutional strategies in unlocking the full potential of the Third Mission across Europe.

1.5 The research originThis study's approach is deeply informed by the researcher's extensive experience as an evaluator for various national and international institutions, including prestigious bodies such as the European Commission, European agencies, Italian ministries, and ANVUR. In particular, as a member of the national commission (CETM) tasked with conducting the first-ever evaluation of the Third Mission in Italy, she gained invaluable firsthand insight into the complexities and challenges involved in the institutionalisation and evaluation of Third Mission activities. This role provided her with a unique vantage point from which to observe the intersection of policy frameworks, academic missions, and societal expectations. Beyond this significant national role, the researcher's extensive experience working within universities and research centres across Europe has greatly enriched her understanding of the Third Mission in an international context. Her work in diverse academic environments across different countries has exposed her to various higher education systems and their approaches to societal engagement, enabling her to appreciate the broader implications of Third Mission activities. These experiences have not only deepened

her interest in the Third Mission but also enhanced her ability to critically assess its implementation and evaluation. Her multilingual and multicultural competencies further amplify her capacity to understand how Third Mission policies and practices are shaped by the specific socio-cultural and economic contexts of different nations. This diverse background allows her to engage with the subject matter from both theoretical and practical standpoints, offering a comprehensive and balanced perspective. It equips her to explore how the Third Mission evolves within different national frameworks while also identifying common patterns and divergences across borders. Ultimately, her blend of hands-on experience and theoretical knowledge positions her to provide a well-rounded and critical analysis of the Third Mission, not only within specific countries but also within the broader European higher education landscape.

1.6 The thesis' structure

This thesis is structured in six chapters with the following logical construction. The first chapter outlines the objectives of the thesis, explaining its significance in terms of both necessity and anticipated outcomes. It clearly defines the focus of the research, introduces the key research questions, and presents the central argument that will be used to address them. The second chapter illustrate the literature review, and it is structured into distinct sections that thoroughly explore the conceptualization, institutionalization, and evaluation of the Third Mission, addressing both theoretical foundations and practical implementations while incorporating country-specific literature. The final section focuses on the Third Mission's presence in European agendas, providing a foundation for analytical discussions that compare the case study countries to broader European policy trends. The chapter concludes with a brief overview of the expected contributions of this thesis in relation to the existing literature. The **third chapter** illustrates the methodology informing this study. Firstly, it describes the epistemological and methodological approaches. It then illustrates the collection and analysis of empirical data. It also addresses the challenges posted by this thesis such as the multilingualism. Chapter four is dedicated to illustrating the results emerging from the analysis of data in its complexity. It follows the logical structure that guides the entire research and devotes specific sections to the conceptualisation, institutionalisation, evaluation of Third Mission. Chapter five is devoted to a critical

discussion of results, illustrating how the complex mosaic of analysis contained in chapters four and represents a robust foundation for further knowledge growth. The **sixth chapter** closes the thesis with final considerations and includes a section devoted to the study limitations, future research directions and surprises arisen during the thesis work. This thesis includes as Appendix the basic model for the semi-structured interviews (Appendix 1 - Questionnaire).

Chapter 2 - Literature review

2.1 Introduction

This thesis explores the conceptualisation, institutionalisation, and evaluation of the Third Mission in four European case-study countries in an evolutionary study of its complexity. It aims to enrich academic literature by providing nuanced insights into how Third Mission activities are conceived, implemented, and evaluated in four diverse settings: Sweden, Germany, Portugal and Italy. This thesis argues that by examining the variations and commonalities among four different countries, it is possible to shed light on the interplay of cultural, political, and economic factors that influence the engagement of universities. The way to this definition is paved with a multitude of research studies, policy discussions, and institutional reporting. Numerous academic papers have delved into the interactions between universities and their communities, exploring a myriad of different aspects. Policymakers have also played a crucial role, advocating for frameworks and funding mechanisms that support this integrated approach. These efforts collectively constitute the basis for any further exploration of Third Mission in its complexity. This thesis argues that enabling a more comprehensive understanding of the Third Mission 's evolution can impact future directions within the diverse landscape of European higher education.

The overall goal of this chapter is to establish the significance and the boundaries of the field of research so to clearly identify the space where this research sought to make new contributions in response of each of the research questions. The literature review will adopt a structured approach in line with the research design, focusing on the conceptualisation (section 2.1), institutionalisation (section 2.2), and evaluation (section 2.3) of Third Mission. Additionally, it will examine the positioning of the Third Mission within European and country-specific policy agendas. Section 2.4 explores the literature on the positioning of the Third Mission in international policy agendas. The section 2.5 closes the chapter by illustrating the literature supporting the conceptual framework of "changes", which will inform the comparative approach underlying this study.

2.2 Sources

Besides the scholar literature, an important part of this thesis work has been devoted to study other types of literatures, namely policy, institutional and grey literature. The scholarly literature on the Third Mission has been thoroughly reviewed, catalogued, and analysed from various perspectives and across different phases (Degl'Innocenti et al., 2019; Compagnucci and Spigarelli, 2020; Neves et al., 2020; Schnurbus and Edvardsson, 2022). On the contrary a systematic review of the policy and institutional productions on this subject is lacking (Perkmann et al., 2013). This thesis argues that the integration of non-scholar literature is essential for comprehensively understanding the evolution of the Third Mission in Europe. By integrating institutional and policy productions, it is possible to gain valuable insights into the complexities, diversities, and dynamic nature of Third Mission evolution in each of the four case-study country. As suggested by Perkmann (2013) this contributes to a twofold challenge: a) a better understanding of how policies and institutional frameworks are shaping, supporting, or hindering the Third Mission of universities; b) it supports the comparability of the different national approaches. By incorporating policy and institutional literature at every phase of analysis, this research aims to uncover the underlying factors that contribute to the evolution of the Third Mission. In all four examined countries Third Mission and Third Mission evaluation have been at the core of open debates. Due to the political relevance of some cases such as for example the Excellence Program in Germany (Civera et al., 2020a) or the first round of research evaluation in Italy the debates have crossed the boarders of academia and scholars' interests becoming of public domain (Bonaccorsi, 2015). Newspapers, (online) magazines, and blogs serve as further sources to this research. For instance, in Italy, the blog www.ROARS.it (Return on Academic research and School: https://www.roars.it/) and in Germany, the online magazine "ZEIT Campus" (www.seit.de/campus), the university supplement of the national daily newspaper Die Zeit cover a wide range of topics, from university governance to student life, and often publishes in-depth analyses and opinion pieces. In Sweden's "Universitetsläraren" (www.universitetslararen.se) an online magazine run by the Swedish Association of University Teachers and Researchers. In Portugal, there are several newspapers, for example the online platform UNIAREA (www.uniarea.pt) provides relevant information and resources. At international level, platforms like University World News (www.universityworldnews.com) and The Times

Higher Education (<u>www.timeshighereducation.com</u>) have provided relevant information to understand the broader context of phenomena overarching the national approaches.

2.3 Searches

The academic literature review is grounded in a comprehensive search strategy utilising several databases to ensure a robust and exhaustive examination of existing research. Key databases employed in this strategy include 'Web of Science', 'Scopus', and 'Google Scholar' Additionally, "One Search" of Lancaster University was used to broaden the scope of the literature review and access a wider range of publications. During the initial search phase, the primary keywords employed were 'Third Mission' and 'research impact.' To ensure a thorough examination of relevant literature, the search was subsequently expanded to include broader terms such as 'engagement' and 'collaboration,' specifically within the context of 'universities' and 'university missions'. This expansion aimed to encompass studies focusing on how universities interact with external entities and the collaborative efforts that contribute to their missions. Further extensions of the search strategy incorporated terms related to the broader roles and functions of universities to capture the dynamic and evolving nature of higher education institutions using expressions like 'transformation of universities,' 'roles of universities,' and 'changes in universities.' These searches intended to identify literature that discusses the changing landscape of higher education, and the various transformations universities undergo in response to internal and external pressures. Further searchers were associated with expressions such as 'knowledge production', 'knowledge transfer', 'knowledge sharing', and 'knowledge capital' By exploring these terms, the review aimed to cover the understanding of the role of universities about knowledge generation and dissemination. Specific concepts such as 'freedom' 'accountability' and 'autonomy' (Woodhouse, 2019; Becker, 2019; Kästner, 2020; Colombo, 2022) were also the focus of dedicated searches. These terms are critical for understanding the governance structures within academic institutions and how these elements impact their functioning and decision-making processes. The themes of freedom, accountability, and autonomy are critically analysed in the context of academic governance, providing insights into the balance between institutional independence and regulatory control (Legrottaglie, 2019). The subsequent sections of the literature review reflect the results of these comprehensive searches. They highlight key themes that inform the conceptual framework of the study and contribute to the formulation of research questions and related discussion. This methodical approach ensures that the literature review is thorough and informed by a broad range of scholarly sources. Figure 1 shows the organisation of the searches into distinct stages, each focusing on specific themes. The structured approach has ensured a comprehensive coverage to grant a robust literature review:

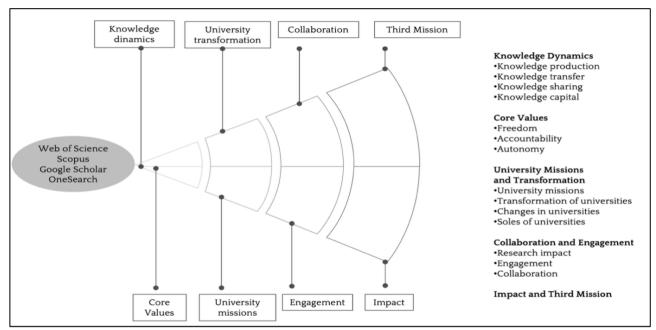


Figure 1 Structure of the key words and key themes searches

2.4 Conceptualisation of Third Mission

2.4.1 The conceptualisation timeline

The literature review suggests that Third Mission has been fed and informed by the conceptual evolution of models (related to both knowledge and innovation) serving as tool for comprehending the dynamics of modern societies. By tracing an imaginary temporary line and marking the progression of policies (including strategies, goals, and instruments), societal evolution, theories on knowledge transformation, and mapping these against the development of universities and their changing roles, the evolution of the Third Mission becomes evident and reveals its political meaning and function. Figure 2 is a comprehensive graphic representation of the extensive literature analysis on the Third Mission and associated theoretical frameworks. It maps out the

evolution of policy strategies, implementation tools, and overarching goals at the European level, spanning the last thirty years. This visual summary captures the progression and depth of discussions that have shaped the understanding and operationalization of Third Mission within higher education systems. It is grounded in the literature review and serves as a solid guide for the empirical analysis of interviews. It provides a structured framework that supports the interpretation of qualitative data by linking theoretical insights with real-world experiences, thus facilitating a deeper understanding of how Third Mission strategies and transformations are perceived and implemented by various stakeholders. Figure 2 also illustrates how the conceptualization of society has shifted during this period, transitioning from an information society to a knowledge society, as originally theorized by Etzkowitz and Leydesdorff (2001) and further applied within the realm of innovation economics. This theoretical shift underscores the increasing emphasis on collaborative knowledge production and dissemination as a cornerstone for societal development (Bölling and Eriksson, 2016; Grafström, 2017). Moreover, Figure 2 also highlights the development of learning models, tracing the transition from K Mode 2, as proposed by Gibbons scholars, which emphasized problem-solving (1988)and other through interdisciplinary collaboration, to the emergence of K Mode 3. This advanced conceptualization, formulated by Carayannis and Campbell (2010), reflects an even more dynamic, multilevel approach to knowledge creation, embracing diverse stakeholders and cross-sectoral partnerships.

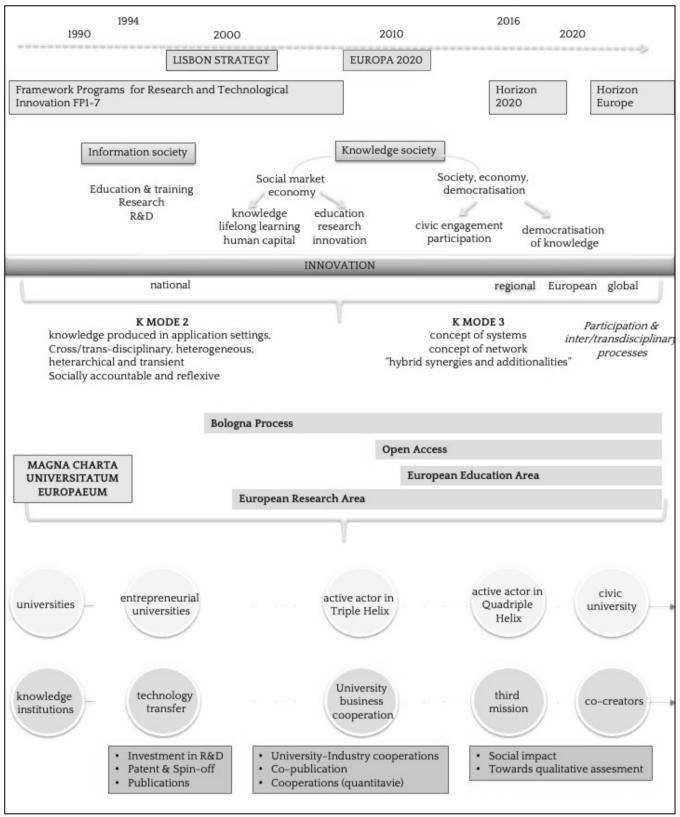


Figure 2 Conceptualisation Timeline

Figure 2 also clearly indicates the evolution of universities and its expansion of roles (Neave, 2000; Altbach, 2009): from being a knowledge institution with research as a core function (as envisaged by Humboldt) and teaching as a core function (as envisaged by Newman); to an institution that creates ways of transferring monodirectionally the knowledge produced inside to the outside (intending the industry

primarily); to an institution that is responsive to challenges and takes on the role to find solutions; furthermore, an institution that opens its door to create cooperation partnerships for mutual benefits; and eventually arrives to the conceptualisation of a Third Mission as engagement with the society at large (see following section for specific bibliographic references). Figure 2 also shows the state of the art about how universities interpret their role in modern society, namely the *civic university*, as defined by Goddard (2018): "the 'Civic University' as a model to capture the mutually beneficial engagement between the community, region or wider world and the university" (Goddard, 2018, p. 356).

The idea of civic society includes a new institutional dimension: universities understand their role concerning their "responsibility" towards society. Third Mission thus gains relevance and not only becomes a transversal dimension within universities, but it is also charged with a contemporary meaning of 'institutional civic sense'. More and more universities are trying to fulfil their role with a greater sense of institutional social responsibility (Knudsen et al., 2019). There is room to investigate the extent to which this process is progressing towards its accomplishment, how it is shaped within different country settings, and, ultimately, what the concerns and challenges are (Bonetti and Villa, 2014; King and Rivett, 2015)

2.4.2 Contextualising the raise of Third Mission

Corbett (2005) details the significant political developments in university history from the late 1940s to the turn of the 21st century. This historical trajectory helps understanding the path leading universities to expand their roles beyond teaching and research by incorporating a "Third Mission". Global societal, political, economic, and technological challenges are contributing to change the nature, the roles, and the organisation of higher education institutions (Gornitzka et al., 2005; Altbach, 2009; Stanit et al., 2014; Gläser & Whitley, 2014; Benneworth et al., 2017; Bruckmann and Carvaho, 2018; Giuri et al. 2019) so much that this era has become the "era of the transforming university" (Siemens, 2010, p. 13). It emerges a progressive shift towards the increasing recognition of the critical role of universities in societal and economic development (Bercovitz and Feldman, 2006; Breznitz, 2014; Viesti, 2016). Initially, the focus was on voluntary collaboration among universities, over time, formal structures were established to support more structured cooperation (Corbett, 2005). The

Erasmus programme in the 1980s marked a significant legislative step, integrating education into the broader economic framework of the EEC (Altbacj, 2009). In the early 1990s the Treaty of Maastricht and European declarations like Sorbonne and Bologna laid the ground for a unified European Higher Education Area and the European Research Area (de Wit, 2015). In the late 1990s' policies' analysis (EC, 2004) evidence a shift towards quality assurance (Pacheco, 2014). Scholar studies have focussed on the emerging need for standardisation (Manatees, 2017; Urbano, 2019) and accountability (Hammarfelt and de Rijcke, 2015; Once, 2017; Wilson 2023). Finally, the turn of the 21st century's focus on the "knowledge-driven economy" underscoring the strategic importance of universities in innovation and economic growth (Marek, 2012; Fia et al., 2022). The following table synthesises the key political developments in European university history from the late 1940s to the turn of the century as presented in Corbett's work (2005):

Time	Policy priorities' evolution	
Late 1940s In The Hague, a brainstorming exercise led to the proposal of a supruniversity for Europe, which was rejected in favor of a voluntary federal European universities.		
The first formal meeting of university rectors occurred in Messina, leadin formation of the Standing Conference of Rectors and Vice-Chancellors European Universities (CRE), the predecessor of the European Universities.		
1960s	Italy lobbied for a European University, resulting in the establishment of the European University Institute (EUI) in the 1970s, located in Badia Fiesolana	
The Erasmus programme became the first EEC legislation to include education the community budget.		
Early 1990s The Treaty of Maastricht mentioned education, setting the boundaries for while recognizing education as a national matter. The Sorbonne and Declarations called for a European Higher Education Area (EHEA)		
Political focus shifted to university quality assurance. Significant policing documentation efforts were made by international organizations like the UNESCO, EC, and EP to support university developments. The European of Ministers adopted the Recommendation on European cooperation in assurance in higher education, leading to the creation of the ENQA Network.		
Turn of the XXI century The concept of the "knowledge-driven economy" gained prominence in police academic discourse, emphasizing the role of knowledge in economic growth the importance of universities in innovation and adaptation to new conditions.		

Table 1 Key political developments in European university

After 2010, the conceptualisation of the Third Mission has evolved alongside the transformation of modern European universities (Poole, 2005; Taliento, 2022) in a mutual and intertwined relationship of change (Bruckmann and Carvalho, 2018). The European Commission has encapsulated the current state of this evolution, emphasising that a paradigm shift is occurring through the recognition of the social role of "knowledge institutions", underscoring the role universities play in "building successful, inclusive societies" (EC, 2017, p. 2). References to the "role of university" (Breznitz, 2014; Kruss and Gastrow, 2017; EUA, 2019) have emerged prominently addressing the rationale behind Third Mission and exploring why universities undertake certain activities (Garcia, 2009; D'Este and Perkmann, 2011; Martino, 2018; Cinar and Benneworth, 2021; Abdo et al., 2022). This perspective reflects the need to understand the multi-stage evolutionary process whereby universities evolved from democratic mass institutions to communities of applied researchers, to organisers of technology transfer, and finally to commercially engaged entities (Benneworth and Zomer, 2011; Frondizi et al., 2019; Peterson et al., 2022). Meanwhile, universities at large have taken a central place within the policy discourse (Berbegal-Mirabent et al., 2022). It is nowadays widely acknowledging that universities are increasingly viewed as proactive societal co-creators, extending their influence beyond traditional boundaries, which are explicated in many different ways (Aleffi, 2020). Initial scholar discussions around Third Mission were especially focussed on definitions, meanings, and the significance of connecting university research activities with economic and social spheres (Laredo, 2007; Mora, 2010).

A number of factors have played a significant role in driving changes in European HE systems (Gornitzka, 2005; Altbach, 2009; Antunes, 2009; Siemens and Matheos, 2010; Stanit, 2014; Galán-Muros, 2016; Bruckmann and Carvalho, 2018; Pinheiro et al., 2019) and the transformation of **knowledge, education and university paradigms** (Poole, 2005; Bercovitz and Feldman, 2006; Hartmann, 2009; Mateus, 2013; Breznitz, 2014). As drivers, scholars have indicated, for examples, **demographic waves** (Nellis and Slattery, 2012; OECD, 2018), the acquisition of **institutional autonomy** (Legrottaglie, 2019; Bergan et al., 2018; Puaca, 2021; Colombo, 2022; Holmén, 2022), adoption of **New Public Management** principles (de Boer et al., 2007; Jessop, 2012; Naidoo and Williams, 2015; Teodoro and Guilherme, 2014; Henke, 2017; De La Torre, 2015, 2017, 2018; Donna and Paleari, 2019).

Furthermore, other drivers of change, amidst the context of **massification** (Börjesson and Dalberg, 2021; Alves and Tomlinson, 2021), the **neoliberal regime** (Naidoo and Williams, 2015) and **globalisation** (Krücken and Meier, 2006), are the heightened emphasis on **accountability** shaping political agendas (Oancea, 2019; Wilson et. al, 2023), the raise of **quality** ensuring frameworks (Brennan, 2000; Elken, 2016; Pacheco, 2014; Manatos and Sarrico, 2016; Manatos, 2017), as well as the growing roles of **students** (Arora, 2015; Tomlinson, 2017), the **stakeholder** influence (Bercovitz and Feldman, 2006) the changing duties of **academics** (Altbach, 2009, EURYDICE, 2011; Bergan et al., 2018; Civera et al., 2020a and 2000b), the evolving significance of **Higher Education markets** (Agasisti and Catalano, 2006; Cini, 2018; Börjesson and Dalberg, 2021, Alves and Tomlinson, 2022).

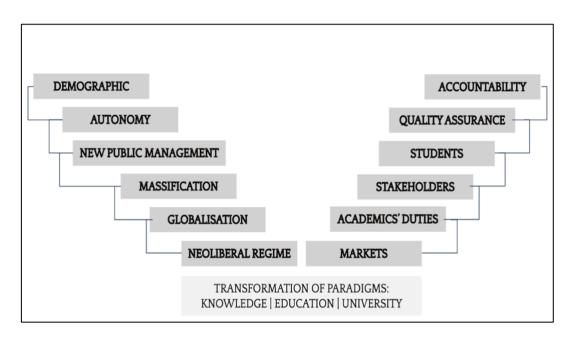


Figure 3 Key factors of changes in HEs

These factors and changes are embedded within the **knowledge society and the knowledge economy** of the 21st century (Posits, 2015; LERU, 2017). On the turn of the century the concept of the "knowledge-driven economy" (OECD/GD(96)102) pervaded policy as well as scholar thinking (Lundvall and Borrás, 1997; Archibugi and Lundvall, 2001). **The rise of the knowledge economy coincides with the time of** transition from traditional industrial economies to ones where the creation, distribution, and use of knowledge are primary drivers of growth and development (Benneworth et al., 2016). In knowledge economies, intellectual capital, innovation, and information

technology play crucial roles in generating wealth and improving societal well-being (Trencher et al. 2014). Also, the increasing interconnection of economies, cultures, and societies worldwide, called globalisation (Krücken and Meier, 2006), has profound implications for education, as it requires individuals and institutions to adapt to diverse perspectives, compete in a global job market, and address global challenges collectively (Karakhanyan and Stensaker, 2020; Farnell, 2020). The path of changes in contemporary universities also had to face **financial crises** with severe disruption in financial markets and systems, characterised by long phases of economic downturns (Lehmann et al., 2018; Aguiar-Conraria, 2024) and in many countries of funding reductions for education (Šušteršič et al., 2018; Aguiar-Conraria, 2024). Furthermore, environmental crises, encompassing a range of challenges, including climate change, biodiversity loss, pollution, resource depletion, and natural disasters started to address existential threats to ecosystems, human health, and sustainable development (Staniškis, 2016; Carra, 2022). Universities recognise the need to play a critical role in addressing these challenges (Argyropoulou et al., 2019) and are compelled to redefine and broaden their missions beyond traditional roles such as teaching and research (Laredo, 2007; Montesinoset al., 2008; genus and Muscio, 2009; Nelles and Vorley, 2010; Rubens, et a., 2017; Pinheiro et al., 2017). The awareness that knowledge was due to increasingly play a key role in economic growth and social wealth spreads out, together with the assumption that the performance of individuals, firms, regions and countries is increasingly determined by the capacity to learn and adapt to new conditions (OECD EDU/WKP(2007)4). Consequently, The entire higher education ecosystem has changed (Housewright and Schonfeld, 2008) and competitiveness has overcome boarders and national perspectives (Kwiek, 2012; Taliento, 2022); technological innovation has made learning, teaching, researching, and collaborating in general, easier and more effective than ever before, despite space and time (UNESCO, 2014, 2021a); the participative, democratic ideals of open source are impacting heavily both teaching and research (Vorley and Nelles, 2009; Bacevic and Mullerleile, 2018; Heuritsch, 2021).

Compagnucci and Spigarelli (2020) have revised and catalogued international literature on Third Mission. Their work contributes significantly to the identification of potential and constraints of the recurring themes surrounding Third Mission. It constitutes an organised base for exploring the theoretical framework underlying Third

Mission evolution and highlights the need for investigating the complexity, multidisciplinary and heterogeneity of Third Mission as an evolving phenomenon.

2.4.3 Conceptualisation of Third Mission dimensions

The conceptualisation of the Third Mission encompasses a multifaceted set of dimensions through which universities extend their impact beyond traditional academic boundaries. This section delves into these dimensions. A significant portion of early scholarly literature has aimed to define and understand the dimensions of this Third Mission, laying a foundation for how universities can address societal needs through various mechanisms and interactions. From the early stage both the economic and the political dimensions emerged clearly. Scholar have investigated universities influencing public policy and contributing to governance through expert advice, research, and active participation in policy-making processes (Boesemann et al., 2014; Bonetti, 2014). This involves collaborating with government agencies, contributing to policy debates, and providing evidence-based research that informs decision-making. Universities were increasingly recognised as key actors in creating value that addresses societal needs, basing on the idea that discoveries emerging from university research have potential economic value for external entities such as businesses, industries, and society. A value realised through various mechanisms, e.g. spinouts, licenses, innovations, collaborations (Laredo, 2007), which have been collectively referred to as Technology Transfer (Boseman, 2000; Berkowitz and Feldman, 2006; Brescia, 2016; Giuri, 2019) and has developed further to be encompassed, with different degrees of systematisation, within the Third Mission of universities (Geuna and Muscio, 2009). For scholars around the first decade of the century, investigating Third Mission included examining the "spillover effects" of research activities as sources of innovation and economic growth (Abel and Deitz, 2011). Contributions to the definition and conceptual foundation of Third Mission are numerous and varied (Laredo, 2007; Jongbloed et al., 2009; Vorley and Nelles, 2009; Chessa & Vargiu, 2014). While some scholars limit the scope to more specific interactions with industry and economic stakeholders (Vorley and Nelles, 2009; Fonseca, 2018). Others tend to include a wide range of university functions such as public service and cultural engagement (Jongbloed et al., 2009). Others highlight broader societal contributions, including social innovation and community engagement (Chessa & Vargiu, 2014). Academics have progressively focused on the commitment of universities to their community (Whitehurst et al., 2008; Breznitz and Feldman, 2012; Molas-Gallart and Castro-Martinez, 2007). More recent debates have shifted towards analysing Their Missions' potential for higher education (Jaeger and Kopper, 2014; Piirainen, 2016), the societal achievements of universities (Roessler et al., 2015), and the future of universities shaped by their collaboration with society (Bölling and Eriksson, 2016). With the step towards the 'learning economy' (Lundvall, 2002) attentions was given to the relationship between knowledge and local development (Malecki, 2007; Pawlowski, 2009; Ponds et al., 2010; Morais, 2016). Higher Education Institutions have assumed an increasingly significant role in the **regional dimension** (Glaser, 2014; Gustavsson et al., 2016; Ciappetti, 2017) and emerged as essential regional assets (Arbo and Benneworth, 2007). These institutions often drive the transfer of new research findings into technological or social innovations through practical collaborations (BMBF, 2019; Ciapetti, 2017). Consequently, academics have increasingly focused on the potential contributions of HEIs to local businesses and their commitment to the community (Whitehurst et al., 2008; Breznitz and Feldman, 2012; Molas-Gallart and Castro-Martinez, 2007). The development of the role of universities becomes embedded in the policy discourse surrounding innovation (Etzkowitz, 2003; Piro, 2006; Owen et al., 2012; Figueiredo Nascimento et al., 2016; Benneworth et al., 2017; Agasisti et al., 2019; EUA, 2019; Arocena, 2021). Thus, universities gain a new centrality in the complex innovation dynamics. The first and direct implication for universities was the involvement of multiple stakeholders and the ability to liaise and create synergies among them (Amaral and Magalhaes, 2002; Benneworth and Jongbloed, 2010; Tjong Tjin Tai, 2018; Reichert, 2019; Wilson et al., 2023). However, as highlighted by Compagnucci and Spigarelli (2020) the development of the Third Mission is more than just a structural change since it involves social conventions and legal rights as well as economic interests (Bercovitz and Feldmann, 2006; Nelles and Vorley, 2010a; Brescia et al., 2016). A Third Mission was added to higher education when knowledge needed to be operationalised as a fundamental role for economic growth and regional development (Paleari et al. 2014; Oliva, 2017). Within the local/territorial/regional perspective, some theories focus on the role of universities in regional development and local innovation ecosystems (Goddard, 2018; Guerreiro and Pinto, 2012; Dilorenzo and Stefani, 2015; Gustavsson et al., 2016; Caruso et al., 2020), while others consider their contributions to global

challenges and international networks (Benneworth et al., 2017; Farnell, 2020). Also, the **cultural dimension** of Third Mission has been explored by looking at activities such as supporting the arts, engaging in cultural heritage projects, and providing platforms for cultural expression and exchange (Benneworth, Jongbloed, 2010; Hammarfelt and De Rijicke, 2015). Universities' contributions to the preservation, promotion, and creation of cultural capital (Santagati, 2017; Martino, 2018; Corradini, 2019; Paterlini, 2023) has strongly permeate a further evolution of the conceptualisation of Third Mission.

2.4.4 Critical conceptualisation voices

Some scholars have highlighted critical views surrounding the conceptualisation of the Third Mission. Marginson (2016 and 2017) provides a critical perspective on the Third Mission, contextualising it within the broader trends of marketisation and neoliberal pressures on higher education. He argues that while the Third Mission can enhance the public value of universities, it also risks being co-opted by market-driven agendas that prioritise economic returns over social and cultural contributions. He calls for a more balanced approach that maintains the core educational and research missions of universities while also fulfilling their societal responsibilities. This perspective underscores the importance of universities as social actors, which this thesis investigates through the lens of cross-country comparisons.

Other scholars have highlighted that the mere physical presence of universities in a region is not sufficient for economic development (Pinheiro et al., 2012). Critical policy analysis (Lester and Sotarauta, 2007; Gustavsson et al., 2016) has led to the recognition that the merely establishing universities in peripheral regions also requires that the knowledge producer must be within a broader regional knowledge ecosystem, which includes multiple actors and necessitates various governance approaches, thus calling for more articulated Third Mission policies (EUA, 2019). These contributions are relevant for this thesis as they highlight the importance of viewing universities not as standalone drivers of development, but as embedded actors within complex regional knowledge ecosystems. This perspective aligns with the thesis's aim to explore how national and institutional frameworks shape the Third Mission's operationalisation looking also at the presence, or absence, of enabling factors.

Peter Scott's (2015) views on higher education reflect a critical perspective on the influence of both state intervention and market forces. He advocates for a balanced approach that moves away from relying solely on governmental control or market pressures to shape universities. Moreover, Scott (2015) criticises the homogenisation of universities into "brands" that use similar language and imagery to market themselves. He argues (Scott, 2015) for a more nuanced understanding of what makes universities successful and impactful and identifies in a holistic understanding of Third Mission the way towards the reappropriation of an altruistic and diversified nature of universities that seems lost. This contribution is relevant for this thesis as it critically engages with the tensions between state control, marketisation, and institutional autonomy. These dynamics are central to understanding the evolving conceptualisation and evaluation of the Third Mission.

Other critical voices have emphasised that initial valorisation of Third Mission in terms of economic contributions like technology transfer, licensing, and spinouts (Aghion, 2009; EURYDICE, 2011; Stanit et al., 2014; Breznitz, 2014; Civera et al., 2020a and 2020b) has led to neglect certain stakeholder groups and overlooked the broader societal contributions of the humanities, arts, and social sciences (HASS) (Oancea, 2018; Bonaccorsi, 2018). As a result, these disciplines were perceived as less important, leading to a situation where 'HASS stakeholders are not sufficiently salient as stakeholders to universities' (Benneworth and Jongbloed, 2010; Lebeau and Cochrane, 2015; Cooper and Shewchuk, 2017; Bonaccorsi, 2018). This body of literature is relevant for this thesis as it underscores how the dominant economic framing of the Third Mission, which has focussed on technology transfer, licensing, and commercial outputs and shaped institutional priorities. It informs the investigation into how different national systems recognise, or not, the full diversity of Third Mission activities and actors, particularly with regard to disciplinary inclusion and the relevance of less obvious stakeholder groups (such as museums and libraries for examples).

A further aspect of critical consideration is the role played by cultural shifts which are transversally concerning countries, such as the use of English as lingua franca in academic work (Bolton, 2012; Björkman, 2014; Amorim, 2017; Soler, 2018; Queiròs, 2023), which brings this thesis to address this aspect in relation to the Third Mission of universities and their relationships with relevant communities.

Efforts to standardize the Third Mission at an international level, like the EU-funded S3M project, have offered valuable insights but have not gained widespread acceptance or made a significant impact. Despite all efforts, Third Mission is still often described as nebulous (Filippini and Lepori, 2007) and ambiguous (Laredo, 2007; Pinheiro et al., 2015a; Derrick, 2018). This discussion is relevant for this thesis as it highlights the persistent conceptual ambiguity and lack of consensus surrounding the Third Mission, despite international attempts to standardise its definition and implementation. These challenges reinforce the importance of examining how the Third Mission is interpreted, institutionalised, and evaluated within different national contexts. The limited impact of standardisation efforts supports the thesis's comparative approach.

2.4.5 Country specific conceptualisation

While the following section reviews literature focused on country-specific conceptualisations of the Third Mission, it is not be understood as a discussion of the empirical case studies analysed in this thesis. Rather, these references are used to illustrate the diversity of national interpretations and approaches, providing a broader contextual backdrop for the cross-country analysis that will follow as part of the third chapter of this thesis.

The German case-study is unique in terms of size, geo-political complexity, multilevel governance, and articulation of the HE system (Kehm, 2013; Eichhorst et al., 2015; Kuhlmann, 1997; Bibow, 2001; Winkel, 2010, Niemann, 2010; Wolter, 2012; Berghäuser, 2018). In Germany, scholars have emphasised the rise and the effect of the "New management" approaches and cultures in universities (de Boer et al., 2007); and their consequent changes (Krücken and Meier, 2006; Hoelscher, 2016; Henke, 2017). The regional perspective has also been object of attentive studies (Koschatzky, 2014). More recently, scholar attention has been given to the political frameworks and universities' reactions (Berghaeuser and Hoelscher, 2018) and to Third Mission as a challenge for scholars (Guenther, 2019); as well as Third Mission as a challenge in terms of measurement (Hachmeister et al, 2016a and 2016b). Studies in a wider German-language space, such as studies looking at Third Mission in Austria (Roessler, 2015; Graf et al., 2021) represent an invaluable source of cultural and system specific information for framing conceptualisation of Third Mission as they

provide to capture current terminologies and definitions of the Third Mission and the Third Mission activities in German-speaking countries. A consensus on the understanding of the term and generally valid criteria for activities have therefore not yet been formulated at universities in German-speaking countries. The literature review of the German research production on Third Mission suggests that the term acts as an umbrella-term for a wide range of diverse activities that engage 'nonuniversity recipients', support social development interests, and utilise resources from research and teaching (Graf et al., 2021; Henke et al., 2016). Maassen (2011) and Graf (2021) argues that the range of social responsibilities undertaken by individual universities varies according to their academic focus and the characteristics of their regional context (Koschatzky, 2014). Interestingly, they also add a further layer of differentiation, namely that comprehensive university will assume different social roles compared to a university of applied sciences that specialises in certain fields, letting emerge how a dual HE system encompass specific characteristics depending on the nature and mission of each type of institutions and marking a clear line of difference between type of universities.

The distinction between these two types of institutions is addressed by Portuguese scholar as well. They evidence that the complexity of the Portuguese binary system is strictly regulated by law and argue that, contrarily to traditional universities, polytechnics have adopted a more practical and vocational approach embedding in a natural manner the mission of transferring knowledge to industry and society (Silva, 2018; Fonseca, 2018; Guimarães et al., 2018; Lievore, 2021). The parallelism between Portugal and Germany can also be traced in other aspects such as for example the fact that they both have a wider space influence in terms of language: Germany encompassing also Austria e a small part of Italy; Portugal encompassing Barasil. This aspect is not relevant for the other two case study countries, Italy and Sweden. In Portuguese research there is a significant research production which focus on the strong links between Portugal and Latin America, especially Brasil (de Freitas, 2012; Guimarães and Esteves, 2018; Nunes Gimenez and Bonacelli, 2021), which helps this research as model for framing conceptual definitions across shared linguistic but diverse socio-cultural contexts. In Portugal, the multifaceted university-society relationship and the dimensions of the Third Mission has been investigated (Laredo, 2007; Guerreiro and Pinto, 2012; Mora and Vieira, 2014; Jimenez and Bonacelli, 2013; Bruckmann and Carvahlo, 2014; Teixeira, 2015; Manatees et al., 2016) together with

the concept of 'extension' or 'projection' of the university toward the society has been object of political consideration (Fernàndez-Larrea and Gonzàlez, 2003). Many scholars (e.g., Pinheiro et al., 2012; Koschatzky, 2014) have looked at universities and regional development, while Machado and Cerdeira (2012) have looked into New Managerialism under the perspective of the state's strong involvement in HE, looking at the broader context of public administration (Gonçalves, 2012; Cabral, 2000) as well as the broader socio-historical context of Higher education growth in Portugal after 2014 (Gomes et al., 2015; Pereira, 2019) as well as the engagement with Science and Technology in the specificities of the Portuguese context (Oliveira and Carvalho, 2015).

The regional perspective has played a key role in the Nordic countries (Pinheiro, 2017; Koschatzky, 2014; Knudsen et al., 2019; Holmén, 2022) and especially in Sweden (Triple et al., 2005; Gustavsson et al., 2016; Karlsen et al., 2017; Holmén, 2022), where also the transition - phases and the changing role of universities has been at the centre of interest for long time, with studies spanning from 2009 to 2021 (Pålsson et al., 2009; Bertagna, 2011; Rubens et al., 2017; Börjesson and Dahlberg, 2021). Third Mission has been explored within the changing policies for innovation and examined against the backdrop of the changing national climate for universities in the wake of the Swedish reform of the national innovation system (Jacob and Lundqvist, 2003). The entrepreneurial role of universities has been investigated especially in the light of Third Mission of universities and looking specifically on how Third Mission, broadly speaking, is conceived of in Swedish university strategies to uncover the many ways in which "a general vision of university entrepreneurialism may embody more socially informed missions" (Hellström, 2007). Sweden has been presented as an interesting case, as the nation has a history of using universities instrumentally for transforming regional economies (Pålsson et al., 2009). Third Mission has also been supported by collateral research on collaboration, for instance spreading a generally positive attitude to cooperation and establishing a common cooperation culture with parties where there is an understanding of each other's different priorities and conditions (Perez Vico et al., 2014 and 2017; Ljungberg et al., 2015; Bölling and Eriksson, 2016; Grafström, 2017).

In **Italy**, Bonaccorsi (2014; 2015; 2018; 2020 et al.) is a key actor in its double role of academic and active member of the National Agency for University and Research Evaluation (ANVUR). Many authoritative voices discussed the conceptualisation and

development of Third Mission at large (e.g., Luzzatto, 2011; Pitrone, 2016 Ciappetti, 2017; Martino, 2018; Corradini, 2019; Privitera, 2019; Donina and Paleari, 2019). There are considerations surrounding the notion of "government" in universityindustry-government relations (Venditti, 2013; Primeri and Reale, 2015; Agasistsi et al., 2017; Fonseca, 2018). Third Mission is today conceived as a mix of regulatory tools and soft instruments (Ciapetti, 2017) that are part of the mix dedicated to the governance of the university system, in order to improve the valorisation of university research and evaluate its commitment at a social level (Reale and Potì, 2009; Facchini et al., 2019). However, Venditti (et al. 2017) highlights that in Italy there is still a lack of "ecosystem" vision for which Third Mission really becomes a process that involves different actors, in different roles with the aim of improving the entrepreneurial and innovative context (both social and economic) of a regional system. Santagati (2017) and Martino (2018) delve into the cultural dimensions of the Third Mission, emphasising the sociological aspects of academic heritage and its preservation. Pitrone (2016) offers a critical reflection on the conceptual underpinnings of the Third Mission, challenging traditional notions of academic engagement and proposing new frameworks for understanding university roles. Privitera (2019) explores the concept of community engagement, emphasising the need for universities to actively participate in local development. From a strategic perspective, the conceptualisation of the Italian Third Mission has been widely explored in terms of the creation of intellectual capital (Di Bernardino and Corsi, 2018; Mariani et al., 2018). Also, the strategic orientation of universities highlighting the relevance that universities' Third Mission has for economic and societal development (Giuri et al., 2019). However, Venditti (et al., 2017) suggests that the theoretical conceptualisation of the Third Mission does not yet correspond in Italy to a complete implementation process.

2.5 Institutionalisation of Third Mission

The institutionalisation of universities' Third Mission, which expands their roles beyond traditional teaching and research, has become a significant focus in higher education discourse. This process aims to enhance the quality of education and research and contribute meaningfully to society (De Wit et al., 2018 and 2020). In this study, the concept of 'institutionalisation' is defined using Dahler-Larsen's work as a basis (2012): he describes it as the establishment of structurally defined organisational roles and

functions within the organisation. This process involves a transformative shift requiring universities to adapt to new roles and expectations, balancing traditional academic values with societal demands (Pinheiro et al., 2015). This adaptation necessitates redefining institutional boundaries and roles, integrating societal engagement alongside academic pursuits (Vorley and Nelles, 2009; Pinheiro, 2015). Universities face considerable pressure from stakeholders, including government bodies, industry, and the community, to demonstrate tangible outcomes from their Third Mission activities. Benneworth et al. (2015) highlight the tension between the genuine desire of universities to contribute to society and the urgent demands from stakeholders. This creates strategic ambiguity, where universities struggle to align their Third Mission activities with both internal values and external expectation (Kitagawa et al., 2016; Hachmeister et al, 2016a and 2016b; Guenther, 2019).

The institutionalisation of Third Mission in universities has been driven by multiple forces and influences across different contexts. Policy-driven initiatives have been instrumental in advancing the institutionalisation of the Third Mission, The Bologna Process, for example, has elevated the Third Mission to a core institutional objective, with governments developing policies and allocating funding to support Third Mission activities (Keeling, 2006; Adelman, 2009). The implementation of these policies varies across different regions and countries (Turri, 2012; Chessa & Vargiu, 2014). In Germany, the relationship between political frameworks and university responses has been closely examined (Berghauser and Hoelscher, 2020), while in Sweden, a relevant body of research has been devoted to stakeholders, e.g., their pressures and institutional strategies (Benneworth et al., 2015) as well as their increasing role in evaluation processes and mechanisms (Luo and Shankar, 2021). In Portugal, the focus has been on performance management and the perspectives of university managers (Pinheiro et al., 2015).

Tensions and challenges in institutionalising the Third Mission also arise from specific geo-economic and geo-political dynamics. The literature review suggests that some country-specific contexts further affect the approaches to institutionalising the Third Mission. For example, the Germany's federated system with uneven resource management across Lands results in significant regional differences (Hüfner, 2002; Capano, 2015; Koschatzky, 2014; Henke, 2017; Lehmann, 2018). The country reunification process has brought with it disparities between universities in East and West Germany, which has played a role (Pucher, 2016; Hüfner, 2002). In Sweden, the

fragmentation of policy areas within the knowledge triangle (research, education, societal engagement) and a complex research funding system contribute to the challenges (Schwaag Serger, 2016). In Portugal, the concentration of public educational institutions in the nordic region of the country (Alves et al, 2021; Lievore, 2021), where there is a higher concentration of industry and a limited availability of public resources (Teixeira et al., 2014; Koryakina, 2015) have slowed down the institutionalisation processes. In Italy, the low density of industry in southern regions adversely affects the overall economic system and thus also the relationship of universities with the territories both in relation to regional markets and heritage (Nifo et al., 2020; Calvano, 2022). Italy's political instability has also impacted policy coherence and sustainability, and regional differences in economic resources and administrative capabilities affect the educational landscape (Tentoni, 2019; Formari and Giancola, 2010; Ciarini and Giancola, 2016).

Despite progress in embedding Third Mission activities into Higher Education systems, significant diversity persists in how institutions implement these activities. The literature review underscores the complexity and evolving nature of institutionalising the Third Mission in universities, reflecting broader trends and specific regional contexts. Importantly, the success of this institutionalisation also hinges on the institutions themselves.

A of this effort across Europe is the establishment of Knowledge Transfer Offices (KTOs), which universities have developed to support the Third Mission. These offices serve as intermediaries between universities and external stakeholders, managing and facilitating Third Mission activities. Research by O'Gorman et al. (2008) and Aragonés-Beltrán et al. (2017) highlights the critical role of KTOs in translating academic research into societal impact, thereby operationalising the Third Mission. As a further evolution, ad hoc functional bodies have been founded in many countries for information, inspiration and coordination of Public Engagement in the HE sector with the aim of institutionalised and formalised these activities within universities structures and strategies. For example, NCCPE in UK (funded by Research Councils UK) and the association APENET founded in 2018 in Italy ("Italian Network of Universities and Research Institutions for Public Engagement"); the PUBLIC ENGAGEMENT KODEX, in Germany (Cyber Valley, 2022). APNET is working to promote a PE-oriented renewal of the strategic agendas pursued by Italian universities and research centres. In Germany a code containing the first "Principles of public engagement" has been

recently published by the Berlin School of Public Engagement and Open Science (2022); also, a guideline has been elaborated for developing education and public engagement, which has been adopted by Portuguese museums too.

However, the institutionalisation process faces numerous barriers, including organisational and individual antecedents. Naranjo-Africano (2023) points out the significance of support structures, policies, and technology transfer capacity in overcoming these barriers. Literature has emphasised how universities must strategically define their roles within regional, national, or international ecosystems and determine how they will leverage internationalisation, incorporating international, intercultural, or global dimensions (Knight, 2008; Bergan et al., 2018; Farnell, 2020). It has been argued that maturity of this engagement is evident in how institutions recognise and navigate associated opportunities and challenges (Santiago, 2008). Furthermore, there is evidence that individual academics often do not receive the motivational incentives, rewards, or recognition that would encourage their continued involvement in Third Mission activities (D'Este and Perkmann, 2011; Nedeva et al., 2012; Czarnitzki, 2015; Rosli et al., 2016; Torrance, 2019; Bandola-Gill et al., 2021; Pilonato, 2022; Naranjo-Africano, 2023; Püttmann et al., 2023).

2.6 Evaluation of Third Mission

2.6.1 Foundations

With the aim of contextualising the rise of evaluation of Third Mission and supporting the identification of the most relevant traits, it is important to make a short introduction of the evolution of evaluation in the academic world at large. This section contributes to an understanding of how the evaluation of the Third Mission is situated within the broader landscape of higher education assessment, particularly in relation to the more established regimes of research evaluation, teaching assessment, and course accreditation. Through this literature analysis, the chapter provides a conceptual framework that supports the empirical work of this thesis, helping to identify both the continuities and discontinuities in the ways universities are measured, incentisized, and held accountable, including in relation to their expanding societal roles.

At the turn of the century, the advent of evaluation as a defining element of society marked a pivotal shift in the landscape of research and academic institutions (Thomas and Nedeva et al, 2020). The evaluation of research gained significant relevance, as it became essential to assess not just the academic merit but also the broader impact of research activities (Campbell and Felderer, 1997). Consequently, in more recent times, the evaluation of the Third Mission, alongside the monitoring and assessment of social impact, has become increasingly critical (Esko, 2020) generating a socalled 'discourse of impact' (Wróblewska, 2021). The growing focus on the Third Mission underscores the importance of evaluating how academic institutions contribute to societal well-being, innovation, and economic progress (Pinheiro, Benneworth, and Jones, 2012; Kitagawa et al., 2016; Frondizi et al., 2019). This section of the literature review illustrates key studies and reports on the evaluation of the Third Mission, highlighting both the theoretical foundations and practical implications. For this thesis exploring policy literature is a fundamental step in understanding these evaluation frameworks. It serves as a guide for navigating through both institutional and scholarly publications and it constitutes the starting point of the literature review itself, providing a solid base from which to explore and understand the complexities of evaluating the Third Mission and social impact.

Specific literature on Third Mission evaluation often refers to theoretical foundations of evaluation, its merit, and its role (e.g., Furubo, 2002 and 2016; Gorard, 2013; Glaser, 2014; Bonaccorsi, 2015; Bölling and Eriksson, 2016; Bornmann, 2017; Frondizi et al., 2019; Compagnucci and Spigarelli, 2020). exploring the role of evaluation in contemporary societies provides insights into how evaluation has become a central tool for governance, accountability, and improvement across various sectors (Power, 1995; Ozga and Dahler-Larsen et al., 2011; Dahler-Larsen, 2012; Hammarfelt and de Rijcke, 2015). It highlights the societal expectations for transparency, effectiveness, and impact, which are equally applicable to higher education institutions (Grafström, 2017; Püttmann et al., 2023). The review of literature surrounding the evaluation of Third Mission has led to engaging with the scientific field of evaluation as a subject of study (Neave, 2012): from philosophical reflections on the merit of evaluation; through the role that evaluation plays in contemporary societies; through the significance of evaluation in the educational sector, specifically in higher education; and ultimately to a focused examination of Third Mission evaluation. By navigating through these stages, this research aims to contribute to a comprehensive understanding of how Third Mission evaluation frameworks are developed and applied in European universities.

The formulations of scholars who have explored the foundations, pervasiveness, and increasing importance of the 'evaluation phenomenon' in contemporary society such as 'the audit society' (Power, 1995), 'the evaluation society' (Dahler-Larsen, 2012), 'the evaluative state' (Neave, 2012), and 'evaluation as social encounters' (Varriale, 2015) provide a guidance through the exploration of Third Mission evaluation. The interest in and demand for evaluation is increasing internationally (McVicar et al, 2023), affecting all publicly funded sectors to some degree (Power, 1995). Political agendas and fiscal austerity have put higher education institutions under immense pressure to demonstrate accountability for public investments (Koryakina et al., 2015; Ricci and Civitillio, 2017). As significant players in the 'evaluation society,' higher education institutions are not immune to constructing and operating their own "evaluation machines" or adapting to their imposed use (Dahler-Larsen, 2012) emphasising how evaluation has become a pervasive policy tool for governance. According to Dahler-Larsen (2012), evaluation is perceived as a vehicle to promote modern reason through systematic methods, data analysis, and structured processes. In his view, this approach can help eliminate ignorance, prejudice, traditions, and inefficient practices, thereby fostering a more innovative and effective educational environment.

The concept of evaluation in the context of universities has been seen as a driver of modernisation and progress (Gorard, 2013; Benneworth et al., 2015; Pinheiro, 2019) and as such it has raised increasing attention (Compagnucci and Spigarelli, 2020). More explicitly, the idea of the 'evaluative state' (Neave, 2012) refers to the role of government and policy in shaping evaluation practices within public institutions. These theoretical and broad concepts are relevant to Third Mission evaluation as they underscore the policy-driven nature of evaluation practices. They also underline the connection between policies promoting Third Mission activities as part of higher education policy agendas (Curaj, et al., 2012) and the consequent need for robust evaluation mechanisms (OECD, 2018a) to monitor and ensure the effective implementation of these policies. Varriale's view (2015) of 'evaluation as social encounters' suggests that evaluation processes are not just technical exercises but involve complex social interactions and negotiations. This insight is crucial for Third Mission evaluation, which often involves diverse stakeholders, and it helps understanding to which extent the evaluation of these activities is also understood as 'social process', and it is designed as inclusive and context-sensitive evaluation

frameworks that consider the perspectives and interests of all involved parties (Heuritsch, 2021). Furthermore, Dahler-Larsen and Schwandt (2012) have argued that "one way to understand the context of evaluation is in term of its interaction with political culture" (p. 75); in the same paper they conclude that "evaluation practices do not simply interact with context; rather context and evaluation practices are co-constructed" (p. 81). Dahler-Larsen and Schwandt have developed this theory surrounding a case study based on Denmark. Considering that the basis for this research is a multiple set of comparable interviews across four countries it is therefore important to have a look at how the cultural context of evaluation has developed in each of the four countries. This thesis will contribute to the discourse by providing a wider empirical basis.

2.6.2 Contextualising the rise of Third Mission evaluation

The year 2010 marked a turning point in the European higher education landscape, signalling a shift toward greater integration, accountability, and strategic alignment with societal needs. This transformation, however, has unfolded unevenly across countries, shaped by distinct national priorities, institutional traditions, and policy frameworks.

OECD and European Commission jointly published a series of reports on "Supporting Entrepreneurship and Innovation in Higher Education" (e.g., Italy and Sweden). In that year in UK a pilot evaluation exercise confirmed the viability of the case-study approach to impact evaluation, which was then formalised by the Higher Education Council for England (HEFCE) in its guidelines regulating the new assessment (HEFCE, 2011). By then Third Mission evaluation had found its place in national institutional literature production in each of the case study country (see guidelines and report published by ANVUR in Italy, the Green Paper of A3ES in Portugal, and VINNOVA in Sweden). Third Mission has also been object of state laws (in Portugal Law 38/2007, in Italy Legge 240/2010, diverse directives from Wissenschaftsrat in Germany, etc.), which have represented in different ways a key point of the respective institutionalisation processes. Initially left out of the Bologna Process, in a 2014 Bologna Process Researchers' Conference Report, the concept of 'the Third Mission of education' was raised and it brought Third Mission in the innovation agenda of member states when discussing higher education developments (Keeling, 2006; Piro,

2016). The relevance of the Bologna Process on higher education developments has increased attention on the policy's role in education (Keeling, 2006; Adelman, 2009). In 2015, over 190 of the United Nations have signed the "Education 2030" Agenda". Within this policy framework UNESCO supports Member States in building capacity for quality assurance in higher education at global level. At the 2017 Gothenburg Summit, European Union leaders outlined a vision for education and culture. In its December 2017 Conclusions, the European Council called on EU Member States, the Council and the Commission to take forward a number of initiatives, including strengthening strategic partnerships across the EU between higher education institutions and encouraging the emergence by 2024 of some twenty 'European Universities'. The European Commission publishes the final report on the state of university-business cooperation in Europe (EC, 2017) and in 2022 issues a European strategy for universities. While there had been progress recorded across the board in quality assurance (Lima et al., 2008; Pacheco, 2014; Smidt, 2015; Ellen, 2016), the establishment of a genuine quality culture in higher education institutions is still in development in most higher education systems (EURYDICE, 2020).

More recently, institutions have focussed their priorities on how to support and promote a culture of evaluation (OECD, 2020b; Viney, 2022). After the nineties, and growingly after 2010, Third Mission has been the object of several studies and reports published by (inter)national associations - especially in the last decade the scope of the interested was extended to include Third Mission evaluation EUA (2018; 2019), ENQA (2008; 2020), EURYDICE (2023). In recent years there has been a widespread concern on how to ensure a fair and accurate reflection of the quality and diverse impact of research (Bornmann, 2012 and 2016; Cooper, 2017; Derrick, 2018; David, 2019; Bandola-Gilla, 2021; Bonaccorsi, 2020; Fia et al., 2022). In response to these movements, some attempts have been made within academies to start changes in the research evaluation approaches. In this respect documents such as the "San Francisco Declaration of Research Assessment - DORA", issued by the American Society for Cell Biology in 2012 assumes a great relevance in the international panorama. Furthermore, during the meeting "Science and Technology Indicators -STI 2014" that took place in Leiden from 3 to 5 September 2014, also the scientometric community acknowledged the distortions caused by the misuse of the research metrics made available by the community itself. In that occasion Diana Hicks of the Georgia Institute of Technology, Atlanta, USA, presented a first draft of a set of

statements for best practice in quantitative metrics usage, which represents the basis for a new document written in collaboration with other colleagues present at the meeting, which has been published with the title "Leiden Manifesto" (Hicks et al, 2015). Both these documents, generated within academies, have gained international relevance, and are considered important references also in the policy arena for policy developments. In 2022 a process of drafting an Agreement on reforming research assessment was initiated involving more than 350 organisations from over 40 countries and creating the Coalition for Advancing Research Assessment (CoARA). The underlying principles of all three manifestos for research evaluation changes, albeit each with its focus and specificities, are relevant to the Third Mission in Europe as they emphasise more holistic, inclusive, and socially responsible approaches (Sørensen, 2019) to research assessment and ultimately provide frameworks to develop research evaluation systems that include and support Third Mission.

The two subsequent sections serve distinct but complementary purposes. The first, "The constellation of Third Mission evaluation-related themes," offers a broad conceptual overview, mapping the key issues and debates in a broader dimension. The second section, "Evaluation of the Third Mission," narrows the focus to examine how these themes are operationalised in practice, analysing specific approaches, instruments, and frameworks used across different national contexts.

The constellation of Third Mission evaluation related themes

The scholar landscape is populated by a myriad of studies, papers, and reports surrounding evaluation in higher education, covering a wide range of themes directly relevant to the discourse of Third Mission evaluation. The attached table encapsulates the key themes identified through the extensive analysis of literature review and illustrates the complexity and depth of the ongoing discourse surrounding Third Mission evaluation. By focusing on the aggregation of key themes and thematic connections, the table highlights the main points of the literature, making it easier to compare and understand the overall research landscape:

Dimensions /	Evaluation	Evaluation	Normative &	Societal &
Focus Areas	Objectives	Tools &	Critical Issues	Institutional
		Systems		Outcomes

Institutional Evaluation	Evaluation in universities	Quality assurance	Compliance vs improvement	National systems
Research Evaluation	Academic performance	Performance- based evaluation frameworks	Harm of 'measurement and evaluation' in education	International rankings
Third Mission / Societal Engagement	University- society relations	Cultural value	Measurement of societal impact	Democratisation of research
Innovation & Market Interface	University- industry alliances	Economic benefits	Marketisation trends	Technology & innovation accelerators
Organisational Behaviour & Change	Research impact at organizational level	Academic & organisational behaviour	Development of indicators	Entrepreneurial universities
Evaluation Theory / Meta- Evaluation	Merit of evaluation	Evaluation frameworks	Biases in evaluation practice	Evaluation in higher education
Ethical and Social Considerations	Ethical implications	Gender-related challenges	Excellence	HE measurements

Table 2 Aggregation of key themes surrounding evaluation of TM

In the realm of higher education measurements, scholars have investigated into the efficacy and merit of evaluation practices, scrutinising from a critical perspective the potential utility and harms that measurement and evaluation can impose on the educational frameworks (Minelli et al., 2008; Baccini, 2010; Bonaccorsi, 2015). Studies have explored the linkages between HE measurements, academic performance, and quality assurance (e.g., De Rijcke et al., 2016; Kohouteck, 2016). Researchers have been looking at evaluation in relation to the notion of 'quality' (Langfeldt and Nedeva, 2020) and the notion of 'excellence' (Brusoni et al., by ENQA, 2014). Most recently, interest is increasing for the "cultural value" (Oancea et al., 2017 and 2019; Martino et al., 2018; Reed et al., 2018). Building on this growing body of research, this research explores how different conceptualizations of cultural values across European

countries affect both the evolution and the evaluation of the Third Mission in higher education institutions.

As noted by Derrick (2016) a substantial body of research has explored the ways in which evaluation exercises have shaped both academic practices and organisational behaviour within higher education institutions (e.g. Henkel, 1999; Talib, 2002; Butler, 200; Manville et al., 2015; Franssen and de Rijcke, 2019; Kuipers-Dirven et al., 2023). Many studies have been devoted to the development of indicators (García-Aracil and Palomares-Montero, 2009; Azma, 2010; Neresini and Bucchi, 2011; Lepori, 2012; Sobrero and Spigarelli, 2015; Oancea et al., 2017), with an eye on the ambiguity and conflict specifically in the development of Third Mission indicators (Ferrão and Mourato, 2010); some specialising on specific area of disciplines such as social sciences (Cooper and Shewchuk, 2017; Bonaccorsi, 2018). Others have a broader scope, looking at national systems (Sandström and Van den Besselaar, 2018). During the last decade attention has been paid to the development into evaluation frameworks (Glaser, 2014; Ochsner et al., 2018; Segerholm, 2020).

The number of studies fallen in categories correlated to Third Mission evaluation are so many that referencing them shortly does not do justice enough to such an impressive scientific production with a kaleidoscopic ocean of perspectives and interpretations. To give an exemplifying idea of the amount of works and publications, Thomas and Nedeva (et al., 2020) have carried out a study on research evaluationrelated literature. Just by focussing on "institutional performance-based research evaluation arrangements", they have analysed over 350 works constituting what they indicate as the state of the art for that very specific subject. Research has explored approaches to measurements of university-industry alliances (Leydesdorff and Meyer, 2006; Geuna and Muscio, 2009; Perkmann, 2013 and 2019; Brescia et al., 2016) and universities' role as organisational, technology, and innovation accelerators (García-Aracil and Palomares-Montero, 2009). Researchers have also explored the marketisation trends and the economic benefits deriving from Third Mission activities (Salter and Martin, 2001; Perlman et al, 2013). Research has also looked at the nature, scale, and beneficiaries of research impact at organisational level (e.g., Manatos et al., 2017; Oancea, 2019; Cinar and Benneworth, 2021) as well as individual level (D'Este and Perkmann, 2011; Ozga and Dahler-Larsen et al., 2011; Hammarfelt and de Rijcke, 2015; Derrick and Samuel, 2017; Bonaccorsi et al., 2020). At the individual level, the focus has been on understanding how researchers' personal motivations,

career trajectories, and publication strategies are influenced by these trends (Boon, 2022; Watermeyer, 2023). This individual-centric approach highlights the pressures faced by researchers to align their work with broader institutional goals and stakeholders' expectations (Grafström, 2017; Rubens, 2017; Kelchen, 2021; Stolse and Sailer, 2022; Püttmann, 2023). The proliferation of bibliometric data, which has become readily accessible through the internet, has led to a significant rise in the importance of quantitative methods for evaluating research (EP, 2015). In many instances, these quantitative metrics have supplanted the qualitative assessments traditionally provided by peer review. The influence of these metrics has been further magnified by the increasing prominence of international university and research institution rankings (Montesino et al., 2008; Hongcai, 2009; Marhl and Pausits, 2013; Daraio and Bonaccorsi, 2015; Hammarfelt et al., 2017; David, 2019; Kelchen, 2021). As a result, tools that were originally intended to enhance the quality of research, it is argued that are contributing to tensions (Langfeldt and Kyvik, 2011) and critical distortions within the scientific community, such as priorities in publications, opportunistic orientation of research interests, quantity-over-quality approaches, unbalanced resources allocations (Marginson, 2013; Hicks et al., 2015; Abramo, 2017; Kelchen, 2021). This thesis will contribute to this immense body of research by extrapolating key themes that result to be most relevant to academic stakeholders and systematising them within the context of Third Mission evaluation. By filtering and paralleling findings from interviews and literature review, the study aims to provide a structured framework that clarifies how these themes influence the Third Mission.

Third Mission evaluation

Interest in the university-society relations (Nunes Gimenez and Bonacelli, 2021) has steadily grown. This increasing focus is evident across various studies and reports, emphasising the pivotal role universities play in societal development and innovation (Etzkowitz et al., 2000; Benneworth et al., 2010).

As a prelude to the section dedicated to the *evaluation of the Third Mission*, it is important to acknowledge a related and foundational body of literature concerned with the *measurement of societal impact*. Emerging in the early 2000s, this strand of research initially centred on assessing the impact of science before expanding its scope to encompass broader societal outcomes (Bornmann, 2013; 2017). The

inclusion of 'impact' in the UK Research Excellence Framework in 2014 (UKRI, 2022) marked a pivotal moment, triggering deeper inquiry into how societal contributions of research can be captured and evaluated. Scholars such as Derrick (2013; 2014), and more recently Pan and Pee (2020), have offered key conceptual and methodological insights into this field. These debates are particularly relevant for understanding the conceptual underpinnings and evolving criteria used in the evaluation of the Third Mission.

A relevant body of research has also indicated that universities contribute significantly to regional economic growth and social cohesion through knowledge transfer and community engagement. Albulescu (2014) provides a foundational exploration of how universities can serve as catalysts for regional innovation and development. His research underscores the importance of universities not only as educational entities but also as active contributors to local economies through partnerships with industry and government. This perspective is echoed by Bonetti and Villa (2014), who delve into the mechanisms through which universities can effectively engage with their communities, emphasising the role of knowledge transfer and collaborative projects in driving societal progress. Privitera (2019) shifts the focus to the internal dynamics within universities that enable effective societal engagement. Farnell (2020) takes this a step further by exploring the role of universities in addressing global challenges, such as sustainability and social justice. His work emphasises the moral and ethical responsibilities of academic institutions to contribute to the broader societal good. Farnell argues that universities, as centres of knowledge and innovation, have a unique capacity to address pressing global issues through interdisciplinary research and community engagement. More recently, scholars (e.g., Petersen et al., 2022) have investigated the impact of digital transformation on university-society relations. Furthermore, recent publications have highlighted the evolving dynamics of these relationships in the context of globalisation and technological advancements (Cunningham et al., 2014; Perkmann et al., 2021). Queirós (2023) provides a contemporary analysis of the evolving expectations and roles of universities in society. These studies illustrate the critical importance of fostering strong, reciprocal partnerships between academic institutions and their surrounding communities. Scholars such as Jongbloed et al. (2008), Breznitz and Feldman (2012), Pinheiro et al. (2015 and 2017), Rubens (2017), Talent (2022), and Petersen et al. (2022) have all contributed to this understanding. They collectively emphasise that for universities

to truly benefit society, they must engage in meaningful and sustained collaboration with local, regional, and global communities, leveraging their resources and expertise to address complex societal issues and drive innovation.

Hidden tensions of Third Mission evaluation

While much of the literature and policy discourse focuses on the potential benefits of the Third Mission, critical voices have emerged within the scholarly landscape, bringing to light the unintended, and often overlooked, tensions embedded in evaluation frameworks across the academic world. These critiques highlight not only systemic distortions caused by the push to quantify societal impact, but also the numerous barriers that hinder meaningful engagement with Third Mission activities. An important concept introduced by Derrick et al. (2018) is "grimpact", which refers to the unintended negative consequences of research evaluation and impact measurement policies on academic and institutional practices. This concept underscores the complexity and potential drawbacks of implementing evaluation frameworks and it will be explored by comparing consequences of policy interventions in each of the case study country. The concept is well suited to address the unexpected consequences for individuals and institutions occurred with the raise of Third Mission and its evaluation.

Also, barriers to achieve the real capacity for innovation both in academia and society have been explored, such as, for example, gender-related challenges (Teelken and Deem, 2013; Brooks et al., 2014; Sugimoto, 2015). Barriers of internal organisational and cultural nature have also been object of observations, such as for example the fact that engaging in Third Mission activities has been seen as impediment for the 'true' academic work (Göransson and Brundenius, 2011; Philpott et al., 2011; Predazzi, 2012; Shore and McLauchlan, 2012). Consideration has been given to related moral and ethical implications of marketisation of research impact (Chubb and Watermeyer, 2016). The literature review also indicates interests in Third Mission and Research Impact as instrument to achieve the policy-driven effect to democratise research (Derrick and Pavone, 2013; Bianco, 2016).

Together, these studies support a more critical and reflexive understanding of how Third Mission policies are experienced on the ground and are relevant to this thesis as they help identify the unintended effects of evaluation frameworks across different national contexts. They enrich the cross-country comparative analysis by offering

conceptual and empirical tools to assess not only what is evaluated, but also what is silenced, marginalised, or distorted in the process.

2.6.3 Third Mission evaluation in country-specific literature

In all four examined countries Third Mission and Third Mission evaluation have been at the core of open debates. Third Mission evaluation has been object of a number of relevant studies specifically focussed on each of the examined countries: in Italy (Frondizi et al., 2019; GSA AIDEA report, 2019; Taliento, 2022); Germany (Löwenbein, 2008; Roessler, 2015; Henke et al., 2017); in Portugal (EUA, 2018; Sin, 2018 and 2019; Pinto, 2021); in Sweden (Helstrom et al., 2013; Benneworth et al., 2015). The following sections illustrate the specific literature surrounding Third Mission evaluation in each of the four case-study country with the aim to provide a framework for understanding how these evaluations are conducted, their challenges, and their impact on policy and practice. Together, these literatures provide a detailed understanding of Third Mission evaluation practices in each of the different national contexts. This constitute the comparison structure agains which the insights coming from interviewees will have to be confronted and compared.

Literature on Third Mission evaluation in Germany

In a detailed study about Evaluating Academic Research in Germany, Campbell and Felderer (1997) have presented a series of potential cultural reasons that has determined the »antievaluation« attitudes of German academic university communities, which appear to be the product of a distinct historical tradition and thus are deeply rooted in academic culture. They have identified two types of reasons: structural (such as size, geo-political structure and historical division of the territory) and cultural (Humboldtian principle of the Unity of Teaching and Research; consensus-oriented society which does not conceive competition as a mean for improvement). In those years Müller-Böling (1995) argued that the German university sector was guided by the idealised conceptual belief that an ex-ante quality control for universities and university research is possible. Therefore, policy makers – who accepted this conceptual approach – preferred to invest their activity in developing a system or regulatory framework of quality checks and quality thresholds that already in advance, this means ex-ante, should have the capability to promise a high-quality

output of university performance (Campbell and Felderer, 1997). They concluded that Germany as a society had generated such favourable conditions that it could afford the "luxury" of a university system that relied on some ex-ante control principles but without rigorous ex-post quality checks. Schmidt et al (2010) starting from theoretical and conceptual reflections, argue that higher education evaluation practices in Germany are trending towards increased emphasis on accreditation. This trend encompasses not only the procedures and agencies responsible for accreditation but also includes the evaluation of various faculties and the growing influence of university rankings (David, 2019; Kelchen, 2021). After 2014, Third Mission of universities has evolved significantly in Germany (Stolse and Sailer, 2022). The framework for this mission has been shaped by political directives and the universities responses to these policies as highlighted by Berghäuser and Hoelscher (2020) who explore how German universities have reinvented their Third Mission, adapting to political frameworks and enhancing their societal roles. The evaluation of academic research in Germany has traditionally focused on scientific excellence, but there has been a shift towards incorporating societal impact. Campbell and Felderer (1997) discuss how the patterns and policies of research evaluation have evolved to reflect this broader scope. The integration of New Public Management principles into the governance of universities has further influenced this shift, as de Boer, Enders, and Schimank (2007) explain in their comparative analysis of governance systems in Europe. Capano (2015) highlights the federal dynamics of governance in education in Germany, noting that the decentralised nature of the system poses unique challenges and opportunities for implementing the Third Mission. This federal structure allows for diverse regional interactions between universities and industry, which are essential for fostering innovation and economic development. Evidence of such interactions is provided by the Fraunhofer Institute's 2014 report on new forms of regional collaboration.

The historical context of higher education reform in Germany (Struhkamp, 2007), particularly the challenges and opportunities presented by unification, is discussed by Hüfner (2002). This context is important for understanding the current landscape of higher education, its societal role and the cultural context in which they evolve (Koschatzky, 2014). The financial aspects of higher education, as examined by Loevenbein (2008) and later by Teichler (2018), reveal both intended and unintended consequences of recent policy changes, which also affect the Third Mission. Evaluation practices in Germany have been critiqued for their focus on scientific output

at the expense of broader societal contributions. Kuhlmann (1998, 2003a and 2003b, 2008) provides a critical perspective on research evaluation, advocating for a more comprehensive approach that goes beyond traditional impact measurements. This critique is echoed by Schmidt et al. (2010), who analyse the higher education evaluation landscape in Germany. Schmidt et al. (2010) examines the implementation and outcomes of evaluation practices within various organisational contexts, shedding light on how different stakeholders perceive and react to evaluation processes and the implications for organisational learning. The conditions of service for academic staff, as documented by Eurydice (2023), also play a crucial role in shaping how universities can fulfil their Third Mission. These conditions impact the ability of academics to engage in public discussions and contribute to societal debates, a topic explored by Orr and Paetzold (2006) and more recently by Püttmann, Ruhose, and Thomsen (2023). Their study provides experimental evidence on the factors influencing academics' willingness to participate in public discourse. Leadership and strategic vision are crucial for advancing the Third Mission, as Stolze and Sailer (2022) argue. Their research underscores the importance of dynamic capabilities in higher education institutions (HEIs) and the role of leadership in aligning institutional goals with societal needs (Stolze and Sailer, 2022). This alignment is necessary for universities to effectively contribute to societal challenges and drive innovation. The impact of the economic crisis on university efficiency (Šušteršič, 2018; Lehmann et al., 2018), also highlights the resilience and adaptability of German universities in fulfilling their Third Mission. Despite financial constraints, universities have continued to engage with society and foster economic development.

Literature on Third Mission evaluation in Sweden

In Sweden, the evaluation of the "Third Mission" of universities, which includes their societal contributions beyond teaching and research, is gaining substantial attention and development. In the early years of the 21st century the interest focussed on indicators. For example, Jacobsson and Rickne's study (2004) challenges conventional views on the academic sector's size and composition through the lens of science and technology indicators. A decade later Karlsson (2014) explores, with critical eyes, the nature, implementation, and consequences of various evaluation practices in the context of Swedish higher education. Meanwhile, the Swedish Research Council publishes the FOKUS report (2025), which stands for "Forskningens

kvalitet och utvärdering" / "Research Quality and Evaluation", is a comprehensive evaluation project aimed at understanding and improving the quality of research conducted at Swedish universities and research institution. Furubo (2016) supports this by advocating for the integration of comprehensive evaluation mechanisms that capture the multifaceted contributions of universities to society. Stockmann and Meyer (2016) underscore the significance of establishing rigorous evaluation frameworks to measure the impact of these activities. Bölling and Ericsson (2016) provide insights into the practical implementation of these evaluations, stressing the need for adaptable methodologies that reflect the unique contexts of different institutions. Nordesjö's study (2019) contributes significantly to understanding how evaluation approaches change between contexts by studying them in relation to their social, cultural, organisational, and political settings. His research describes and analyses how the European Union's ongoing evaluation approach was translated within Swedish public administration. In 2019 is also published, under the curation of Segerholm et al., a scholarly book that explores the complex interplay between governance, evaluation, and knowledge production in the context of Swedish higher education. Segerholm (2020) highlights the importance of adhering to established standards and guidelines to ensure consistent and reliable evaluation practices.

Literature on Third Mission evaluation in Portugal

Varela de Freitas (2001) initially emphasised the importance of integrating universities more deeply with societal needs, advocating for frameworks that measure the impact of community engagement, innovation, and knowledge transfer. Ferrão and Mourato (2012) and Pacheco (2014) further developed this perspective, arguing for the need to create comprehensive evaluation systems that include both qualitative and quantitative metrics to capture the diverse impacts of university activities on society. According to Sin et al. (2019), effective Third Mission evaluation in Portugal must consider regional development, social innovation, and cultural engagement, ensuring that universities contribute to societal well-being in multifaceted ways. According to Sin et al. (2019), despite these advancements, the evaluation of Third Mission activities remains underdeveloped in Portugal, with efforts still in the early stages of conceptualisation and implementation. Koryakina et al. (2015) highlight the challenges and opportunities in implementing these evaluations, stressing the importance of

aligning evaluation methodologies with European standards while also adapting them to the unique Portuguese context.

Literature on Third Mission evaluation in Italy

Like in UK the introduction of 'impact' in the Research Excellence Framework in 2014 (UKRI, 2022) marks a significant milestone in this discourse, in Italy literature review shows that the National Agency for the Evaluation of Universities and Research Institutes (ANVUR) has played a pivotal role in defining and evaluating this mission (Rebora, 2012; GSAAIDEA, 2018). In the 2013 document, ANVUR outlines the indicators for Third Mission activities, emphasising engagement with external communities and knowledge transfer as key components. This framework was further refined in 2015 with a detailed manual for evaluation, illustrating a comprehensive approach to assessing university contributions beyond academic boundaries. By 2016, ANVUR's evaluations included comparisons among universities and research entities, highlighting best practices and areas for improvement. This initiative culminated in a workshop held in Rome, which provided a platform for stakeholders to discuss the impact and future directions of the Third Mission. The subsequent years have seen a continuous evolution in the assessment methodologies and an increasing recognition of the Third Mission's importance. From the early stages scholars have interpreted Third Mission in a broad and holistic way (Rizzi and Silvestri, 2002; Santagati, 2017) encompassing a diverse range of activities, from fostering cultural development to enhancing regional economic growth, thereby necessitating a robust and multi-faceted evaluation framework (Rebora, 2012). According to Urbano (2019), this evaluation is crucial for understanding how universities contribute to societal development through activities such as public engagement, knowledge transfer, and innovation. Together, these works underscore the evolving landscape of higher education in Italy, where Third Mission activities are increasingly recognised and systematically evaluated for their societal benefits. Frondizi et al. (2019) provided a theoretical framework and applied it to Italian universities, emphasising the need for comprehensive assessment metrics that capture the breadth of universities' societal impact. Blasi et al. (2019) introduced a novel method for evaluating Third Mission activities underscoring the importance of tailored evaluation frameworks that reflect the unique contexts of different universities and suggesting that metrics should include

both quantitative and qualitative indicators to capture the full spectrum of university contributions to society. Calvano's 2022 analysis of the VQR-Third Mission 2015-2019 report, critically examines the opportunities and contradictions inherent in the Third Mission and underscores the challenges universities face in balancing traditional academic goals with broader societal contributions. This analysis reveals the complexities and sometimes conflicting demands placed on higher education institutions as they strive to fulfil this expanded role. Donatiello and Gerardini (2019) cautioned against the surrogate use of university spin-offs as a simplistic metric for evaluating societal impact. They argued for more nuanced indicators that accurately reflect the diverse contributions of universities. Cassella (2017) adds to this discourse by detailing the evaluation processes, including the specific metrics and criteria used to measure success of activities related to libraries. The review of the Italian scholar literature also includes specific original perspectives such as the role of university museums in the Third Mission and the related challenges in evaluation (Cassella, 2017; Corradini, 2019). Research (Talent, 2022) has also analysed the interplay between the three core missions of universities (education, research, and societal engagement) in Italy, highlighting how integrated performance evaluation can enhance overall institutional effectiveness and societal contributions.

Third Mission's evaluation in comparisons

There is a rich corpus of comparative studies which analyse higher education systems, reforms, and practices across different European countries. They all address Third Mission related themes and reviewing them helps in identifying similarities and differences. It also provides a solid basis for the further comparison to be executed in this study. In many of these UK is taken as a point of reference in discussions about the Third Mission of higher education institutions (de Boer et al., 2007; Rebora and Turri, 2013; Geuna and Piolatto, 2015; Sivertsen, 2017; Ploner and Nada, 2020). Marketisation of Higher Education in Italy and England is addressed by Cini (2018) offering a critical perspective on resistance movements that counter neoliberal reforms. These movements emphasise the importance of preserving the public good aspect of universities' missions, highlighting a common struggle in maintaining educational integrity amidst growing market (García-Aracil and Palomares-Montero, 2010; Alves and Tomlinson, 2021) and societal pressures (Secundo, 2017). Geuna

and Piolatto's (2015) analysis of research assessment in the UK and Italy illustrates the complexities and costs associated with such evaluations (Checchi, 2019). While they acknowledge the challenges, they also highlight the potential benefits, at least for a while, suggesting a nuanced view of the value of research assessments.

There are also studies employing a comparative approach, to examine higher education systems in England and Portugal. A study (Alves et al., 2021) on the changing value of higher education in England and Portugal examines the impacts of massification, marketisation, and the public good, providing a comparative analysis of how these higher education systems evolve under similar pressures but within different socio-political environments. Complementing this, Deem's research on evaluations in the UK and Portugal highlights both the differences and similarities in higher education assessment practices, offering crucial insights into the broader European context of research evaluations. Additionally, Ploner and Nada's (2020) investigation into international student migration from the perspectives of Portugal and the UK provides a unique lens on the mobility experiences. Together, these studies offer a comprehensive understanding of the evolving landscape of higher education in England and Portugal, encompassing value changes, evaluation practices, and international dynamics.

In examining the Third Mission evaluation, two studies present direct comparison of Italy and Portugal. Donina and Hasanefendic (2019) examined higher education governance reforms across Italy, the Netherlands, and Portugal. Their study underscores the necessity of policy translations that strike a balance between homogeneity and respect for local contexts. Urbano's analysis (2019) of higher education systems in Mediterranean countries provides a comparative overview of the historical construction, policy, and evolution of key indicators. The analysis (Lehmann, 2018) of economic crisis and university efficiency in Germany and Italy provides a comparative view of how economic downturns impact higher education. This thesis is critical in understanding the varied resilience and responses of universities in different economic and cultural contexts. Sweden is often explored within the context of the Nordic countries and compared with Finland, Noway and Denmark (Froestad and Bakken, 20024; Gornitzka and Maassen, 2011; Elken et al., 2016; Gustavsson et al., 2016; Pinheiro, 2019; Sørensen et al., 2019; Schnurbus and Edvardsson, 2022; Holmén, 2022).

The theme 'Third Mission and the region' has been explored by comparing UK, Sweden, and Austria (Trippl et al., 2012). There are some studies which could be collected in a specific strand, namely, studies based on the use of international dataset for a comparative analysis. For example, Wolszczak-Derlacz (2011) examines HEIs' efficiency by focusing on the dual mission in 10 European countries (Austria, Finland, Germany, Italy, the Netherlands, Poland, Spain, Sweden, Switserland, and the UK). Using a European dataset, Daraio et al. (2015a) conducted an analysis of teaching and research efficiency of 400 HEIs from 16 European countries for the 2008/09 academic year. Likewise, Daraio et al. (2015b) propose a new technique to rank universities according to their research and teaching missions. In these cases, however, it is extremely difficult to extract and compare data on Third Mission activities (Degl'Innocenti, 2019).

Bonaccorsi (2015) has noticed that a vast majority of the comparative studies, focuses, in a way or the other, on assessment methodologies and indicators (e.g., Lepori, 2012; Zacharewicz et al., 2019). While cultural and political ratios underpinning the evaluation frameworks have been considered in generic terms, they have not been yet systematically analysed (Bonaccorsi, 2015), especially not in a multi-country comparative perspective (Thomas and Nedeva, 2020).

2.7 Third Mission in the European Agenda

By examining key European policies, reports, and strategic documents, this thesis has provided an analytical framework for the empirical research to explore how the Third Mission is being integrated into higher education systems across Europe, highlighting the importance of local adaptations and the challenges faced in achieving these ambitious goals. The relationship that links the national university systems to the institutional framework of the European Union is a topic that is receiving everincreasing attention and space (Verderame, 2009; Santos, 2016). A strong focus of the discussion at EU level is dedicated to finding ways toward promoting a pan-European agreement for "the Europeanisation of higher education" (Schmidt et al., 2010). The Lisbon Strategy, covering the period between 2000 and 2010 (European Commission, 2003), heavily emphasises the universities' ability to support the economy by fostering innovation, collaborating with business, and developing human capital (Maassen and Stensaker, 2011). However, "societal development" was given

more weight in the EU2020 Strategy that followed. The EC's Renewed Agenda for Higher Education (European Commission, 2017) reinforced this notion of the "societal" even more, making it the first EU policy statement to give universities priority in engaging with the broader society. In fact, "building inclusive and connected HE systems" is one of the Renewed Agenda's four pillars, indicating a major emphasis on community engagement that is separate from innovation: "Higher education institutions are not ivory towers, but civic-minded learning communities" (European Commission, 2017, p. 6). The same elements emerge from various international reporting published by international institutions where Third Mission is specifically mentioned (e.g. OECD, 2008; EURYDICE, 2014; EUA, 2019; EURASHE and ENQA, 2020; etc).

The trilogy published by CEDEFOP (Descy and Tessaring, 2004) which includes the volumes dedicated to "The foundations of evaluation and impact research", "Evaluation of systems and programmes" and "The value of learning Evaluation and impact of education and training", constitutes a key publication with reflections on the philosophy and types of evaluation, methods and limitations, competences in evaluation as well as assessment frameworks, which will be then singularly further developed both in institutional and scholar literature. In the same year, the importance of quality assurance was underlined in the Joint Interim Report of the Council and the Commission, submitted in March 2004, on the implementation of the detailed work programme on the follow-up of the objectives of education and training systems in Europe (EC, 2004) Proposed by the European University Association and backed up by the European institutions the Vision 2030, universities without walls indicates the pathways for transforming higher education and emphasises the importance of breaking down barriers between universities and the wider community, fostering greater collaboration, innovation, and inclusivity.

According to the European Commission (2020), the *Social Dimension Coordination Group* observed in its Stocktaking Report dated 2009, that although nearly all countries had initiated measures to promote participative equity in higher education, only a limited number had developed monitoring mechanisms. Even fewer had adopted a comprehensive and integrated strategy aligning governmental actions with institutional efforts across areas such as funding policies, lifelong learning, recognition of prior learning, support for cultural and linguistic minorities, guidance services, communication and social policies, anti-discrimination measures, and fiscal

frameworks. Based on this assessment, the group concluded that significant progress was still needed to fully achieve the objectives related to the social dimension of higher education. Yağcı (2014) judged the social dimension 'stuck in the agenda-setting stage of the Bologna Process, because of the implementation problems it entails and for which no clear policy means have been defined so far'" (EURYDICE, 2020). In fact, the concept of 'the Third Mission of education' was raised in the Bologna Process Researchers' Conference Report only in 2014.

2.8 Third Mission: Changes and Effects

This thesis will explore the effects that the evolution of Third Mission, its institutionalisation and its evaluation have generated in European higher education. To this end scholar literature concerning theories and practices of changes in universities has been considered and analysed. There is a wide literature surrounding the dynamics of changes at the national (mega), university (macro) and researcher (micro) levels (Nedeva and Boden, 2012; Nedeva, 2013) and the intertwined implications for the decisional system, the organisational structures, and the individual performance (Ozga and Dahler-Larsen et al., 2011; Hammarfelt, de Rijcke, and Wouters, 2017). It has been argued that new conceptualisation and missions radically change the nature of universities as sociologist-organisations (Gläser & Whitley, 2014). Tensions between international trends, national reforms and organisational challenges have been under the lens of including non-trivial critics to political intentions and policy design (Capano and Regini, 2014), generating animated and controversial debates, many of which are still open.

The effects of universities' reforms in name of Third Mission recognition on organisational governance and performances have also been looked at in a comparative perspective (Amaral, 2002; Donina, 2019; Pinheiro et al., 2019; Hilliges, 2020). Universities worldwide have experienced significant systemic transformations driven by globalisation, technological advancements, and policy reforms. One of those transformations is the blurring of boundaries as Primeri & Reale (2015) have evidenced, referring to "the move beyond sectoral and disciplinary boundaries and the increasingly blurred boundaries of academic professions and of scientific work" (p. 11). However, this thesis expands the perspective by identifying further effects and types of boundaries that are transformed by the raise of Third Mission. The Bologna Process

is an example of systemic change, aiming to harmonise higher education systems across Europe. Witte, van der Wende, and Huisman (2008) discuss how this process has blurred the boundaries between university and non-university higher education institutions in countries like Germany, the Netherlands, and France, fostering a more integrated and comparable European Higher Education Area. They used the term 'deinstitutionalisation' with reference to the standardisation of degree types through the Bologna Process (Witte et al., 2008). Interestingly, this becomes relevant also for Third Mission, for example Geuna and Rossi (2011) highlight how these changes have prompted universities to adopt more entrepreneurial approaches, balancing their traditional educational missions with innovation and commercialisation activities.

Institutional changes within universities often stem from external pressures and internal strategic decisions. Ansell (2008) explains that universities must navigate a complex environment of political, economic, and social influences to maintain their relevance and effectiveness. This requires adaptive governance structures and strategic agency to foster regional innovation systems, as explored by Benneworth, Pinheiro, and Karlsen (2017). The shift towards the "entrepreneurial university" model illustrates significant institutional change (Vorley and Nelles, 2009; D'este and Perkmann, 2011; Barrioluengo, 2016). Rubens et al. (2017) describe how universities are increasingly engaging in third-mission activities, which are affecting dynamic capabilities and leadership alignment, as discussed by Stolse and Sailer (2022) and in Etzkowitz and Zhou 2008. Moreover, the Excellence Initiative in Germany represents a paradigmatic change in university policy, aimed at fostering research excellence through competitive funding and structural reforms (Hartmann, 2009). This initiative underscores the importance of quality assessment and accountability in driving institutional change, as noted by Brennan and Shah (2000) and later on by Laredo (2007) and Trierweiler (2021).

At the individual level, changes in higher education impact both faculty and students, shaping their experiences and roles within the university (Wouters, 2014). For institutions, the push towards internationalisation and increased research output has altered academic careers and expectations. Nellis and Slattery (2012) discuss how demographic trends and internationalisation have introduced new challenges and opportunities for academic staff, including greater collaboration and competition. Academic attitudes towards public engagement and the dissemination of research are also evolving (Armbruster-Domeyer, 2011; Reed et al., 2018; Weingart et al., 2021;

Teodorowski et al., 2021; Featherstone, 2022). In a time when academics face mounting pressure from performance evaluations and a culture centered on citations (Wouters, 2014), there is growing concern about how this environment impacts scholarly behavior beyond conventional research outputs. Püttmann et al. (2023) delve into this issue, emphasizing that the decision for academics to participate in public discourse is not solely driven by individual initiative but is significantly shaped by the surrounding academic ecosystem. They argue that institutional support—manifested through resources, recognition, and encouragement—plays a pivotal role in motivating scholars to engage with broader audiences and contribute their expertise to societal discussions.

For students, the modernisation of higher education involves a greater focus on employability and skills development. EURYDICE (2011) emphasises the need for funding models that support social inclusion and lifelong learning, ensuring that higher education remains accessible and relevant in a rapidly changing world.

However, despite the momentum for change, there are significant barriers to achieving true cultural and organisational transformation in universities. These barriers can create unwanted consequences and generate contradictory behaviours both at institutional and individual levels (Di Bernardino and Corsi, 2018; Mariani et al., 2018; Franssen and de Rijcke, 2019). One of the primary institutional barriers is the resistance to change inherent in established academic cultures. Universities, as longstanding institutions, often have deeply ingrained traditions and practices that can impede the adoption of new paradigms. Bruckmann and Carvalho (2018) note that understanding and overcoming these archetypal structures is crucial for effective change management in higher education. Additionally, policy reforms and initiatives, while well-intentioned, can sometimes produce unintended consequences. For example, the Excellence Initiative in Germany has been criticised for fostering a competitive rather than collaborative academic environment, which can undermine collegiality and the sharing of knowledge (Hartmann, 2009). Similarly, the focus on quantifiable research outputs and rankings can detract from the broader educational and societal missions of universities, leading to a narrow definition of academic success (Montesino et al., 2008; Hongcai, 2009; Marhl and Pausits, 2013; Daraio and Bonaccorsi, 2015; Hammarfelt et al., 2017; David, 2019).

At the individual level, faculty and students may experience contradictory pressures. Faculty members, for instance, are often expected to excel in research, teaching, and

community engagement simultaneously. This can create conflicting priorities and stress, as highlighted by Krücken and Meier (2006), who discuss the challenges of turning universities into organisational actors capable of balancing diverse demands. Students, on the other hand, may face the dilemma of pursuing education for personal and intellectual growth versus the pressure to acquire skills solely for employability (Cardoso et al., 2012; deWitt, 2020; Ibarra-Sáiz et al., 2021).

Cultural resistance to change is another significant barrier. As observed by Hunter (2015), internationalisation and modernisation efforts (Kwieck, 2012; Gorard, 2013; Epuran, 2016) often encounter scepticism and opposition from those who are accustomed to traditional ways of operating. This cultural inertia can slow down the implementation of innovative practices and hinder the overall progress of reform initiatives (Meek et al., 2005). Furthermore, organisational inertia, characterised by rigid administrative structures and bureaucratic processes, can stifle creativity and responsiveness. Siemens and Matheos (2010) emphasise the need for systemic changes that address these structural impediments to foster a more agile and adaptive higher education system. Furthermore, Sutrisno (2018) has noted that universities have the option to internationalise their missions and activities in order to improve the quality of higher education and have a positive impact on the wider society. However, not much has been explored in terms of how this is concretely operationalised in each country.

2.9 Expected contributions of this thesis

The literature reviews indicates that in all four countries, the knowledge economy serves as a dominant economic narrative (EUA, 2019). The interlinkages between educational policies at European and national level has been object of several studies (Giuliani, 2015; Dakowska, 2019) as it is of considerable importance for achieving the objective of creating a European Higher Education Area (Costes, 2008; Curaj, 2012; EC, 2018 and 2021). Studies have highlighted discernible drivers for changes in European Higher Education systems such as institutional autonomy and accountability (Ricci and Civitillio, 2017; Oancea, 2019; Legrottaglie, 2019; Colombo, 2022; Wilson et al., 2023). However, while shifts are observable in all four countries, they manifest differently (Turri, 2012; Chessa & Vargiu, 2014; Bartlett and Vavrus, 2017). The trajectories of each case study country are deeply rooted in their distinct cultural,

economic, and social system (Bourelos et al., 2012; Perkmann, 2013; Chessa & Vargiu, 2014; Kromydas, 2017). Building on the recognition of these transnational trends, this research explores how national contexts respond to this shared overarching context. By investigating the degree of variation among Sweden, Germany, Portugal, and Italy, this thesis provides, within a unique research framework, a systematic analysis of the multifaceted aspects surrounding Third Mission evaluation that in previous studies have been tackled singularly. Consequently, this research contributes to the discourse by offering a nuanced, comparative perspective of how context affect shaping evaluation frameworks and answers the quests for a more holistic and comparative approach expressed by Bonaccorsi (2015) and Thomas & Nedeva (2020).

2.10 Summary of Chapter 2

Chapter 2 of this research includes an extensive literature analysis surrounding the key aspects of the Third Mission, which are the focus of this thesis. The introductory section illustrates how sources and searches have been meticulously used to inform the analysis, providing a clear methodology for the literature review. This thorough approach ensures that the review is comprehensive and well-grounded in existing scientific work. The chapter is structured into specific sections that delve deeply into the conceptualisation, institutionalisation, and evaluation of the Third Mission. Each of these sections is subdivided to cover theoretical foundations, practical implementations, and country-specific literature.

Chapter 3 - Methodology

3.1 Introduction

The European Union has articulated a range of strategies and policies to advance the vision of the European Education Area and the European Research Area. However, there is significant disparities in how these initiatives are understood and implemented across member states. As a result, national higher education systems are responding to the associated challenges in diverse ways. In this context, stakeholders increasingly emphasize the need for coherent and coordinated university strategies as a critical precondition for realising the EU's broader ambitions. Thus, universities are more and more requested and expected to contribute generating solutions to socio-economic problems and grand societal challenges. This involves universities in their entirety engaging all three universities' missions: teaching, research, and their relationships with society. On one side, important step have been achieved towards harmonising teaching throughout Europe via the Bologna Process; and relevant achievements have been made in strengthening a European research space, through international collaboration within the Framework Programs (e.g. Horizon). On the other side, stakeholders have expressed the need for contributing stronger towards reaching a common understanding of the emergent Third Mission of universities (Hochstein, 2022). This is putting universities' Third Mission at the core of European Union's policy targets. The interest is high also in the research-on-research agenda.

As illustrated in Chapter 2, Third Mission is preliminarily investigated, based on an extended analysis of the wide scholar, institutional and grey literatures. The introductory analysis of the institutional documentation together with the identification of the theoretical framework on the basis of the literature review has allowed the declination of the research questions useful for achieving the proposed aim:

- 1. How is Third Mission conceptualised in the specificities of each country context?
- 2. How is Third Mission institutionalised in the specificities of each country context?
- 3. How evaluation of Third Mission develops within the specificities of each country context?
- 4. How do country-specific evolution and evaluation of Third Mission relate to the European broader perspective?

5. How is Third Mission and its evaluation impacting on key stakeholders?

This chapter sets out the philosophical stances (Section 3.2) and the foundations of the research methodology (Section 3.3) of this thesis. The research design, built on Case Studies (CS) and broadly inspired by Grounded Theory (GT), is outlined in Section 3.4. While the comparison framework is described in Section 3.5. The case studies is explained in Section 3.6. Section 3.7 is dedicated to interviews (with its subsections for sampling, saturation, profiling, etc). Data analysis (including challenges for multilinguality) are treated in Section 3.8. The chapter closes with ethical considerations in Section 3.9.

3.2 Philosophical stance

The analysis of the existent literature constitutes a solid propaedeutic foundation of this study. This has evidenced that explorative research is required in order to be able to theorise answers to 'why' questions (Charmaz, 2012). A fine-grained inductive analysis of how people construct actions and meanings can lead to theorise answers to 'why' questions, although the 'why' might emerge with the 'how' (Charmaz, 2012). This thesis focused on how and why the developments of Third Mission occurred through times and across countries. Yin (2009) argues that using case study research is useful when the focus of the research questions are "how" and "why" problems. Following his line of reasoning, this thesis gathers qualitative information within specific cases in order to gain understanding on a broad scope and contribute to answering the research questions.

The intention to investigate the choices, the challenges, and the trade-offs of Third Mission by looking comparatively at national frameworks in Europe has led to the exploration of 'how' Third Mission has developed. For this purpose, there is a need for achieving a broader representation of the overall complexity. Expanding knowledge on Third Mission within a comparative context (Püttmann, 2022) requires an empirical approach capable of grasping how people construct actions and meanings. Oancea (2011) has developed a methodological approach, further refined and tested in Oancea (2017), which emphasizes the importance of networks, interaction, intersubjectivity, configurations, texture, and flows in developing an understanding of the discourses and practices related to research impact and cultural value. While this

approach is not directly applied as a technique in this study, it serves as a source of inspiration together with the understanding of views, environment, history, institutional context, and culture of a variety of actors as a mean to gain understanding about the evolving world around them (Denzin and Lincoln, 2011). This approach requires a fine-grained inductive analysis (Charmaz, 2012) so as to include the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them (Denzin and Lincoln, 2011). To achieve the 'level of visualisation' (Denzin and Lincoln, 2011) needed to investigate the deep ratios underpinning. Third Mission evolutions 'in their natural settings' specific representations must be used. This is why the 'how' has become the key to the research questions of this study.

To get answers the research has to look at 'how' processes unfold, which actors influence them, and how to trace linkages over time in different spaces and at different scales (Bartlett and Vavrus, 2017). This is possible by using inductive interpretivism (Gray, 2009), which puts an emphasis on seeking the views and perspectives of participants. In general, the interpretive and inductive perspective, aiming to understand actors' meanings, privileges meaning-oriented methods for data collection and representation (Charmaz, 2012). Among those interviewing appears to be the most suitable instrument for this thesis.

The approach of this qualitative research is configured as a situated activity, which places observation in reality: it is made up of a set of interpretative and factual practices through which reality acquires visibility (Denzin and Lincoln, 2011). By listening to the voices of a wide range of actors across different countries, this investigative process gradually allows to attribute meaning to phenomenon, through comparison, categorisation and classification of the thematic object of this research (Miles and Huberman, 1984). It allows to build on the interviewees' points of view and thus to conduct the investigation according to subjective methods. Data emerge from the texts collected and answers emerge from data analysis. The process goes through the text analysis procedure, the description, the development of categories or themes, up to the interpretation of the meanings of the results obtained (Creswell and Cresswell, 2018).

This perspective positions this research clearly within the remit of inductive interpretivism (Gray, 2009) and constructivism-based epistemology. The logical extension of the constructivist approach into research practice means learning how, when, and to what extent the studied experience is embedded in larger and, often, hidden structures, networks, situations, and relationships (Clarke, 2005). Each research method represents a strategy of inquiry that moves from underlying philosophical assumptions to research design and empirical material interaction (Myers, 1997). The following table shows how the philosophical stances are operatively translated in this study:

STANCE	General Framework	Operational Focus	This thesis
PHILOSOPHICAL	Constructivism based epistemology → inductive interpretivism (Grey)	Theorize answers to 'why' questions → why might emerge with how	Investigate Third Mission → 'how' Third Mission is evolving in EU → Comparative analysis of national frameworks in Europe
METHODOLOGY	Broadly inspired to Grounded Theory (Glaser/Charmaz)	 Logic of tracing (Bartlett and Vavrus) Culture → economic, political and social factors 	How and why the developments of Third Mission occurred through times and across countries
METHODS	Multiple case studies (Gerring) Case studies (Bartlett and Vavrus)	Study things in their natural settings → interpret phenomena ↔ meanings people bring to them	4 EU countries Cross country comparison
INVESTIGATIVE TOOLS	 Analysis of institutional reporting Analysis of data collected through interviews (Charmaz/ Derrick and Samuel) 	 Attention to language, discourses and institutions Attention to power relations Attention to single voices 	OECD, European Commission, EUA, etc. 67 interviews: 12 DE, 20 IT, 14 PT, 13 SE, and 9 international

Table 3 Operationalisation of the philosophical stances

3.3 Foundations of the Methodology

The methodological challenges associated with this comparative research are substantial (Bloch, 2007; Uddin et al., 2012). These include complexities inherent in cross-national comparisons (Bloch, 2007; Uddin et al., 2012), cross-country data collection (Pennell et al., 2010), issues related to multilingualism (CORDIS, 2010; Rehm and Uszkoreit, 2013), and the challenges posed by translations (Inhetveen, 2012). Furthermore, the sociology of knowledge - especially when conducting expert interviews—adds an additional layer of complexity (Littig, 2014). Given that the study of the Third Mission cannot be disentangled from the university ecosystem, it necessitates engaging a wide array of actors and stakeholders in their respective contexts (Michalak, 2017). Expanding the understanding of Third Mission in a comparative framework (Püttmann, 2022) requires an empirical approach that captures how people construct meanings and actions.

This thesis is carried out using a mix of techniques and tools, reflecting the broad and flexible understanding of grounded theory as described by Charmaz (2012 and 2017). The idea of grounded theory as a "do-it-yourself methodology" (Glaser, 1978, p. 116) offers valuable inspiration for addressing the specific challenges encountered in this thesis. Charmaz's (2017) concept of grounded theory as a "constellation of methods" helps explain the rationale behind adopting a mixed-methods approach in this research. Bartlett and Vavrus (2017, p. 7 and ff.) further argue that the "logic of tracing" is particularly suited for such analysis. Similarly, Yin (2009) advocates for the case study method in addressing the key 'how' and 'why' questions surrounding universities' engagement with their Third Mission responsibilities.

The Comparative Case Study Approach (Eisenhardt, 1989; Bartlett and Vavrus, 2017) provides an essential framework for integrating cross-country, multi-level analysis, enriching both the depth and validity of the findings. The selection of case study countries has been made strategically to ensure diversity across various factors, thus enhancing the robustness of the comparative analysis (Hantrais, 1999; Elken et al., 2016; Bourelos et al., 2012; Schnurbus and Edvardsson, 2020; Urbano, 2019). This interpretive and inductive perspective, which seeks to understand the meanings attributed by actors, privileges meaning-oriented methods of data collection and representation (Pozsebon, 2004).

Consequently, interviews have been employed as the primary data collection method due to their versatility and ability to support in-depth investigation (Tessier, 2012; Creswell and Creswell, 2018; Robinson, 2014; Negrin et al., 2022; Glaser and Strauss, 1967; Bryant and Charmaz, 2007; Sandelowski, 1995; Kane, 1985; Given, 2008; Wilson, 2014; Malmovist et al., 2019; Mikuska, 2016). The interviews are designed to follow an 'open approach' (Derrick and Samuel, 2015), allowing interviewees the freedom to share insights from their personal perspectives. As Minichiello et al. (2008) suggest, this approach provides critical insights into human experiences as seen through the lens of the participants. By adopting a comparative approach to understanding Third Mission, Bartlett and Vavrus (2017, 2020) further enhance the study through their advocacy for multi-level and multi-temporal comparisons across diverse national and institutional contexts (Creswell and Creswell, 2018). The extension of the constructivist approach facilitates the generation of new categories and theories through the juxtaposition of data points (Clarke, 2005; Myers, 1997; Denzin and Lincoln, 2011; Nolas, 2011). This triangulation of data (Noble and Heale, 2019) through coding (Henwood, 2008) is essential for understanding the complex interplay of historical, cultural, and policy environments influencing the development of Third Mission across Europe (Gray, 2009; Denzin and Lincoln, 2011). Nedeva's work (2007, 2010, 2012, 2013 and ff.) has stimulated the idea of integrating the crosscountry analysis with a comparison from a vertical perspective. From her research derives the recognition, which is the spine bone of this thesis, that a full understanding of Third Mission in Europe can only go through a complex comparison that includes the exploration and confrontation of the correlations between nations but also between national and European levels. As a result, the study not only deepens the understanding of the Third Mission's multifaceted nature (Kitagawa, 2016; Püttmann and Thomsen, 2020) but also highlights the contextual factors that influence its operationalisation (institutionalisation and implementation) and evaluation, thereby adding significant value to the existing literature.

This thesis also addresses the issue of multilingualism, and the challenges posed by translation (Inhetveen, 2012; Stolke and Drop, 2014; Errattahi et al., 2018). Baumgartner (2012) and Shklarov (2009) emphasize the difficulties of working across multiple languages in qualitative research, particularly with respect to translation and interpretation, which can affect the validity of data analysis. To mitigate these challenges, the decision to conduct interviews and review institutional documents in

their original languages, while coding and analysing data in English, preserves the contextual nuances of each country without compromising research rigor (Fryer et al., 2012; Harsing, 2005).

3.4 Research design

The exploration of the profound ratios of Third Mission evolution in different countries within continental Europe is carried out through qualitative research applying an articulated approach consisting "of a set of interpretive, material practices that make the world visible" (Denzin and Lincoln, 2011, p.3). The methodological approach is based on a logic of comparison. This is used to generate and discover new categories and theories by juxtaposing one instance from the data with another (Nolas, 2011). Due to its complex nature and wide scope, this research faces a concentration of methodological challenges such as the cross-national comparison (Bloch, 2007; Uddin et al., 2012), the cross-country data collection (Pennell et al., 2010), the multilinguality (CORDIS, 2010; Rehm and Uszkoreit, 2013), the complexity surrounding translations (Inhetveen, 2012), the complexity surrounding sociology of knowledge (e.g., related to "experts" interviews) (Littig, 2014). For this thesis, two different but complementary investigation methods are used, namely the Case Study approach and a mix of techniques inspired by Charmaz's Grounded Theory.

However, Bartlett and Vavrus (2017) argue that the co-existence of the two methodologies is not without criticalities, they raised concerns about case-study approaches being based on the definition of the "case" and the delimitation of boundaries. For this research this would mean that carrying on comparative research by nation-state cases and cross-nation analysis may theoretically be conflicting with the grounded theory approach. However, Bartlett and Vavrus fully resolve the concerns and provide a useful tool, which perfectly support the need of this study, namely the *Comparative Case Study Approach* (CCS), which has been specifically thought to strengthen and enhance case study research in Comparative and International Education (Bartlett and Vavrus, 2017). This choice is supported by recent literature pointing out that CCS "has grown in sophistication and is viewed as a valid form of inquiry to explore a broad scope of complex issues, particularly when human behaviour and social interactions are central to understanding topics of interest"

(Harrison et. al., 2017, p. 4). Furthermore, previous research explicitly combining the two methodologies has already been carried out (Halaweh, 2012, p. 4).

3.4.1 Data sources

The literature review in Chapter 2 of this research aims to encapsulate the essence of scholarly discourse on the significance and value of Third Mission. It focuses predominantly on literature dating from 2000 onwards, often spanning multiple languages. A cornerstone of this thesis lies in the examination of a diverse array of data. This approach forms the bedrock of the analytical framework, drawing from Bryant and Charmaz's (2007) notion that data and analysis are co-created through interactions with participants and various data sources (Charmaz, 2012). Initial data sets primarily consist of institutional papers and official reports, predominantly sourced from international organisations such as the OECD, the European Commission, and the European University Association. These documents have been invaluable in establishing a foundational understanding of policy frameworks, strategic priorities, and evaluative trends shaping the Third Mission across Europe. However, they tend to offer a static, top-down snapshot of the landscape. To gain a more dynamic and nuanced perspective for this thesis, also supplementary materials within the * of grey literature have been explored, including blogs, online magazines, organisational web pages, and other non-peer-reviewed sources. These forms of data source have provided a key channel for this thesis into emerging discourses, critical debates, and grassroots-level experiences, which have been important to inform the interview structure. The key data sources, however, is constituted by interviews. This has allowed the incorporation of diverse stakeholder voices - ranging from university staff (academic and non-academic), researchers, and students to policymakers, civil society actors, and industry partners. By engaging with these varied perspectives, the research aims to illuminate the complex interactions and tensions that shape the realworld enactment of the Third Mission.

This multifaceted approach involves a continual dialogue between institutional outputs and the lived experiences, opinions, and reactions of actors within the academic sphere. By juxtaposing institutional narratives with the dynamic responses of stakeholders, the research captures the evolving nature of academic systems, policy landscapes, and cultural influences. Ultimately, this interplay serves as the foundation

for addressing the central five research questions, offering insights into the multifaceted changes occurring within each academic ecosystem.



Figure 4 Multisource of data

3.5 The comparison framework

One of the most relevant elements in Bartlett and Vavrus' approach to logic of comparison is the so-called "logic of tracing" (2017). This engages a realist theory of causation and examines how processes unfold, influenced by actors and the meanings they make, over time, in different locations, and at different scales (Bartlett and Vavrus, 2020). This approach supports well the main objective of this research as it encompasses assessing all relevant variables that may affect the evolution of a widespread phenomenon such as Third Mission. In order to capture those variables CCS entails three axes of comparison. The horizontal axis encourages comparison of how similar policies and practices unfold across sites at roughly the same level or scale. The vertical axis urges comparison across micro-, meso-, and macro-levels or scales. Finally, the transversal axis, emphasises changes over time (Bartlett and Vavrus, 2020). This thesis is not looking at nations as places assuming they are not related entities or entities to be put in opposition. Instead, it looks at linkages across place, space, and time. With the articulation in horizontal, vertical, and transversal comparisons axes the framework analysis of this research is based on multiple dimensions and their intertwining. The way in which this approach is operationalised within this research is the following: the horizontal have is referred to country-internal comparisons (four selected countries) - includes different perspectives within one nation (e.g. Policy culture, academic, society); the **vertical** axis is referred to levels

(from international to individual) which corresponds to 5 different levels of analysis - from mega to micro – expanding the 4M model already successfully applied in research on academic understanding (Eaton, 2020); the **transversal** axis, namely the time-related axis, is reflected in the cross comparison over time. The following figure synthetises the comparison frameworks with its key elements:

	HORIZONT	AL AXIS			LEVELS	OF ANALYSIS
COUNTRIES	SWEDEN	GERMANY	PORTUGAL	ITALY	MEGA	European
PERSPECTIVES	POLICY	CULTURE	ACADEMIC	SOCIETY	MACRO	Federal/ National
HE SYSTEMS	HE ecosystem & research landscape	Funding & Resources	University models	Quality assessment frameworks	META	Regional
EVALUATION	Cultural contexts	Objectives	Objects	Outputs & Impact	MESO	Institutional
INTERVIEWS	Representativ es of relevant institutions	Universities' top management	Evaluators (TM)	Academics & Stakeholders	MICRO	Individual
	TRASNVE	RSAL AXIS	2000			>>>>

Figure 5 The comparison framework

The benchmark is conventionally set at the year 2000. From the preliminary study of international and national institutional and policy as well as scholar literature (Compagnucci and Spigarelli, 2020), this is the period in which countries register remarkable changes directly related to Third Mission. The first decade of the century, as a consequence of the boost coming from the Lisbon Strategy, marks a period of rapid accelerations (Maassen and Stensaker, 2011). The direct consequences in terms of policy development and implementation at national level of member states are thus, starting to be perceivable and visible after 2010, with different paces and speeds.

3.6 The case study design

The selection of Sweden, Germany, Portugal, and Italy for a cross-country comparison to study the Third Mission of universities is driven by several strategic and contextual considerations. These countries represent a diverse array of higher education systems, each with unique historical, cultural, and institutional contexts. This diversity

allows for a comprehensive analysis of how different systems approach and implement the Third Mission of universities. The case study countries have been strategically selected so as to promote diversity across a number of factors and thereby enhance the results of the approach (Hantrais, 1999).

From a **geographical and economic** perspective, these countries offer a wide range of contexts. Sweden exemplifies the Nordic model, known for its strong emphasis on social welfare, innovation, and a highly collaborative relationship between universities and industry. Germany, with its well-established higher education system, has a strong tradition of research and robust mechanisms for technology transfer and industrial collaboration. Portugal provides insight into the Southern European context, where economic challenges and regional development significantly shape university missions. Italy offers another Southern European perspective with a rich academic tradition and current efforts to enhance the socio-economic impact of its universities. These countries also exhibit different policy frameworks and governance structures for higher education. Comparing them allows to identify how national policies and governance impact the Third Mission of universities, particularly in fostering innovation, regional development, and social inclusion. Additionally, the selected countries vary in terms of their economic development, influencing the resources available for universities to engage in Third Mission activities. This variation helps to understand the role of economic context in shaping university-community interactions and knowledge exchange practices. Cultural differences also play a significant role, as attitudes towards higher education, innovation, and community engagement vary across these countries. Studying these variations helps to identify cultural factors that support or hinder the implementation of the Third Mission, each of these countries has unique innovations or best practices in engaging with the Third Mission. Sweden's innovation ecosystems, Germany's Fraunhofer Institutes, Portugal's regional development initiatives, and Italy's cultural heritage projects are examples of diverse approaches to university-community engagement. By selecting Sweden, Germany, Portugal, and Italy, this research examines a broad range of approaches and outcomes related to the conceptualisation, institutionalisation, and evaluation of the Third Mission, resulting in more robust and generalisable findings. Firstly, a series of criteria have been identified that could function as scaffold against which empirical data could be confronted and assessed. When analysing research systems across different countries, several key factors are taken into consideration.

These include the population size, the economic conditions, GDP investments in research, the presence of research full-time equivalents (FTEs), the type of research system in place, the number and quality of universities, diverse university models, and the traits of both the academy and the research system. These factors collectively shape the research landscape and determine the competitiveness and innovation potential of each country's research ecosystem. The following specific features have been taken into consideration for choosing the four country-case studies:

Country	HE sector
Size/population	Type of system
Economic situation	Number of universities insisting on the country
GDP investments in research	University models
Research FTE	Traits of academy
	Traits of the research system

Table 3 Features determining case study selection

3.6.1 The 4 selected case-studies

The EC Innovation Scoreboard (2020c) indicates that out of the four countries, **Sweden** is one of the most innovative. The Swedish HE systems, as the other Nordic countries, are well-financed by the state with the aims of protecting "the population against some of the downsides of market competition" (Elken et al., 2016, p. 782). Sweden is the first country to add Third Mission to the agenda of universities in 1975 (Bourelos et al., 2012). It has also started earlier than other countries (OECD, 2013) to introduce funding with the intention of strengthening collaboration between universities, companies, and the public sector (Schnurbus and Edvardsson, 2020). **Germany** is the biggest of the four countries. It is commonly recognised to be one of the highly developed countries in Europe in terms of research and innovation (EC Scoreboard, 2020c). Even though, till the end of the last century, the German higher education system showed relatively low student ratios for a highly developed country and was regularly criticised for this by the OECD (Hoelscher, 2016). This characteristic reflects a peculiarity of the German HE system, where historically universities were elitist ivory towers permeated by the Humboldtian conception of independency and untouchability (Müller-Böling, 1995; Felderer, 1997). The relationship between

knowledge and industry was left to the less noble but very efficient system of universities of applied sciences (Fachhochschulen). Portugal and Italy are very different in size, number of universities, and HE system; both have been traditionally anchored to the so-called "Mediterranean" system (Urbano, 2019). Also, they have been both historically characterised by relatively closed academies, with limited internationalisation and strongly defined by local and regional contexts. Both have gone under significant reforms of universities' system in the first decade of the century. The following table captures the core themes and differences in the Third Mission's evolution across the four countries as emerged by the literature review.

Country	Historical and Societal Evolution	Third Mission Development	Key Challenges and Influences
Sweden	The State's protection of citizens and need for qualified workforces in modernization (conceptual and political roots in the 1970s).	1990s, regarded as	Challenges of modernization led to legal regulations connecting state, industry, and universities.
Germany	Series of transformations due to reunification, managerialism, and market-oriented dynamics.	Third Mission is developed and	Transformations driven by managerial and market forces; supported by specific funding schemes at federal and state levels.
Portugal	Significant demographic and social changes after democratization and EU accession.	Third Mission is under development, supported mainly by EU inputs, but faces economic and cultural barriers.	Lack of policy attention and resources; reliance on EU input for Third Mission development.
Italy	Universities have long traditions of collaborating with territories but faced global economic challenges before formally integrating Third Mission.	Third Mission formalized through ANVUR evaluation system after a lengthy, contentious national process.	Initial resistance but became institutionalized through policy interventions; challenges included defining Third Mission and addressing global economic pressures.

Table 4 Core themes surrounding Third Mission in each case study country

3.6.2 The Tertiary Education systems in numbers

Some basic quantitative data may help frame the differences in context. The biggest of the four countries is Germany with over 400 institutions in tertiary education and a growing student population of almost 3 million. Italy follows in terms of size of the

country and number of institutions insisting on it with its 97 universities, 4 polytechnics and almost 150 academies of arts and counting over 2 million students in HE. In terms of size Sweden is about 5 times bigger that Portugal, which is the smallest of the four countries. In Sweden there are 14 state-universities and 17 public university colleges/independent HE institutions, counting something around 372 thousand students in HE. In Portugal, which is clearly defined as binary system, there are about 50 universities (public and private) and about 80 polytechnics (public and private) with just over 445 thousand tertiary students. The following table reports the numbers of HE tertiary institutions in each case country (gathered through respective ministerial sources) – data referring to the reference year: 2019/2020:

Germany (DE)

- 213 Universities of Applied Sciences
- 107 Universities
- 52 Colleges of Arts and Music
- 30 Administrative Colleges
- 16 Theological Colleges
- 6 Pedagogical Colleges.

In addition to academic institutions, Germany features a highly developed non-academic research infrastructure with more than 1,000 public and publicly funded science and research institutions.

Sweden (SE)

- 14 public universities
- 17 public university colleges or independent higher education institutions
- 6 higher education institutions entitled to award first- or first- and second-cycle qualifications
- 3 state higher education institutions of arts
- 2 private institutions of arts
- 5 independent organisations are authorised to award second-cycle degrees exclusively in the field of psychotherapy.

Research is coordinated through a network of Centres of Excellence.

Portugal (PT)

14 public universities

- 36 private universities
- 20 public polytechnic institutions
- 64 private polytechnics
- 1 public distance learning university

The research landscape is supported by 26 associated laboratories and 307 research and development (R&D) units.

Italy (IT)

- 97 universities, of which
- 67 are state universities
- 19 are non-state universities, including
- 11 non-state distance universities that are legally recognised.
- 4 polytechnics
- 145 institutions dedicated to high-level arts, music, and dance education (AFAM)
- 81 being state-run
- 63 non-state.

Other types of institutions include higher schools for language mediators (SSML) and higher technical institutes (ITS).

The Italian research system includes 12 national research bodies, more than 120 specialised scientific institutes, and 15 university consortia.

Table 5 HE institutions in each country case study

In the final country selection there is a country of upper income economy, that has registered steady growth and appears to be already well ahead in reaching its targets in terms of compliance to EU universities strategies (Germany); a weak economy going through one of the longest and severe recessions, therefore cultivating an ideal background for assessing the investment potential amid these conditions and difficulties hindering financing and implementing EU strategies (Portugal); a country that experienced one of the fastest economic recovery in Europe where the role played by universities is one of its key long-term strategic element (Sweden); a diversified economy with a well-established legislative framework with regards to Third Mission (Italy).

UK is intentionally not included among the case studies for its peculiar long history and current advancements in research assessment. UK has started far earlier than

EU countries (Rebora and Turri, 2013) in defining, promoting and implementing a national research assessment framework. Thus, UK is perceived to play a role of precursor and innovator in the field with respect to EU countries (Rebora and Turri, 2013; Geuna and Piolatto, 2016). This has been confirmed by interviewees across all four studied countries.

3.7 Interviews

In general, the interpretive and inductive perspective, aiming to understand actors' meanings, privileges meaning-oriented methods for data collection and representation (Pozsebon, 2004). Interviews are adopted as the major data collection instrument in this thesis as they are versatile and allow for in-depth investigation (Creswell and Creswell, 2018). In order to grant for the flexibility and openness required by the studies and especially, to give interviewees the freedom to express their views in their own terms, interviews are conceived as semi-structured within the predetermined thematic framework.

3.7.1 Interviews sampling

Sampling is central to the practice of qualitative methods (Robinson, 2014). For this qualitative interview-based research a four-point approach to sampling (Robinson, 2014) was implemented by defining a *sample universe*; selecting a *sampling strategy* (and revising it when needed); defining *sample sourcing* (and revising it when needed) and deciding upon a *sample size* (see next section on Saturation).

The definition of the **sample universe** was based upon the careful consideration of the actors directly involved in the phenomenon under exploration, namely the Third Mission activities and the evaluation activities. Actors were then categorised, and three main target groups were defined: Interviews with representatives of the institutions dealing with Third Mission and running the national evaluations in each of the four countries aiming to gather information on Third Mission evolution and evaluation; Interviews with Universities' top management (vice-rectors, pro-rectors, and administrators) to underpin the analysis of universities' understanding, acceptance, and implementation of Third Mission policies and its evaluation approaches; Interviews with evaluators who have been involved in Third Mission evaluation exercises in different capacities. The sample universe was enlarged after the piloting phase by

adding a further layer of international interviews (as detailed in the 'Interview piloting' session).

At the basis of the initial **sampling strategy** there was the researcher's personal knowledge and professional networks. The writer's dual role as a university's employee and an independent evaluator was a good point of departure to identify and approach the right people in Italy, in Germany and at European level (having had working experiences in several countries and within European institutions). Thus, the most suitable method to start recruiting interviewees was the snowball effect: at the end of each interview participants were asked a referral to another qualified subject. This technique has been proven to be particularly useful in hard-to-reach populations such as high-level academic management. Requests for interviews received from unknown researchers on sensitive topics (as it is evaluation in academia globally nowadays) are not welcomed if no trusting relationship pre-exists (Negrin, et al. 2022). Although the snowball sampling approach yielded a number of reliable contacts, it proved insufficient for a study of this scope - namely, a comparative analysis across four countries and the broader European context. In particular, the method did not ensure an adequate number or diversity of interviewees in terms of roles and affiliations. To enhance access to hard-to-reach populations and diversify the sample, targeted use of social media platforms was incorporated as a complementary recruitment strategy. In total, each method (snowball, personal network, and social media) has granted for about one third of people who have accepted to be interviewed. Success rates in responses have been rather balanced across the three approaches. In terms of geographical distribution, the incidence has been rather different: the snowball approach has worked well in Sweden and Portugal; the personal networking has been more successful in Italy and at EU level, and partially in Germany; social media have integrated well the other approaches across all four countries. Recruiting through social media proved to require proportionally great enforcement of efforts. Overall, social media have been a reliable and rich source of contacts that could provide first-hand accounts or further referrals and played an important role in complementing the sampling strategy for this study.

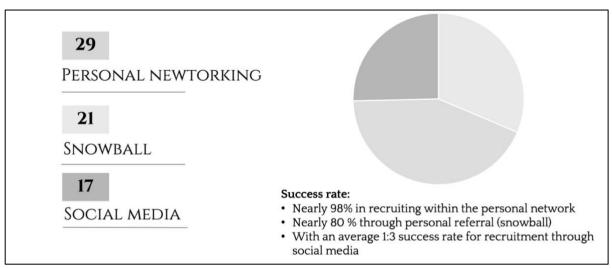


Figure 6: Interviewees recruitment

3.7.2 Saturation

Glaser and Strauss (1967) introduced the idea of 'theoretical saturation' as part of their grounded theory approach to qualitative research. In this technique, theoretical saturation is defined as "the point at which gathering more data about a theoretical construct reveals no new properties, nor yields any further theoretical insights about the emerging grounded theory" (Bryant and Charmaz, 2007, p.611). Thus, it is the time in data collection when all essential concerns or insights have been exhausted from data, indicating that the conceptual categories that form the theory have been 'saturated'. Theoretical saturation is also integrated in an iterative process of sampling, collecting, and analysing data simultaneously (Sandelowski, 1995), in which data constantly informs sampling till saturation. According to the literature, there is "no single answer" (Kane, 1985) for how big a sample to use or when to cease collecting data. Saumure and Given (2008) emphasizes that researchers must exercise judgment in determining the point at which further data collection yields minimal additional insight, as new information may contribute little to the development of the emerging theory.

The number of interviews for this research was not pre-defined. The key question 'how many interviews are enough' to produce reliable results is not answered in theoretical literature. After a certain number of interviews, the challenges related with the recruiting of participants became clear: getting availability and/or permissions (especially from institutions) was extremely time consuming; identifying the right

person to approach and invite was not obvious (especially within large institutions); arranging meetings with highly busy interlocutors, made it difficult to keep a regular pace in time. The decision of a minimum number of interviews for each target group was driven by these challenges. So, a minimum range which was coherent with the ambition of the work and compatible with the time constrains was identified as follows: 10-15 interviews per each of the case-study country (encompassing samples of all target groups) and 10-15 interviews for the European level. Considering the articulation and multifaceted themes relevant to this study, the goal was to reach a significant data richness rather than absolute saturation.

3.7.3 Interviewees profiling

A database has been created for the management of the interviews, which includes contacts, date of interviews, progress of work (transcribed, coded, etc.).

The interviews' final database includes 67 interviews, of which 12 German, 20 Italian, 14 Portuguese, 13 Swedish, and 9 internationals.

All relevant National Agencies dealing with Third Mission and its evaluation in each of the examined country have been contacted and involved with at least 1 interview per each institution: in **Sweden**, the Swedish Agency for Innovation Systems (VINNOVA) and the Swedish Higher Education Authority (UKA); in **Germany**, the German Federal Ministry of Education and Research (BMBF, Federal and Land Agencies); in **Italy**, National Agency for the Evaluation of University and Research (ANVUR); **Portugal:** Agency for Assessment and Accreditation of Higher Education (A3ES) and relevant Ministries.

The following table illustrate the profiles of the interviewees whose analysis inform Chapter 4 to 6 and whose quotes are used to support the results in Chapter 4.

N	Country	Type of Institution	Role	Focus Area	Anonymation CODE	Language	Gender
1.	Germany	Governmental agency	Top management/	Evaluation	DE_01	EN	F
			Evaluation expert				
2.	Germany	Governmental organisation	Top management	Policy	DE_02	DE	M
3.	Germany	Private company	Top management/ Accreditation expert	Evaluation	DE_03	DE	М
4.	Germany	Research Centre	Top management/ Researcher	Policy	DE_04	DE	F
5.	Germany	University	Professor	University	DE_05	EN	М
6.	Germany	Private company	Top management	Policy	DE_06	DE	F
7.	Germany	Governmental agency	Top management	Evaluation	DE_07	EN	М
8.	Germany	Governmental agency	Researcher	University/ Evaluation	DE_08	DE	F
9.	Germany	Research Centre	Project Manager/ Researcher	Research	DE_09	DE	F
10.	Germany	University	Professor	University/ Evaluation	DE_10	EN	М
11.	Germany	University	Top management	University	DE_11	DE	М
12.	Germany	Research Centre	Top management/ Researcher	Research	DE_12	DE	М
13.	Italy	University	Professor/Pro-rector	Evaluation	IT_01	IT	F
14.	Italy	University	Professor/Pro-rector	University	IT_02	IT	М
15.	Italy	University	Professor/Pro-rector	University	IT_03	IT	F
16.	Italy	University	Professor	Evaluation	IT_04	IT	F
17.	Italy	Governmental Agency	Professor/Governmental agency	Policy/	IT_05	IT	М

N	Country	Type of Institution	Role	Focus Area	Anonymation CODE	Language	Gender
				Evaluation			
18.	Italy	University	Professor	Evaluation	IT_06	IT	М
19.	Italy	University	Professor	Evaluation	IT_07	IT	F
20.	Italy	Research Centre	Top management/ Researcher	Evaluation	IT_08	EN	M
21.	Italy	Research Centre	Researcher / Evaluator	Evaluation	IT_09	IT	F
22.	Italy	Governmental agency	Top management	Policy/Evaluati on	IT_10	IT	М
23.	Italy	University	Top management	Evaluation	IT_11	IT	М
24.	Italy	Research Centre	Top management	Evaluation	IT_12	IT	М
25.	Italy	University	Professor	Evaluation	IT_13	IT	М
26.	Italy	Research Centre	Researcher / Evaluator	Evaluation	IT_14	IT	М
27.	Italy	University	Rector	University	IT_15	IT	М
28.	Italy	University	Professor	Evaluation	IT_16	IT	М
29.	Italy	University	Professor/Evaluator	University	IT_17	IT	М
30.	Italy	University	Top management/ Researcher	Evaluation	IT_18	IT	M
31.	Italy	University	Management/Evaluator	Evaluation/poli cy	IT_19	IT	F
32.	Portugal	Research Centre	Top management/ Researcher	Policy	PT_01	EN	М
33.	Portugal	Governmental agency	Researcher	Policy	PT_02	EN	F
34.	Portugal	University	Top management/ Researcher	University	PT_03	EN	М

N	Country	Type of Institution	Role	Focus Area	Anonymation CODE	Language	Gender
35.	Portugal	Governmental agency	Top management	Policy	PT_04	EN	М
36.	Portugal	Governmental agency	Top management/ Researcher	University	PT_05	EN	М
37.	Portugal	University	Professor	University	PT_06	EN	М
38.	Portugal	University	Researcher	University	PT_07	EN	М
39.	Portugal	University	Professor	University	PT_08	EN	F
40.	Portugal	University	Researcher	University	PT_09	EN	F
41.	Portugal	University	Professor	University	PT_10	EN	F
42.	Portugal	University	Top management/ Researcher	University	PT_11	EN	М
43.	Portugal	University	Top management/ Researcher	Third Mission	PT_12	EN	М
44.	Portugal	Governmental organisation	Politician	Policy	PT_13	EN	М
45.	Portugal	University	Professor/Evaluator	University/Eva luation	PT_14	EN	М
46.	Sweden	Governmental agency	Top management	Policy/Evaluati on	SE_01	EN	F
47.	Sweden	Governmental organisation	Top management	Policy/Evaluati on	SE_02	EN	М
48.	Sweden	Governmental organisation	Top management/ Researcher	University/Eva luation	SE_03	EN	F
49.	Sweden	Governmental organisation	Top management/ pro-rector	Third Mission	SE_04	EN	М
50.	Sweden	University	Top management/ pro-rector	University	SE_05	EN	М

N	Country	Type of Institution	Role	Focus Area	Anonymation CODE	Language	Gender
51.	Sweden	University	Top management/ academic	University	SE_06	EN	M
52.	Sweden	University	Professor	University	SE_07	EN	М
53.	Sweden	Governmental organisation	Top management	University	SE_08	EN	F
54.	Sweden	University	Top management/ pro-rector	University	SE_09	EN	М
55.	Sweden	University	Political Advisor/ academic	University	SE_10	EN	M
56.	Sweden	University	Top management	University	SE_11	EN	F
57.	Sweden	University	Rector	University	SE_12	EN	F
58.	Sweden	University	Rector	Evaluation	SE_13	EN	F
59.	International	International association	Top management	University	EU_01	EN	F
60.	International	International organisation	Top management/ Accademic	Policy	EU_02	EN	М
61.	International	International association	Top management	Policy	EU_03	EN	М
62.	International	International organisation	Policy Officer	Policy	EU_04	IT	F
63.	International	International association	Policy Officer	Policy	EU_05	EN	М
64.	International	International organisation	Top management	Policy	EU_06	EN	F
65.	International	International organisation	Top management	Policy	EU_07	IT	М

N	Country	Type of Institution	Role	Focus Area	Anonymation CODE	Language	Gender
	International	unavailable	technical problems		EU_08		
66.	International	International organisation	Policy Officer	Evaluation	EU_09	EN	F
67.	International	International organisation	Policy Officer/ Researcher	Policy	EU_10	EN	F

Table 6 List of interviewees

With the aim of providing for a complete coverage of different perspectives, this thesis has sought for a balanced ratio between academics, researchers, policy experts, evaluators, and Third Mission experts. The 67 interviews cover all relevant areas, such as universities, policies, evaluation and research. The following figure shows the coverage of each of the targeted key areas in terms of percentage out of the total corpus of interviewees. This is elaborated on the basis of interviewees background experience, their role at the time of interview and their self-declarations during the interviews phase. Each interviewee may have expressed or demonstrated experience to cover more than one area. 92% of the interviewees has substantial knowledge of universities and academic world; 55% of the interviewees is knowledgeable in evaluation (25% is knowledgeable in policy on evaluation); 7% has engaged with research on Third Mission.

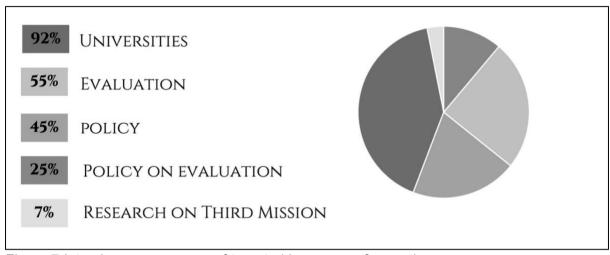


Figure 7 Interviewees coverage of targeted key areas of expertise

3.7.4 The interviews' design

The interviews for this research were semi-structured, namely combining a flexible structure with some unstructured exploration (Wilson, 2014). An indicative set of questions (integrally included in Appendix 1) has been elaborated to cover the broad spectrum of information to be collected. Since the sample universe of interviewees includes different types of roles, such as people working for Third Mission agencies, academics and international policy experts, the questionnaire was slightly adapted in the formulation of some questions, to facilitate the understanding of the questions and reduce barriers. The questionnaire was prepared in three versions, conventionally denominated as the 'Institutional questionnaire', 'University questionnaire', and 'International questionnaire'. The term *institutional* refers broadly to any type of organization, including agencies, research centres, or similar bodies, whereas *university* specifically addresses staff affiliated with higher education institutions. There are no substantial changes between the three versions of the questionnaire but some rephrasing mainly aiming at making feel each interviewee comfortable and

confident. The following Table shows the level and type of changes made in the questionnaire to adapt it to be relevant to the various targeted groups:

Institutional questionnaire	University questionnaire	International questionnaire
How would you describe the development of HE system in your specific country during the last decades? And what does this mean for your institution?	How would you describe the development of HE system in your specific country during the last decades? And what does this mean for your university?	How would you describe the development of HE system in Europe during the last decades? And what does this mean for your organisation?
How would you describe the role of Third Mission activities in in your country?	How would you describe the role of Third Mission activities in in your country?	How would you describe the role of Third Mission activities in Europe?
How would you describe the role of academic evaluation in your country?	How would you describe the role of academic evaluation in your country?	How would you describe the role of academic evaluation in Europe?
Would you say that institutionalisation of Third Mission has been a participatory process? And which role has played your institution?	Would you say that institutionalisation of Third Mission has been a participatory process? And which role has played your university?	Would you say that institutionalisation of Third Mission has been a participatory process? And which role has played your organisation?

Table 7 Example of rephrasing to adapt questions lists to each target group

After the initial introductory part, interview questions have been grouped into five broad sections strictly related to the research questions.

Section	Main Theme	Description	Relevant to RQ
1	Conceptualisation and institutionalisation of Third Mission:	Initial questions such as "How would you describe the development of HE system in Europe and in your specific country during the last decades" have supported the definition of the broad and country-specific contexts. The specific Third Mission-related questions have been introduced by a more focussed prompts such as "How would you define Third Mission at the current state" and "please talk	RQ 1 and 2 How is Third Mission conceptualised in the specificities of each country context? How is Third Mission institutionalised in the specificities of each country context?

Section	Main Theme	Description	Relevant to RQ
		about the importance of Third Mission nowadays". Those questions have informed the analysis of conceptualisation of Thiord Mission in each country. Following, the specific topic of institutionalisation was covered with a direct question "please describe the process leading to the institutionalisation of Third Mission" and the related prompts concerning the "facilitating and/or obstructing factors" as well as a prompt about lessons learnt and what could/should have been done differently.	
2	Evaluation of Third Mission	This set of questions aimed at exploring the evaluation of Third Mission. They firstly inquired the context in terms of overall system of evaluation in HE. Questions aimed at clarifying who decides (policies) and who runs/implement evaluations (e.g. agencies) in each country. Prompts such as "why/why not" helped understanding processes as well as dynamics between actors involved. This section also explores the "culture of evaluation" in each country with the aim of better understanding issues and challenges surrounding "acceptance" of evaluation.	RQ 3 How evaluation of Third Mission develops within the specificities of each country context?
3	National evaluation	The third section of the Questionnaire aims at identifying objectives, objects, and methodologies of Third Mission evaluation. Objectives: Questions and prompts have addressed the comparison of Third Mission evaluation with evaluation of	RQ 3 How evaluation of Third Mission develops within the specificities of each country context?

Section	Main Theme	Description	Relevant to RQ
		teaching and research aiming at identifying commonalities and differences. This has informed the framing and definition of the political rationale behind the model/approach adopted. For example, it provides data concerning whether a country has adopted a national system or not (and possibly why).	
		Objects: Questions focus on approaches and models of Third Mission evaluation. They attempt to identify which dimensions are covered (e.g., technology transfer, social impact), and which is predominant. Also, they pay attention to elements that can frame evaluation of Third Mission from impact and public engagement assessments. Methodologies: Questions also explore techniques, indicators (both quantitative and qualitative) used to measure/monitor Third Mission activities and processes. Whereas relevant, also topics such as comparability, contextualisation, and calibration are questioned.	
4	The international framework	In addition to the national interviews to a variety of relevant stakeholders, also a set of 10 interviews to international stakeholders was added to this study. The aim was to intercept	RQ 4 How do country- specific evolution and evaluation of Third
		and frame how national developments relates to international inputs. By including international stakeholders in the study, the aim is to intercept and frame how national developments in the Third Mission relate to international inputs. This involves	Mission relate to the European broader perspective?

Section	Main Theme	Description	Relevant to RQ
		examining how trends, challenges, and innovations observed at the national level align with or diverge from global practices and perspectives. The international interviews serve as a comparative lens through which to evaluate the effectiveness and relevance of national strategies and initiatives related to the Third Mission.	
5	Outputs and Impact:	the last set of questions address Evaluation outputs (e.g. transparency of processes and public availability); use of evaluation results (Do you think results are useful instruments? To whom? Why? To which extent?); effects of evaluation to identify wanted and unwanted consequences, at all levels; impact of evaluation of Third Mission at all levels (e.g. for universities as well as for researchers; and finally, questions surrounding ethical aspects of evaluation.	RQ 5 How is Third Mission and its evaluation impacting on key stakeholders?

Table 8 Structure of the interviews' questionnaire

3.7.5 The interviews' pilotingWhile methodological textbooks encourage the use of pilot studies in qualitative research, there is a scarcity of published information on how to perform such pilot studies (Malmqvist, et al., 2019). As part of this research a pilot was conducted to test the interview approach in advance and feed back into the question structure. This is to be intended as a small-scale execution of the whole interview strategy. Problems with question wording, interview methodology, coding, data analysis, and matching intents to accessible data have been addressed at this stage before significant resources were devoted to the full-scale investigation (Mikuska, 2016). The pilot helped to identify some key issues which needed particular attention and has helped in the identification of flaws and challenges (Malmqvist, et al., 2019). For example, generally, people were more confident speaking about

generic developments in Higher Education rather than speaking directly about evaluation. This is because evaluation is perceived as "hot topic". Talking about evaluation seemed to intimidate some of the participants as they defined themselves "not knowledgeable", intending for this being expert of the subject. Therefore, the order of the questions was arranged to flow from more generic and less complicated, to more specific and critical questions. The interviews started with a generic recap of HE developments in the past 20 years, leaving the interviewee the freedom to talk about their personal experience and questions on evaluation were introduced slowly and gradually.

As a result of the piloting, it has become clear that referencing to the European level was recurring in national interviews across all four countries. Thus, to grasp the cohesion across emerging themes between the four countries, an overarching international level of confrontation was needed. Therefore, the addition of a further set of interviews has been added to the research design. The supplementary layer of interviews with key representatives of international institutions is meant to supports this research in three ways: to cross-validate inputs obtained at national level; to define the broad European context of current developments; and to capture a different dimension of international developments. This triangulation of data (Noble and Heale, 2019) has enhanced concreteness and solidity to the empirical data collection framework. A further element emerged from piloting interviews suggesting that there is a direct relevance between some of themes emerging from the coding (such as professional path, career stage, life-balance) and the gender dimension, which on its turn, does not explicitly emerge as a theme. This has trigged the need to care for a supplementary layer of analytical consideration to cover the gender dimension and avoid inherent bias throughout the data collection phases. For this reason, attention has been given to reach the highest possible gender balance among interviews. This was intentionally sought but only partially achieved - out of 67 interviews 25 are to female (= 37%). This thesis was confronted with the difficulty of achieving a perfect balance, partially due to the resisting gender gap in universities and education institutions leadership positions (Rosa, 2020; Stolze and Sailer, 2022).

3.7.6 Conducting the interviews

As the aim of the interviews was to capture individual perspectives and opinions, each interview was conducted with each interviewee singularly (no groups of interviewees). Also, in cases in which participants belonged to the same organisation, the interview was conducted individually. It was made clear to interviewees that their contribution was intended as "individual" and not as representative of their institution. The approach to anonymisation of data was also clarified. Interviews lasted in average about fifty minutes. They were done via Skype or phone and were recorded (video or audio) using the licensed software ApowerRec. Each interview was conducted in one go. No double interviews system was considered. However, in two exceptional cases, especially for representative of national institutions, it happened that interviews were conducted just before or after national political elections. In these cases, interviewees were provided with the transcripts of their first interview and were then asked if they wanted to change/update anything in light of any potential new political development. Eventually, a second short interview was arranged for an update, it was recorded, transcribed, and added to the previous text for analysis.

The interviews were done following an 'open approach': overarching broad and open questions were followed by prompts. This method allowed interviewees to guide the flow of the conversation, shaping the logic of the discourse and indicating the sequence in which topics were addressed. The prompts were employed to keep the interviewee within the boundaries of the relevance to the main topic, while simultaneously acting as a means to investigate emergent details. In this way, the strength of the qualitative approach adopted in this research is maximised (Derrick and Samuel, 2015). Each interview was highly flexible and high-level of freedom was left to interviewees. They were free to express in a fluid and open dialog the logic of their thoughts and priorities. In some cases, further questions have arisen from the conversation. In some cases, questions were skipped because they were either not relevant to the interviewee or fell outside their area of expertise. This decision was informed by the flexibility encouraged by the approach adopted as it "permits interviewers to discover discourses and to pursue ideas and issues immediately that emerge during the interview" (Charmaz, 2014). According to Minichiello et al. (2008),

this approach allows researchers to get insight into the relevance of human experiences via the viewpoint of actors.

Attention has been paid to avoid bias, especially measures have been taken to avoid prejudgments or postulations. For example, some introductory questions may have appeared obvious, but they were asked in that form to gather the interviewees' perspective without making assumptions. As a further measure, notes were taken during the interviews (Tessier, 2012) so that these could be used at a later stage in case the interpretation of data emerging during the analytical phase were not sufficiently explicit.

3.8 Data analysis

All 67 interviews were fully transcribed. The texts were anonymised and filed using a standard code composed of the country acronym and the interview's sequential number—for example, DE_01 (German interviewee, where 01 indicates the first interview conducted in chronological sequence). International interviews are classified as "EU_ and consecutive number".

The first-level analysis of the interview transcripts was conducted through a two-step approach combining quantitative and qualitative methods. At the first level, a basic quantitative exploration was performed by systematically counting and categorizing the key terms and recurring themes mentioned by each interviewee. This allowed for an initial mapping of the most salient concepts and provided an overview of the frequency and distribution of specific topics across the dataset. At the second level, a qualitative grounded analysis was applied to examine the underlying meanings and relationships among the identified themes. By integrating these two analytical levels, the study ensured both a data-driven overview of thematic relevance and a deeper understanding of the contextual and conceptual dynamics at play.

For the qualitative analysis of the rich amount of information generated by the semistructured interviews, a thematic, flexible and open approach was used (Gray, 2009). The main analytical instruments are codes, quotes, and nodes. Coding is used to identify and capture concepts, themes, and patterns emerging from the data. In NVivo, nodes serve as containers for coded data segments, allowing researchers to organize and group related codes and quotations systematically. These nodes facilitate both descriptive and interpretive analysis, helping to build connections between emerging categories and ultimately supporting the emergence of themes grounded in the empirical data. This technique let emerge themes from the information people's reveal through interviews when talking about their experiences and activities. Only after coding, the research moved to a further level of extraction to more abstract interpretations of the interview data (Charmaz, 2006). The coding for this thesis is done with a combination of manual and computer supported techniques using the licensed software NVivo (version 12 for Mac).

The anonymised texts were imported in NVivo in the original language. After attentive consideration a key decision was taken, not to translate the transcripts into English. A piloting version of coding and analysis has been done on the basis of 12 interviews to test the multilingual coding. The results of the testing were that NVivo supports well the coding across different languages. However, this added a further layer of complication in the analysis. It required that inclusion criteria were made clear and defined throughout the coding exercise, without losing on flexibility and openness. For the initial coding phrases and lines were linked to nodes in English. The aim was to generate a wealth of nodes emerging from or implied by the data. During this phase, nodes were kept short, simple, and focussed; abstract and theoretical concepts were avoided; the definition of nodes has been an extensive, reiterated, and continuously developing exercise. The following screenshot of the NVivo interface shows the initial coding and an embryonic list of nodes (in English, while the interview text is in German):

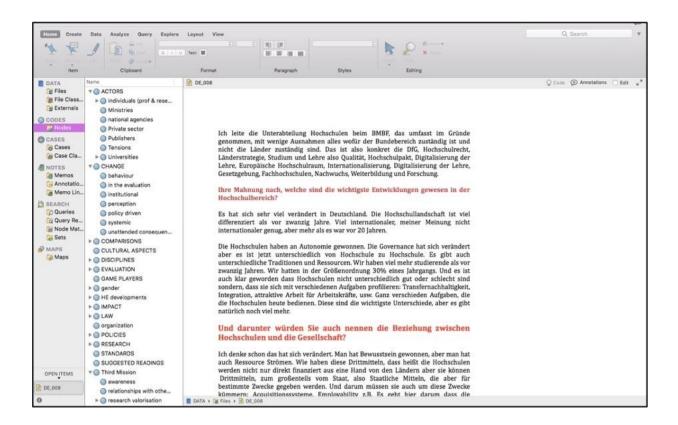


Table 9 Nvivo interface (multilingual coding)

Throughout this phase nodes were named, renamed, merged, and split; lines were linked to one or more codes as it felt appropriate. As an example, the above Figure shows the interview with it is a German participant, who works in a policy-making institution. The word "Drittmittel" (= translated 'third parties resources') was mentioned several times and thus it was linked to several nodes: Change (as the interviewee present the concept as a new development in terms of resources availability); Policy (as the interviewee present the concept as result of new policies); HE developments (as the interviewee present the concept as one of the main drivers of HE developments). The following figure shows how the lines are linked to the nodes and how nodes develop into thematic:

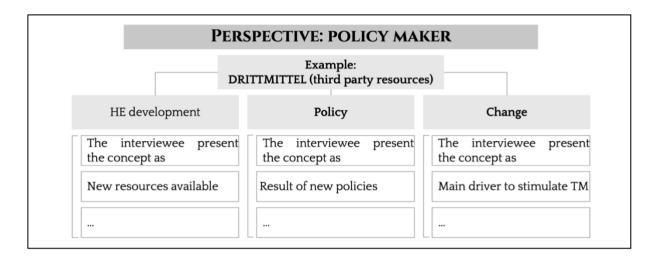


Figure 8 Nodes development & linkages

The initial coding exercise allowed to take distance from personal ideas and to critically look at the participants' accounts (Charmaz, 2014). The complexity of this research has required several gatherings of data from the field. In fact, once the first round of data was analysed, categories emerged via coding (Henwood, 2008), some of which were predictable on the basis of the literature review, others were unexpected. For example, among the actors relevant for the discourse of Third Mission, students played a surprisingly important role. Also interesting, notions related to "game playing" has not proven to be of relevance for interviewees in relation to Third Mission (and has played a less relevant role compared to research-related questions).

As a result of the initial coding, it was possible to see some emerging linkages, hierarchies and patterns. Nodes were organised in hierarchies, moving from general topics at the top (the parent node) to more specific topics (child nodes). The flexible structuring and aggregation feature of NVivo allowed to identify the first logical connection between nodes. For example, to the parent node "Academic system" were linked the "child nodes" relating to being public or market driven and being their academies open or closed. To the parent node "Funding and resources" were linked lines relating to "state or private sources" as well as being project or evaluation dependent. The following figure illustrates how hierarchies of nodes develop, and the conceptual ramifications arise:

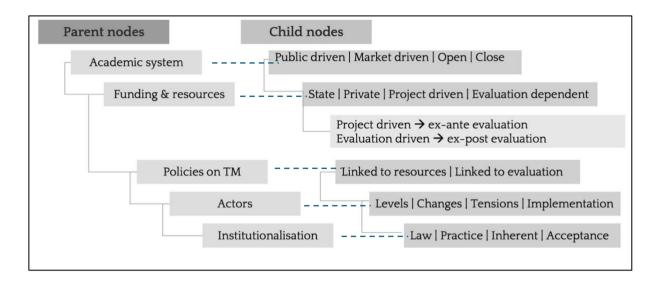


Figure 9 Nodes development (emergeance of nodes herarchies part 1)

At this stage the first critical decisional intervention was operated. Those themes that were judged to be of higher conceptual value became categories, on which comparison could be based. The analysis was here building up to a conceptual level. The figure below, compared to the previous one, based on the further development of nodes into linkages and themes, shows the embryonic comparison components:

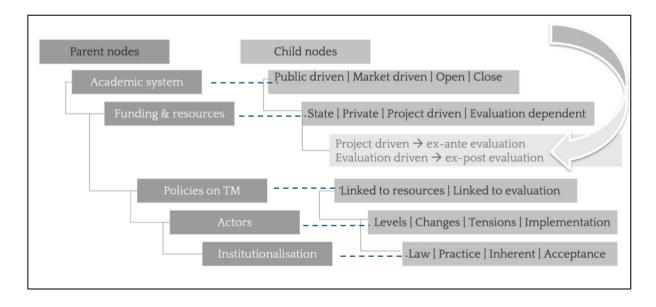


Figure 10 Nodes hierarchies (emergeance of nodes herarchies part 2)

At this stage a further advanced literature review was conducted with a focus on institutional literature. This functioned as triangulation to verify and validate (and/or contrast) the results in a sort of ultimate evaluative comparison. The following figure

illustrates how the chosen methodology is applied to collect and analyse data to achieve findings, which are relevant to answer the research questions:

Research questions	How	Answers sought
1. How is TM conceptualised in the specificities of each country context? 2. How is TM	HORIZONTAL HAXE OF ANALYSIS Induction moves from the particular to the general: it develops new theories or hypotheses from many observations.	Identification of different traits of TM in each country Identification of ways of institutionalisation in each country
institutionalised in the specificities of each country context?		
3. How evaluation of TM develops within the specificities of each country context?	VERTICAL HAXE OF ANALYSIS Data collection □ interviews multiple actors: - institutional representatives at country level - evaluation experts - academics which have undergone evaluation - institutional representatives at EU level	Participants contribute to identify changes opportunities challenges at all levels Tensions are classified between levels Cross-comparison between case studies
4. How do country- specific evolution and evaluation of TM relate to the European boarder perspective?	VERTICAL + TRANSVERAL HAXE OF ANALYSIS Triangulation between different types of data: - National vs international - Interviews vs institutional reports	Relates national traits of TM within a common international policy framework
5. How is Third Mission and its evaluation impacting on key stakeholders?	VERTICAL + TRANSVERAL HAXE OF ANALYSIS Triangulation between different types of data: - National vs international - Interviews vs institutional reports	Tensions are classified between levels Cross-comparison between case studies & International level

Table 10 How the research design supports the contribution towards research questions

Participants' *quotes* were extrapolated and used as conceptual exemplification, when they seemed to summarise either key experience or views of the participants to summarise succinctly and in a clarifying way essential points of interpretation. The use of quotes from participants is typical to qualitative research (Sandelowski, 1994; Eldh et al., 2020). In this research it plays a key role as the outcomes of the research is strongly based on participants' voices and they underline findings throughout the Chapters 4 to 6 of this study.

3.8.1 Multilinguality

One of the challenges of this research is related to the fact that data are in different languages. This is true for policy and institutional documents, for institutional and scholar literature as well as for the interviews. There is a paucity of studies attempting to address the pragmatic and methodological issues that arise from the use of multiple languages within a qualitative research work (Fryer et al., 2012; Harsing, 2005). "Almost all of those scarce methodological studies seem to deal with the issue of translations, particularly with the problematic use of interpreters and translators in the course of a qualitative inquiry" (Baumgartner, 2012, p.2). In the same study Baumgartner hypothesises that the reason for this scarcity lies in the fact that "the situation where the researcher possesses mother-tongue fluency in all or most of the languages used in a particular study is very rare" (p. 2). In the case of this study, the researcher possesses proficiency-level competences in three of the involved languages (Italian, English and German), however, she is not equally fluent in Portuguese and in Swedish. The intimate sensitivity to some of the languages used in this research and to the familiarity of working with foreign languages at large, represent an advantage. The functions of translation and conceptual analysis, thus, is intertwined in this thesis, technically and strategically (Shklarov, 2009). "Grounding the translation" is shown to be achieved through intertwining the activities of translation and conceptual analysis. The two activities are inseparable in time and take place along with constant comparison across language boundaries (Shklarov, 2009).

For the written institutional literature there is no other option as to deal with interpretation and translation of foreign languages texts. This has surely added a level of complications and was time consuming, though it has been a manageable challenge considering that the writer talks and speaks Italian and German and can read and

comprehend both Portuguese and Swedish. For the interviews there was an option of either selecting only interviewees who were comfortable in talking in English (which might have restricted the choice in sampling) or translating the transcribed interviews into English. For this thesis, a third solution was adopted: interviewees were allowed to choose the language they felt most comfortable speaking. This decision was based on the observation that, in some cases, the use of English limited their ability to fully express the nuances of their perspectives. Interviewees felt limited in their potential of expressing their opinions and views with a full range of nuances. Thus, interviews were realised in three languages: English, Italian, and German. The following figure shows in numbers the main traits of the multilingualism within this research:

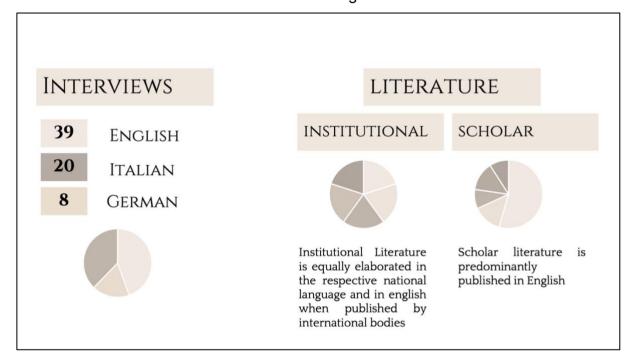


Figure 11 Multilinguality Stats

The decision of not translating the entire corpus of interviews texts surely meant relevant savings of efforts, time, and resources. This also limited the risk of interferences, which comes with interpretation and translation. Especially if the translation is operated on texts, meant to be verbal and not written. Hence, restricting translation on the sole case of quotes used it is also limiting potential bias coming from translation (Inhetveen, 2012).

One of the most important implications of international interviews is that it makes it extremely difficult to use automatic transcription software. Automatic transcription tools have been available for a while, and technologies are improving fast. However,

in practice it has been proved difficult to use them with non-mother tongue speaking people. Machine transcription software does not cope well with accents and pronunciation. These aspects still play a huge role and strong impact on the rate of errors and imprecision (Stolke and Drop, 2014; Errattahi et al., 2018). This was a clear limitation for all those interviews done with people speaking in English but not being native speakers. Within this research several automatic transcription tools (NVivo, Youtube, Trasnkriptor, etc.) were experimented in different languages, but the results were mostly cost expensive and overall, not satisfactory in terms of quality. As a consequence, the transcription work required a significant number of manual interventions.

3.9 Ethical considerations

Ethical approval for the present study was gained in June 2017, by Faculty of Arts and Social Sciences and Lancaster Management School Research Ethics Committee (FASSLUMS REC) at the University of Lancaster.

Particular care has been put into ethical issues surrounding interviews. As part of the Ethics approval process the Participants Information Sheet (PIS), the Consent Form for the interviewees, and the Questions List (Appendix I) have been submitted to the Committee for examinations. The approved Information Sheet and the Consent Form were sent to each interviewee in advance of the interviews. All participants signed consent forms and chose the level of confidentiality.

During the preparation phase, specific measures were foreseen in case the inclusion of translators or interpreters would have been needed. For example, a specific confidentiality form and a basic code of conduct were drafted. Eventually, these were not needed, as the involvement of intermediate roles was not required.

To safeguard data privacy protection, recordings of interviews have been stored safely and have not been shared with anyone, apart from the PhD supervisor.

Participants were aware of the methodology used for the research and the interview. At the beginning of each interview, participants were given the possibility to ask questions and clarifications before starting and were reminded that the conversation was going to be recorded. The list of potential questions was sent in advance, if requested.

Parts of the transcripts that could compromise the participants' confidentiality and any personal reference was eliminated from the transcribed text and the file was coded to grant anonymity (coded file names were registered in the interviews database).

Chapter 4 - Results

Introducing the countries' specific analysis

The objective of this chapter is to serve the purpose of answering the five research questions of this study. This is done within each of the examined country, Sweden, Germany, Portugal and Italy, in relation to their specific systems. This chapter is informed by the analysis of 67 interviews' texts with actors relevant for Third Mission, which have been done in the four countries and at European level.

The structure of this thesis is guided by the five research questions, each of which addresses a key dimension of the study. Accordingly, this chapter follows the same approach. The next five sections are organized around these questions. Each section delves into one specific research question, presenting relevant findings, analyses, and reflections. This organization allows for a coherent exploration of the topic while ensuring that each question is examined in depth and in relation to the broader framework of the research.

- 1. How is Third Mission conceptualised in the specificities of each country context?
- 2. How is Third Mission institutionalised in the specificities of each country context?
- 3. How evaluation of Third Mission develops within the specificities of each country context?
- 4. How do country-specific evolution and evaluation of Third Mission relate to the European broader perspective?
- 5. How is Third Mission and its evaluation impacting on key stakeholders

The first section (4.1) explores the characteristics that the Third Mission assumes in each of the four case study countries, aiming to clarify what the Third Mission entails and what it does not. At first, results from analysis of scholar literature and analysis of policy literature constitute the foundation for the subsequent analysis of interviews. The second section (4.2) outlines the processes that have led to the institutionalization of the Third Mission within each national context. The third section (4.3) focuses entirely on the evaluation of the Third Mission, beginning with a comprehensive

analysis of the cultural context of evaluation. The fourth section (4.4) offers a comparison of the national cases within the broader European framework. The final section (4.5) examines some of the effects that the Third Mission and its evaluation have produced at different levels.

Before analysing the interviewees' contributions, it is important to trace the evolution of national and European policy frameworks to contextualise the results of the interviews. The development of the Third Mission in higher education has occurred and has been shaped by successive reforms, evaluation mechanisms, and strategic priorities introduced over decades. This historical and institutional background highlights how each country - Sweden, Germany, Portugal, and Italy - has approached the conceptualisation, regulation, and implementation of Third Mission activities, often in response to broader European agendas or internal system dynamics. The timeline presented below outlines major policy milestones from the 1970s to the 2020s, offering a comparative lens through which it is possible to interpret national specificities and convergences. This overview serves as a foundation for understanding how interviewees' perspectives are embedded in distinct policy environments.

Decades	Year	European/Nation	Policy milestone			
1070s	1975	Sweden	Initial governmental mandate to universities for the Third Mission in the form of communication and strengthening of external linkages.			
1980s	1980	Europe	Debate about evaluation in the education system			
		Germany	Debate surrounding TM began in the late 1980s later than in many other European countries [EURYDICE]			
1990s	1990	Italy	CRUI initiated the evaluation system in Italian universities.			
	1993	Italy	Law 537 that establishes the setting of an evaluation system			
	1993	Portugal	Initial quality assurance activities organized – as pilor experiment - by the Conselho de Reitores das Universidades Portuguesas (CRUP).			
	1996	Italy	National Observatory for university evaluation established.			
	1997	Europe	Pilot project launched to assess universities' activities in 46 universities across 17 countries.			

Decades	Year	European/Nation	Policy milestone			
	1998	Portugal	Law 205/1998 created CNAVES, the national board for higher education assessment.			
	1998	Sweden	National mandate for universities to disseminate evaluation results.			
	1998	Sweden	First assessment cycle completed – incl. public & catholic universities			
	1999	Europe	Bologna Declaration signed to harmonize higher education across Europe à BIOLOGNA PROCESS			
	1999	Italy	Law 370 defines new architecture of the university evaluation system			
2000th	2000	Europe	Lisbon Strategy and the ERA concept introduced.			
	2000	Sweden	Constitution of VINNOVA agency for Innovation			
	2002	Sweden	Act 31/2002 Council of Education is entitled to require the Ministry of Education to gather necessary evaluation data			
	2003	Europe	COM(2003) 58: role of universities in the Europe of knowledge			
	2005	Europe	COM(2005) 152: enabling universities to make full contribution to Lisbon Strategy			
	2005	Portugal	Law 42/2005 and subs. 49/2005 reforming the national PT Higher Education System and implementing ERA			
	2006	Italy	Law 24 established ANVUR, the national evaluation agency.			
	2007	Portugal	Law 38 à Approved legal framework for evaluating the quality of higher education			
	2008	Sweden	Research and Innovation Bill (I) introduced.			
	2009	Europe	Recognition of ERA through Art 179 of the Lisbon Strategy			
	2009	Portugal	Decree-law 205/2009 regulated academic careers in public universities.			
	2009	Sweden	Introduction of a performing based model for resource allocation			
	2009	Sweden	'Autonomy reform' deregulated the academic sector demanding institutions to restructure their organisation			
2010th	2010	Europe	Several public inquiries have been undertaken in the aftermath of the reform, including the academic career system, university governance and management, and academic entrepreneurship			

Decades	Year	European/Nation	Policy milestone		
	2010	Europe	Recognizes the need to support interactions between science and business when it provided a strategic framework for European cooperation in education and training, the so-called "Education and Training 2010"		
	2010	Italy	Law 240 (Gelmini Reform) introduced quality assurance and governance reform.		
	2010	Italy	Presidential Decree 76/2010 required systematic evaluation of university processes: «to evaluate the quality of processes, results and products of management, teaching, research, including technology transfer activities»		
	2010	Italy	Presidential Decree 76/2010 includes the regulation of ANVUR		
	2010	Portugal	The A3ES guidelines and report templates for the assessment and accreditation of higher education institutions and study programmes address the three core institutional processes: teaching and learning, research and community engagement.		
	2011	Europe	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Supporting Growth and Jobs—An Agenda for the Modernisation of Europe's Higher Education Systems. COM (2011) 567 final		
	2011	Sweden	Swedish National Audit Office, 2011, The use of the basic grant for research and postgraduate education, RiR 2011: 21		
	2012	Sweden	Research and innovation bill (II) A new bill on research and research-based innovation as well as a new National Innovation Strategy and Programmes		
	2012	Italy	Legislative Decree n.19 (2012), Enhancement of university efficiency and consequent introduction of reward mechanisms in the distribution of public resources based on criteria defined ex ante also through the provision of a periodic accreditation system for universities and enhancement of the figure of permanent researchers not confirmed at first year of activity, pursuant to art. 5, c.1, letter a), law December 30, No. 24		

Decades	Year	European/Nation	Policy milestone
	2012	Italy	ANVUR defines the Quality assurance model (AQ), incl. self-evaluation, recurrent evaluation and accreditation of the Italian university system (AVA)
	2012	Italy	Ministerial Decreen. 47 on self-assessment, initial and periodic accreditation of offices and study courses and periodic evaluation
	2013	Italy	Legislative Decree 19/2012 implemented accreditation and quality review processes.
	2013	Sweden	Swedish Research Council Survey of different national systems for evaluating the quality of research - feasibility study for the government assignment U2013 / 1700 / F
	2013	Sweden	Ministry of Education and Research Assignment to investigate and submit proposals for a model for resource allocation to universities and Colleges that include collegial assessment of the quality and relevance of research, U2013 / 1700 / F.
	2013	Italy	Ministerial Decret 47/2013 definition of evaluation parameters of TM
	2014	Sweden	National Research Council report on feasibility of evaluation systems.
	2014	Europe	In a 2014 Bologna Process Researchers' Conference Report, the concept of 'the third mission of education' was raised
	2014	Germany	German research society (DFG) -Guidelines Priority Programmes
	2014	Germany	Federal Ministry for Education and Research (BMBF) - Expert policy advice in the view of liability law
	2014	Sweden	FOKUS - the Swedish Government commissioned the Swedish Research Council to develop and propose a model for allocating resources to universities (in consultation with Vinnova, Sweden's innovation agency)
	2016	Germany	Science Council: Knowledge and technology transfer as the subject of institutional strategies Position paper. Federal Ministry of Education and Research (BMBF): Federal Report Research and Innovation 2016.

Decades	Year	European/Nation	Policy milestone	
	2016	Italy	Ministerial Decree 987/2016 added the Third Mission to university study courses.	
	2016	Italy	Institutional/Policy Workshop "The evaluation of the third mission within the VQR 2011-2014: a comparison with universities and research bodies" – ANVUR	
	2016	Sweden	Swedish Government (2016b), SOU 2016:29 Security and attractiveness - a research career for the future Swedish Government (2016c) - It suggested that the so called "third mission" activities at universities (i.e., outreach and collaboration with society) should be given more attention.	
	2016	Sweden	Research and innovation bill (III) with the launch of "strategic cooperation programmes"	
	2017	Germany	Launch of the Excellence Strategy initiative.	
	2017	Sweden	The Swedish National Audit Office criticises several of the previous and existing programs for lack of clear criteria for measuring goal attainment, and on aggregate level, it also included some criticism towards the governmental policy in the area for lack of coherence and overall sense of purpose - Swedish Government Riksrevisionens rapport om statliga stöd till innovation och företagande	
	2017	Italy	The results of the 2011-2014 VQR evaluation exercise were published with a specific section on Statistics and summary results - Third Mission.	
2020th	2020	Italy	Launch of the third 2015-2019 VQR exercise - The word "impact" appears next to Third Mission on the ANVUR web page.	
	2022	Europe	The European Strategy for Universities	
	2022	Europe	EC promotes the Agreement on Reforming Research Assessment	

Table 11 Policy Timeline

Across the four examined higher education systems - Sweden, Germany, Portugal, and Italy - some themes related to the Third Mission appear to be of shared relevance, although their emphasis varies by country and shifts over time. A comparative analysis reveals distinctive national patterns and priorities in how the Third Mission is conceptualised and institutionalised.

In Sweden, there is a moderate emphasis on new managerial approaches, alongside a strong focus on regional engagement and innovation systems. The interaction among universities, industry, and government is moderately developed, whereas less attention is paid to definitions and terminology. Sweden's efforts are notably embedded within a broader Nordic context, with a particular interest in participatory models of university engagement.

Germany places high emphasis on both new managerialism and innovation systems, while regional perspectives and the university-industry-government nexus receive a moderate level of attention. Definitions and conceptual clarity are also a point of interest. A key internal distinction is the differentiation between comprehensive universities and universities of applied sciences, which shapes how Third Mission activities are approached.

Portugal shows moderate attention to managerialism and innovation systems, and a strong focus on regional engagement. In contrast, less emphasis is placed on university-industry-government relations and definitional aspects. Portugal's position is further characterised by its historical and linguistic ties to Latin America and by the complexities arising from its binary higher education structure.

Italy shows comparatively lower emphasis on managerialism and innovation systems and a medium focus on regional engagement and collaboration across university, industry, and government. However, it stands out for the specific importance placed on defining the Third Mission, and—unlike the other three countries—for the prominence of cultural dimensions, including activities related to museums, libraries, and heritage institutions.

These findings highlight the diverse trajectories and contextual specificities of Third Mission development across national systems. The following table summarises the relative importance of each theme by country.

Themes	New managerialis m	Regional perspective	Innovation system	University- industry- government relations	Significant international sphere of influence	Specificities
SE	Medium	High	High	Medium	Nordic region	Participatory nature of university activities
DE	High	Medium	High	Medium		Differences between comprehensive universities and universities of applied sciences
PT	Medium	High	Medium	Low	Latin America	Complexity and contraddictions in the binary higher education system
IT	Low	Medium	Low	Medium	Mediterr anean area	Culture/ Museums/ Libraries

Table 12 Comparison of national specific themes in literature

The policy literature analysis indicates that while Third Mission remains a consistent subject of scholarly interest across various academic disciplines, the specific themes areas are dynamic, reflecting broader changes in policy focus.

4.1 The conceptualisation of Third Mission: comparing the four countries

The concept of the Third Mission has emerged as a key component in understanding the evolving role of universities within society. While the roots of Third Mission can be traced back to broader shifts in innovation systems starting in the late 1980s and further developed in the following two decades (Etzkowitz, 1998; Etzkowitz, 2001; Etzkowitz, 2003a; H., 2012), its conceptualization as a distinct mission alongside teaching and research has gained traction more recently (Compagnucci & Spigarelli,

2020). The term itself was first introduced by Etzkowitz and Leydesdorff (2000) in the context of innovation dynamics, marking a transition in theoretical models of the university's societal engagement: "The increased salience of knowledge and research to economic development has opened up a Third Mission: the role of the university in economic development" (Etkowitz and Leydesdorff, 2000, p.5). Since then, Third Mission has been analysed, interpreted, and explained under a myriad of perspectives. It is largely recognised that definitions of Third Mission are composite. fluid, and broad (Compagnucci and Spigarelli, 2020). This thesis aims at exploring the conditioning factors and the outcomes of Third Mission in different countries as well as its evolution over time. The differences in the conceptualisation and realisation of Third Mission in the different countries may depend upon a number of variables, such as for example the characteristics of the host region and/or of the institution themself but also economic and political events and historic factors play a key role. Other contextual determinants such as traditions, geographical conditions and cultural sedimentations as well as local and national situations are elements of great importance that influence the processes of stratification and diversification (Chessa & Vargiu, 2014). Furthermore, HEIs exist in both public and market orientations (Marginson, 2016 and 2017). Interviews suggest that all these orientations and variables, contribute to shape how and why some HEIs may adopt certain choices. With specific reference to Third Mission interviews analysis suggest that as launching a funding program as in Germany or create a national evaluation framework as in Italy, and others do not (as in Sweden and Portugal).

4.1.1 Exploring contextual definitions of Third Mission through interviews

Two main angles emerged prominently from the cross-national comparative field work: (1) interviewees have talked about the significance of Third Mission either in relation to the "model of university"; or (2) in relation to the "role of university". There is a wide range of recurring concepts which are commonly mentioned in literature, which have been also cited by interviewees in relation to Third Mission, such as entrepreneurial

university (Etzkowitz, 1983), the new management approach (de Boer et al., 2007; Benneworth, 2016; De La Torre, 2017), the Triple (or more recently the quadruple) Helix Model partnerships (Carayannis and Campbell, 2010; Etkowitz and Leydesdorff, 2014; Trencher, 2014). As demonstrated by the literature analysis in Chapter 2 these concepts are extremely important in a critical analysis to frame Third Mission. However, interviews data suggest that they are less relevant for academic practitioners, who do not necessarily deal with the theoretical framework. Other concepts appear to be more relevant to them. The word 'collaboration' or 'partnership' came in conjunction with industry, business, and enterprise. References to the "type" or "model" of universities - mostly intending the entrepreneurial university model suggest implying questions surrounding how the university does or doesn't do something: linkages, network, connections, enterprise. The term "engaging" was mentioned across all national interviews, and it has been used in conjunction with other concepts, such as "regional engagement", "territorial engagement", "stakeholder engagement" but also "social engagement", "public engagement", etc. Often these combinations came up in conjunction with terms such as "actor" or "player" or "builder". The following tree figure represents how the connections between words, as resulted from the text analysis of the interviews, informs the development of the discourse's logic:

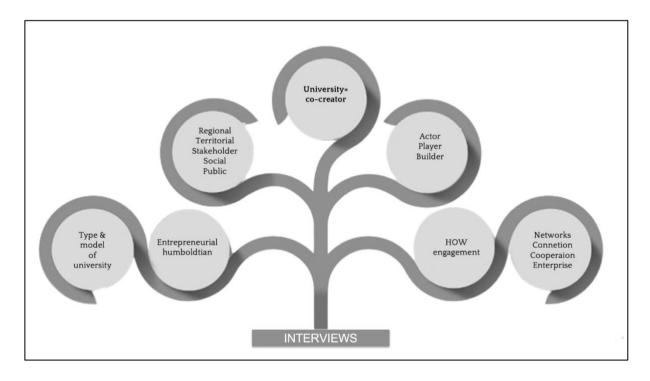


Figure 12 The word tree stemming from interviews

Interviews data confirm the idea of university in its proactive role as societal co-creator (Aleffi, 2020) and extend knowledge in contributing to detailing how the theoretical framework is operationalised at country-level and to identify the variable elements. Many nations have modified their higher education institutions during the past 25 years, altering HEI autonomy, public funding, purpose, and accountability (Geuna et al., 2011 and 2015; Puaca, 2021; Colombo, 2022). In Europe, the European Union regulations and the national government efforts both have an impact on higher education institutions (Curaj et al. 2018). However, as emphasised by Stolze & Sailer (2022), there are limitations due to differences in environmental context, resources and internal capabilities (as also in Etzkowitz & Zhou 2008; Philpott et al. 2011; Stensaker & Benner 2013). There have been several attempts to codify the conceptualisation of Third Mission at international level (see for example the EU funded project S3M), which still represent solid point of reference, but none has been a breakthrough, and none has been widely adopted. None has endured, as numerous studies have followed approaching the conceptualisation of Third Mission from different perspectives (Etzkowitz & Leydersdorff, 2000; Laredo, 2008; Benneworth & Jongbloed, 2009; Nelles & Vorley, 2010; Lebeau and Cochrane, 2015, EUA, 2019). Fact is that along the past twenty years, the term Third Mission has been defined as nebulous (Filippini & Lepori, 2007) and ambiguous (Laredo, 2007; Pinheiro et al., 2015a; Derrick, 2018; Guenther, 2019).

As it results from the interviews realised for this study, the significance of Third Mission is (decades later) still fluid, ever changing and evolving. What is not yet available is a composite picture that compares how the forces coming from the united European policy frameworks are translated by the national governments in each country. To gain this overview this Section explores the definitions of Third Mission within four EU member states with very different contextual characteristics. To place the theme of the Third Mission in the context of each university system it is necessary to recall, albeit briefly, the main characteristics of the system itself, the transformations that it has undergone and is undergoing.

4.1.2 Sweden's approach to Third Mission

Sweden's economy grew substantially throughout the twentieth century, from a poor, primarily agricultural economy on Europe's northern periphery to one of the top in

terms of GDP per capita and integration into the global economy (Börjesson and Dahlberg, 2021). As a consequence, it faced issues owing to vast inequities (Piketty 2013). Sweden stood out from the overall trend by being especially equitable in terms of economic means and social insurance (Börjesson and Dahlberg, 2021). According to several Swedish interviewees, the legacy of the social democratic welfare state dominates current trends. The Swedish higher education system has been defined as an "intriguing case study for investigating the higher education system's relationship to the state and the economy; its relationship to politics; its own structure, composition, and size; and its uses by social groups" (Börjesson and Dahlberg, 2021). To understand the Third Mission in the Swedish context it is essential to consider that historically public financing was predominantly allocated to 'basic' research as defined within the scientific community (Palsson et al., 2009). While industry carried out development-related duties in relative organisational separation from academies. In Sweden, policy issues related to the knowledge triangle (research, education, and social participation) are traditionally administered separately. As a result, the three key public financing sources are segregated and isolated from one another, posing considerable issues in terms of the knowledge triangle. As a result, tasks become fragmented and poorly integrate. Furthermore, Sweden's research financing system is distinguished by a vast number of funding organisations, resulting in additional fragmentation (Schwaag Serger, et al., 2016).

All Swedish interviewees have specified that they do not use the term Third Mission, Instead, they use the word *samverkan*. This has a meaning that varies in translation between collaboration, alliance, and cooperation - with a greater percentage of interviewees opting for the latter. Almost all interviewees have also specified that this is a conscious and targeted choice, that derives from the willingness of not considering these types of activities in the third position of a hypothetical missions' ranking: *We try on purpose not to use the term Third Mission* (SE_01). The choice of not using the term Third Mission, represents the intrinsic inclusion of those activities in the Swedish university's organisation model, which developed in the nineties in the shadow of the financial crisis.

Following a ground-breaking reform in 1993, the higher education sector was fundamentally deregulated, with a reduction in central laws and ordinances and an increased formal autonomy for HEIs (Piheiro et al., 2019; Puaca, 2021). Those

measures were linked to widespread concerns about economic growth and rising unemployment rates (Göransson and Brundenius, 2011). The ambition to increase the number of educated people in Sweden lead to an increase in 'seats' available for more students throughout the 1990s. This expansion of Sweden's higher educational system was important and necessary. Nonetheless, the expansion happened at a rate where quality could not be maintained (as reported by the Confederation of Swedish Enterprise, Svenskt Näringsliv, 2017). Both educational levels in the labour force and qualification requirements for jobs in the market have significantly increased since the early 1990s. However, this growth has occurred out of synch.

In addition to teaching and research, the 'third mandate' included in the Higher Education Act of 1977 requires universities and colleges to raise popular awareness of their operations. This was updated in 1997 to reflect third-mission activity. As a consequence, all colleges and universities were required to engage with society in general, which added to their purpose but had no connection (then or later) to the resource distribution system. Tasking for Third Mission activities reflects society's desire to emphasise the intrinsic value of education that leads to employment, as well as the critical role that HEIs play in improving the national skills supply (Svenskt Näringsliv, 2017). For this reason, Swedish interviewees have highlighted that the name of Third Mission does not reflect the reality of Swedish universities where Third Mission is integrated and equalised with respect to the other mission: *In Sweden, the* Third Mission is something integrated in the nature of the universities. (SE 11). This reflects the deep debate which exploded in Sweden by the late nineties (Göransson and Brundenius, 2011) precisely in relation to the missions of the university. This played a role in Etzkowitz and Leydesdorff initial conceptualisation and was further informed by their Triple Helix theorisation postulating the importance of intertwining planning and action by the three strands of government, industry, and university (OECD, 2013).

Together with the word *samverkan* some Swedish interviewee have also used the expression of "*social obligation of the universities*". The use of the term "obligation" may relate to the fact that engaging with society has been codified by laws as being a mandatory university' mission:

Sweden has a pretty strong position on that, due to the fact that the university has by law, written in the regulation, a task to have this collaborative mission. It

is in the regulations since '97 and even before that. It is historically a strong role of the university. So, we have had a quite strong tradition of this. (SE 01)

In fact, the Swedish Education Act of 1992 clearly stated in Article 2 that "the mandate of higher education institutions shall include third stream activities and the provision of information about their activities, as well as ensuring that benefit is derived from their research findings". Later, in 2016 the debate became public and hit headlines in the aftermath of the announcement of the research bill "Knowledge in collaboration" (Prop 2016/17:50) (Grafström et al., 2017). In Sweden, the philosophical idea of a state responsible for the education of its citizens hip has clashed with the market-oriented model. This has had a negative impact for the whole educational sector (incl. the friskolor policy - privately run schools funded by public money). Regarding the HE system, in autumn 2013, students protested vigorously against the Swedish governmental proposal to privatise universities. The overall governmental plan officially aimed at granting institutions more autonomy, but the students' movement posed a significant barrier. As pointed by one of the interviewees this aspect relates strongly to the Third Mission discourse in terms of the social role that European universities traditionally used to play in opposition to the market-oriented model of the Anglo-Saxon tradition (USA and UK):

Free Education comes with a price! Here education is paid by the society and therefore the education (although education of individuals) is for the society. So, for an American in Sweden, this opens a completely new standpoint when you get why education is paid by taxpayers' money (SE_06)

In contrast to the other three case-study countries, Swedish interviewees uniquely identified 'genre,' 'equalities,' and 'environment' as themes intrinsically linked to the Third Mission. This indicates a distinct emphasis in Sweden on these issues as central to the role and responsibilities of institutions in contributing to society beyond their traditional functions of education and research. This perspective highlights a particular focus on addressing societal challenges and promoting inclusivity and sustainability, reflecting Sweden's broader social values and priorities in the context of the Third Mission. However, this does not mean that the other countries do not address these challenges; rather, from interviews emerges a less evident awareness of the

potentialities of addressing them through the universities' Third Missions. The difference lies in the visibility and explicit recognition of these themes within the Swedish context compared to the other case-study countries.

4.1.3 German's approach to Third Mission

Germany is a federalist nation made up of sixteen States with independent authority over matters of education and culture. All decisions of collective interest are discussed in the Standing Conference of the German Ministers of Culture and Education (KMK). The Federal Ministry for Education and Research (BMBF) is primarily in charge of financing research and setting research priorities in the sphere of higher education, organising, and facilitating international exchanges in education and research, negotiating framework agreements, and providing scholarships (Kehm, 2013). Germany has a huge and complex education and research sector in which universities play an important role but are by far not the only players. Traditionally, trade unions and employers' associations play a crucial role in the context of education responsibility, not least due to importance of dual vocational training in Germany (Eichhorst et al., 2015). The intrinsic characteristic of the German multi-sectorial arena is that it is populated by a myriad of actors with no obvious centre of political power (Kuhlmann, 1997). At the turn of the century German society has undergone deep, rapid, and lasting changes (Niemann, 2010). As a consequence of unification and other economic challenges, German monetary resources came under pressure (Bibow, 2001). At the same time the Bologna process started to operate, and Germany has taken this process seriously on board as driver for drastic changes (Winkel, 2010). from the sixties onwards, complexity of the articulated educational/research/innovation systems has increased enormously and with it, also the conflicts of interests and controversies, also due to the changes in the dynamics regulating these relationships: Markets dynamics have emerged and expanded (Wolter, 2012). They have not substituted the previous attitude but integrated it, so it is plausible to see a society in which the "consensus culture" (Schimank, 2005) coexist with strong "competitiveness" and as indicated by interviews, this mix constitutes the skeleton of the sector: Germany is a coordinated market economy with a lot of cooperation networks. (DE 05). Originally sector structure every type of actor had its well-defined mission and nature. For the Fraunhofer-Gesellschaft for example collaboration with industry and society,

market orientation, commercialisation of research outputs and technology transfer are in its DNA:

Mr. Fraunhofer existed, he was an inventor who had a workshop in his courtyard with a door on the street and he built his inventions and sold them immediately after. This is why universities do not have to have bilateral relationships with industry, not the Max-Plank-Gesellschaft has...but we have to, and we are measured on the basis of that in our performance evaluation. (DE_12)

Historically, universities were exclusive institutions characterised by an elite and isolated environment, influenced by the Humboldtian idea of independence and invulnerability (Müller-Böling, 1995; Felderer, 1997). The connection between knowledge and industry was entrusted to the pragmatic and very effective system of universities of applied sciences, called *Fachhochschulen*, (Roessler, 2015). Interviews clearly suggest that Third Mission has been forced within the generalist universities and it is the expression of recent political will and policy implementation:

Without the injection of resources from the BMBF to force universities to develop Third Mission, they would not have done it. For them Fachhoschulen were doing it and this was enough. (DE_02)

This is also reflected in the formal institutional relations between politics and universities. Universities and Bundesländer sign regulatory pacts, so-called *Ziel-Leistungsvereinbarungen*, in which goals, objectives and performances are listed and on which universities are measured (Berghäuser, 2019). Target and performance agreements do not address the overall financial resources of the universities but rather focus on a limited number of strategic development goals. These differ from university to university and from state to state. According to Berghauser (2019), who analysed the role of the Third Mission in the target and performance agreements between the university and the responsible ministry, the definition of Third Mission refers primarily to knowledge and technology transfer (KTT) activities. Interviews also suggest that while goals and indicators are detailed for both teaching and research, when it comes to Third Mission, they are still generally and vaguely formulated:

If you take a look, you see how differentiated the statements on the area of teaching are; you also see differentiated statements on the research focus and

research activities. But the counterpart to the Third Mission is mostly missing, there the explanations are very vague. (DE 09)

According to Berghäuser (2017) knowledge and technology transfer, as well as further education, are recognised as fundamental responsibilities and requirements of universities. In relation to the transfer of knowledge and technology, the laws include multiple provisions that require higher education institutions to collaborate with nonuniversity entities such as private companies. This collaboration aims to support commercialisation activities, such as establishing new companies based on research findings, as well as facilitating personal transfer, for instance, by expanding alumni networks or implementing internship programmes (Berghäuser, 2017). Regarding social interaction, certain rules may be established, particularly with increasing participation and, to a lesser extent, open access (Berghäuser, 2019). Other areas of social participation are hardly addresses. Consequently, the government's external management of universities is centred upon knowledge and technology transfer, further education, and increasing participation (Berghäuser, 2019). Although the German higher education system has always had a strong connection with the social backdrop as a coordinated market economy (Hoelscher 2016), recent modifications in higher education regulations have made this connection more explicit and have financially supported this new emphasis on the Third Mission with the injection of the federal and states funding schemes (Berghäuser, 2019).

From German interviews confirms that the concept of Third Mission is still strongly related to technology transfer. In fact, the word "transfer" appears in German interviews more than in all interviews of the other three countries together. This aspect also emerges from a review of specific German literature and institutional documentation (Roessler et al., 2015; Henke et al., 2017). It corresponds to a specific characteristic of the German system. Originally Third Mission was considered to be technology transfer because this was a key element of the so called *Fachhoschulen* (Universities of Applied Sciences). This type of institutions was founded in the late seventies with the explicit mission to relate to industry and provide the industrial sector with skilled workforce and technological products that responded to the industrial/market needs. Universities, in the traditional sense, maintained a certain distance from the relationships with the outside world for much longer (Berghäuser and Hoelscher, 2020). Third Mission is for German universities a rather new

phenomenon (Roessler, 2015), which has been temporarily framed by interviewees in the period starting after 2012. The original meaning of "technology transfer" continues to permeate the idea of Third Mission in Germany:

This is, so to speak, a new term for what was previously described as transfer (DE_11)

Although currently it has assumed more the value of "Transfer in die Gesellschaft" which means "transfer to society" (DE_03), the economic focus of universities relationships and partnerships is anyhow very strong (Berghäuser and Hoelscher, 2020).

Dichotomies in the German case study

In Germany the deep-rooted vision of the Humboldtian university characterised by freedom and autonomy in teaching and researching (Campbell and Federer, 1997), had to face the reality of a country with one of the highest funding rates from the private sector. The question is particularly relevant for Germany as this is one of the countries with the highest percentage of research funding of private nature, as more than twothirds of the annual funds invested in research come from industry (BMBF, 2021). In the opinion of many German academic freedom has been questioned because of the increased injection of private funding to subvention public research and teaching (Teichler, 2018). Interviews confirm public debates surrounding the question whether an interest in profit and independent science can be compatible. It has been argued that cuts in government funding and managerial-like approaches have, in one way or the other, an effect on the academic freedom of researchers and of collegiality within the HE institutions (Woodhouse, 2019). The conflict between academic freedom and profit-driven interest has been campaigned globally, with strong echoing in Germany and Sweden (Becker, 2019), for the medical/pharma and energy sectors with obvious and explicit reasons but not exclusively. It has also raised further questions about transparency, competition, trade secrets, etc. (Kästner, 2020). Also, ethical reasons have been brought up in relation to political and diplomatic circumstances such as the German cases where the USA Pentagon had financed a PhD place at the University of Bremen. A website has been created called Hochschulwatch which collects and publishes the origin of third-party funds to German universities in name of transparency and ethical behaviour. The unbalanced distribution of third-party funds through competitive acquisition has also been questioned and criticised. Interviewees noted that the main issue relates to the fact that funds are unevenly distributed, and this allows for a "patchy coverage", as resources are not sufficient for every institution, no matter how good they are or how good their plans are:

There is a debate about why we are doing all this with third-party funding. It's about how much you do with the basic funding and how much you do with third-party funding. Everything we do at the federal level is through third-party funding and the question is whether it would not have been better to raise basic funds. (DE 02)

4.1.4 Portugal's approach to Third Mission

In the twentieth century, Portugal had two significant transformations driven by the socio-political and economical events that enabled it to narrow the gap with the rest of Europe: the democratisation of the country achieved through the Revolution of 1975 and Portugal's accession to the European Common Market, which resulted in significant financial assistance and technical collaboration (Urbano, 2019). In the sector of education, a significant public policy was implemented via the Education System Basic Law (LBSE 46/1986), which was subsequently modified and adjusted to align with Bologna's educational framework in 2005 (Law 49/2005); and a new legal framework for universities' governance was established in 2007 under recommendations of OECD (2007). Subsequently, education in Portugal has been progressing rapidly, with a constant decline in illiteracy rates (Urbano, 2019). In Portugal, the higher education system is called binary as it is divided into two subsystems: university education and non-university higher education, known as polytechnic education; both type of institutions may be public or private (Neave, 2012). The difference between the two types of institutions is rather complex and strictly regulated by law (Carvalho and Diogo, 2020), the research mission being the strongest reason for the binary division. Higher Education institutions are not allowed to use the term "university" unless they provide a minimum of three PhD degrees in three distinct academic fields. Portuguese universities have been traditionally primarily focused on teaching and research and dedicated to the pursuit of knowledge for its own sake. In contrast, polytechnics have a more practical and vocational approach, with a clear

focus on the applicability and transfer of knowledge to companies and society (Alves, 2015; Guimarães et al., 2018; Lievore, 2021). Since the Third Mission implies engagement with the community and an "interested" search for knowledge, universities have had more challenges than polytechnics in changing their conventional function and adapting to the transformation brought about by the Third Mission (Alves, 2015; Sin et al., 2018)

As resulted by the interviews, in Portugal the term Third Mission is not frequently used and is widely perceived as being resulted 'and imposed' from policy. Almost unanimously, interviewees recognise that incentives mainly related to the economic valorisation of research outputs and thus the connection is strongly orientated towards entrepreneurship and connections with industry. Interviewees indicate that this aspect contributes to the limited use of the term "Third Mission," with the English word "outreach" being more commonly preferred instead. It literally means 'to reach' or 'to extend beyond'. Interviewees highlight that in recent years it has quickly evolved to become equivalent to expanding access to services, benefits, and resources to a broader segment of the population, with a specific relevance for (although not exclusively referred to) education. The Portuguese word extensão is used, although this is habitually more used in Brazil. It appears in scholar literature about both countries (Silva, 2018) and in studies comparing Brazil and Portugal (e.g. Guimarães et al., 2018; Lievore, 2021). The literal translation of extensão would be "extension", which implies an enlargement of the domain or of the mission of the institution (Silva, 2018), in this context it has been unanimously translated by interviewees as "outreach":

We call it outreach. Well, we have a big debate ongoing on what to call it and we have constituted an outreach committee (PT_08)

Portuguese public administration is generally considered "centralised, hierarchical and secretive" (Gonçalves, 2012). The Portuguese suffer from a deficit in participation and civic culture, they have weak cognitive mobilisation and the limited availability of effective mechanisms for interaction with public administration also does not favour or encourage their progression (Cabral, 2000). Oliveira and Carvalho (2015) have

analysed the formalised structures in place in Portugal to manage and enhance citizen participation and involvement in science and technology (S&T) governance. These structures include the Superior Council of Science, the forum Technology and Innovation, which was established in 1986 and officially reactivated in 2003. The forum brings together individuals from political, academic, and business sectors. Additionally, there is the Scientific and Technological Policy Coordinating Office, which consists of representatives from academic and scientific institutions, both public and private. The Parliamentary Committee on Science and Technology has been actively involved in this field for a significant period of time. It has organised several public discussions and Science Cafés to examine scientific policy and the social consequences of science and technology (Alves, 2011). Additionally, there are several organisations, both public, private, and mixed, that have endeavoured to stay engaged in the discourse around certain subjects pertaining to science and technology. However, their level of effectiveness and impact is limited (Alves, 2011). There is a Portuguese legislation that addresses broadly the relationship between science and society: for example, Law 83/95, Law of Procedural Participation and Popular Action, or through the Constitution of the Portuguese Republic itself, enshrines, since 1976, the right of citizens to participate in decision-making and foresees public participation, and the right to information that is implicit in it, as one of the rights of citizens. Historically, Portugal has been one of the EU countries with highest illiteracy rate (Gomes et al., 2015). Thanks to policies, information campaigns and the opening of universities people have gained confidence in science and interest in education as confirmed by at least 4 Portuguese interviewees, two of which made direct reference to the role played by the former Minister for Science, Technology and Higher Education, Mariano Gago, who held government offices for over 13 years:

Thinking about Third Mission and policy legacy in Portugal it is undoubtedly that we must refer to a man who has been for long time minister of science and was respected by all academia, politics and media. He changed the way people think about research, science, and universities. Thanks to him Portuguese people, citizens, have gained confidence in science. (PT_03)

Interviews show that in Portugal there is still controversial understanding of what is to be considered Third Mission activities. Portuguese interviewees describe Third Mission in a broad and generic sense. None of them has referred to formalised definitions, they have instead provided their own interpretation and personal views, which indicate different standpoints. For example, Third Mission is conceived as being a sort of instrument to promote the other two ("real") missions of universities:

I think it defines all activities for the promotion of the first two missions to the outside world. (PT_09)

Other participants conceive universities as actor of the "triple helix interaction", as theorised by Etzkowitz and Leydesdorff (1995), within a local ecosystem dimension:

What I think the Third Mission really is, what we are walking into for many years now, not today, is actually related with a kind of a quadruple helix type of approach, where higher education generates relations with industry, society and policy makers (PT_01)

In the practice it has assumed quite often the form of university-industry relationship, and only more recently, is assuming a broader connotation, encompassing relationships with the public sector:

It is exactly in the decision-making processes within the public sector_that universities should play a big role, where decisions are taken which can make a difference not for then profit of a company but for the benefit of a community or the society (PT_03)

The absence of a formalised, shared, and applied definition of Third Mission has been stigmatised by some Portuguese interviewees, detonating by it a lack of policy intervention:

I'm not defending labels. Because labels become enclosed in themselves and they have a very short time span of liberty, even if they can have a momentum of positive impact. But I think in this respect something should be done (PT_01)

Portuguese politics has invested significant resources to achieve alignment with European standards in the higher education (Antunes, 2009) but interview show that with regard to Third Mission there is an underdeveloped process (Sin et al., 2018). Portugal is out of the four case countries, the one that has suffered most from economic crisis and austerity backlashes (Mateus, 2013; Lehmann et al., 2018; Šušteršič, 2018; Aguiar-Conraria, 2024). This is clearly reflected in the interviews and

most of the discussions surrounding universities relates to the difficult economic conjuncture of the nation. Interviewees confirmed that current academic debates mainly focus on contractual, career, jobs, funding, related issues. Tensions emerge evidently from interviews, especially concerning the relationships between government and society. As a consequence, following European trends, both political and societal stakeholders have been asking for changes in universities. Representatives from Portuguese academia have responded that HE institutions' capacity to proactively react to these challenges relates strongly to lack of resources. Interviewees have identified in economic issues the main barriers to these developments. In their opinion the resistance to changes in the Portuguese universities is less a cultural rather more an economic factor. It is important to highlight that in the edition 2020 of the OECD innovation monitoring report, where countries' innovation capability is scored on a basis of a composite indicator, Portugal (previously classified as Moderate Innovator) joins the group of Strong Innovators (EC 2020c, accessed September 2020). This reflects the strong commitment of government to provide instruments to drive and support structural changes to modernise and improve national systems in their complexity (Sandström and Van den Besselaar, 2018). Policy has operated first and foremost a cultural change.

4.1.5 Italy's approach to Third Mission

The Italian academic system comprises various types of university institutions, which can still be meaningfully traced back to two main categories first recognized in 1933 (Barbati, 2017). These are: universities established by the State—now referred to as "state universities"—and "legally recognised non-state universities," also known as "free universities," founded by private or public entities other than the State. These two categories differ significantly in their nature and, above all, in their legal status (Barbati, 2017). The first Italian legislative declaration concerning the definition of universities comes with the Law n. 168/1989, whose art. 6 opens by stating that "The Universities have legal personality and, in implementation of the art. 33 of the Constitution, have didactic, scientific, organisational, financial and accounting autonomy" "(Legrottaglie, 2019, p. 3)as well as the right to establish "autonomous systems with their own statutes and regulations" (Legrottaglie, 2019, p. 2). Up to that time, state universities did not have independence as their statutes were limited by strict national laws,

teaching staff were determined by ministerial restrictions, financing was allocated to specific spending categories, and instructional procedures followed inflexible ministerial guidelines (Luzzatto, 2011; Colombo, 2022). Over the course of a decade, the conditions changed with the acknowledgment of statutory and financial as well as teaching and research autonomy. During the first decade of the XXI century several laws, and especially the Moratti law in 2003 and the Gelmini law in 2010, manifest the exigence of profound changes in the Italian education system at all levels (Reale and Potì, 2009; Facchini et al., 2019). However, statistical reports (Openpolis, 2020) portray the first two decades of this century as marked by a gradual disinvestment in schools and education, alongside a notable absence of a culture of evaluation. This lack has had repercussions not only on cultural and scientific development but also on economic perspectives (Rizzi & Silvestri, 2002). During those years, debates surrounding universities, and their role have been contentious and seemingly endless (Viesti 2016, Storchi, 2020; Colombo, 2022). De Marco (2016) argues that in Italy these series of reforms were in fact "a make-up operation" to re-align some elements in a "European-fashion way" (De Marco, 2016) but were not capable of generating profound changes. This probably because universities were not prepared to selfgovernance, leading to a consociationalism and self-referential structure (Luzzatto, 2011). In Italy, as in many other countries, universities facing financial constraints and reduced public funding have embraced the idea that governance should involve external actors. The aim is to foster collaborations with organizations aligned with market needs—those that see value in supporting universities, particularly by contributing to the production of knowledge generated within them (Pitrone, 2016). Universities had to acknowledge that they were no longer "alone" on the scene of higher education and that they were called upon to relate themselves and their role with a plurality of subjects (Bertagna, 2011). But it is only with the inclusion of the Third Mission in the evaluation system of ANVUR that Italian universities were forced to systematically question themselves on the activities of this "additional" mission (Privitera, 2019). There was a long, open, and disputed national process of defining what Third Mission is. During which the term Third Mission was commonly used and consolidated with in the academic world as well s outside it and skyrocketed in popularity:

there, whether we like it or not...(IT_19)

Interviews suggest that, differently from the other countries, Italy has formalised the meaning of Third Mission in the attempt to institutionalise this mission within the university system. Some interviewees, with long experience in working with ministries and ANVUR, have retraced the evolution of the meaning that the term has indicated over a period of twenty years. As they indicate, over time the definition has changed from the "valorisation of research" to the current conceptualisation, which is broad, rich and holistic:

Third Mission includes the cultural role and also the social role of the university. Surely the technological impact aspect is very important, also because universities invest heavily in technological research. So, this role is very important. But there is also a social role that I would understand in a much broader way... (IT_07)

In Italy, the idea of modernising the university system has clashed against its intrinsic nature of self-references and conservatisms as well as its resilient internal traditions. The Gelmini reform (2011) had the goal of broking some of the traditional bonds, but it has generated only limited changes (Reale and Poti, 2009; Donina et al., 2014; Facchini et al., 2019). About 1500 people have undersigned a petition shouting that 'Italian universities are dying'. The cause of this softly killing process is a twofold weapon: the hypertrophic bureaucratisation and the related enslavement of research and teaching to self-styled market logic (ROARS, 2020). In the introduction of the petition Margaret Tatcher is quoited "Economics are the methods. The object is to change the soul" (statement made during an interview with the Sunday Times in 1981). This summarises well the contraposition between philosophical idea and policy objective. The success of the petition represents a widespread discomfort that needed to find a voice. The ongoing debate in Italy about the role and future of the university focuses on the tension between the shortcomings of the traditional university system and the current education policies. These policies are widely criticised for aligning the national framework with external pressures for standardisation and for introducing a new model of governance under the misleading banner of "modernisation. A big part of the philosophical/political discussions surrounding Italian universities (and fully

investing Third Mission) concerns quality assurance and especially the mechanism of national evaluation, which will be discussed in section 4.3:

The truth is that in Italy there is a tendency to blow on the flames of controversy (IT_10)

4.1.6 Third Mission conceptualisation in cross-country comparison

The section provides an exploration into the diverse conceptualisations of the Third Mission across the four selected countries. In Sweden, this mission is encapsulated within the term "Samverkan", not merely as an adjunctive endeavour but as an inherent facet of the university's raison d'être, fortified by legislative backing. Swedish interviewees conscientiously refrain from employing explicit Third Mission terminology, opting instead to underscore the strategic imperative of collaboration as the essence of what is otherwise known as Third Mission. In Germany, the "Dritte Mission" emerges as a deliberate outcome of policy deliberations, often buoyed by competitive (mainly federal) funding programs. Interviewees noted that the economic dimension of Third Mission is perceived as being predominant and all economic aspects assumes paramount importance. Portugal, meanwhile, embraces the Third Mission under the guise of "Outreach" (extensao), influenced by scholarly research and implemented as reflection of EU strategic initiatives. Despite the scholarly discourse adopting the terminology, the practical implementation of the Third Mission remains in its formative stages, hampered by the absence of robust policy frameworks. Nonetheless, interviewees noted that there is a palpable acknowledgment of its potential transformative impact at the institutional level. Italy's "Terza Missione" represents a concerted effort to expand the horizons of academic engagement, orchestrated through policy directives and embedded within the evaluative frameworks of academic performance. Significant efforts have been imputed into the definition of Third Mission activities within the existing research evaluation scheme. These endeavours underscore the pivotal role played by the Third Mission in bridging the gap between academia and society; catalysing transformative change across diverse socioeconomic landscapes. The following table provides a concise synthesis of the diverse approaches to conceptualisation of Third Mission across the four countries:

Country	Label	Source	Meaning	Perceived as	Formalisation
SE	Samverkan	Inherent to university natural role	Collaboration TM intentionally not used	Strategic for institutional and social growth	Through law
DE	Dritte Mission	Originating by policy decision and solicited through federal competitive funds	Third Mission	Strong economic dimension	Trough state-universities pacts (<i>Ziel-Leistungsvereinbarungen</i>)
PT	Outreach [extensao]	Conceptualised in scholar research and partially implemented through EU effects	Outreach [extension] TM only used in policy and scholar literature	At embryonic stage	Lack of policy formalisation
IT	Terza Missione	Originating by policy decision and implemented through evaluation	Third Mission	broad holistic approach with efforts to define which activities are/are not considered TM	Through inclusion within the research evaluation framework

Table 13 Conceptualisation of Third Mission in comparison

What it could be seen as a mere linguistic issue related to the labelling of a phenomenon, is indeed a more serious question that introduces considerations about the real meaning of Third Mission. But the labelling of a phenomenon is problematic if both the labels and the phenomena are changing and integrated parts of the construction (Berghäuser and Hoelscher, 2019). In this specific case, the labelling through a numbering adds a level of misunderstanding as it is associated to the idea of a classification and consequently to an order of importance: *Third Mission - but third after what?* (IT_02). Interviewees across all four countries, have attempted to broaden,

to narrow or to focus the scope in trying to give "their" definition. Interviewees often describe the term Third Mission as "not adequate to define what Third Mission really is". It emerges that "Third Mission is clearly perceived to be related to the institution as a whole". In that respect, the word 'mission' assumes centrality as to reflect the institutional dimension and the intention to define the role of university in its entirety:

We consider university a sustainable organisation that is actively contributing to the development of society: when it comes to making sure that knowledge produced here has value for the society, it means we contribute to the sustainable development of the society (SE_10)

The term is around for a couple of decades, but there is no universal valid definition of Third Mission (Laredo, 2017). In addition, the definition of which activities are counted as part of Third Mission varies considerably from one university system to the next (Berghauer and Hoelscher, 2019). In fact, they vary from university to university (Lebeau, 2015). As testified by a Portuguese interviewee, after two decades there are still departments and universities constituting committees to define what Third Mission is:

For now, we call it outreach. We have a big debate on what to call it. So, we currently have created this committee to define it. There is an ongoing debate about what Third Mission actually is... (PT_08)

4.1.7 Third Mission evolution: comparing the four countries

Interviewees spanning the four countries commonly view the Third Mission as a result of political intention. Interviewees noted that Third Mission is not perceived as a catalyst for change coming from inside the universities, it's seen more as a tool used by political authorities to initiate and maintain desired transformations. Throughout the different sets of national interviews, there's a shared recognition that policymakers are making deliberate efforts to support the institutionalisation of universities' engagement activities. It emerges across the four countries the interpretation of Third Mission as an instrumental tool. This aims to compel universities to undergo a significant transformation - a second major academic revolution, according to Vorley and Nelles (2008) - involving a strategic repositioning of knowledge institutions (Poole, 2005) to better serve the needs of the knowledge society (LERU, 2017). The figure below

demonstrates that while consistent with the overarching assertion that institutionalisation of the Third Mission is driven by policy, each excerpt underscores a unique aspect. Policy undeniably has been instrumental, particularly in propelling progress and has been the primary impetus behind Third Mission development. Interviewees also noted that the significant systemic shifts witnessed internationally in recent years simply wouldn't have occurred without a cohesive and unitary political input:

Country / Interviewee	Quote	Policy Concept Framing
SE_13	TM is very much a requirement pushed by policy	Requirement
DE_02	I believe that such a systemic change as it has been in the last few years, it just wouldn't have happened without politics	Systemic change
PT_02	I would say the driver was policy	Driver
IT_02	Policy has surely played a key role, especially in terms of moving things forward and accelerating them	Accelerator

Table 14 Political inputs towards Third Mission

In the cases of Sweden and Portugal, the term Third Mission is well known but interviewees perceived that it is mostly used in policy documents and scholar literature. Thus, the term Third Mission assumes a policy-technical meaning in the context of the two countries:

We actually don't use that anymore. It was regulated in terms of the Third Mission, but we don't really see it that way anymore, even if it is still part of the discourse in academia, so to speak (SE_13)

Similar comments surrounding the adequacy and efficacy of the term Third Mission has been expressed also by Italian and German interviewees, although in both their

countries the term Third Mission is commonly used in academia, and it is not restricted to scholar literature or policy documents jargons:

We do know the term and use it commonly among us. But if we have to talk about Third Mission outside the university, we may use other expressions, which give a better sense of what we mean. Usually those expressions include the word 'territory' (IT_02)

The use of the word 'territory' associated to the activities of Third Mission underline the local dimension of these activities (Dilorenzo and Stefani, 2015; Goddard, 2018; Benneworth et al., 2017; EUA, 2019). Across all four countries, especially small and medium universities are anchored in their regional environment through practical collaborations and are taking on the role of driving forward the transfer of new research findings into technological or social innovations (BMBF, 2019; Ciapetti, 2017). However, participants extended their consideration by arguing that precisely the relationships with SMEs and local actors are indicative of the inadequacy of the term Third Mission. Participants observed that frequently, the term "Third Mission" requires a form of "translation" when used beyond academia. Academics involved in Third Mission activities emphasised the necessity of clarifying its intended significance:

People do not value Third Mission as a mission. But the fact itself that it's called Third Mission, although fashionable, it doesn't express what it really is. (PT_01)

Furthermore, some Portuguese interviews show that, in the absence of a codified definition of Third Mission, also academics struggle with interpreting the real nature of Third Mission activities and their classification. They also highlight how the interpretation of what Third Mission is, may vary upon discipline as the theoretical definition may have different applications when it comes to classifying typologies of activities. For example, it is said that serving services is relevant for areas such as engineering, architecture, healthcare. While communication, public engagement with science, reaching out to policymakers are perceived to be more related to humanistic areas:

There was an ongoing discussion at the University [anonymised] about this sort of mission: the main dispute concerns what the Third Mission actually is for our colleagues in engineering. So, it's fundamentally technological transfer, selling

services and so on? But in our case, since we are a social science research, a broad definition seems to suit. So, we call it outreach in the sense of science communication, public engagement with science, reaching out to policymakers and stakeholders. And so that's what we consider the Third Mission (PT_08)

Initially, Third Mission primarily served as a conduit for transferring technology and knowledge from academic institutions to businesses, resulting in the generation of patents, startups, and competitive advantages (Lissoni, 2015; Rubens, 2017). The academic discourse surrounding the Third Mission was predominantly economic, focusing primarily on university spin-offs, startups, and patents (IT_16). However, more recently, the relationship between academia and society has been viewed from a broader perspective, emphasising the public dimension, opportunities for mutual development, two-way interactions, and the capacity to address significant issues such as inclusion, sustainability, and inequality policies (Carra, 2022). Interviewees observed that particularly in a time marked by social crises in Europe, where various challenges create substantial tension and widespread problems, universities must fulfil their societal role. Interviewees across all four countries remarked that universities must address emerging issues such as educational poverty and contribute to developing new skills or harnessing existing ones within society to tackle the pressing challenges. Interviewee across all countries indicated that the conceptualisation of Third Mission has evolved and moved from the idea of opening to the economy via transfer of knowledge to a wider concept that still includes economic valorisation of universities activities (not exclusively related to research) but also a wide range of social, cultural, and educational values. A common thread among participants was the observation that, despite its original meanings and the diversity of systems, the label today encompasses a broad range of interpretations (Compagnucci and Spigarelli, 2020). As such, it can no longer be regarded as a proxy for either knowledge transfer or the economic valorisation of research - "even though it includes all" (DE 05 and IT 19). The term 'transfer' has a too narrow (Roessler, 2015) perspective as it implies mono-directional activities from universities to society:

It is not about the universities communicating what it does internally, it is not about the universities providing something to the industry, it is not about giving operational or economic value to what we produce internally. (DE_08)

Third Mission has evolved (Benneworth and Zomer, 2011) from being considered a one directional communication from university to society to a multi-directional collaborative, participatory and synergetic relationship (Roessler, 2015):

So, it's been that kind of process from just communicating to actually making the results beneficial for the society and also making the outside society to come into the universities to be collaborators in the universities' activities (SE_01)

4.1.7 What is the Third Mission?

Sweden has traditionally developed an open and multi-typology approach to Third Mission (Knudsen, et al., 2021; Schnurbus, 2022). As elicited by two interviewees in Sweden there is a widespread awareness that science, research, and universities part of the solutions to global challenges and problems (Paterlini, 2023). To the point that during global economic crisis, Sweden has maintained the same share of funding in the education sector instead of operating cuts as governments did in other countries (OECD, 2014).

I would say that opening up the university has been one of the main drivers to increase the funding to the sector. In the financial crisis in 2008 a lot of European countries cut funding for the universities. We did not. Actually, we increased the funding for the universities because we saw universities as being part of the solution rather than part of the expenses. And I think that is a way of saying that there is a good way of interacting with the societies. (SE_02).

The **German** education domain, featuring 400 universities and over one thousand research bodies, is quite extensive. The duality of the system which sees universities flanked by universities of applied science has strongly determined the nature of Third Mission activities. The "transfer" culture is evolving from a mono directional techrelated conception to a synergetic societal interpretation - but it is still extremely strong the focus on economy-related aspects, which seem to dominate universities' German education as a whole (Berghäuser and Hoelscher, 2020). The **Portuguese** conceptualisation is still at embryonic phase (Sin et al., 2018), very much conditioned by the binary systems, with polytechnics playing an active role in regional cooperation (Pacheco, 2014; Alves et al. 2015). The main proportion of research is generated by the public HE system and therefore universities' Third Mission is strongly dominated

by economic valorisation of research activities. The **Italian** interpretation is by far the amplest and variegate of the current four conceptualisations. In addition to the traditional elements of Third Mission such as spin-offs, patents, transfer activities etc. (Lissoni, 2015; Donatiello and Gerardini, 2019) it also formally includes elements such as university museums and libraries (Cassella, 2017; Corradini, 2019), valorisation of cultural goods, historical buildings and archaeological sites, arts exhibitions and performing arts. "Italy has been a pioneer in the Third Mission of universities, formally recognising in 2010 the role of museums, collections, and heritage [...] No such movement has been observed anywhere in the world, even in Latin America, where universities are most oriented towards the Third Mission" (Lourenço, Speech, 2019, p.4).

It emerges clearly from interviews that Third Mission does not exclusively relates to research and its valorisation. Innovative approaches such as the integration of project-based learning and co-creation in research (Staniškis, 2016), are making service to society (= outreach or Third Mission) an increasingly integrated element of the other two missions, both research and education (EUA, 2019):

One thing is for sure; Third Mission does not relate to research only. It encompasses a lot more. It is difficult to differentiate what Third Mission is or it is not. But the creation of knowledge and competences in the society, for the society, outside the curricula it is for sure Third Mission, For example, there is an association of universities that have taken this topic, social responsibility, and cooperation in civil society, as their goal. How can we say this is not Third Mission? (DE_06)

and in some cases, interpreted as an extension of them both (Serna Alcantára, 2007):

When it comes to contributing to the society the other missions, research and teaching, are equally important and relevant (SE_06)

Interviewees have provided series of interesting anecdotal cases about Third Mission activities which are, in their opinion, exemplars of what Third Mission includes and especially demonstrative of what European universities understand for engagement with the society. It was important for the interviewee to demonstrate that often servicing the society means 'going beyond' what it would be expected by a university. As an example, made by a German participant explains the universities do not limit

their activities by providing the educational service. They also play a strategic role within their surrounding territory (Zomer & Benneworth, 2011; Dilorenzo and Stefani, 2015). For example, the institution for which this interviewee works is placed near the border with another EU country. The nurses they train, very often cross the border to work after graduation as they are better paid in the neighbour country. This translates in loss for the territory where the university insists as it invests in education of a workforce, which will not return the investment in services. In theory by providing high-quality education and training, the university would have done its job, but this institution interprets its institutional responsibility not in the restricted terms of providing educational service but in the broader and strategic terms of contributing to the wealth of the region. As part of the social responsibility, the university is addressing this issue in dialog with other actors, so as to improve the overall working environment in care.

The goal is to impact on the focus of the decision: the monetary difference should not be the decisive elements for someone to decide whether to leave the region or to stay and work here. (DE_11)

Other examples highlighted their original and innovative interpretation of engagement, whereas university develop the concept of skills incubation by inviting small and medium enterprises, especially start-ups, to a university-lead space where they can co-develop ideas, share experience and skills, create synergies. In this way, a local territory which is characterised by micro and very small enterprises manages to create a synergetic ecosystem, where the driver is the university:

We have opened the doors of the university to 7 thousand companies [...] We welcome them and provide them with a service. It's not a traditional spin-off, it's an innovative spin-in! (IT_15)

Possibilities offered through Third Mission activities very much depends upon size, vocation, geo-localisation of the institution (Lebeau and Cochrane, 2015). It is often the case that small universities have limited opportunities to enlarge their range of action. Internationalisation processes and mobility, for example, may suffer from limited networking opportunities (Wolter, 2012). Since it is not easy for a small or medium universities which have traditionally been devoted to teaching to create connections outside academia, they have developed a strategy to build connections

around research cooperation, by implementing traditional Third Mission activities such as IPR, business creation, and technology transfer:

This gives us three gains: funds that allow us to be sustainable; benchmark of what others do (so we learn from them and measure ourselves); we build a network that allow us to support our activities worldwide. And we gain in credibility thanks to our track record. (PT_12)

Participants noted that Third Mission may take a leading role being able to drag institutions out of their shell toward new horizons in a direct, quick, and efficient way. The merit of Third Mission lies not only in the direct linkages with the "outside world" it also has beneficial impact within the organisation itself (Laredo, 2007) Third Mission has the merit of enriching and improving the other two missions as well_(Pinhero et al., 2015; Arocena and Sutz, 2021). Vorley and Nelles in an OECD study (2008) stated that there were missing data to support their assumption that Third Mission can contribute improving quality of research and teaching. Interviews for this research suggest that doctoral thesis with collective utilities or research co-production can prove how Third Mission activities contribute shaping new methods of knowledge sharing and knowledge production:

It would not be possible for us to provide high quality teaching without external collaborations. The same for research. We would not be able to do some pioneering research about body language and gestures without the collaboration with [*] hospital and the retirement home for people with Alzheimer... And for our students the possibility to participate in such projects represents an invaluable experience. (SE_13).

4.1.8 What Third Mission is not

The framing of Third Mission by identifying the conceptual boundaries of what it is commonly considered Third Mission, and it is not, is particularly relevant within the discourse of the entrepreneurial university. Interviews encompass several observations concerning what Third Mission is not, or better, what Third Mission should not be. As seen, current interpretation of Third Mission implies a multidirectional relationship, whereas different actors (inter)play in a correspondence of "give and receive" with mutual benefits (Laredo, 2007; Frondizi et al., 2019). Interviewees noted that Third Mission is not just about making business, getting a

supplementary income to finance other activities, selling, or buying competencies. Although the form of contract is the way that Third Mission activities are regulated, Third Mission is not understood as proxy of making business: *There is a subtle line between engaging with companies and selling your expertise (PT_04)*. Engaging implies to get something in return. Selling knowledge, skills or products means doing entrepreneurial activities. However, interviewees noted that some limitations in the ability to sell or valorise the research outputs may also come from a "biased" European culture of what means "economic valorisation" (IT_08). In their opinion, the bias does not come from within the universities but from their counterparts, namely enterprises and public institutions. The concept has been made clearer with an example comparing the interviewee's European experience with the one in the USA, where the perception was that enterprises working with universities take for granted that there must be a compensation for the work and the output; while in Europe, instead, interviewees said, this is not equally obvious, especially from side of the enterprises:

When we work with US enterprises to access markets, we do not have to explain that there is a cost related to that and that it is not offensive. While in Portugal, in Spain but also in other European countries, there is a wrong idea of 'ownership'. This is changing, thanks to some of EC policies but the change of culture is something that takes long. (PT_12)

The origin of such an attitude may lay in the public nature of European HE system and in the expectation that universities have to 'return' to industry and society part of what they receive by the states. This approach invests and shapes fully the concept of Third Mission as a mandate for universities to contribute to the national, regional, and global social-economic development:

We are public funded, and we need to be responsible in what we do with taxpayers' money. We are a sustainable organisation that is actively contributing to the development of society; thus, we have to make sure that knowledge, that is produced within the university, is also creating value for society. Ans that also contributes to sustainable development. That's one of our key aims. (SE_10)

Participants have also observed the risk that both universities and their partners might misinterpret this relationship, leading to universities being seen as a budget-friendly alternative for counselling and service provisions that small enterprises or public bodies may otherwise find unaffordable. This risk is particularly high in periods of public funds' cutbacks so that universities, with their paid staff and low-rate students as workforce, may become easy to handle and cheap replacements for what it used to be a consultant or a service provider in times prior austerity:

There is a risk, a big risk, that universities become cheap service providers for enterprises or even worst public administrations, which cannot afford counselling anymore (IT_16)

The understanding of these borderline concepts it's not trivial. This aspect has implications also at institutional level. For example, in relation to marketisation of activities (Agasisti and Catalano, 2006). In an education sector, which is increasingly becoming a huge market, where geographical and political boundaries do not represent a real physical limitation, universities face the need to make their activities relevant for stakeholders, local and international (Michalak, 2017). The line between marketing and information, commercial operation and synergetic collaboration may be difficult to be operationalised, accounted and to be presented internally and externally. In this context, it is worth noticing that there is in many institutions/countries a growing debate about universities' investments in PR and marketing (Bolshakova et al., 2020). Interestingly, none of the interviewees have employed the term "third stream" as a proxy for Third Mission. When examining the HEFCE definition of the Third Stream, it seems that these two terms could be used interchangeably. However, this observation may stem more from a specific non-Anglo-Saxon cultural context rather than a mere language issue. Interviewees seem to interpret the Third Stream as closely linked to the entrepreneurial conception of universities, a notion that they primarily associate with the UK and USA, finding it challenging to contextualise it within European imaginary:

Maybe because I am not English native speaker. To me Third Stream sounds like a term with a strong monetary flair which is much more akin to Anglo-Saxon culture of "pure" entrepreneurial universities, rather than public institutions as our universities. (IT 17)

From interviews also emerged a rather cinical but realistic perspective, namely that Third Mission is "rarely generated from genuine altruistic motivations" but it is instead the result of a strategic choice.

It's a reaction to the need to get funds that drives these entities to develop Third Mission related activities and not a kind of a social awareness "benefactor mood" that takes over the soul of people, but all of a sudden makes them invest in non-market related among the few science-related activities. (PT_01)

The statement suggests that these activities are often not primarily motivated by genuine altruism. Instead, they may be driven by other factors such as financial incentives, institutional reputation, or compliance with governmental or funding agency requirements. It is also interesting that the focus of the attention in this case is not at institutional but at individual level. It transfers the universities engagement in these activities to secure additional funding, enhance their standing in rankings, or fulfil certain obligations to the role of the academic. This perspective implies a degree of cynicism regarding the motivations behind universities' Third Mission activities, suggesting that self-interest or external pressures often play a significant role in driving these endeavours. It also implies that the mission of academics is somehow "deviated" by them.

What emerges from interviews is that while entrepreneurial universities focus specifically on fostering entrepreneurship and innovation, the Third Mission of universities encompasses a broader set of societal engagement activities aimed at promoting the public good and addressing societal needs. It appears that there is an agreement in considering entrepreneurial activities as a possible part of Third Mission, particularly when they contribute to social and economic development. However, not all entrepreneurial activities, which might legitimately be carried by universities, fall necessary under the umbrella of Third Mission (De La Torre, 2017; Compagnucci and Spigarelli, 2020). It is interestingly to note that these aspects, have emerged across three countries, Sweden, Portugal and Italy, where the marketisation of the higher education system is not yet advanced (Cini, 2018; Alves and Tomlinson, 2021; Börjesson and Dalberg, 2021) but have not been mentioned by German interviewees,

which are more used to market-alike approaches in the Education sector (Orr and Schwarsenberger, 2015; Teichler, 2018).

Interviewees have expressed clear opinions concerning the boundaries of Third Mission and defining those grey areas where the overlaps are possible. For example, supporting policy development may be considered Third Mission activities, unless it is a way of providing public administrations in shortage of funding with cheap workforces (students, PhDs, junior researchers) to supply for consulting services, which otherwise would be expensive on the market. The following figure synthesises results detailed in Section 4.1.2 concerning how interviewees have mapped out Third Mission significances. The figure is meant to be illustrative and not exhaustive of the terminology used in interviews:

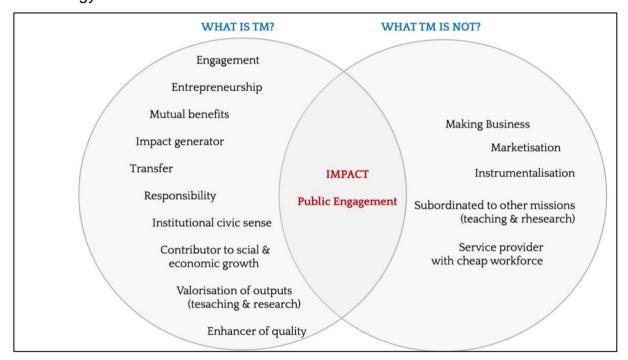


Figure 13 Framing Third Mission

Furthermore, interviews suggest that the operationalisation process is more mature in countries such as Sweden and Italy, and it is still in evolution in other countries such as Germany and Portugal. However, the rationale, the 'how' and the outcome of this process differs in each of the country. As seen in the previous sessions, there is an underlying agreement that Third Mission has been induced from policy into the academic world with the precise intent to stimulate universities to take over the role of driver and the responsibility to contribute to the economic and social development of

the territory they insist in (Dilorenzo and Stefani, 2015; Ciappetti, 2017). However, there are about two decades of difference between the policy operationalisations in each of the country. In Sweden the process started already in the nineties while in Italy only after the first decade of the century, in Germany and Portugal is even younger, giving Sweden a considerable advantage (Oliva, 2017). Furthermore, interviewees noted that in Sweden Third Mission has found fertile ground in the academy, which is in its nature open and committed to internationality. While Italian interviewees have evidenced how the institutionalisation of Third Mission has encountered significant cultural barriers. Similarly, Germany and Portugal lie at the opposite for some basic factors such as size and overall wealth of the country. However, they share some common aspects such as a binary HE system with well-defined roles and strategic duties between the research and applied universities. Interviews suggest that in both countries the economic dimension of Third Mission prevails over the others. Also, interviews across the two countries indicate that there is not a formalised and standardised definition of what Third Mission is. It also clearly emerges from interviews that the main difference between the two countries lies in the economic resources with Germany investing strongly through dedicated funding programs in the development of Third Mission in traditional universities and Portugal struggling because of a critical economic conjunction of the country, which impact negatively on the overall research, and HE sector.

Sweden	Italy	Germany	Portugal
1970/1990→	2010 →	2015→	2015→
Strong economy	Constrained but	Strong economy	Critical conjunction
	stable economy		
Hybrid: binary in	Unitary HE system	Binary HE system	Binary HE system
form but unitary in			
function			
Open academy	Closed academy	Closed academy	Closed academy in
		in traditional univ.	traditional univ.
Competitive	Late comer	Late comer	Late comer
advantage			
Academy embraces	Academy opposes	Selective and	Academy embraces
TM	TM	economically	formally but does
		driven embrace	not implement TM
Conceptual affinity	Cultural barriers	Transfer/economic	Transfer/economic
		dimension	dimension
Dedicated funding	Portions of state's	Dedicated funding	Lack of funds
programs	ordinary funding	programs	

Table 15 Third Mission comparison of operationalisation

Interviews highlight that in all four countries emerges a prioritisation of the public and social mission rather than a focus on entrepreneurial or financial goals. However, the public and social mission is understood in different ways: in Germany, the public mission is closely tied to the concept of *Bildung* and the idea of providing education as a public good accessible to all, emphasising personal and intellectual development. In Sweden, the public and social mission is largely centred around egalitarian principles and inclusivity. Swedish universities are committed to promoting equal opportunities and providing free education to all citizens. In Portugal, the public mission of universities is viewed through the lens of addressing social inequalities and promoting regional development. In Italy, the public and social mission is rooted in a rich cultural and academic tradition. Italian universities are dedicated to advancing knowledge and preserving cultural heritage. Each country's interpretation of the public and social mission reflects its unique cultural, historical, and social contexts, shaping how universities contribute to society beyond mere economic considerations.

Interviewees from all four countries expressed concern about a strong push to adopt a more entrepreneurial model in European universities, akin to those in the UK and USA. This shift is often influenced by external factors like funding reductions and the quest for financial stability, which may increase the focus on revenue-generating activities. There is a worry that this transition could jeopardise the public and social missions traditionally associated with European universities, potentially compromising their broader educational and societal responsibilities. Thus, from interviews it emerges clearly that there is a wide-spread concern that the very forces advocating for Third Mission might ultimately undermine what they define the "genuine" societal role of European universities. Third Mission, in this context, is perceived as a doubleedged sword: while it aims to enhance the relevance and impact of universities by fostering partnerships and contributing to social and economic development, it also carries the risk of shifting the focus too heavily towards market-driven objectives. Literature shows that this may lead to the commercialisation of academic activities (Bourelos et al., 2012; Shore et al., 2012; Perkmann et al., 2013; Koryakina et al., 2014) and a potential dilution of the universities' core missions (Benneworth et al., 2015; Pinheiro, 2019) and recognise that Third Mission brings with it a risk of undermining the pursuit of advancing knowledge and fostering critical thinking (Maassen and Stensaker, 2011). From interviews emerges that across all four countries there is a common orientation towards serving the public good. The way this

is sought in all four academia is to foster a balance between the three missions: research, teaching and societal responsibility. Interviewees across the four countries have noted that the big challenge is doing it without compromising the foundational values and broader responsibilities of higher education institutions.

Interestingly, the analysis let emerge that interviewees across all countries have mentioned that usually a characteristic that differentiate Third Mission activities from the other two missions is that the latter two are properly "institutionally-lead" while Third Mission is usually generated by individual initiative. Only in a second phase, when it becomes relevant to the institution, it is uplifted to institutional value:

The Third Mission was a purely individual activity; the individual professor or researcher decided whether or not to do a certain activity; he decided it with a certain autonomy and therefore they were initiatives linked to the single commitment, while now, they are coordinated in a certain number of activities and departmental planning. (IT_17)

It would probably require more specific research to investigate in which proportion academics still perceive that the initiative of the individual professor or researcher is still the key element that initiate and determine engagement activities. Interviewees have provided a range of exemplars, sometimes contrasting, from the consolidated assumption of Third Mission as a binding commitment and responsibility. Interviews show a broad range of nuances in interpreting the light and blurry boundary between individual action and institutional duty. Swedish academics have conceptualised Third Mission as a sort of their "statutory duty" (SE_04). Interviewees in the other three countries interviewees noted that while research activities have a critical mass, and a stronger inertia, and teaching even more for reasons related to management parameters, the activities related to Third Mission are much more exposed to persons-related factors. It is not about how they do it, or how well, it is about whether they do it or not:

And if so, do they have to fight for doing it or are they supported in doing it? Third Mission is (still) strongly dependent upon persons rather than institutions. (PT_03)

In conclusion, interviews contribute to identify a fine granularity of the conceptual and philosophical themes surrounding Third Mission and to frame its nature temporarily and spatially. Nonetheless, many aspects remain open and intrinsically undefined as Third Mission significances and values are in a continuous evolution.

4.1.9 Third Mission and impact

Within the context of trying to frame what Third Mission is or is not, some interviewees have referred to "impact". However, the concept of "impact" has been interpreted in multiple distinct ways. Some argue that "impact" can be used interchangeably with the concept of the Third Mission, implying universities can be measured not only through traditional academic metrics but also by the tangible effects they have on society and communities (this is further discussed in Section 4.3). Others suggest that "impact" works alongside the Third Mission, potentially enhancing its objectives. Additionally, there's the perspective that "impact" is an intrinsic component of the Third Mission itself, implying that real-world contributions are essential beyond traditional academic pursuits. Lastly, some view "impact" as a natural consequence of effectively executing the Third Mission. Whenever during the interviews, the concept of impact came out (either spontaneously or prompted), a reference was made, even if only indirectly, to UK and its assessment exercise. Impact was clearly, no matter which nationality was the interlocutor, indelibly linked to the British experience of impact assessment within the REF2014. Clearly, UK is a point of reference in this respect, and as it will be discussed later concerning evaluation, Europe looks at UK with interest but not without critical eyes (Rebora and Turri, 2013; Geuna and Piolatto, 2015; Sivertsen, 2017; Ploner and Nada, 2020). For the sake of being able to discuss assessment of Third Mission - and of impact - it is important to unravel this entanglement.

The conceptualisation of impact, especially in the context of the Third Mission, is far from clear-cut, even following the formalisation as a criterion in the REF evaluation. In practice, it remains an ambiguous notion (Derrick, 2018). For the purpose of this part of the study, however, in the attempt to frame the two concepts and their relationship, it appears useful (and not contrasting with the hints coming from interviews) to borrow the official definition of impact from REF2014 and to compare it with the official definition given by the Swedish Research Council and by ANVUR as recently the concept of Impact has been introduced also in Sweden and Italy (Blasi, 2021). The UK and Sweden place their research definitions in a broader societal context, considering economic, social, cultural, and environmental implications. Italy's

definition echoes these sentiments but accentuates the importance of impacts within specific territorial contexts and from external sources. Regarding application, Sweden emphasises translating research into tangible societal benefits, including commercialisation or practical implementation, whereas the UK and Italy imply this but not as explicitly. UK and Italy provide specific domains of relevance like economy, health, and environment to gauge impact, while Sweden delves deeper, specifying types of impacts and actions contributing to them. Italy stands out for its emphasis on impacts outside academia, aiming to mitigate negative externalities and prioritise societal relevance and sustainability.

Country	Definition of Impact	Institutional Source
UK	Impact was defined as 'an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia'	UKRI (n.d.) https://www.ukri.org/who- we-are/research- england/research- excellence/ref-impact/
SWEDEN	We propose that the term impact of research be used to describe the effects of research beyond academia. Impact means, in a broad sense, effects of research beyond academia which in some contexts and over time could amount to concrete influence on society by the application of research results to achieve social, economic, environmental, or cultural effects. Impact beyond academia thus refers to the dissemination, further refinement, commercialisation, patenting, licensing, or other practical use of research results. The Swedish Research Council would underline that the term impact (genomslag in Swedish) refers to the impact that occurs beyond academia's confines []	Swedish Research Council, (2015)
ITALY	The transformation or improvement that (possibly in connection with the results of scientific research produced by the Institution) has been generated for the economy, society, culture, health, environment, or, more generally, to contrasting economic, social, and territorial inequalities and increase the quality of life in a territorial context (local, regional, national, European, global). It is also intended as the reduction or prevention of damage, risks, or other negative externalities; priority will be given to the impact generated externally (including any spillovers within institutions)	ANVUR, (VQR 2015– 2019)

Table 16 Definitions of 'Impact' in cross-country comparison

German and Portuguese interviews, although very informative regarding impact, did not provide references to 'official' definitions for those countries. Nonetheless, it emerges clearly from interviews' analysis that the concept is of relevance for these countries as well. The word impact with the meaning of 'non-academic' or 'nonscientific' impact appears over 45 times in 9 of the German interviews and 39 times in 8 Portuguese interviews. The analysis of all four sets of national interviews let emerge a wide-spread tendency to considering Third Mission in the broader and holistic perspective, encompassing all known facets related to exploitation of research, processes of transformation of scientific results into productive knowledge, applications in the economy and the market. However, in interviews emerges clearly the inclusion of forms of openness, interaction, intertwining, engagement which produces "public good" of social, educational, and cultural nature (Marginson, 2011). The nebulous and fluid conceptualisation of both Third Mission and Impact complicates their direct comparison. It is conceivable, however, to posit that the Third Mission does not serve as a mere proxy for impact, nor does impact necessarily encapsulate the entirety of the Third Mission's scope. There is no equation of meanings either. While research impact outside academia is part of Third Mission, Third Mission is not limited to research impact outside academia. The number of different interpretations emerging from 67 interviews, underscores a prevalent confusion surrounding these concepts. These mixed interpretations come from profiles that may deal with Third Mission activities from an operative point of view but are not concerned with the theoretical conceptualisation. Nevertheless, the frequency of mentions of the term itself, coupled with the array of interpretations provided, indicate the importance of elucidating the conceptual distinctions between these two notions. Also, interviews, especially the internationals, indicate that the concept of 'impact' will play a key role in the forthcoming evolution of the university's role and missions:

For the moment entrepreneurship and engagement are the more prominent topics, we position them one for the economic contribution side and the other on the social contribution side but in the next future I believe we will just talk about - I don't know yet what the name will be - a more sustainable university integrating the impacts made to the economy, to the society and to the environment (EU_02)

4.1.10 Third Mission and public engagement

The absence of a direct translation for the term "Public Engagement" in Swedish as noted by one of the interviewees, sparked curiosity. This observation led to a broader analysis across the four sets of national interviews, revealing a consistent pattern: regardless of the language spoken, the term remains untranslated. Interviewees suggest that there is a shared understanding and usage of the term across these diverse linguistic and cultural contexts. The consistent use of the term "public engagement" across different societal and academic contexts underscores its significance, although each system has its own unique way of operationalising it. Originally the term Public Engagement is confined in the policy-making field rooting in philosophical discourses surrounding 'participatory democracy' by thinkers such as Jean-Jacques Rousseau and John Stuart Mill. It appears in the HE sector in the early 2000s. During the second decade of the century, following the indication of the UN General Assembly include in the 2030 Agenda, a strong push comes from the European Commission. The European programme for research and innovation Horizon 2020 adopts the Responsible Research and Innovation approach (RRI), which "requires all societal actors (researchers, citizens, policy makers, business, third sector organisations etc.) to work together during the whole research and innovation process" (Owen et al., 2012; Figueiredo Nascimento et al., 2016, 12; European Commission, 2009 and 2014; Sørensen, 2019; Ivani and Novaes, 2022). The idea underlying RRI is that science should be done with and for society: research and innovation should be the product of joint efforts of scientists and citizens, and should serve societal interests (Ivani and Novaes, 2022). Both frameworks require an increased responsibility by the academic world in relation to social challenges and explicitly mentions responsible research and public engagement, introducing these expressions into the language of European programming and shortly the 'Public engagement with science' becomes a 'buzzword' (Weingart et al., 2021). In Sweden the VA Report (2011) defines Public Engagement diverse forms of interaction between science and society ranging from directly informing the public and creating dialogue with the public to collaborative longer-term projects between science and the public in general (allmänhet) and with specific actors within society. In Germany the newly

published Public Engagement Kodex (2022) describes Public Engagement as a field of the German scientific landscape practice of exchange between researchers and the public and stands for the attitude that science and society rely on mutual exchange benefit. In Portugal a definition of Public Engagement is referenced with the activities of the European Commission for a more effective communication between citizens, scientists and policymakers. In Italy ANVUR defines Public Engagement as the set of activities carried out by the University on a non-profit basis and with an educational, cultural, and social development value. Italy demonstrates significant engagement from universities, often organized into associations, in advancing Public Engagement and advocating for its pivotal role within the VQR. A notable example is APENet and its Manifesto for Public Engagement. Across all four countries, interviews have noted that Public Engagement is intended to be inclusive, generating mutual benefits and contributing favourably to the achievements of science, with the sharing of skills, knowledge and capabilities, and the development of society and of citizens, in a politically transformative action. Public Engagement activities are indicated to be carried out with different levels of involvement: from free individual initiative to activities planned at the level of research projects, up to institutional activities. In summary, each definition provides a unique perspective on public engagement, emphasising different aspects such as the range of activities involved, the institutional context, the goal of improved communication, and the values underpinning engagement efforts. Together, they paint a comprehensive picture of what public engagement entails and its significance within the scientific and societal landscape, as represented in the following figure, which illustrate the emphasis of each of the four definitions adopted in each country.

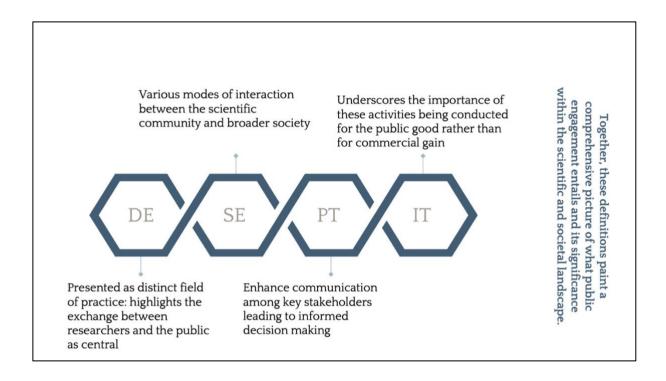


Figure 14 Public Engagement definitions in comparison

A common trait across all the definitions provided by interviewees is their high level of generality. Recent research also confirms an increasingly vague and inclusive definition of 'engagement' as well as of the 'public' being addressed, and a diverse range of motives driving the rhetoric (Weingart et al., 2021). Although, they are very similar, data suggest that there are some differentiations in their formal interpretation. These affect especially the relationship between Third Mission and Public Engagement, concerning which of the two is the umbrella encompassing the other. With the purpose of entangling the differences between the two concepts, it is useful to look at two of the major studies that have explored and categorised PE. The University of Oxford in the strategic document "Public Engagement with Research" (2016) identifies three main levels of citizen engagement, each associated with specific types of action and relationship between researchers and the public. University College Dublin (2018) proposes a similar classification, which identifies six grades of Public Engagement. The number of categories however are not the most significant difference. While University of Oxford refer to public engagement in the context of research, the University College Dublin the perspective is extended to the university missions, beyond the perimeter of research, linking Public Engagement also to teaching and contributions to society, also known as Third Mission. This clarifies the

apparent contradictions or discrepancies in the various interpretations of the connection Public Engagement and Third Mission as resulted from interviews. The common striking element that occurs across all four countries is the specification "for mutual benefits". This would assume that the interaction between researchers and public bases upon the principles of transparency and inclusion. However, this aspect is also at the core of some controversies in both policy and scholar discourses (Bonetti and Villa, 2014), namely concerning the "instrumentalisation" of actors. The ethical considerations would involve many levels: governments are accused to instrumentalise universities, and the public is seen as instrument to serve research rather than privileging mutual interests (King and Rivett, 2015):

I would say that the trans disciplinary aspect you're getting at a cooperation would be a better way to describe it otherwise we may end up simply informing the public about what we do. For the purpose of quality and usefulness a sort of participatory engagement of the community in research is essential. (SE_06)

The digital technological revolution has impacted significantly in the forms of engagement between research and "outside" communities (Petersen et al., 2022). On one site the practice to make research openly available through internet via Open Science tools and techniques, on the other side the technologies enabling distance and massive interactions through data (data mining). Research has proven that Open Science has the potential to support public engagement (Boon, 2021). In this perspective the Berlin School of Public Engagement and Open Science is a collaborative project that foster new practices of sharing between science and society. The Robert Bosch Stiftung (a privately owned foundation) is supporting the establishment of the Berlin School with the aim of making it a permanent institution of the partners involved and setting new standards for opening up science to society. Big data research projects require public support to succeed, and it has been argued that one way to achieve this is through public involvement and engagement. This presents new challenges around ethical issues, such as consent, data storage and anonymisation. Big data research has grown considerably over the first two decades of this century but the need persists to better understand the role public involvement and engagement can play in big data research (Teodorowski et al., 2021). Data suggest that vice versa also the role played by big data into Public Engagement implementation is to be attentively explored as new trend:

The engagement in science of citizenship in Sweden is becoming more and more data driven now. And also, scientific knowledge is challenged by citizen groups or social movements, collecting data, for instance, on air quality in cities to try to affect political decision-making. (SE_07)

The diversity of forms and the ambiguity of definitions has made the monitoring and measurement of such activities even more difficult. Some countries (such as UK and Italy) have included in their evaluation frameworks indicators or other evaluation forms (e,g., case study review) to assess universities' Public Engagement. Public Engagement is formally part of both REF and VQR exercises. The ANVUR classification partially differs from REF, as 'Innovative tools to support Open Science' and the 'Production of public goods' are placed outside of the perimeter of Public Engagement. Nonetheless, public engagement has risen to prominence as a crucial touchstone for Italian universities, which have embraced the VQR structured framework:

In the Anglo-Saxon world, everything is Third Mission in public engagement, while in Italy we have done exactly the opposite - we have identified the Third Mission, and we have put public engagement as one of the things of the Third Mission (TI_11)

In Sweden there has been voices advocating for the definition and adoption of indicators to measure Public Engagement (Armbruster-Domeyer, H et al., 2011). More recently, some voices ask for a common standard for the evaluation of Public Engagement with research (Reed et al., 2018), other perorate the cause of non-including Public Engagement in the future Impact Case Studies for REF exercises. The main issue seems to be related to the generality of the term: *Our language reflects our thinking and our understanding, does the continued use of this broad term demonstrate a sector that hasn't interrogated the practice(s) of public engagement robustly enough to develop a common language that accurately describes the range and complexity of activity that is currently delivered under this umbrella term (Featherstone, 2022). A similar debate is ongoing in Italy, mainly involving CRUI and APENET, surrounding the proposal of not including explicitly Public Engagement within the Third Mission activities to be evaluated within the framework of the upcoming VQR exercise.*

Summary of Section 4.1

The section 4.1 contributes answering the first Research Question, namely how Third Mission has evolved in its meanings and forms. To do so the analysis has sought to frame Third Mission by identifying what Third Mission is and it is not in the opinion of the interviewees. The study also compares Third Mission with other related notions such as 'impact' and 'public engagement'; furthermore, it compares Third Mission and the other two missions to define conceptual boundaries. The analytical work on a linguistic and terminology level brings to light some key aspects to define Third Mission beyond the specific labels. The word 'mission' assumes centrality as it reflects the institutional dimension and the intention to define the role of the university in its entirety, differing from the concept of 'public engagement' and 'research impact'. These are both narrower and more focused on specific outcomes: the firs, focuses on the goal of extending the university's influence beyond academia; the second, strongly relates to the measurable effects and contributions of academic research. Both PE and Impact have assumed a crucial role in demonstrating the value and relevance of academic work, however, they represent only a component of contemporary universities' broader mission. The term Third Mission, instead, although not fashionable, as suggested by interviewees across the different countries, integrates and completes the overall purpose of modern universities.

4.2 Institutionalisation of Third Mission

4.2.1 Contextualising the institutionalisation of Third Mission

The previous section (4.1) has shown the transformation of universities through the evolution of Third Mission from a conceptual perspective. This section illustrates the paths to institutionalisation of Third Mission in the four case-study countries. This section focusses its attention on the crossroad where international trends meet national contexts, in the attempt to identify those forces driving the institutionalisation of Third Mission (Pinheiro et al., 2015). A first level of interviews' analysis has informed the identification of the themes relevant to institutionalisation of Third Mission, A second level of analysis results in a deep exploration of how those themes relates to the single institutionalisation paths. A further level of analysis informs the cross-country comparison. It is important to clarify right at the beginning of this discourse

that in Sweden, Portugal, and Italy the introduction of evaluation mechanisms for the monitoring and quality assessment of universities has played a significant role in the institutionalisation of Third Mission (Bonaccorsi, 2018), while Germany has taken a different approach based upon accreditation and programs/policies evaluation, which will be discussed in the following sections. Discourses surrounding the transformation of universities have covered themes such as effects of autonomy (Poole, 2005; Machado and Cerdeira, 2012), New Managerial Approach (Deem, 2005 and 2008; de Boer et al., 2007), structural changes (Kwieck, 2012), actors' roles (Jongbloed, 2008), resources (Aghion et al., 2009) etc. This section does not intend to retrace the full set of themes addressed in scholar literature, although most of them have been mentioned in several interviews. This section discusses them by focussing on their pertinence with Third Mission institutionalisation. The result is an articulated picture of the key dimensions that contribute to clarify Third Mission institutionalisation paths: the identification of the key policy drivers promoting the institutionalisation of Third Mission within universities; the roles played by international, national and regional factors (such as geopolitical/strategic factors) which contribute to hindering/strengthening these processes; and the effects of changes in structures (both at MESO and MICRO level) affecting the behaviours of actors (Di Bernardino and Corsi, 2018; Mariani et al., 2018). The following figure shows the articulation of results which are going to be detailed in the upcoming sections:

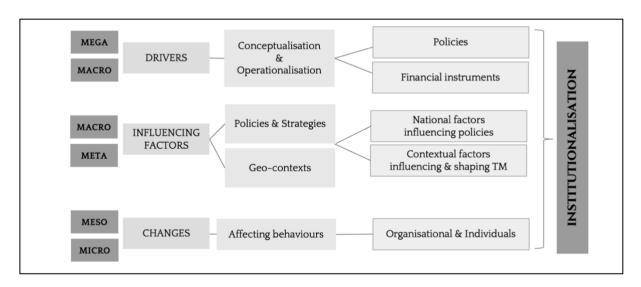


Figure 15 Paths towards the institutionalisation of TM

As outlined in Chaper 3, Section 3.8 Data analysis the analysis of the interviews texts has been carried out in two ways. The first level of analysis is a basic quantitative exploration of themes by counting the key words mentioned by each interviewee. This indicates how relevant the specific theme is for each of them. The recurrence of mentions among interviewees of the same country gives an indication - albeit not generalisable - of the relevance that the topic has within that country. The most mentioned topic across all four countries is the Bologna process: followed by funding-related themes and factors influencing national/regional policies. Themes related to MICRO/individual level are homogeneous among the four countries in terms of number of mentions, they are addressed in Section 4.5.

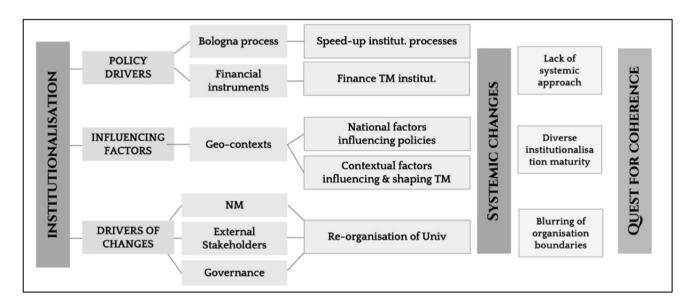


Figure 16 Interviews' quantitative analysis

The second level of analysis is a qualitative grounded analysis to identify the logic of how the above-mentioned forces affect the institutionalisation of Third Mission. It emerges how these topics are relevant for the discourse of Third Mission in general and contribute to understand the logic behind the institutionalisation paths and processes within each country. The following figure shows an overview of the key elements and their interconnections:

		Number of interviewees mentioning each topic					Bologna	
Level	Country	SE	DE	PT	IT	Total		third party
MEGA	Bologna process	2	11	10	13	37	11% 15%	comparative
MACRO	Third party funding	10	12	7	3	32	11% 15%	funding
MACRO	Competitive funding	10	10	7	7	34	13%	regional context
META	Regional context	10	2	8	12	32	10%	internationalis
META	Internationalisation	10	7	9	8	34	14%	ation
MESO	New mangerialism	7	11	4	2	24		= NM
MESO	External stakeholder	7	5	6	5	23		= external
MESO	Institut. leadership	6	5	5	9	25		stakeholder
	-							institutional leadership

Figure 17 Institutionalisation Logic

4.2.2 Policy drivers

The Bologna process

Data indicate that the Bologna Process represents a sort of symbolic bedrock for the processes that have led to modern universities and stays at the crossroad between European policies and national reforms (Curaj, 2012). The inclusion of Third Mission within the framework of the Bologna process in 2014 brought Third Mission on the priorities' top of the innovation agenda of member states when discussing higher education developments (Yağcı, 2014; Piro, 2016). However, the way chosen to drive the operationalisation of Third Mission within the national contexts varies greatly. In fact, it has been mentioned in several of the German, Portuguese, and Italian interviews reflecting the perceived relevance that this process has played:

I don't need to search too long for the main driver. What I, and all colleagues who work in universities, have felt, is of course the Bologna Process as the first very important point, which has revolutionised the entire structure of HE. And we had to adapt to it. It has been a quick revolution with strong consequences. (DE_08)

On the contrary, the Bologna process is almost absent in the Swedish interviews. It has been mentioned in only three interviews (SE_03, SE_06 and SE_11). The reason for the striking absence of this reference in Swedish interviews has been explained by interviewees themselves in that the Swedish academy did not acknowledge as being

imported through the Bologna process. They noted that many of the ideas promulgated by the Bologna process were already embedded in the Swedish HE system. The same explanation has been given by Marita Hilliges, Secretary General of the Association of Swedish Higher Education Institutions, during an EUA webinar, where she states that building a European higher education area through more compatible higher education structures and building mutual trust through quality assurance were never controversial, but the initial Bologna inputs were just felt as being Swedish ownership (Hilliges, 2020). Following inputs from the Bologna process, Sweden, Portugal, and Italy have started including the conceptualisation of Third Mission within regulatory frames. Although this happened in different timeframes. As seen, Sweden has played a sort of precursory role by formalising these aspects during the nineties and therefore at the incipit of the European policy-driven trends. In Portugal and Italy, the reforms went almost in parallel and were formalised with important reforms of the HE systems (Amaral, 2002; Donina, 2019): Law 38/2007 in Portugal and Law 240/2010 in Italy:

There was a fresh breeze coming from Europe which drove changes. It acted like a hurricane and Portugal education system has been completely revolutionised in a few years (PT_02)

However, interviewees also pointed to the top-down approach imposed by governments as follow up of international decisions. With regard to Third Mission this has been felt, especially by the Italian academic, as a infringement of the academic autonomy:

The overall Third Mission issues would have been different if would have been the result of a discussion inter pares. The government has decided, almost overnight one can say, to force the institutionalisation of Third Mission by bounding it to the research evaluation. Universities were not ready and not structured. Their adaptation has been forced. It is in the best cases work in progress; in other cases, it is just formal and apparent, it is not substantial nor institutionally digested (IT_17)

Interviews indicate that Germany has chosen a different way: the main instruments adopted by both federal and Länder ministries were the so-called "Förderinitiative" or "Förderprogramme", meaning specifically devoted funding initiatives and programs,

with the clear intent to steer changes by providing financial resources to make them possible. The following statement, released by a German state officer at federal level, reflects the approach that Germany has towards "implementing policies", namely designing specific financial instruments that accompany the promulgation of legislative decrees so that in addition to the political indications there is also the immediate provision of resources for their implementation:

Where there is money, there is the power of obtaining the changes that you envisage. If you only set boundaries and obligations by law, universities do not move. They would declare that they do not have the resources to implement what policy makers ask. (DE_02)

Financial instruments

Third-party funding and competitive schemes are mentioned across all four countries. Interviewee suggest that a mature process, true institutionalisation of Third Mission will come when resources are associated with it (IT 14). The pictures emerging from each country are rather different as they can be seen as reflecting the characteristics of the economic profile of the different contexts (FCT, 2013). German interviewees suggest that in Germany institutionalisation of Third Mission has been supported in a speedy process through extra federal funds dedicated to developing the engagement dimension of German traditional universities. Italia interviewees indicate that the institutionalisation of Third Mission in Italy the institutionalisation process underwent a strong acceleration once the Third Mission was included among the evaluation areas granting universities a share, although in a minor percentage, of the state's functional funds (GUF). In Sweden OECD (2023) specifically suggests amending GUF allocation to link it to performance and rewards to incentivise the Third Mission in universities. In Portugal the institutionalisation of Third Mission was hindered and slowed down by resources (Teixeira et al. 2014, Koryakina, 2015). university/industry partnerships have been at the core of governmental actions through various direct and indirect instruments. In this perspective supporting some form of Third Mission activities such as patents, spin-off, etc were privileged (Geuna and Rossi, 2011). But Third Mission has also been indirectly promoted and financed with governmental instruments, which were not managed by the ministry of education, but by other ministries such as economic developments, industrial innovation (e.g.,

industry 4.0), European policies, cohesion funds, etc. In fact, some interviewees have mentioned that in many cases universities were invited to collaboration projects by external stakeholders and funding came from other governmental strands:

Ironically, if we look at the amount of resources made available, the Ministry for Economic Development has done more to support Third Mission activities than the Ministry for Education. (IT 07)

Both in Portugal and Italy economy is characterised by an overwhelming majority of small and micro enterprises active in industries with a low R&D intensity. Bridges between academy and industry in those two countries must traditionally face structural, cultural and organisational barriers. In Portugal with regard to the role of universities in the dynamics of innovation systems (Guerreiro and Pinto, 2012) there is explicit mention to the fact that "Information and communication technologies are lagging behind and the cooperation between business and academia is not strong enough. This is having a negative impact on the innovation capacity of the Portuguese economy" (RIO Report Portugal, 2018). A further challenge is given by the skills shortage in SMEs which become a further challenge to be addressed by universities with specific actions, which usually exceed their remits: *Universities and polytechnics* have a mission in skilling up industry work force in order to allow them to be more competitive in a globalised economy. (PT 03). In Italy support for R&D in the industrial sector has mainly taken the form of tax reductions (RIO Report Italy, 2018), with industries carrying limited intra-muros¹ activities and looking for partnerships with universities privileging extra-muros R&D.

We have designed programs to work with micro or individual enterprises. In this case it is not the economic value of the program that has to be looked at. Our skilling program has created behavioural virtuosity, which have as a result cultural and social benefits. (IT_15)

-

and institutions.

¹ 'Intra-muros' and 'extra-muros' are part of a technical vocabulary that is globally recognized and standardized according to the **Frascati Manual** developed by the **Organisation for Economic Co-operation and Development (OECD)**. This manual provides the internationally accepted methodology for collecting and using data on research and experimental development (R&D), ensuring consistency and comparability across countries

However, analysis shows clear agreement across interviewees about the fact that these schemes are not adequate to support neither company willing to plan and do R&D, neither their partners (e.g. universities) as they are per nature provisional, temporary, and unforeseeable. Thus, they may support well ad hoc projects but do not allow long-term planning nor venture undertaking. Interviews indicate that there is a growing perception in all four academia that Third Mission is much more subject to different forces and factors unlike the other two missions, which have solidly institutionalised funding treads. In Sweden, Portugal and Italy, the block funding allocation mechanisms are defined and managed at national level and apply following the same schema to all universities throughout the country:

There is little flexibility to move funds from one mission to the other as the allocation criteria are fixed at central level for both teaching and research. (IT_15).

Thus, for Third Mission the insufficient basic financing and an increasing reliance of third-party funds, (RIO Report Germany, 2018) is the most immediate challenge to face:

It is obvious that if the Third Mission does not find any element of economic enhancement by governments and funding bodies, this will not be able to happen (IT_10)

In conclusion, interviewees have clarified some key aspects concerning the relationship between Third Mission. The comparison, basing on interviewees' opinion, suggests how each country uses financial instruments to drive and accelerate changes. Whitin this context, apart from confirming the perceptions they have concerning the availability of financial instruments supporting Third Mission in their respective country, interviewees have highlighted some criticisms on their use. They also noted to which extent the relationships Third Mission/financial resources is determinant for Third Mission institutionalisation and evolution.

INTERVIEWEES' OPINION	DE	SE	PT	IT
AVAILABILITY	VERY HIGH	HIGH	INSUFFICIENT	COULD BE MORE

INTERVIEWEES' OPINION	DE	SE	PT	IT
CRITICISMS	Use of competitive funding: •Patchy coverage •Inequalities •Increase competition among institutions in internal/externa markets	Use of competitive funding: • Patchy coverage • Extra workload	Lack of financial resources overall	Strongly linked to evaluation outcomes Limited % related to TM
PROPOSITIONS	Would it be preferably to include funding in GUF?	Would it be preferably to include funding in GUF?	Resistance from academics Lack of instruments Risks of confusing TM with acquisition of funds exercises	Risks competition between missions → using TM to balance cut in research funds
EFFECTIVITY	Is accelerating changes in universities and driving TM activities	TM already intrinsically included in university life – funds are helpful, but fragmentation is not supporting adequately TM	Causing slow development of TM	Supporting institutional awareness of TM - A direct injection of resources dedicated to TM would speed up more processes

Table 17 Criticism on Third Mission's dedicated financial resources

Universities recognise that without financial resources there is not real, systematised, formalised, and structured inclusion of activities within the institutional framework:

It is obvious that if the Third Mission does not find any element of economic

enhancement by governments and funding bodies, this will not be able to happen. (IT 10)

The collection of various topics related to funding, as evidenced by interviews, highlights how the Third Mission differs from the other two missions in terms of funding mechanisms. While research and teaching enjoy established institutionalised funding pathways, with established and dedicated support from public sources, the Third Mission is more susceptible to a range of internal and external forces, sometimes conflicting or divergent in nature. Unlike research and teaching, which benefit from direct streams of government funding, Third Mission activities have historically relied on ad hoc funding arrangements. This presents two significant challenges: Firstly, it increases the workload associated with proposal preparation to secure additional funds. Secondly, as these funds are often temporary in nature, it becomes challenging to plan effectively for the long-term sustainability of Third Mission activities. This is particularly impactful for activities falling solely within the Third Mission's purview, lacking direct financial returns but carrying substantial social benefits.

4.2.3 Influencing factors

The geo-contextualisation of Third Mission institutionalisation

The history and evolutionary dynamics of European universities have been linked since their origins to those of the territories in which they unfold (Dilorenzo and Stefani, 2015). In Europe, traditionally, academic institutions are forced to take into consideration and best interpret socio-cultural changes and universities and cities live through a continuous dialogue, often explicit and constant, sometimes shy or unspoken (Caruso et al, 2020). Academic interviewees across all four countries contributing to this research clearly indicate how the glocal (global & local) dimension of Third Mission is evolving by strengthening the original local vocation and developing the international aspirations of universities. At this crossroad Third Mission is growingly playing an important role (Sutrisno, 2018). Data analysis shows that there is a common agreement across national interviewees in that three elements play a key role in the discourse surrounding Third Mission evolution: national factors, regional factors, and universities-related factors. This section illustrates the factors influencing the

interrelation between universities and their territories as they emerge from national interviewees.

National factors: The glocal contextualisation of Third Mission

As highlighted by interviewees across all four countries, the regional contextualisation plays a significant role with regard to how Third Mission activities are understood and operationalised. Interviewees have highlighted in each country internal social, economic and cultural divisions. For example, the north-south divide within Italy and in Sweden, similarly also in Portugal as well as imbalance and differences between the 16 German Länder were explicitly mentioned and linked to how each regional conformation directly affect Third Mission activities. For example, most of the German Excellence universities are concentrated in Baden-Württemberg and Bayern, while in other Länder the concentration percentage is significantly lower (BMBF, 2024). Interviewees have related this factor to the investment in education, research and technology developments, which depends on political priorities and policy agenda: You can see the difference with other Länder such as Rheinland-Pfalz or Sachsenanhalt, where they clearly have other policy issues and priorities on the tables (DE 02). Furthermore, interviewees noted that the disparity in GUF (depending on each Land) and the application of competitive schemes such as the Exsellenzinitiative, which distributes funds on a very selective basis, have direct repercussions in accentuating differences between those universities which have the capacity (and the resources) to reach competitive levels and those who have not (DE 09). Their worry is especially linked to non-virtuous mechanism whereby those who are excellent will increase their values but those who are in difficulty won't probably get the resources to change their status. This would end up increasing disparities and inequalities between universities and between lands:

The German landscape is changing, less than two decades ago we had excellent universities across the whole federation, now we have universities competing to be designed as excellent, and other who do not even compete...". (DE_09).

Swedish interviewees have highlighted that there is a relevant difference between the Swedish universities in the south of the country and those located in the less populated northern part. The difference concerns especially the role played by the university

institutions in the local territory proportionated to the territory's needs and expectations. For example, according to some interviewees universities in the North are very active in urban contexts but not necessary with industry as the metropolitan area host many potential stakeholders, which however, are self-contained and resourceful in terms of being able to do research on their own, thus do not have to look for the university to develop research. *And so, there are different expectations towards universities depending on where they are located. (SE_05).* It results that local stakeholders' expectations in terms of engagement are higher in rural areas, where universities play a concrete role of contributors to the economic dimension. As part of a specific governmental strategy of decentralisation, Sweden has also developed "sector university", which specialises on those disciplines which are key for the local economy (e.g. agriculture and forestry). The success of this regional policy was based on the premise that the allocation of resources to the newer regional colleges will increase not only the educational level, but also the number of jobs in these regions (Andersson, 2001), underlining universities pivotal role in driving territorial prosperity:

It is about thirty-seven years after my academic experience in the USA. On may return, I had to realise that societies support universities because they think universities provide the society in parity with benefit directly. Whereas university education at the undergraduate level in the US was very much about individual. It was for the individual growth not for society. We paid for the education we got in the United States, and it was for us. Whereas in Europe the Education at Universities is paid for by the society. And so, the education is for society. The same for research...(SE_06)

On the contrary, in Portugal the higher number of education institutions (especially the public ones) is located in the north region of the country (Amaral and Teixeira, 2000). From Portuguese interviews emerges that the relationships universities and industry/society is more vital in this area which is more populated (offer a bigger student population), register a high industrial concentration, and attracts the biggest portion of European structural funds to be invested in infrastructures *and for certain projects (PT_01)*. In Portugal, polytechnic institutes are widely recognised as the key stakeholders in regional development (Alves, 2015) and their Third Mission has developed coherently with this role with a strong interest in innovation and knowledge transfer (PT_01 and PT_07). For traditional universities, historically, engagement has

been assimilated prominently with university/industry relationship (Fonseca, 2018). Thus, those universities in the North have got major engaging experiences and are more likely to develop their Third Mission in terms of university/industry relationship:

Portugal is like Italy; the highest industry concentration is in the North. It is in the universities located there, that there is more experience in university engaging (PT_05)

Within the Italian well-known "southern question" (*questione meridionale*) and the endemic economic and social gap between North and South, there is a specific HE-related issue, namely the high percentage of students (both under- and post-graduate) that migrate from south to the north (ROARS, 2015):

A dramatic thing that is happening in the South is the abandonment of students from master's degrees, for example, from the three-year to the master's I lose 51% of students. Most of my current students do not think of continuing their studies with us, and therefore this impoverishes the master's degree, and it impoverishes doctoral prospects. This is a problem that all master's degrees in the south have to face (IT_13)

This migration phenomenon has several reasons, and it affects heavily the university system in many ways. One of the reasons for the migration immediately after the first degree is that southern regions are very low-density in terms of industry, which strongly affect the job market (Nifo et al., 2020). Interviewees noted that the economic landscape, the disparity in terms of concentration and typology of industry between the nordic and southern regions also conditions the development of Third Mission activities. ANVUR has registered a greater attention to technology transfer structures in northern universities, while in the south and on the islands, Third Mission often takes the form of management of artistic and cultural heritage and the valorisation of the heritage available in these regions (Calvano, 2022). The following table illustrates the key regional factors which contribute to shaping Third Mission (by characterising and/or limiting its operationalisation) in each of the four countries:

Country	Regional contexts influencing TM	How/Why
Sweden	Metropolitan area Urban areas Rural areas Development areas	Sites of bigger industry with low expectations from universities TM develops in terms of societal contributions Key driver for development (sectoral universities) Key driver for development (sectoral universities)
Germany	Differences between 16 Länder Unification of Germany	Does not impact capacy of the country but Creates tensions and disparities within the federeted union Required a significan plan/effort to harmonise standards
Portugal	Concentration in metropolitan areas of public institutions Polytechnic	University/industry as priviledged TM activity Major concentration of structural funds → infrastructures Key drivers for regional development
Italy	Industry high concentration in the north 'Questione del Sud'	Universities located in the North have greater attention to technology transfer and economic valorisation of research Universities located in the South focus on the «social/heritage dimension» of TM Migration of students after bachelor degree Scarcity of opportunity for university/industry relationships

Table 18 Local factors affecting Third Mission operationalisation

National factors: the cultural values

The concept of cultural value is a contested concept (Oancea, 2018), it can vary significantly across contexts and influences how universities engage with society and prioritize areas of impact (Bonaccorsi, 2018). This study, delve into how and measure the outcomes of their Third Mission activities. For instance, in countries like Italy, where cultural heritage and historical preservation hold a central place, universities may focus more on heritage conservation, arts, and humanities, framing their Third Mission in terms of preserving and promoting cultural identity (Santagati, 2017),

producing cultural value (Oancea, 2017, 2018 and 2019) as well as affecting the need for the formalisation of a holistic conceptualisation of Third Mission (Di Berardino and Corsi, 2018). In contrast, countries like Germany emphasize efficiency, innovation, and technical expertise, leading universities to prioritize industry collaboration, technology transfer, and the development of a skilled workforce through structured systems like the dual education model. In nations that value social equality and inclusivity, like Sweden and Portugal, evaluation metrics might prioritize community engagement and the societal impact of university outreach, reflecting a broader commitment to social responsibility and public service. The deep analysis of the interviews allows the framing of different cultural values and how these intersect with both the strategic orientation and the evaluation mechanisms for universities' Third Mission across different European countries as illustrated in the following table. The illustrative representation shows, on the basis of some examples, how cultural values may affect Third Mission -related aspects:

COUNTRY	CULTURAL VALUE	EFFECT ON TM
SE	COLLABORATION	 Collaborative innovation Open Science Knowledge sharing
DE	HUMBOLDTIAN TRADITION / EXCELLENCE	 Specialisation (TM in a dual system) Efficiency (organisational indicators as part of evaluation) Standardisation of knowledge transfer Focus on industry collaboration Economic value of TM
IT	CULTURAL HERITAGE & TRADITIONS	Holistic conceptualisation of TM Libraries and Museums involved in TM & TM evaluation
PT	COMMUNITY & SOCIAL RESPONSIBILITY	 Regional development Privileging social inclusion activities & social impact

Table 19 Cultural value affecting TM

The result of this analysis suggests that there is a high level of tensions that can arise when trying to develop a cohesive European-wide approach to the Third Mission, given the varying cultural, historical, and socio-economic contexts in which universities operate:

You can imagine 48 countries or even the 44 that we have in Europe. There is a lot of diversity. We have east and west and north and south. That small system, big systems, very different academic cultures and everything. And that is the both the beauty, as you know, and the challenge of Europe is that there is a lot of diversity in a small space. We have a very deep level of collaboration, which means we need some kind of a common basis. And at the same time, we have to allow for a lot of diversity (EU 06)

National factors: influences on policies

National factors influencing policies on Third Mission in each of the country have emerged from interviews being as follow.

In **Sweden**, the fragmentation of areas of responsibilities and of funds, together with an increased use of competitive schemes to allocate GUF. In Sweden, the policy areas of relevance to the knowledge triangle (research, education and societal engagement) are largely managed in silos (Schwaag Serger, 2016). Consequently, the central public funding streams for the three tasks are separated and isolated from one another, creating significant challenges from a knowledge triangle perspective. This creates fragmentation and weak integration of tasks. In addition, Sweden's research funding system is characterised by a relatively large number of funding organisations, which creates further fragmentation (Schwaag Serger, 2016). At least four Swedish academic interviewees have explicitly mentioned the word "fragmentation" in relation to national factors influencing a wide and homogeneous spread of Third Mission activities across the whole country.

In **Germany**, the complexity of the federated system with uneven management of resources between Lands has created marked differences between regions (Pucher, 2016). Especially the fact that education is within the remit of each Land (although with bodies responsible for coordinating at the federal level) has implied that state-investment in education, research and innovation are not equal across Länder. In Germany the paramount unification between west and east has also played a role as the disparity between investment and standards between the universities insisting in

the two parts of the country were significant (Hüfner, 2002). Interviewees recognise that partially also with the aim of addressing important aspects at a wide federated level, funding programs supporting Third Mission-alike strategies are mostly run by the federal ministries (see Excellenzinitiative).

In **Portugal**, a reason for tensions lies in the incoherent relationships between universities and research units, also known as "structural ambiguity" (Koryakina, 2015) as well as the disparity of funds between private and public universities. In Portugal research is mainly conducted within a network of R&D units belonging to public universities and state-managed autonomous research institutions (Pereira, 2019). However, interviewees note that research units and universities live parallel lives: professors and researchers work for universities and are affiliated to units; they are paid by universities but run their projects (research and Third Mission) within the units. As elucidated by a Portuguese interviewee, public subventions go directly from the funding entity to the units without going through the university, "which have ultimately no control and limited monitoring opportunities" (PT_03). These are formally reported within the university remit but are carried outside it. Furthermore, these dichotomies are creating tensions within the system, between the different actors and influencing the way universities manage their relationships with the outside world, especially if these relationships are not directly linked to research outcomes.

For what it concerns **Italy**, two elements have been highlighted by interviewees: the political instability and the divide North/South. The political instability has generated about 65 different governments since the post Second World War with a significant impact on policy coherence and sustainability (Tentoni, 2019). The Italian welfare system lacks a comprehensive approach owing to its insufficient allocation of funds and the absence of consistent policy decisions. This has translated into a worsening of inequalities in educational sectors in the Italian regions (Formari and Giancola, 2010). Additionally, there is a significant issue with internal diversity, which not only relates to economic resources but also encompasses substantial differences in regional and local administrative capability (Ciarini and Giancola, 2016). The following overview illustrates the national factors influencing those policies which advocate for the institutionalisation of Third Mission:

Country	National factors influencing policies on TM	How/Why
Sweden	 "apparent fragmentation" "openness" of the system "universities are part of the solution" 	 Various agencies and organization which put money into research (SE_01) Universities receive 50% of their basic funds from central gov. Other 50% arrives through agencies 8public funding) Strong increase of competitive schemes to allocate 50%. Universities complains that this is limiting their capacity to design long term strategies → needed to address big challenges
Germany	Federal configuration (articulated and multi-layered system under political, structural, organisational, and funding perspectives)	 Disparities of GUF between Lands Creates tensions and ambiguities within the system Weaken the capacity of some universities to participate to competitive schemas Create issues for monitoring data collection.
Portugal	Binary system (universities & polytechnics) (R&D) units belonging to public universities → live parallel lives	Public subventions go directly from the funding entity to the units without going through the university → but these have no control and limited monitoring opportunities.
Italy	 Unitary system with homologated and rather standardized educational offer Chronic political instability, with over 60 governments since 1945 	 Quick and effective implementation of governmental directives Severe impact on long-term strategies as well as policy coherence and sustainability

Table 20 National factors influencing Third Mission policies

When interviewees have been asked 'what would you change in the policies concerning Third Mission' all of them, in all four countries, have given two sets of answers which are related to each other. First and foremost, they would ask for major attention and consideration to Third Mission in terms of designing policies that addresses Third Mission related challenges and opportunities in a direct and focussed way. This need has emerged both at national as well as European level finding a

widespread "common ground". Secondly, interviewees across all four countries asked for more *coordination* of policies. Although this has been declined in different ways in each country as it relates to national specificities. Sweden, Portugal, and Italy have a centralised state-led system which governs HE (Perez-Vico et al., 2014 and 2017; Urbano, 2019). In all these three countries the government is responsible for educational policy and largely determines the educational framework. These also have another common treat: they have all created governmental agencies or other form of public organism to co-manage the sector. However, interviews across with representatives of the key national agencies in the three countries (UKÄ and VINNOVA; FCT and A3ES; ANVUR) suggest that agencies have remarkable differences in many aspects, and especially in the degree of autonomy, which is rather high in Sweden, medium in Portugal and very limited in Italy. Interviewees across the three countries also reported of tensions between actors due to the fact that some key factors affect negatively policy design, which consequently limit universities' capabilities to effectively implement policies with a severe impact on long-term strategies as well as policy coherence and sustainability:

There is, it has always been and always will be, a subtle tension between academia and states. Academia claims its freedom, policy makers impose their accountability measures. Academia expects a paritectic relationship with participatory decision making, the state imposes with top-down approaches its decisions. The ways to institutionalisation of Third Mission are paved by these contrasting relationships (EU_10)

The international aspirations

The word 'international' (and related stemmed words) appear about 200 times in interviews. It is related to a number of variegate themes: collaboration, research, students, recruitment, mobility, reputation, credibility, evaluation, etc. A relevant percentage of the mentions (about 35%) is connected to the notion of Third Mission. At the crossroad where the global dimension (Farnell, 2020) meets the institutional autonomy, there is space and need for inquiring how Third Mission is positioned. Data shows that within the sphere of this virtual space, internationalisation and Third Mission are mostly linked through the connections to words such as 'decision' and 'strategies'. Through these connections interviewees have placed the discussion in the sphere of institutional strategic decisions. The conquest of institutional autonomy

also brought with it the need for each university to decide its own strategies (Puaca, 2021). It has become crucial for the institution to decide in which ecosystem it want to play a role in regional, national, or international (Bergan et al, 2018). According to academic interviewees the option for universities to choose as its range of action the local or the global society may depend on several factors. Interviewees have identified localisation, size, resources, tradition, research profile, marketisation, attractivity of location which are valid across the four countries:

Our research finds its main strengths in the international collaboration. Of course, we look for engagement activities at an international level, as our entire institutional body is projected into that dimension. (IT_03)

Interviewees also noted that when the other two missions, teaching and research, are already projected in an international setting and are enriched through international mobility and collaboration, then also engagement is potentially located within an international dimension. Examples provided by interviewees have depicted two different scenarios. The big universities, with personnel and financial resources, which translate their research collaborations into international engagement activities. But also, the more 'glocal' dimension of those universities which research/teaching/engaging projects anchored to the local dimension through which their project themselves into an international system:

My research and Third Mission projects created to combat gangmastering in the Basilicata countryside have become the export of good practices to other countries. This is how our local reality has allowed us to open up to the international arena (IT_16)

Similarly, to the concept of Third Mission, also the concept of 'internationalisation' is complex and still evolving. It has been intended as "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education" (Knight, 2008). But it has evolved into "the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society [authors' emphasis]". (De Wit et al, 2018). Hence, with the integration of the Third Mission -dimension, from 2017/18 onwards, Swedish

universities are intensively debating about internationalisation's strategies, values, and ethics. As part of the discussion four Swedish institutions² have produced a guideline on responsible internationalisation: This is a new frontier, that we have to face as we overcome geographical boundaries in our engagement activities. (SE_02). Together with interesting and positive opportunities such as a broader dissemination of findings and increased possibilities to find solutions to global issues, it also brings complex challenges coming from the broader set of geographical and cultural interfaces in the science landscape. The discourse that aroused in Germany recently (2019) surrounding the 'Internationalisation of Higher Education for Society' (IHES)³ goes in the same direction. IHES is to be intended as the social responsibility component of internationalisation and focuses on the international dimension of social engagement. With these stances, university internationalisation movements are lifting Third Mission from a regional/local to a globalised context. However, also in this case, interviews evidenced different paces and maturities, with Sweden and Germany championing the new frontiers, with data suggesting that Germany is already actioning the new markets; Portugal mainly focussing on internationalisation in relation to expertise and reputation; and Italy demonstrating an uneven picture of the universities landscapes, with some institutions which are strongly projected in the global dimension and others, which see in the local dimension the only way to survive in a growing competitive global sector. The following table synthetises the number of mentions of words related to 'internationalisation' and the percentage of those explicitly relating to Third Mission, the ratio suggests the level of maturity intended in terms of acknowledgement of opportunities and challenges related to the "new frontier" of international engagement (Santiago, 2008).

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² The Swedish Foundation for International Cooperation in Research and Higher Education (STINT), the KTH Royal Institute of Technology, the Karolinska Institute and the Lund University.

³ Virtual conference sponsored by the German Ministry for Education (BMBF), the German Academic Exchange Service (DAAAD) and the British Council.

Country	Development LEVEL	Number of mentions INTERNATIO	PERCENTAGE of MENTIONS related to TM	DESCRIPTION
PT	Not emerging from interviews	54	0%	Only referred to evaluationMainly concerned with reputation
	I TOTT ITTEL VIEWS			and credibility
IT	Acknowledged	28	20%	 Acnowledgement of potentialities Depending on size, resources, credibility and strategies Lack of systemic approach Institutional initiative (sporadic)
SE	Acknowledged	50	30%	- Acnowledgement of potentialities - Depending on size, resources, credibility and strategie Institutional initiative (wide spread) - Searching for standards - Working on values and etics
DE	Fully evidenced	19	45%	 Already in full implementation Resources availability Searching for standards (Internationalisation of Higher Education for Society) Working on 'social responsibility' Developing a market

Table 21 Internationalisation of Third Mission

The institutionalisation processes in an international dimension raises new challenges to be faced by universities and their stakeholders. Among these, also monitoring and evaluation; these aspects will be addressed in Section 4.3.

Summary of Section 4.2

The section 4.2 contributes answering the second Research Question, namely how Third Mission has been institutionalised in the specificities of each country context. To do so, the analysis focuses on two dimensions: the policy contextualisation and the geo-contextualisation. Within the first part the analysis traces the logical thread starting from international policies (with reference to the importance played by the Bologna

Process and subsequent financial instruments of EU origin) to move on to the factors that influence national policies. In the second subsection, it continues by identifying the geo-political factors that characterise the relationship between universities and territories. It concludes by highlighting the growing role played by the internationalisation of universities and the reflection that these forces have on all university missions. Interviews clearly indicate the growing relevance of the *glocal* (global and local) dimension of Third Mission. This evolution involves the fusion of the traditional local (territorial) vocation and the development of an international perspective of engagement. The lifting of Third Mission from the local to the global perspective plays a significant role in terms of ambitions and strategies for contemporary universities. Data shows different interpretations of internationalisation of Third Mission across the four examined countries and especially different levels of maturity in terms of both acknowledgment and implementation. Internationalisation also poses new challenges.

4.3 Evaluation of Third Mission

4.3.1 National contexts in comparison

Quality assurance has become increasingly important, not least in the current debate about excellence (Brusoni, ENQA, 2014), global competition, internationalisation, and cluster formation as well as through the possibilities for evaluating research achievements with the help of evaluations, ratings, and rankings (Hongcai, 2009; David, 2019). The Bologna Declaration (1999) aimed to promote European collaboration in ensuring the quality of higher education by establishing uniform standards and evaluation methods. In 2005, the European Ministers of Education approved the "Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)" which were created by the European Association for Quality Assurance in Higher Education (ENQA) in collaboration with its member agencies and the other members of the "E4 Group" (ENQA, EUA, EURASHE, and ESU). A revised edition was implemented in 2015 in Yerevan. Since 2005, considerable progress has been made in quality assurance as well as in other Bologna action lines such as qualifications frameworks, recognition and the promotion of the use of learning outcomes. Under the strong push from the European Union each

European country has developed a set of complex quality assurance practices in teaching and learning and mechanisms of accreditation of degree programmes (EC, 2018). Thus, usually, quality assurance systems at national level are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) that are drawn up by the European Association for Quality Assurance in Higher Education (ENQA) (Costes, 2008; Sarrico and Rosa, 2016). Basing on the four set of national interviews this section gives an overview of the main themes relevant to Third Mission evaluation. In particular it explores how Third Mission relates to existing accreditation and research evaluation frameworks, whether it modifies them, and which are the consequences of the addition of this third element. In order to be able to look at the context of each system and cultures and to compare the different approaches in a cross-country analysis it is propaedeutically needed to look at the broad context and frame each of the case study. Thus, the importance of evaluation and how it is organised varies across countries (Ochsner et al., 2018).

4.3.2 National culture of evaluation

Interestingly, many interviewees across all four countries are of the opinion that their own country was rather a "late-starter" for what regards evaluation in the public domain and especially with regard to the higher education sector. Some interviewees from each country have made references to "more advanced" or "historically consolidated" evaluation cultures such as the USA and UK, which are generally considered to be pioneers and benchmark with regard to evaluation (public and non).

The livelihood of the **German** evaluation market has emerged from interviews, which confirm how this peculiar aspect defines and distinguish the German education, higher education, and Third Mission evaluation sectors. The first interest in public evaluation for European countries can be dated around the sixties in terms of discussions, with some first attempts of implementation dating a decade later. For example, in 1970 in Germany a federal law was passed which regulated the "success controls" (*Erfolgskontrollen*) for governmental measures. As a result, there has been a high demand for "success control" studies (Löwenbein, 2008). Most of the services came from commercial research and consultancy firms, while the academic world remained alien to evaluations for another 20 years (Struhkamp, 2007). The German evaluation sector has since developed as a real market. "*Looking at the history of evaluation in*

Germany, by and large and despite certain ups and downs, there has been continuity concerning such tasks as evaluation studies" (Struhkamp, 2005). The initiation of the German Society for Evaluation (DeGEval) in in the late nineties contributed to both professionalisation and standardisation within this market, thus giving an impulse to the quality of evaluation as a product and/or service (Furubo et al., 2016; Henke, 2019; Pohlenz, 2022). There have been interesting research attempting the estimation of the German evaluation market, which in the first decade of this century was estimated to sum up to almost 150€ Mio. excluding accreditation of universities and evaluation of teaching at universities and colleges (Loevenbein, 2008). In Germany evaluation is generally conceived as "service" which complete and integrate public policies and programs. Therefore, the same market-logic that has characterised the public evaluation sphere has also developed in the German educational sector. "Current practice of higher education evaluation in Germany seems to lead towards a growing significance of accreditation" (Schmidt et al., 2010). The engagement in evaluation of policies and programs is regulated by typical market dynamics such as service demand and offer, engagement/contract acquisition, tender/competition, etc.

Germany is one of the few countries within the European Higher Education Area, with a real market. You have a few other countries where it's possible for foreign agencies to do assessment procedures but in most of the other countries is a closed shop. In theory, in Germany, we also have the opportunities for other foreign agencies to come here, from Austria, Switserland and from the Netherlands and also Finnish agencies and some others sometimes (DE_07)

An analytical mapping elaborated by Furubo et al. (2002) evidenced that **Sweden** (together with Australia, Canada, The Netherlands, and the United States) have the highest "rating of evaluation culture" among OECD countries. Some argue that evaluation in Sweden has its roots in Gunnar Myrdal's thinking from the 1930s (Stockmann and Meyer, 2016). Evaluations were run in the 50s focusing on educational reforms (Furubo, 2016). Historically, evaluation in Sweden emerged from the need to supply useful information for governing bodies at the state and local levels. With joining the EU, the demand for more evaluations has increased substantially. Today's evaluation in Sweden is a key and integral component in public policies and especially in higher education. However, there is an ongoing open public debate surrounding the social responsibility of universities which, in the opinion of Professor

Ole Petter Ottersen, president of Karolinska Institute in Stockholm (*University World News, 2021*), "is easily curtailed by political control and regulation which will necessarily be dictated by short-term needs rather than by the long-term gains of independence and freedom". The intertwined relationship between politic, society and academia are in Sweden still a debated hot topic, which encompass a number of critical issues and challenges, participants noted that the legitimacy of evaluation of the society-university relationship is one of those:

There should be an arm's length distance between what society needs and what the universities do. My primary stakeholder is the citisen, not the government. (SE_05)

In **Portugal**, 30 years ago the term evaluation applied to education was practically unknown and therefore was hardly used. But it was only in the second half of the 20th century, especially after 1970, that evaluation flourished, testing different models, based on equally different methodologies, which, unsurprisingly, reflected the very differences existing among researchers in the social sciences. Today, it is not only known but has provoked great debates - and will certainly continue to stimulate them (Varela de Freitas, 2001). Similarly, to the other EU countries, under the European push the landscape of public policy evaluation in Portugal has changed considerably. The evaluation exercises have multiplied, the objectives pursued, the application domains and the methodologies used have diversified. There has been a significant increase in the number of professionals, researchers, and private sector organisations (profitable and unprofitable) specialising in the evaluation of public policies and programs, generating demand and driving the supply of specialised training (Ferrão and Mourato, 2012). In opposition to what emerges about Germany and Sweden, in Portugal is not a well-established field. A virtual workshop on "Science for policymaking in Portugal" (2021) organised by the European Commission's Joint Research Centre (JRC) in partnership with the Fundação para a Ciencia e a Tecnologia (FCT) from Portugal, has highlighted some specific traits. Portugal has regularly implemented all evaluations required by the European institutions and has established solid policy evaluation practice in the context of EU funds (OECD, 2018a). Among the key factors explaining why only little is known about policy efficiency and effectiveness the Portuguese interviewees have mentioned the limited culture of evaluation; the quality of the studies carried out; the little visibility of the results obtained; and the lack of clarity about who does what (or should do) in the evaluation of public policies in Portugal. Going more specifically to the relevance for the discourse of Third Mission and its evaluation, interviewees have highlighted that policy advice has traditionally not been an attractive task for pure academics as they have considered it as a potential limitation of their academic freedom. "Public-policy extension" is considered at the same level of teaching or any other Third Mission-alike activities and thus not particularly rewarded in terms of career building. This discourages high-skilled researchers to engage into science for policy, when otherwise they might engage in more valuable activities such as research. Interviewees have highlighted the need for going beyond the usual personal relationship defined by political personal affinities and trust; for clear academic engagement in policymaking; for stimulating institutional trust; and motivating the sparking of evaluation among advisory functions. Interviewees noted that these are Third Mission related matters and that supporting Third Mission would increase relevance of the contributions that science can bring to policy. In response to these issues, interviewees have reported of the debates about the potential establishment of a public entity in Portugal with specific evaluation responsibilities, endowed with resources and autonomy of action following the model of other countries.

Since the eighties, the **Italian** legislation contains continuous and increasingly precise references on the need to introduce and apply in a widespread way in the Italian public administration, at all levels, principles and criteria, suitable for monitoring the legitimacy and correctness of administrative action with the effectiveness of public intervention policies (Senato della Repubblica Italiana, 2016). However, interviewees noted that in the practice, Italy has not developed a robust and extensive system for evaluating public policies. Despite intense and open debates, a real culture for policy/program evaluation has not taken roots:

We have a rather significant anomaly, in that on the contrary of most European countries, we do not evaluate policy, and we do not evaluate programs. (IT_14)

Concerning the higher education sector, under a formal perspective the "evaluation of the efficiency and efficacy of public financing and programmes for the promotion of innovation and research activities" is mentioned as explicit task of the national agency ANVUR, which as it will be illustrated in the following sections, plays a key role in the Italian evaluation of Third Mission.

4.3.3 National evaluation in higher education

In Germany the higher education system is structured upon a high number of welldefined typologies of institutions, each with well-defined roles and missions. In its complexity, considering the size and number of actors, it appears heavily fragmented with no unified scheme for evaluating academic research (Kuhlmann, 2003a; Heinze and Kuhlmann, 2008). Evaluation of research in universities following the UK, the Netherlandish or the Italian models has been defined by interviewees (DE 05 and DE 10) as "unthinkable" due indeed to the strongly rooted cultural dimension of academic freedom. The question of whether it would make sense to centralise research evaluation activities has been asked by several experts in explorative studies (e.g., Kuhlman and Heinze, 2003; Orr and Paetzold, 2006). This aspect has emerged insistently also in the interviews, however, representatives from the Federal Ministry of Education (BMBF), specifically questioned for the purpose of this study, have explicitly and convincingly confirmed that there are no plans for a central evaluation agency in Germany. From the interviews it emerges rather clearly that in Germany and partially in Sweden - the concept of evaluation of research in HE reflects the "systemic investigation of the worth or merit of an object", as defined by the American National Foundation of Science, where the object is a policy, program, or action meeting the stated goals. Interviewees noted that institutional performances as well as individual merits are assessed through different and separate channels, with none or little intersections. However, the Federal Ministry for Higher Education explicitly urged the strengthening of studies that serve as a foundation and constitute a unanimous and shared understanding of quality assurance (BMBF, 2019).

Differently in Sweden, Portugal, and Italy the state-depended and government-centric structures have opted for forms of systemic nation-wide evaluations. Whereas evaluation has different aims, objectives and uses in each of the country. In **Sweden** national evaluation framework in higher education looks at two different aspects: a) if universities have systems in place to guarantee the quality of the education program, and b) if they have systems in place to guarantee the quality of the research activities.

UKÄ (the Swedish Higher Education Authority) follows up on both these legs within the framework of a situational evaluation. This implies that universities run their own research quality assurance evaluations via peer reviews with the engagement of external (non from the same institution) reviewers. The national evaluation thus concerns not the research in itself but the quality assurance mechanisms that the university needs to have in place to grant the governmental-defined standards. Aside from this, the National Science Council of Sweden make national evaluations of different research fields (Karlsson et al., 2014; Nordesjö, 2019), which are more sort of targets analysis such as how Sweden performs in a specific field/discipline or how is this considered within an international comparison:

There are all sorts of evaluation exercises which are run by the different competent bodies under the request of the government. Usually, every government asks for a national evaluation of something. (SE_12)

Also, the competitive programs financing research are subjected to ex-ante and expost evaluations. In these cases, evaluations may cover both aspects the quality of the funded research and the efficiency of the measures:

The evaluation landscape in Sweden is fragmented and multilayered as it reflects the fragmented landscape of funding bodies. It is not easy to explain who does what (SE_13)

In **Portugal** the national assessment system was established by Law 38/94, 21st November, and initially applied only to public universities. Decree-Law 205/98, 11th July, extended the system to cover all higher education, and created the National Council for Assessment of Higher Education (CNAVES) to guarantee the smooth running, cohesion, and credibility of whole process of accreditation. This Decree-Law also established the general rules for the creation of the system of assessment and monitoring of higher education and the principles to be respected in the creation of bodies representing the public and private higher education institutions, both universities and polytechnics (A3ES, 2021). The national agency A3ES has the remit to evaluate all HE institutions: universities and polytechnics, public and private. The national Foundation for Science and Technology (FCT) evaluates research units on a regular basis (very 5 or 6 years). There is a direct link between evaluation and

resources, in that evaluation of research is used as an instrument to distribute resources:

Evaluation determines the level of funding. Several research units were assessed as poor, and the resources were cut off. See for example what happened with the evaluation in 2014. (PT 02)

The higher education quality assurance includes internal and external quality assurance and international evaluation at different levels. Internal quality assurance is conducted by the higher education institutions (HEIs) according to their own regulations in the framework of institutional autonomy, which must include the assessment of teaching staff, researchers and non-teaching staff.

Italy has constructed a complex, centralised and omni-comprehensive framework to monitor and assess quality assurance based on self-evaluation, recurrent evaluation and accreditation of the university system (ANVUR, 2023). The quality assurance system is led by ANVUR, which has an advisory orientation. The system aims at improving the quality of universities and research institutes by a system of initial and recurrent accreditation of courses; a system of quality assurance (AQ) of the teaching activities of universities, under the responsibilities of quality protection teams; the internal evaluation by joint committees and by the evaluation teams of universities; the external evaluation of research (and Third Mission) carried out by the national agency (ANVUR, 2022). The VQR (Valutazione della Qualità della Ricerca-Research Quality Assessment) concerns universities, research bodies, and their departments. It covers research products (publications) in 14 research areas with the aim of ranking in each area the universities and research bodies on the basis of their research quality, which is measured using both informed peer review and bibliometric methods. Over 60 thousand researchers (professors, researchers, technologists, etc) have participated to the first round (2004-10). The Institutions have chosen a number of research products relating to the latest four-year period (2015-2019), equal to triple the number of researchers, which means that for each researcher they have been able to present a maximum number of four products. In the Italian case the national framework considers and involves all levels of actors (institutional > department/research unit > individual researcher).

National accreditations

In **Germany** accreditations are governed by a complex structure consisting of two levels. At the top there is the German Accreditation Council under the guidance and control of which there are the actual accreditation agencies as the second level. There are eight different agencies for accreditation operating at federal level. Each of this agency has its own approach and may base its accreditation procedures to either qualitative or quantitative or mixed approaches. Students and stakeholders are part of assessment panels:

The work is done by academic peers involving other stakeholders as well. In the first-place student representatives and representatives from companies, industry, trade unions. So, practitioners as such. (DE_07)

In this respect, Third Mission is considered a kind of a transversal dimension. These agencies do not evaluate Third Mission activities *per se*, but look at them in relation to learning, teaching, and students' outcomes. An aspect which is examined, for example, is how much projects of an institution are "visible" in degree programs:

So, I'd say we have a project with the car industry and there is a research project going on, we would look at whether this is integrated also in courses and how students participate, and what do they get from it...things like that. (DE_07)

In a Third Mission perspective, interviewees highlighted that in Germany there is a general expectation (intended as public opinion) that students are enabled by the degree program to be active citizens and contribute to the development of society. These kind of aspects are not easy to be defined and are not easily made visible in the program. But there's certain components which can be checked out to ensure that these expectations are met:

For example, we may check whether there are times allocated for students to participate in campaigns, in services for the society or so on... Or are they at least prepared for doing something that is beyond studies in projects? Is there anything in terms of soft skills that would prepare them for a contribution to the society through their degree? (DE_07)

In **Sweden** the higher education institutions are relatively free to decide on their own organisation, allocation of resources and course offerings. The system is based on the principle of management by objectives. The Government lays down directives for operations of the higher education institutions in their annual public service agreements. The Swedish Higher Education Authority exercises supervision of the higher education institutions. Through panels of external assessors consisting of subject experts, labour market representatives and students, the Swedish Higher Education Authority reviews the quality of higher education and the efficient use of resources and public funding at the institutions (Swedish Higher Education Authority, 2013). The former National Agency for Higher Education, responsible for quality assurance and accreditation in higher education, evaluated all professional degree programmes in the period 2001-2006. Another 6-year cycle of programme evaluation started in 2007, covering all degrees at first, second and third level. Swedish interviewees noted that it is integral part of the accreditation process run by national authorities to verify and assess the so-called work-life cooperation, which means Third Mission:

In Sweden universities are public funded, which means we have a huge responsibility towards taxpayers. It is not enough to think or even to know that we contribute to society. We must evidence that. And this does not happen by chance. So, it is a responsibility of the university to have a structure in place capable of demonstrating how taxpayers' money are treated and used. (SE_10)

In **Portugal** and **Italy**, the responsibility for quality assessment and evaluation follows the same approach - in the wake of a process of modernisation and Europeanisation of the so-called "Mediterranean" system (Urbano, 2019). Namely, the ministries set the normative frames and public organisms/agencies implement them. Both countries have established national agencies with responsibility for quality assessment and evaluation of HE, covering both teaching and research (and in Italy also Third Mission explicitly): the Portuguese Agência de Avaliação e Acreditação do Ensino Superior (A3ES) was established in 2007; the Agenzia Nazionale per la Valutazione delle Università e della Ricerca (ANVUR) was established in 2010. The **Portuguese** higher education institutions have a specific quality assessment system based on the legal framework of quality assurance of higher education and on the higher education evaluation and accreditation agency A3ES. The object of the assessment is the quality

(Pacheco, 2014) of performance of higher education institutions by measuring the degree to which they fulfil their mission through performance parameters related to their operation and to the results that arise therein (this aspect is of particular relevance to Third Mission activities and their evaluation). The university quality assessment is made of two distinctive processes, namely a self-assessment and an external assessment. Self-assessment is carried out by each higher education institution. External assessment is mandatory (as foreseen by the legal framework) and forms the basis of the accreditation procedures; it is carried out by the agency A3ES, which is also responsible for study accreditations. Accreditation and quality assurance are strictly interlinked, and the assessment of Third Mission activities is integrated within the system. For example, interviewees from governmental agency noted that assessment of quality assurance also includes Third Mission as stated in the guidelines, assessment templates, self-assessment reports. In both cases institutional evaluation and program accreditation there are sections that institutions must fill in with details about their connections to the society, their contribution to the society, to regional development. All dimensions such as events, cultural events, sports events, but also knowledge transfer are considered. Practicioners consider Third Mission as integral part of their assessment practices, although might not be aware of the legislative acts, which underly them:

So, we look at how they are involved in those areas, not only in teaching and research, but also how they exploit them. Although, I don't think it's explicit in legislation. (PT_02)

Similarly, the **Italian** accreditation system is based upon two elements: a) an internal quality assurance mechanism, which is the requirement for the accreditation of both courses and settings; b) the accreditation is an external evaluation procedure carried out by ANVUR, which makes its recommendation to the Ministry, this is the body that ultimately releases the accreditation. With the introduction of the Self-Assessment, Periodic Assessment and Accreditation (AVA) system of universities, the Third Mission fully enters in the area of "evaluable activities". Already the Decree of the Minister of Education, University and Research of 30 January 2013 n. 47, defined in Annex E the Indicators and parameters for the periodic evaluation:

things. In the moment in which some degree course has taken the C and the D (therefore in fact they have been rejected) then the problem has arisen. The results of the evaluations were then taken seriously, and due considerations were made. When serious weaknesses emerge from the evaluation, these degree programs are completely redesigned. Also, because objectively some with no connection to the world (and therefore without Third Mission) they were completely faded! (IT_11)

All four countries have included and integrated in their accreditation processes some type of evaluation criteria to assess ex-ante Third Mission activities. Specific ex-post evaluations are then integrated in evaluations of policies, programs, actions, or fields/disciplines which are carried out separately under political and governmental input. Portugal has included the evaluation of some aspects of Third Mission in expost evaluation of research activities when evaluating research units. Italy, however, has created a specific national framework to evaluate Third Mission and impact in parallel with research evaluation.

National Research evaluation frameworks

Germany has no unified framework for evaluation academic research, and it appears that it is not going towards this direction; though the approach to evaluation, especially from side of policy makers, is rapidly changing. As confirmed by interviewees with experiences in both academic and non-academic research institutions freedom is a value for researcher in both types of HE institutions, academic and non-academic.

The major difference lies in the cultural perspective: in the academic environment "freedom of research and teaching" has also been often interpreted as equivalent to "having no duty of accountability. (DE_10)

It is interesting to note that demand for accountability and quality assurance differ depending on the type of research institution. The non-academic research structures are evaluated in terms of performance on a cycle basis:

At the Leibnitz institute but also at all the other institutes (this is standardised of course), there is a major evaluation every seven years, which sounds like a very long time, but since it's a big evaluation, it takes ages to prepare, especially for big institutions. (DE_10)

The German evaluation practice in the field of research and research institutions performance mirrors the research landscape: it is highly developed and articulated, dynamic and rich but also fragmented. "It is developed with regard to the high degree of self-organisation in internal scientific procedures, the consensus and encourage engagement between researchers, as well as dynamic because of diverse new evaluation approaches and strategy developments in all institutions and at all levels. However, also unsystematic, and fragmented because the various institutionsoriented evaluation efforts have so far not been coordinated" (Kuhlmann, 2003a, p136). The dichotomy in evaluation practices and obligations between non-academic research institutions and universities has emerged in a number of interviews. It has been mentioned as a matter of fact, which characterises the German research landscape. None of the interviewees have questioned or criticised the ideas of such a strong and unique "academic freedom", which is clearly different from the common and shared principle of "freedom of research". In this respect a representative from the Federal Ministry of education has clarified that many of the current initiatives to support universities in their way toward improvement and excellence have as a background the political will to change universities and drive them out of their auto referential world. The evaluation activities related to German Pakts between the Federal government and Bundesländer and funding programs are designed to measure success of the initiatives and not the performance of the institutions or the individual researchers:

We gained awareness that resources must flow if we want to change certain things. For this we use third-party funds. This means that the universities are not only financed directly from one source by the states, but they can also receive third-party funds for specific purposes. But they also have to take care of these purposes: acquisitions, employability, but also transfer, excellence and so on...We would then measure these when we evaluate the programs. We do not need to evaluate professors on those aspects. There is no need to evaluate them more than they are already evaluated. (DE_02)

It shows how evaluation plays a key role, but it is applied at a different level (such as policy and programs) and it is not conceived as a mean to measure academic performance or assess academic quality. There have been several attempts to formally suggest some form of aggregation of coordination activities in evaluation or a form of service facility addressing all actors in the research system (Roessler et al., 2015). However, for the specific purpose of this research the question has been posed

to representatives of the Federal Ministry of Education (BMBF) and the possibility to create a sort of federal agency for evaluation has been "categorically excluded" (DE 02).

In **Sweden** from 1995 to the present (2019), there have been five different national evaluation systems in operation in higher education. They have all been introduced with explicit political aims and conceived as technical accelerators (Rosa, 2012). They aimed at stimulating HEIs internal quality work in compliance with the Government Bill, 1992/93; enhancing trust in higher education institutions, increasing student influence; providing a better alignment with the Bologna principles; strengthening Sweden's position in the global market; supporting a better alignment with the ENQA's standards and guidelines (Segerholm, 2020): *The Swedish way to develop a system for HE assessment has been long and 'painful' (SE_11)*. The apex of this tortuous path was reached in 2011, when a new quality assurance system was introduced in order to meet new demands that were based on the goals of greater freedom, internationalisation and high quality:

The system was created by officials at the Ministry of Education and generated a widespread criticism as the evaluation kit was enforced top-down despite academics, students, and international experts' views. Other models were actually available which were based on collaboration with academia. (SE_11)

The system was revised by international experts and was so badly rated that it caused Sweden to be excluded from the European Association for Quality Assurance in Higher Education (ENQA). Despite public opinion defining this event as "shameful for the country", some interviewees ironically said that the exclusion from ENQA was a "fortunate" event as it forced the policy makers to re-examine the situation and quickly act to revert it:

The fact that we were thrown out of ENQA - and rightly so - determined a change in the political leadership. They understood that this was not the right way to go. (SE_11)

The proposed method was subjected to careful analysis by independent experts commissioned by the government. One of the main criticisms expressed by the experts was that the evaluators were not able to give recommendations to the

institutions. So, the evaluators were only able to say whether an institution was succeeding or not, but they would not be able to support any change. This limitation was theoretically in the name of autonomy of HE institutions, but it contrasted with the basic principle of evaluation as learning and enhancement tool, which was speeding throughout Europe following Bologna ideals. In fact, this was just one of many examples as interviewees stated that "there were so many really stupid things with that system" (SE_11). In January 2013, the responsibility for quality assurance and accreditation was transferred from the National Agency for Higher Education to the Swedish Higher Education Authority. In March 2013, the Swedish Government commissioned the Swedish Research Council, in consultation with the Swedish Research Council for Health, Working Life and Social Research (Forte), the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), and Vinnova, Sweden's innovation agency, to develop and propose a model for allocating resources to universities and university colleges involving peer review of and relevance of research. The report called (Forskningskvalitetsutvärdering i Sverige Research quality evaluation in Sweden) proposes that a new model for quality-based resource allocation should replace the indicator-based research funding model. The proposal was strongly inspired by the British REF system and included a detailed section on measuring "research impact beyond academy". However, the report was followed by a consultation and was strongly opposed. For example, the Swedish Association of University Teachers and Researchers (SULF) firmly rejected the proposal and refused to expose basic university funds to competition through evaluations. SULF argued and publicly reported that "there is already an internal scientific system of peer review examination at the universities and researchers always compete through their research, but this type of system indicates something other than accepted, self-evident scientific competition. Instead of creating confidence it signals distrust of researchers and universities". Eventually, the REF-similar approach was dismissed:

The suggestion in FOKUS was mainly to implement a sort of 'REF-like system' but it was led on ice as the government has no interest in it. (SE_03)

Among the various experiments, there was the attempt to allocate parts of the institutional block grant funding to the universities through a performance-based

scheme based on bibliometric analysis, and 20% of this funding stream has been redistributed with the help of this model since 2014, but the model has been subject to severe criticism. Thus, although the 2016 research bill had a slightly different focus than its predecessors (in part due to the 2014 shift in government), funding allocation remains largely intact (RIO Report Sweden, 2017). During the last five years within academia and especially the Conference of Rectors, there has been an intense work on the principle that should guide an evaluation system, so the academia this time was ready to give its contribution to policy. These principles have been incorporated in the more recent attempt. Since 2017 a new system has been put in place which was in the first implementation phase at the time of interviews were taken. Therefore, interviewees have not been able to judge it in terms of implementation, although they acknowledge that.

This latter approach is better equipped for success as it has been generated through a more transparent and collegial process. (SE_12)

More recently, the Swedish Research Council has announced to have developed a model to be used to make national evaluations of the quality and impact of research within various research subjects. During 2020-2021, this was tested in a pilot evaluation of Swedish research in political science. Formas (a government research council for sustainable development.), Forte (a research council and a government agency under the Swedish Ministry of Health and Social Affairs), the Swedish Research Council and Vinnova (the national innovation agency) presented a further development of the joint proposal for a model for quality-based resource allocation starting from 2021. The proposal is the result of a joint Government mandate to further develop those parts of the model that relate to how applications and assessments of profile areas shall be designed and implemented. The new framework includes three components, the scientific quality, preconditions for quality, and quality in collaborations with surrounding society. It foresees panel with international experts to assess the quality and impact of the research on a five-degree scale. It The experts' evaluation will comment on the outcome at national level, it will highlight particular characteristics, and it will propose possible measures for further development of the quality and impact of the research. The path to the definition and consolidation of a

Swedish approach and framework for evaluation of research and its impact is thus still open.

Most of the **Portuguese** scientific research takes place in R&D Units financed by the *National Science and Technology Foundation* (FCT). This is also responsible for their evaluation, through international panels of evaluators. The international approach to evaluation is a key principle of the Portuguese system. Since 1996 FCT runs periodic evaluation by panels of international experts.

With this reform, Portugal pioneered the practice of fully international evaluation processes of R&D Units. (PT_13)

The model included direct contact with the researchers through visits to all units with the goal of reinforcing the efficiency of the process and the sense of responsibility and accountability of the management in the research institutions (FCT, 2018). This process culminates with the panel attributing a qualitative grade. The grading has a direct impact on the resources allocation as it determines the amount of multi-annual funding to be received. FCT runs international evaluation processes of all R&D units and of all Associate Laboratories with the aim to establish a global view of the national scientific system funded by FCT. The evaluation of R&D units which was ongoing at that time and was run by the European Science Foundation (ESF) on behalf of FCT, was closely linked to the allocation of research funding and the results were meant to finance "excellence" in Portuguese research. All evaluation exercises are publicly available. Transparency and fairness of the system were supposed to be the underlining principles. However, exactly those principles were at the core of a controversial and at times heated debate, which has crossed the academic borders to become the object of battle, planning and political negotiation. It all started with the planned assessment exercise in 2013. Two years later the debate, which meanwhile had reached international resonance, generated the initiative of five prominent representatives of the Portuguese research landscape to create a sort of international repository of texts, reports, publications to draw attention to what they called "the process of subversion and mishandling [that] underwent by the scientific evaluation system in Portugal over the last four years" (The Black Book, 2015). The Black Book of Scientific Evaluation in Portugal aimed at raising the voices of academia against the evaluation approach adopted at that time by FCT. One of the five organisers is the

current minister of Science, Technology and Higher Education, Manuel Heitor. This specific evaluation exercise found the opposition of the Rector's Conference (CRUP) and was systematically demolished in terms of methodology and reliability. After that an expert group assigned to analyse the process made a series of recommendations which led to retake the main principles of the first four evaluations and to pursue with their evolution and gradual improvement. Under this guidance the government has newly strengthened and consolidated a 25-year tradition of international evaluations:

This has become very important when twenty-five years ago this decision was only to do research assessment based on international peer reviews and completely abolish national or internal review. So, these external peer review process is run by the Science and Technology Foundation, which sponsors most of the research activity in the country, which nowadays accounts for up to 1.5 percent of GDP. (PT_13)

In **Italy** reflection on academic evaluation begins in the eighties (Rizzi and Silvestri, 2002), initially with the work within the Conference of Rectors of Italian Universities (CRUI) and, subsequently, on the initiative of the Government which, since 1994, has requested the establishment of internal evaluation units in university and, since 1996, has established an Observatory for the evaluation of the university system. In 1997 the Steering Committee for the Evaluation of Research (CIVR) was established, assigning to it the task of carrying out the evaluation activities in order to promote the quality and the best use of national scientific and technological research (carried out by universities but also by other research bodies). Two years later the constitution of the National Committee for the Evaluation of the University System (CNVSU) confirmed a process of reinforcing central evaluation organisms. Meanwhile a first piloting evaluation exercise was run at national level (VTR 2001-2003). The years between 2005 and 2010 were characterised by a decision-making deadlock due to political instability. In 2006 a central agency for university and research (ANVUR) was established, however, the law that determined its operability was only launched in 2010 and the first committee was nominated a year later. During this 6-year period, the two previous organs, although they knew that they were going to be suppressed, remained in charge. A new evaluation exercise was prepared but it went lost in the bureaucratic processes until ANVUR was ready to design and launch the first Valutazione della Qualità della Ricerca (VQR), which is the system currently in place.

Formally, ANVUR's activities were oriented along three main thematic axes: (a) the process of self-assessment, periodic assessment, and accreditation; (b) the new valuation exercise research; (c) national scientific qualifications, aimed at inclusion in the roles (Rebora, 2012). Some of the interviewees provided a critical view of the transition phase that characterised the constitution of the national agency and the definition of its roles and competences. Interviewees noted that the goal behind the establishment of a centralised body in charge of universities and research evaluation was to simplify the system. The gestation of the national agency, however, suffered the alternation of governments and their different visions. After, what has been defined as a "ping pong" of political majorities between the right and left government, who certainly influenced the definition of the area of competence and ended up breaking a unitary vision of those who had thought of it at the beginning, ANVUR was finally established. The waiting time was so long that meanwhile the agency was charged with "salvific aurea", meaning that it was expected to solve all academic-related problems and challenges (IT 14). The model for the central evaluation agency was inspired by the French approach "although when ANVUR entered into force, the French model was already proving not to be sustainable" (IT_14). While the model for the evaluation of research was strongly influenced by the British REF (Rebora and Turri, 2013). The Research Quality Assessment called VQR (Valutazione della Qualità della Ricerca) launched in 2011 becomes a mass exercise involving all institutions and all individuals in academy (Rebora, 2012). So much that evaluation of university becomes a hot theme in newspapers and digital communication. Suddenly, it becomes clear how these new routes would impact the actors - both individuals and institutions-(Pilonato, 2022) and the debate became an open contrast on different aspects: methodologies, indicators, bibliometrics, etc. (Jacobsson and Rickne, 2004). The escalation of this contrast has brought a part of the Italian academy to launch a national boycott of the VQR 2011-2014 (which, it must be said, was only partially related to the research assessment exercise, as it was mostly generated by protests regarding contractual issues with the ministry). Universities have used different methods to "convince" or to "force" researchers to submit their papers for evaluation reference, and although this is not formally reported in public papers, it is known for direct experience by the writer, who works in an Italian university. Some universities made executive decisions to submit papers from researchers even without their

permission as this is within the remit of the Rectors. Others decided to penalise those researchers by denying them access to specific research funding quotas. In the end, the abstention rate from the VQR was below 10%. Still, this had an impact on the evaluation of Third Mission, which was, by then for the first time, integral part of the VQR assessment exercise (ANVUR, 2016). The third cycle of VQR (2015-2019) has generated a relevant number of polemics (ROARS, 2021). There is a constant confrontation between ministry, CUN, CRUI and ANVUR which is currently fought through ministerial decrees, institutional guidelines and newspaper articles. Methodology, indicators, participation, linkages to resources are just a few of the many elements which are debated and meanwhile relate to both evaluation of research and of Third Mission (Luzzatto, 2011; Urbano, 2019; Bonaccorsi et al., 2021).

National contexts in comparison

Despite the efforts for generating a process of supranational integration (Beukel, 2001), national quality assurance systems remain significantly different in Europe (Turri, 2012). Interviews have shown which are the differences and informed the comparative analysis of the factors defining each context. Interviewees have indicated the grade of maturity in terms of evaluation culture, where Sweden registers the highest grade (with some space for improvement); Germany is perceived being "medium high" (with some interviewees showing very skeptical approach to systemised assessment frameworks). Both Italy and Portugal were defined a "low" in terms of "evaluation culture" maturity, although in both cases interviewees have pointed out that "things are rapidly changing". In terms of Quality Assurance, each country has very specific system in place. Germany has developed a very articulated system with a myriad of actors involved in evaluation activities. Sweden and Portugal have a similar approach in that both delegate the assurance of quality to institutions (in name of their autonomy and freedom) while governmental ministries and/or agencies assess the valid of the institutional systems. Whitin each of these national framework, countries have developed parallel and separate accreditation paths and research evaluation paths. Germany has focused strongly on accreditation and has developed a research evaluation framework for Research Centers only, which does not apply to universities in name of their academic freedom. Academic research quality mostly undergoes ex-ante evaluation and ongoing monitoring. In Sweden and

Portugal both accreditation and research evaluation are overseen by government while their operationalisation lies in different governmental bodies/agencies. Italy is the unique country out of the four that has centralised each of the system under the governmental guidance (Ministry) and the operationalisation carried out by the national agency ANVUR, which covers study programs accreditation, research assessment, Third Mission evaluation and also the professorship habilitation. Interviewees noted that in each country the evaluation in Higher Education has originated tensions between the political power and the academies. These have different reasons and have taken different forms although from a chronological perspective they are not too distant. Interviewees noted that although some (e.g. Sweden, Italy and Portugal) are resolved in the contingency of the specific events, tensions between the two powers remain. It emerges as a common trait across all four countries that political efforts have been opposed by significant forces in European academies which have invoked the untouchable principle of "freedom of academia". In 2018, the European Parliament has launched the adoption of an international declaration on academic freedom and autonomy of higher education institutions to support what is stated in the Charter of Fundamental Rights of the European Union: "The arts and scientific research must be free from constraints. Academic freedom must be respected" (EP, 2000). However, interviewees have noted that especially in Germany, Sweden, and to some extent in Italy, the fact that academic freedom is constitutionally defined has been used to question many of the new elements which have been driving changes in academia, to the point that the constitutional principle was used to limit external intervention (politic in the first instance):

Freedom set as a constitutional principle has been used to limit the power of external interventions. (DE 04)

And although interviewees have cited the constitutional value in a positive way and as positive characteristic, participants also acknowledged that this has represented a barrier to changes and innovation within university systems:

A sort of barrier to innovation in universities, especially with regard to evaluation and quality assurance. (DE_04)

These oppositions have emerged clearly, strong and are somehow still actual in Germany, but the same line of thoughts can be traced in scholar and public debates in the other three countries as well. Thus, using the "freedom of academia" as an argument against evaluations is a common element, which has emerged with different gradiations in interviews across all four countries.

CONTEXT	SE	DE	PT	IT
EVALUATION CULTURE	High	Medium high	Low	Low
GOLTONE	Integral component in public policies	Dynamic & bustling evaluation market	Eval of public policies NOT well established	Eval of public policies NOT well established
QUALITY ASSURANCE in HE	Separate channels with no intersection: Institutional performance Individual merit Quality assessment Nat. government/ Institutions	- Institutions are autonomous in QA - Governement assesses QA systems in place Governments/I nstitutions	- Institutions are autonomous in QA - Governement assesses QA systems in place Ministry/A3S/FC T	Centralised omny- comprehensi ve national framework Ministry/AN VUR
ACCREDITAT ION	Service providers: 8 agencies	Nationwide UKÄ - Swedish Higher Education Authority	Nation wide A3ES - Agência de Avaliação e Acreditação do Ensino Superior	
RESEARCH	Nationwide Governament- lead Swedish Research Council + UKÄ + VINNOVA	N/A in academic institutions ≠ Institutionalised in research centres Unified framework defined as UNTHINKABLE	Nationwide Research Unit (only) International evaluation panels FCT - Fundação para a Ciência e a Tecnologia	
TENSIONS	Exclusion from ENQA (2014)	Federal/Land funding (ongoing)	Black book of scientific evaluation (2018)	Boycott of VQR (2016)

Table 22 National contexts in comparison

How Third Mission is evaluated - in comparison

Resuming what has been evidenced in the previous sections, Third Mission activities are looked at from different angles and their evaluation depends on the overall national approach to quality assurance and on whether there is a consolidated evaluation framework or not. As illustrated in the previous sections, it is possible to identify common aspects and temporal coincidences in the evolution of all university-related matters, the same is for Third Mission and its evaluation. Despite the efforts for generating a process of supranational integration, national quality assurance systems remain significantly different in Europe (Turri, 2012).

4.3.4 Third Mission evaluation in Germany

Germany has a huge and complex education and research sector in which universities play an important role but are by far not the only players (Orr and Paetzold, 2006). The intrinsic characteristic of the German multi-sectorial arena is that it is populated by a myriad of actors with *no obvious centre of political power* (Kuhlmann, 1997). Germany appears in some scholar papers published across the 20th and 21st centuries, as being a country "with the culture of consensus", where high quality is not achieved through competition (Kuhlmann, 2003b). This may partially explain the existence of "an intermediary hybrid governance structure in endangered balance" which managed to successfully moderate the co-operative strategies of actors who were pursuing rival interests. And this represented a real challenge to conventional evaluation procedures (Kuhlmann, 1997). However, as a consequence of unification and other economic challenges (Bibow, 2001; Hüfner, 2002), German monetary resources came under pressure (Bibow, 2001). At the same time the Bologna process started to operate, and Germany has taken this process seriously on board as driver for drastic changes. At the turn of the 21st century German society has undergone deep, rapid and lasting changes. Nowadays, the complexity of the articulated educational/research/innovation systems has increased enormously and with it, also the conflicts of interests and controversies. But especially the dynamics regulating the relationships have changed. Markets dynamics, emerged and expanded. They have not substituted the previous attitude but integrated it, so it is plausible to see a society in which the "consensus culture" coexist with strong "competitiveness" (Campbell and Federer, 1997) and this mix constitutes the skeleton of the sector:

Germany is a coordinated market economy with a lot of cooperation networks. (DE 05)

Within the original sector structure every type of actor had its well-defined mission and nature. For the Fraunhofer-Gesellschaft for example collaboration with industry and society, market orientation, commercialisation of research outputs and technology transfer are in its DNA:

Mr. Fraunhofer existed, he was an inventor who had a workshop in his courtyard with a door on the street and he built his inventions and sold them immediately after. This is why universities do not have to have bilateral relationships with industry, not the Max-Plank-Gesellschaft has...but we have to, and we are measured on the basis of that in our performance evaluation. (DE_12)

Instead, Third Mission activities have been forced within the generalist universities; in Germany Third Mission of universities is clearly the expression of political will and policy implementation. If there is a country among the four, where Third Mission of universities is not a spontaneous phenomenon this is Germany:

Without the injection of resources from the BMBF to force universities to develop Third Mission, they would not have done it. For them Fachhoschulen were doing it and this was enough. (DE_02)

This is also reflected in the formal institutional relations between politics and universities. Universities and Bundesländer sign regulatory pacts, so-called *Leistungsvereinbarungen*, in which goals, objectives and performances are listed and on which universities are measured. While these are detailed for both teaching and research, when it comes to Third Mission, they are either absent or vaguely formulated:

If you take a look, you see how differentiated the statements on the area of teaching are; you also see differentiated statements on the research focus and research activities. But the counterpart to the Third Mission is mostly missing, there the explanations are very vague. (DE_09)

The fact that Third Mission is only partially institutionalised affects the capability to define it and measure it. So, it risks passing through the meshes of the state control network. In addition, Third Mission of universities have not yet been subject of direct

evaluation for the same reason for which evaluation of academic research has not been applicable for a long time. "The measurement of different performances by universities within the framework of the new management model has gained great importance, which will probably continue to grow in the future" (Roessler, 2016). However, two deficits in particular have been identified: the risks that the push to develop Third Mission activities would lead a standardisation and thus impoverishment of performance and the university landscape as "what doesn't "count" tends to be left out". The lack of operationalisation of third-mission services in the systems of performance measurement lies on the variety of possible performance goals within these generic terms. This plurality of goals could be made visible, for example, within the framework of the idea of "diverse excellence" (Roessler, 2016) which has also been confirmed in interviews:

It has also become clear that universities are not good or bad in different degrees, but that they distinguish themselves with different tasks: transfer sustainability, integration, work attractivity, etc. Very different tasks that universities serve today. These are the main differences, but of course there are many more. So, it not about assessing performances it is about understanding the distribution of diverse excellence. (DE_02)

When thinking of evaluation of Third Mission in Germany, it must be considered that the main instrument that has been used to generate them is the use of *DrittmitteIn*, which have been provided through specific programs and competitive schemes. So, policy makers at Federal level have developed a solid evaluation system which looks at Third Mission in universities from a top-down perspective. It bases on three major elements: 1) ex-ante evaluation to acquire competitive resources; 2) monitoring and intermediary evaluation of activities; 3) the comprehensive evaluation of policies and programs. As an example, the *Excellenz Initiative* has required Universities to develop plans and mechanisms for collaboration with industry and interactions with the society. The accurate ex-ante evaluation of those plans; the consistent monitoring and evaluation of progress (with mechanisms of feedback for improvement during the funding); the evaluation of the program, have granted so far for the solidity and quality of the activities and their outcomes.

Evaluation of public policies and programs (including the educational sector) in Germany is subject to market dynamics and competition patterns. Therefore, also evaluation of Third Mission in universities is exposed to the same principles, treats and risks, which have been evidenced in the previous section for the evaluation of research. Also, Third Mission evaluation is therefore subject to the same tensions between political power and actors and between actors:

And of course, there is competition between agencies which do accreditation and evaluation. Actually, at the moment the market is changing, and the cake is getting smaller. (DE_07)

It is important to notice that the evaluation market in Germany differs from ordinary economic markets in this specific detail: in addition to supply and demand of evaluation services, a powerful third party exists, which is the evaluation funder as the federal government is an important funder of political programs and their related evaluations. The German states finance political initiatives and their evaluation as well (Lowenbein, 2008). The direct dependencies of evaluation procedures from political power are felt to be very strong in Germany as in opposition to other countries. The quotes below from a German interviewee is not in response to a specific prompt and indicates not only the German perspective but also the perception Germans may have about the independence of public bodies from governmental control:

There are some big differences between the Swedish and the German systems. In Sweden, for example VINNOVA is by low an independent body. So not dependencies from politics. The degree of independence has always been larger than in Germany. (DE_01)

This important aspect has a direct consequence on the nature and purpose of the evaluations and directly influences the relationship between actors, such as the contracting entity (ministry) and the client entity (public or public/private agency):

Evaluations are run externally, the ministry is always a customer, they have public procurement procedures, agencies tender and are finally commissioned by the ministry. So, there is a customer relationship between the ministry and the agency. Just to clarify, is the ministry not involved at all in the organisation of the evaluation... (DE_01)

Thus, despite the formal impartiality of the system, the underlying power position of the commissioning body is still relevant. For example, it may influence the type of evaluation methodology:

I should start saying that I could imagine we do much more but our customer, the Ministry of Education and Research, wanted to have a more traditional approach to evaluation. This should be kept in mind when we describe our methodology for the tender. (DE_01)

This dependency may also influence the use of the evaluation outcomes as they have an implicit political value of merit which is not limited to the object of the evaluation itself but extends to the people who have managed it (administration) and to those who have promoted it (politicians):

All funding programs have to be evaluated. But there is a kind of fear among people that they cannot control. And there is the idea that the more technically advanced is the evaluation the less they can control the results. Of course, this is not the case. There always a way of giving them the data. But there is a very old fashion fear among people at ministries that maybe the outcome of an evaluation is negative for them. (DE_01)

It appears that in Germany the culture of evaluation has developed with many legs. Its diversity depends on the level (federal, national, etc) and the subjects (policy, programs, organisation, etc.) on which it is applied. Interviewees confirmed that the spirit of the freedom, of the market dynamics and of the public control all coexists in a comprehensive multi-layered and self-balanced system:

And we also have this culture of evaluation, which could be more advanced, but it isn't. (DE_01)

It is probably not a coincidence if the only self-defined "globally operating quality assurance body with a focus on acknowledging engagement and entrepreneurship in Higher Education", called Accreditation Council for Entrepreneurial and Engaged Universities (ACEEU) is based in Germany. It strives "to lead the way in a new era for higher education through evaluating, supporting and igniting the potential of HEIs on their road to Third Mission excellence". It has developed a path that leads Universities, to the accreditation for their economic and social development and entrepreneurship

and community engagement. The way through the accreditation may last from 9 months, which has been so far the quickest journey, to over two years. This may strongly depend on the university. Some of them have chosen to take it slow on purpose to foster cultural change in the organisation and to upscale our people.

We have to ensure that a partnership or engagement is really facilitated in the entire organisation. That means you have to reach out to all the departments, faculties and so on, bring them on one table, create their own understanding of their own interpretation ... (EU_02)

ACEEU has already offered this paid service to a number of universities in about 12 countries world-wide. The first European university to achieve the accreditation has been a Swedish university. Recently, to adapt to the market demand ACEEU offers its services also to individual units within universities, such as department, university, centre, etc. In addition to the accreditation path, ACEEU, which works independently from any national or governmental initiatives, has also developed a series of standards covering 5 dimensions: Orientation and Strategy, People and Organisational Capacity, Drivers and Enablers, Education, Research and Third Mission Activities, Innovation, and impact. The reasons for the universities to choose to pay for this accreditation and the use that they make of the results may be different:

Some said they want to use it to recruit students because many students don't expect any more that they will have a job after finishing their study, they might create their own job. Others said they want to use it for speaking to businesses. So, to show them that they are not only good in research but also in innovation, that they actually are capable of exploiting the value of that knowledge that they generate. And others said this used in funding proposals, so that they in the exploitation section can highlight that they are good in working with external parties, in the commerce solicitation, and with the exploitation of results. So, it's a very diverse set of measures that are implemented after the accreditation. (EU_02)

Fact is, that there are universities willing to pay to undergo evaluation of their Third Mission activities. And it appears that there is a strict correlation between offer and demand in this market niche, which is still very young and may continue growing steadily.

4.3.5 Third Mission evaluation in Sweden

As seen, in **Sweden** the Quality Assurance System includes focus on policies and strategies for sustaining and developing quality of research and societal impact. While the Quality system is periodically reviewed by the Swedish Higher Education Authority (UKÄ), the Innovation Agency of Sweden (VINNOVA) evaluates role and impact of national HEIs interaction with society. Within the framework of the UKÄ remit, Third Mission activities are assessed within the context of accreditation processes. It has developed a system that foresees an ex-ante assessment of Third Mission at institutional level. The assessment is based upon six evaluation areas: 1) Universities have to have a system in place to govern policies and roles within the quality system; 2) The second assessment area concerns the preconditions to have a hiring system which is transparent and actually is capable of getting the best people into the university; 3) The third area concerns peer review assessment of each individual program or each individual research area. Those three are the system assessment areas. In addition, there are: a) gender equality, b) Inclusion of students in the decisive policy at a university, c) the so-called work/life cooperation.

Accreditation or evaluation at universities' level means that it has to have routine and processes in place, securing that the education offering are usable for the needs of the labour market; that it develops the student's preparedness to meet changes in the labour market. So, there must be a link with the outside society and the future labour market of students for each particular program that they have, which could be very different. This assessment concentrate on the social role and responsibilities of the institution. (SE_02)

Within the remit given by the government, the national agency VINNOVA has engaged in a deep exploration of the potential for evaluation of Third Mission in Sweden. It was observed that Swedish universities are generally positive to the current focus on university—society collaboration. Generally, smaller universities, which often have closer connections to the region, are more positive to a model where funds are being distributed in competition based on this type of performance criteria (Bölling and Ericsson, 2016). VINNOVA has explored whether such collaboration can be evaluated in a separate model and whether it is appropriate to distribute funds to universities in competition based on their performance in such collaboration. Furthermore, between 2017 and 2019 the Swedish government undertook and inquiry, known as STRUT

(The steering and resources investigation) that has been looking also into how collaboration with the society may be assessed and awarded. The main reason for the universities' opposition lies in the inborn nature of the Swedish Third Mission: university—society collaboration is regarded as integrated in research and education and this makes it difficult to evaluate collaboration in a separate model. Furthermore, in 2018 and 2019, the Swedish Research Council has been tasked by the government to identify indicators at national level for monitoring collaboration and social impact. The main conclusion from the assignment was that the proposed indicators are in no way able to capture the totality of the variety of phenomena included in the complex concepts of collaboration and societal impact. The Research Council therefore has recommended them not be used for broad evaluation of these areas; those indicators could at the most provide a picture of the development of clearly defined aspects of collaboration and social impact. Thus, they were considered not suitable as basis for funds allocation

Evaluation of Third Mission in Sweden results to be very articulated and sectorial:

So, it looks like the overall research and assessment of research is kind of a fragmented landscape. (SE_13)

Within this fragmented landscape Third Mission is evaluated under different lenses. On one side this evidence that Third Mission plays a multifaceted and key role within Swedish higher education; on the other side it has consequences at institutional level and especially in terms of managing portfolios of contracts, funding, and evaluation procedures:

The 60 % external funding it's one of the highest figures in Europe in terms of external funding. And that is the main challenge for the university to have so many funding organisations: [...] something like 200 funding organisations from different areas to be companies or science counselling, European money, local governments, anything. And just keeping that portfolio contracts and following all the requirements is a very complicated work. One common theme is that impact and benefits for, so let's say, their Third Mission is part of the requirements of so many of those external funding agencies. And is therefore subject of assessment, that there is no way to escape from that. (SE_02)

It also has consequences at systemic level as it clearly creates underlying tensions between institutional actors and supplementary challenges arise when parallel systems are created, and they work simultaneously: *There is a conflict about which evaluation is the most important. (SE_03)*. Several of the Swedish higher education institutions already have an established culture of collaboration and there are several initiatives to evaluate research and its impact. Over the past ten years, some Swedish universities have carried out this type of quality evaluation on their own initiative. However, these individual initiatives from institutions have generated a myriad of different approaches. Some universities have implemented deeper internal assessment systems but others, such as Chalmers for example (Jacob and Lundqvist, 2003), have undergone an additional professional external evaluation to assess Third Mission activities and improve their approach, methods, outcomes, and impact. The Chalmers University also went further and has acquired the ACEEU accreditation, which was awarded for the first time in Europe:

Universities' aim and ambition is to create value on a societal level. But how can we verify that this has happened? We have to show evidence that what to do is valuable. We ought to show that we not only think that we contribute to society, but that we are able to demonstrate it. Also, we have to be able to show that and how we actively plan for it, and that is not something that just happened by chance. Evaluating what we do and how we do it is part of an active strategy within the university as a contributor to society (SE_10)

From all Swedish interviews clearly emerges that evaluation is intended as 'formative' (in the sense of Hasting and Madaus, 1971) and is a concept strictly related to an institutional 'learning process'. However, interviewees have questioned the use in its full potential of evaluation processes by universities themselves:

I mean if you look on the evaluation made by the university themselves it very often contains a large number of the sort of recommendations, and you can see what things they are really developing and what is really happening after an evaluation. And I would say I mean of course they do some of these things and they use them for improvement. But I think maybe not as much as they could do. But that's my impression... (SE_02)

The tension in this respect comes from two different perspectives. On one side, there are those who thinks that this process belongs within each university and has to be carried out autonomously. On the other side, there are those who thinks that in addition

to the institutional level, there should be also a further level of 'meta-analysis' (SE_03) at national/system level where each institution learns from the others:

The key issue is to support improvement of the capabilities of universities without imposing 'punishing mechanisms' or relating to resources. Evaluation has to be for the sake of quality only. (SE_03)

Related to evaluation is also a question concerning the governance of funding which has been raised by governmental agencies. Thus, the need to arrive to a coordinated national framework for evaluation has not only to do with the harmonisation of methods, compatibility of data collections, or effectiveness of the processes but it also relates to the transparency and accountability of funding allocations within a system that (even if partially based on block grants and partially on competitive acquisition) is still for the majority based on taxpayers' money:

It is our tax money. So totally see the point when the government says that we have to be transparent and say what we do and demonstrate that we do it at high standard and who we benefit...the question is: is evaluation the best way for doing it? (SE_05)

However, the agreement on those fundamental issues is far from being reached and this is true in Sweden as in the other countries that genuinely address and discuss evaluation:

It really depends on who you ask. Not everyone thinks the same. A Vice Chancellor of a university will see things differently from a governmental authority. (SE_01)

4.3.6 Third Mission evaluation in Portugal

In Portugal, the practice of R&D evaluation started in the late seventies covering a narrow set of scientific areas, and within a decade it was extended to all areas of knowledge (with the so-called Science and Technology Mobilisation Programme - JNICT). With the creation of the Ministry of Science and Technology (1995) and the Foundation for Science and Technology, FCT (1997) the first evaluation processes of research and development units were arranged. Since then, evaluation exercises have been regular and continuous. The main political goal, which was publicly

declared and pursued, was to grow and strengthen the reputation of the Portuguese scientific production at national and international level. The widespread discussion about the methodologies used and the dissemination of the results of the evaluation has contributed to greater credibility of science and its recognition by the international communities. However, in 2011 there was a political change, which has declared by several interviewees, had a direct effect on the way FCT conceived its mission and carried out its activities. This led to strong changes in the evaluation model, using assumptions and applying methods and practices that have raised widespread opposition from the scientific community nationally and internationally, creating a climate of distrust and discredit which was perceived as "extremely harmful" to the national scientific system. 2016 has turned to be a key year as the Government declared it to a priority to modify the operational framework of FCT, soliciting reflection and revision of the evaluation of science and technology activities and the role of the FCT itself. A Letter of Guiding Principles that the Ministry of Science and Technology has addressed to FCT on February 2016 clearly explains that assessment constitutes a core function of FCT, which should not be outsourced and that it should be a priority plan for the new Board of Directors. The relevance and priority given to the revision of the FCT evaluation system must take into account a number of contributions of the scientific community on the subject (Reflection Group for the future of FCT, FCT Scientific Councils, State Laboratories, R&D Units, Higher Education Institutes, representative structures of teachers, students, fellows and researchers, among others) as well as the information published in the "Black Book on Scientific Assessment in Portugal", of September 2015, which portrays the adulteration of the scientific evaluation system implemented in Portugal over the past four years. In 2019 a specific study on evaluation of Third Mission suggested that "Third Mission, the quality assurance of this core activity is still in an embryonic stage of development. This suggests that quality assurance systems need to be developed so as to integrate the various core missions of an institution (e.g. teaching and learning; research and Third Mission), ensuring they receive similar levels of consideration" (Sin et al., 2018, p. 2). As of today, in Portugal the only assessment that is done of Third Mission is indirect, by including some Third Mission aspects into the institutional self-evaluation or by considering some aspects of outreach in either the accreditation of courses and/or in the evaluation of research units. In all these cases the evaluation is at institutional (not ad individual) level. When it came to evaluation of Third Mission

during interviews with Portuguese academics, usually they generically referred to internal quality assurance mechanisms. But despite a variety of prompts it was not possible to apprehend which methods, techniques or indicators would be used to monitor Third Mission activities and evaluate their quality.

In search of answers, recent manuals (from 2018 to 2020) for quality assurance of five Portuguese universities were taken under the loop. It emerged that all of them have sections devoted to "Colaboração Interinstitucional e com a Comunidade". collaboration with other institutions and with the community, as well as a section devoted to the "Monitorização da Colaboração Interinstitucional e com a Comunidade". The use of the term 'availação' in conjunction with Third Mission appears only rarely in those documents. Only in one case (Universidad de Lisboa) the manual provided a list of what is intended for Third Mission: Inter-institutional collaboration; The provision of services abroad; Cultural, sporting and artistic action abroad; Integration into national projects and partnerships; Contribution to regional and national development, appropriate to the institutional mission; Obtaining own income through the activity developed (Manual da Qualidade de Universidade de Lisboa, 2018). It is striking though that in the sections devoted to teaching and research are included details on evaluation; specific quantitative and qualitative indicators are listed. In some cases, quantitative indicators are also comprehensive of quantitative targets and improvement objectives. However, when it comes to Third Mission, only brief and generic descriptions are provided. None of the manuals identify methods or indicators to monitors activities nor to evaluate the quality of those actions. The inclusion of those sections is a sign that although the assessment of Third Mission activities is growing in importance, at least in terms of institutional intentions, the implementation of efficient monitoring and evaluation mechanisms for Third Mission within the internal quality assessment of universities is still far from being accomplished. In general, in Portugal universities' quality assurance systems still need to be developed so as to integrate the various core missions (teaching and learning; research and outreach), ensuring they receive similar levels of consideration (e.g., Sin et al., 2019). Sin and their colleagues (2019) state that the major reason why the evaluation system of Third Mission in Portugal is still at an "embryonic phase" (p. 33) lies in the "exclusive focus of the European standards and Guidelines for Quality Assurance (ESG) on the learning and teaching dimension" (p. 35). They argue that universities operate in conformity to the A3ES guidelines and report templates for the

internal assessment and the external accreditation which address all three missions (teaching, research, and engagement). Thus, the strategic documentation of Portuguese institutions generally refers to evaluation of all three processes. Opinions emerged from interviews about the reasons are varied. There is who thinks that this relates to cultural barriers toward evaluation as such. From Portuguese interviews emerge that there are concerns related to the maturity of level of consolidation of Third Mission in institutions and thus that evaluation of these kinds of activities may induce people turning actual research into services. Interviewees also noted that there is a concern in terms of financial incentives not at least because of the financial constrains that characterise the whole public sector in Portugal. But the main concern common to several Portuguese interviewees relates to the specific characteristics of the research structure in Portugal, namely the fact that research is not carried out in universities but in research units, which have a kind of separate life (McVicar et al, 2023):

There is a concern related to the fact that research is carried out in research units so in fact outside universities, therefore also Third Mission activities could be done without going through universities, so universities would have no benefits from it. (PT_03)

Others think that the reason is more related to policy deficiencies rather than to an institutional barrier or hindrance:

I am not skeptical about Portuguese capacity to respond to that challenge; I am skeptical of the Portuguese policy capacity to respond to that. (PT_01)

Interviews for this research have evidenced that Portugal is following and implementing with 'obsessive precision' (PT_08) all European guidance, standards, and procedures. So, the reason for the absence of QA measures for Third Mission /SI is probably due to the fact that these have been absent so far from the European policy discourse and common agendas. One of the driving forces in the Portuguese quality assurance system is the growing influence of international practices and trends. In general, as suggested by Portuguese interviewees, the evaluation and assessment in the Portuguese educational sector is strongly defined by the "international" nature in its evaluation approaches and standards (PT_13). External evaluations are carried out

by panels composed of experts coming from other countries. The influence of international instances is increasing. This is envisaged as a positive trait, since it introduces more formal procedures and fosters international policy learning:

We have well-established internationally referencing assessment system for research and development following the best practices in science. (PT_13)

The overall approach to evaluation in the educational sector is in continuous development and interviews (dated 2019/2020) evidence that the consideration of Third Mission -alike activities is having a clear effect on the way evaluation is designed and planned. As for example, the configuration of evaluation panels is responding to the need of including skills, which go beyond the academic world:

I think evaluation in Portugal is changing, especially when we're talking about more applied areas of work. I think there are concrete indicators that you can find in that sense. For example, configuration of evaluation panels. They are more and more societal related and more diverse. This means that they are not only composed by academics anymore. So, evaluation developed by funding entities in the education sector is changing and is becoming more diverse and it is influencing the way public evaluation in general is designed. I think that's important. This is a real positive development in the last few years. (PT_01)

Interviews have highlighted that the *Third Mission dimension has not a lot of expression in legislation at national level (PT_02)* but also that a more consistent and clear intervention at policy level is required and desirable *to unravel the fog that surrounds this dimension (PT_04)*. Instead, discussions in Portuguese academia are strongly focussed on financial issues and careers. Following the big financial crises that have badly hit Portugal (especially between 2010 and 2014) several Portuguese governments decided freeze promotions and salaries in the public sectors (including HE) (Koryakina et al, 2015):

I don't see a lot of concern in the recent history of higher education about the Third Mission of universities. I don't see a lot in terms of policy for higher education at all. It's mostly discussions about careers and funding that dominates policymaking. (PT_08)

Policy is asked firstly to focus on developing the capabilities to work on outreach activities at an individual, organisational, and regional level (EC, 2017). It also emerged that there is a clear demand for more coherent and coordinated policies in the educational sector both at national and sovra-national levels:

There is clearly a lack of national integrated strategies and policies for the education. (PT_02)

4.3.7 Third Mission evaluation in Italy

Although an evaluation process of the Third Mission had already been started at national level within the 2004-2010 VQR experience, only with the Legislative Decree 19/2012 (decree that introduced the principles of the Self-evaluation, periodic evaluation, Accreditation-AVA) the Third Mission has been recognised as an institutional purpose of universities, alongside the traditional teaching and research missions. The subsequent Ministerial Decree 47/2013 made explicit the indicators and parameters for the periodic evaluation of research and the Third Mission in Annex E, (attachment which has not been modified by the subsequent Ministerial Decree 1059/2013). Since November 2014, universities have been required to prepare the Single Annual Form (SUA) - Third Mission, in order to create a solid information and measurement system on which to base the evaluation and comparison of the performance of all 95 Italian universities (excluding online universities). Subsequently, the DM 458/2015 established to consider the competitiveness profile of universities for Third Mission activities in the context of the Evaluation of Research Quality (VQR) 2011-2014. To evaluate the Third Mission, the method of informed peer review is adopted, which combines in an articulated way the analysis of the indicators prepared by ANVUR in collaboration with the technical ministerial counterpart CINECA for the judgment of experts. To this end, the Third Mission Commission of Experts - CETM was set up. It should be emphasised that while research and teaching activities represent a disciplined institutional duty for each individual professor and researcher, Third Mission activities are not mandatory for individuals, but fall within the overall function/responsibility of the university. According to one's specificities, one's own disciplinary areas, behaviours and initiatives individuals or departmental structures undertake them voluntarily. Therefore, attitudes and practices differ greatly from one institution to another, but also within a single university, between different departments

and different subject areas. The experience of the CETM deserves some specific considerations. Who writes this research has been one of the members on that Commission, thus the following considerations comes from direct experience. ANVUR (all reports from 2011 to 2022) launched two subsequent calls to select the individuals with suitable know-how and experiences to be included in so called Register of ANVUR Evaluators. Out of this 200-strong register a number of evaluators were selected and attributed to one of the two evaluation sub-commission CETM-A and CETM-B. Whereas the first was deemed to evaluate the aspects related to valorisation of research, while the second was charged with the evaluation of the socio-cultural-related aspects. In the first instance the commissions were kept working separately and only a few opportunities were created for wide discussion. Soon, elements of criticism were raised within both groups. Although they based on aspects which were very different in nature, it clearly emerged that the pre-selected indicators which were supposed to constitute the data basis for evaluation, in fact were not suitable for the purpose.

For space reasons the discussion is limited here to two cases with exemplary value. Firstly, the group of experts working on public engagement reported that all submitted cases were different in nature, size, relevance (local, regional, national, international). It was evident that not all universities grasped equally how to present and valorise their public engagement activities. In the context of an evaluation with was supposed to end up with a sort of ranking, the comparison was made very difficult if not impossible. Finally, the group suggested for the future to a) give more info on how to present cases and b) publish a repository of best practices for all universities to be able to learn from it. A second indicator, which proved that the selected measures were not suitable for the expected objectives, was related to how universities valorise historical heritages. ANVUR had asked universities to indicate the monetary investments in terms of extraordinary maintenance work on historic buildings in ownership or in use of universities. The collected data were purely numerical. Universities were not asked to describe the values nor to contextualise them. Thus, the evaluators evidenced that the provided data were not suitable to extrapolate any meaningful evaluation of merit. For example, a certain university did invest a high amount in a specific building because it commendably was able to acquire funds and invest them or just because it has neglected the ordinary maintenance so as to require a huge, extraordinary intervention? The lack of information to contextualise the numerical data made of this indicator a useless indicator for the purpose of the Third Mission evaluation.

The political decision to include evaluation of Third Mission activities within the VQR raised immediate protests in the Italian academic world. Partially, because it was not foreseen nor agreed among the parties. Mostly because universities feared that an evaluation for something which was hardly defined and that would have needed to be reconstructed retrospectively (the VQR referred to the past 4 years) would have been a dangerous endeavour considering that VQR results directly affected a percentage of functional fundings to universities. So, at a certain point during the evaluation exercise, probably due to all the different forces and reasons concurring to it, ANVUR and the Ministry let to intend that the real rationale for the Third Mission evaluation was to run a beta version. In other words, the first national evaluation exercise was an experiment which served to the political actors to define the normative framework, to the national agency to define its remits and procedural work, to the evaluation experts to contribute to the definition of new/more suitable indicators for the future cycles. Under this new approach a more cooperative environment was created that brought the CETM commission to elaborate both a provisional first Third Mission evaluation of all universities and a set of recommendations for ANVUR to be used to better define the national evaluation framework in view of the following VQR (2015-2019). In preparation for the 2015-2019 VQR exercise, ANVUR entrusted a group of independent international experts with the task of preparing a report surrounding the strengths and weaknesses of the first two evaluation exercises, in the light of some of the most known international experiences. The report includes two significant aspects: a) the need for the universities to provide a "narrative" to contextualise quantitative data; b) the impact for Third Mission activities on the funding outcome was deemed to be "limited".

a) The narrative

The first recommendation was reflected into one of the major transformations of the evaluation framework for Third Mission: namely the formal introduction of the "Societal Impact" criteria in addition to Third Mission, Thus the National Commission (called GEV Third Mission – Third Mission Evaluation Expert Group) has been called to evaluate those activities carried out by universities, generating impact during the evaluation period, in a given set of fields defining Third Mission, namely exploitation

of intellectual or industrial property, academic entrepreneurship, intermediation and technology transfer structures, artistic and cultural heritage, health protection, lifelong learning, public engagement, public goods and policies for inclusion, open science and activities related to the Sustainable Development Goals - SDGs (Wessels, 2017). ANVUR stated that the commission had to consider specifically the social, economic and cultural dimension of the impact, the relevance in the context, the added value for the beneficiaries and the contribution of the submitting institution. The definition of "Impact" has been kept broad and inclusive, integrating economic growth, environmental protection, and social cohesion. ANVUR is looking at models to represent and measure the multifaceted dimension of universities' missions and impacts to be included in the upcoming round of VQR evaluation, which will cover the period from 2020 to 2024.

b) Third Mission evaluation's outcomes and funding

After the results of the last VQR exercise (2015-2019) there has been an attempt to demand for an increase of the percentage of funding allocated through the results of the Third Mission evaluation, to be raised from 5% to 25%. This being linked (unofficially) to the attempt of some universities, which have not performed well in research, to increase the "monetary value" of Third Mission evaluation results as a way to balance the potential loss in funds through positive evaluations received for Third Mission activities. Whether this request will be accommodated by policy makers is not due to be known yet...This would go against the recommendation given by OECD and reported by ANVUR active member: "The introduction of an incentive system linked to Third Mission activities would be important to support universities and research institutes. However, the incentive devoted to Third Mission should not be in competition with research and teaching incentives, such as in REF where impact evaluation counterbalances output and research environment evaluation, but rather the funding systems should be complementary and strategic". (Blasi et al., 2019, p. 13).

It has clearly emerged from interviews that in Italy, evaluation has historically been tied to bureaucratic control, a cultural legacy that hinders progressive assessment models. This control-oriented mindset stifles innovation and creates a compliance-driven environment:

The evaluation should not be "the control of.."., even if this, speaking of Italy, is a legacy of a part of our culture and it is very difficult to escape from it (IT_07)

Although the VQR method did not rely exclusively on algorithms and quantitative indicators, but it was constituted by a large number of diversified and broad indicators, the 'formative' nature of evaluation is not truly evident in the Italian evaluation framework.

This is the true meaning of evaluation, that is, beyond the mechanical nature of the exercise, that is, I give funds based on the indicators which are at n.%, it is the cultural exercise of evaluation, of having data, sitting there, discussing of the validity of these data, meet among people of different functions, and discuss around these data, and based on the discussion there will then be proposals, beyond a mechanical nature that results, a mechanical nature of bureaucracy and of the exercise that replaces the political choice either acts as a screen, either for a hidden political choice, or for a political sloth who doesn't know what to do and then lets himself go to the indicators. Evaluation is debate... (IT_17)

4.3.8 Third Mission evaluation in a cross-country comparison

Participants noted that since Third Mission has been included in different ways among the institutional activities, alongside teaching and research, some indicators and parameters for Third Mission assessment have been integrated, with different granularity, within the accreditation processes and the research evaluation. This varies significantly across the four countries. Out of the four countries only Italy has created a defined framework for evaluation of each of the universities' mission, where Third Mission -activities are evaluated by governmental agency directly after submission of case studies by institutions. Sweden is heading towards a more organised and structured framework which, however, operates as an overarching level, leaving institutions the responsibilities for the quality assurance itself. Also, in Portugal the evaluation is a responsibility of each institution upon ministerial guidelines and governmental agencies' overarching monitoring and assessment of the system in place. In Germany the size, the number of institutions, the different typologies of actors, the multilevel federated system and a strong tradition of autonomy/freedom do not allow for the constitution of a unified federal overarching system of academic evaluation. Although indicators are included in both paths, accreditation and research

evaluation, a direct and dedicated evaluation of the Third Mission in its own value is only carried out in Italy. Swedish interviewees have underlined that university-society collaboration is so much integrated in the research and education missions that a separated model for evaluating it would not be applicable to Swedish universities. From Portuguese interviews also emerges that indications (although not yet matured into proper indicators) for Third Mission-alike activities are integrated in the accreditation as well as in the research evaluation exercises. However, the reason appears to be that Third Mission awareness is still at embryonic level in terms of policy development. Interviewees have noted that universities, probably through international fertilisations, are autonomously implementing evaluation approaches of Third Mission-alike activities within their quality assurance systems. From interviews emerges that universities practice is evolving quickly despite policies' slower pace.

The direct comparison of the four countries shows a variegate picture where different contextual factors have given different forms to the same phenomenon, namely that some sort of indicators to assess Third Mission are included in both accreditation and research evaluation. However, the evaluation itself follows directions and applies methodologies, which are strictly related to the broad contextual factors. The table below synthesises the results illustrated in the previous subsections individually dedicated to each case study country. The overall cross-country comparison in the table focusses on how Third Mission indicators are related to the assessment systems, already in place for the other two missions. The table is constructed by illustrating the traits of the country context (as emerged by interviews). It then lists the results concerning the linkages between Third Mission evaluation and accreditation processes. Similarly, it lists the results concerning the linkages between Third Mission evaluation and research evaluation (where there is one). The last column right indicates the specific traits that characterise Third Mission evaluation as highlighted by interviewees in each country.

Country	CONTEXT	TM evaluation in ACCREDITATION PROCESSES	TM evaluation in RESEARCH EVALUATION	SPECIFICITIES	
DE	Cohexistance of - Academic freedom - Market dynamics - Public control measures	- Stakeholders play an active role in Education - TM is primarily evalutaed within accreditation of study programs	- N/A in universities - Research & TM are assessed ex-ante as part of programs/projects evaluation	 REF/VQR-alike system defined as 'unthinkable' Way towards a unique body for evaluation is proposed but currently excluded 	
SE	Fragmented landscape - Articulated & sectorial repartition - Competition between evaluations	University–society collaboration is regarded as integrated in research and education – not evaluated in a separate model	The current system includes 3 components: - Scientific quality - Precondition for qulity - Quality of collaboration with surrounding society	- Tortuous path towards a unified national framework - Cohexistance of ex-ante (UKÄ) and ex-post (VINNOVA) evaluation	
PT	 Small sector - Very much interantionally oriented - Not high in policy agendas 	Some TM-aspects (technology transfer & public engagement) are considered accreditation process.	- 'Intimacy' in evaluation between FCT and R&D units - TM generally included in evaluation strategies at institutional level although eval. methodologies are not detailed (teaching & research)	- TM-alike activities is having a clear effect on the way academic evaluation is designed and planned	
IT	Rigid nationwide framework Governmental control & stearing	Since 2013 some TM- aspects are considered as part of accreditation processes but different from TM evaluation	Research and TM evaluation are part of the same national evaluation exercise (VQR) but evaluated separately & with dedicated methodologies	- Growing relevance of TM compared to other missions in terms of «monetary value»	

Table 23 Third Mission Evaluation in cross-country comparison

The development of specialised evaluation methods for Third Mission and societal impact assessment is gaining momentum (Kuipers-Dirven, 2023), whether at institutional or systemic levels. The comparison of the four nations shows a distinct pattern, where efforts towards European integration have led to common phenomena. Nevertheless, these phenomena have been shaped differently due to various contextual factors, and it is possible to identify 4 juxtaposing different models for Third Mission evaluation. In Sweden and Portugal, institutions have the autonomy and responsibility to define them, with governmental bodies that asses the institutional models; Italy has developed a national overarching system, where central authorities design the assessment approach for everyone; in Germany there is a dichotomy between accreditation and research assessments, whereas accreditation is in the responsibility of governmental agencies and research assessment does not exist in the structured ways it appears in the other countries. From interviews emerges that to each model corresponds to a different way of understanding the value of evaluation. In Italy, interviewees have observed that the national framework has fostered a widespread attitude of compliance with regulations, yet universities rarely fully capitalise on the opportunities arising from evaluations to genuinely address issues and drive improvement. Swedish interviewees have noted the fragmentation of the different evaluation systems and activities, which have generated a surplus of work for universities. Portuguese interviewees have highlighted that while policy goals in terms of universities engagement are clearly given by governmental bodies, the political implementation guide is missing, leaving universities with the need to address themselves to develop evaluation frameworks. The German unique landscape has generated a diversified approach to Third Mission evaluation which is incorporated into pre-existent instruments, such as accreditation paths and competitive funds with its ex-ante evaluation of quality. Ad hoc indicators have been included to address and monitor universities' engagement in both pathways.

Country	Evaluation Model	Governance	Link to financial resources
SE	Decentralised, flexible & autonomous.	Governmental dependent & fragmented.	Not directly linked to funding distribution.
DE	Diversified	More linked to accreditation and ex-ante assessment of project proposals.	Financed through dedicated funding in a mixed system where public and market-oriented aspects coexist.
PT	Decentralised & autonomous.	Gap between policy goals and practical implementation.	Not linked to/compensated by financial resources
IT	Centralised & control- driven.	State driven & mandatory.	Linked to basic funding distribution.

Table 24 Four juxtaposing evaluation models

Interviews reveal that while specific procedures and tools vary among countries, the underlying principles are universally valid, and some common trends are emerging in terms of methodological instruments. Use of case studies: While not a new approach, case studies have gained prominence in research impact assessment, even generating a new genre of academic writing, namely the impact case study (Wróblewska, 2021). They are integral in all four evaluation frameworks and procedures and have been formalised as essential tools for assessing Third Mission activities and impact. Inclusion of non-academic reviewers: There's a gradual trend towards involving non-academic evaluators, although it faces resistance in some countries. Italy, for instance, has established a commission for national Third Mission evaluation composed of both highly qualified scholars and experts from various sectors. In Sweden it is not unusual to see calls for scientific and non-academic reviewers for ex-ante evaluation of research proposals, as also reflected in recent scholar studies (Luo and Shankar, 2021). This approach is encountering resistance in some academies (e.g., Italy and Portugal) more that in others, but this is constantly catching on. As one participant noted it's a slow change because when you talk about

academic evaluation, academics are very, very conservative by nature (PT_01). Internationalisation of peer-reviewing processes: Evaluation panels are increasingly internationalised to enhance credibility and disengage from internal power dynamics. This trend is politically driven and aims to boost international recognition and ensure a fair evaluation process. While Germany has managed to include this standard in its federal programs: In order to be capable of acquiring funds for big projects (e.g. Excellence Initiative) you have to deal with international comparison and international reviewers. (DE 05). In Italy, this is not applied with the VQR exercises, but the Ministry is instigating it through other channels. As for example PNRR funds allocation and monitoring. Thematic analysis: Some countries, like Germany and Sweden, are adopting sectorial or thematic approaches in their evaluation systems (e.g. health, management, etc.). This allows for a more flexible and nuanced assessment of research and Third Mission activities: This is something Europe needs to look into for the future... (PT_01). In fact, recently ENQA announced that it was focussing on thematic analysis as best practices in relation to the revision of the Standards and Guidelines for Quality Assurance in the European Higher Education Area, the "ESG, (ENQA, 2020, see also Costes, 2008). Thus, it is to expect that this

It would be better for the evaluation, the panels and the university if assessment would be done in a thematic evaluation instead of in this system evaluation. (SE_11)

will become in the next future a Europe-wide practice:

While the evolving evaluation landscape reflects a shift towards more specialised and diversified assessment methods, aiming to capture the multifaceted nature of societal impact, interviewees across all four countries call for a more profound shift in the evaluation paradigm. Interviewees indicated the need for evaluation processes that drive genuine improvement, that are constructed to balance university missions (not to bring them to compete), that measure Third Mission impact in its complexity, and that recognise diverse forms of excellence to foster meaningful innovation in the broad higher education landscape. Thus, interviews show a shared and widespread request for the design of evaluation processes resulting from "cultural exercise". This concept, as explained by an interviewee, involves assembling a dataset, engaging in discussions regarding the reliability and relevance of the data, convening with

individuals from diverse roles, and discussing the information. Through these discussions, proposals for improvements would emerge. The aim is to transcend mere bureaucratic procedures, moving beyond a purely numerical approach that should never supplant strategic decision-making. It also serves as a guard against using metrics as a shield for veiled political agendas or as a crutch for decision-makers who lack direction and resort to relying solely on indicators:

Evaluation as "cultural exercise" consists in building a data set, discussing the validity of these data, meeting with people of different functions, and discussing around these data. And on the basis of the discussion there will then be proposals, beyond a mechanical nature of the bureaucracy, beyond the numerical exercise that must never replace the strategic choice, or act as a screen for a hidden political choice, or for an indolence decision maker, who does not know what to do and then prostrates himself to the indicators. (IT_06).

It emerges that certain instruments - such as case studies, use cases, or impact cases - are not necessarily considered the *best* methodological option, but rather the *most feasible*. More sophisticated approaches, like the cultural exercise mentioned above, are often not viable due to financial, logistical, and organizational constraints - especially at the national level. As a result, case studies are widely used as a kind of *second-best* solution, precisely because they are more practical to be implemented:

The use of case studies is a necessity. In my experience nothing is better than a personal talk or an interview. But this implies a lot of organisational and logistical issues when it comes to big exercises. Thus, the use cases are the second-best solution. (PT_14).

This cross-country comparison enhances comprehension of the present state of Third Mission evaluation methods and informs this thesis on possible ways for detecting patterns and stand-apart elements in current approaches. The following section is devoted to criticisms expressed by interviewees on current national approaches and developing trends. Participants highlighted the key challenges that Third Mission evaluation is posing at all levels. These include time-consuming processes for evaluators and university staff, concerns about value for money, policy-driven evaluations, market-driven evaluation, fragmentation of funding, lack of national overview, and conservative evaluation methodologies with a lack of innovation in evaluation design itself. Additionally, issues such as overlap of competences between

levels, e.g. state governments and institutional governance, top-down imposition, and non-recognition of the role of national agencies are also raised. The following table shows how the critical views have been expressed within each et of national interviews: The table below summarises the criticisms voiced in interviews regarding the national approaches in each of the examined countries. It becomes evident that common issues include the time-consuming nature of evaluations, which require substantial public investment. Interviewees also referred to the rising of Third Mission's indicators within international rankings and the unwanted consequences for universities strategies, balance and integrity. Additionally, concerns about policy intervention undermining universities' integrity are consistently raised across all countries.

	Economic considerations		Policy			Implementation			Goals		
	Efficiency	Resources	Relevance	Challenges	Framework	Mandate	Value	Design	Methodological shortcomings	Purposes	Strategy
DE	Time consuming (evaluators & university staff)	Not value for money	Policy driven evaluation	Market evaluation – concurrent system of evaluation agency	Fragmentat ion of funding	Lack of overview at national level	Transparen cy in the use of evaluation results	Conservative evaluation methodologies - Lack of innovation in evaluation approaches	Overlap of competences between federal and land governments	Finalised to please funding institutions	Only related to financial resources
IT	Top-down imposition	Not value for money	Contrasting policies	Government al system – non- recognition of the role and composition of the national agency	Centralised and non- democratic	Overall implementatio n timetable - Criteria formulated after the evaluation period (indicators defined a posteriori)	Transparen cy (process and evaluators' selection)	Lack of participation: insufficient stakeholders' participation in definition of evaluation system	Wrong methodology Incompatible/insufficient indicators	Finalised to state control	Not related to financial resources
SE	Time consuming	Relative value for money	Policy trying to make a priority and change	Aspiring to create a national evaluation agency/fram	Fragmentat ion of funding, monitoring	Requires more systemic approach		Indicator-based funding system	Too strongly program based		Strongly related to financial resources

	Economic considerations		Policy		Implementation			Goals			
	Efficiency	Resources	Relevance	Challenges	Framework	Mandate	Value	Design	Methodological shortcomings	Purposes	Strategy
			system	ework	and policies						
PT	Time consuming	Non- mature quality assurance system	Unequal considerati on compared to other two missions	educational policies	systemic		Autoreferen tiality: Institutional self-evaluation	Insufficient monitoring at institutional level		Lack of policy attention	Partially related to financial resources

Table 25 Criticisms on national approaches

4.3.9 European impact vs British REF

Although UK is not formally one of the case-study of this thesis, interviewees noted that it has to be taken into consideration in the analysis of certain aspects as it plays a pivotal role with regard to evaluation. Interviewees in all four countries have referred to REF as the benchmark. While for Italian and part of Swedish interviews this has been indicated as a model to look at (although, they specified, not to be integrally translated); Portuguese and especially German interviewees have demonstrated more skeptical views especially when it concerns the adoption of similar frameworks to be operationalised within their research systems. Despite individual positions on the REF itself and its transferability in the respective country, interviews suggest that there is a common understanding in that the UK's REF has 'formalised' that the evaluation of research impact is possible and thus it has legitimated it.:

Mapping social impact of our activities is not a trivial exercise but if you look at UK and its way to measure research impact than you know that a way is possible. (IT_03)

Academics' perspectives on the evaluation of research impact vary significantly, reflecting the unique positioning of each national academic community. Swedish participants referred widely to the FOKUS proposal, which was an attempt to implement a REF-alike system. After a public debate the government decided not to implement it. Interviewees noted that officially the principal reason was related to the required cost, but in their opinion, it really was because the universities were concerned about their institutional autonomy (Puaca, 2021) and preferred to organise research evaluations themselves. Interviews also suggest that more than the autonomy in terms of research, Swedish universities were defending the separation between evaluation and funding allocation. Thus, Sweden has chosen to follow an alternative model, where each university runs a research assessment exercise by itself supported by international panels of experts. The declared purpose is to capture the condition and analyse processes and paths toward a strategic renewal of research quality (Sivertsen, 2017). In the complex **German** system, there are organisations in charge of developing evaluation methodologies and others in charge of applying them. However, although the roles of those subjects are clearly defined, the assessment paths and relevance are heavily affected by the hybrid role of government bodies. As one participant noted there are specific institutions, which do the theoretical research and empirical work. However, the transfer of this knowledge and competences from the very specialised research institutions to the governmental bodies in charge of their application is not obvious. Thus, some of the governmental institutions have developed "a kind of internal academies to generate the new competences needed for this new kind of evaluations" (DE 01). In **Italy**, it is all about the national evaluation exercise of research VQR, which also encompasses Third Mission, The national agency, after having announced in 2019 via a press communication, that ANVUR was partnering with Research England to prepare the respective forthcoming national evaluation exercises, in 2020 the evaluation of Third Mission has been re-named and its scope has broadened. It is currently called 'evaluation of Third Mission AND social impact' [valutazione della terza missione e dell'impatto sociale (Third Mission /IS)]. ANVUR (2021) has given a definition of social impact intentionally "open". It is linked to the concepts of quality of life, sustainability, and the fight against inequalities; thus, it is in line with international models and especially capable to benchmark impact of universities activities towards international policies and agendas such as Sustainable Development Goals and SDGs 2030. Portuguese interviews show a technical and public recognition of the evaluation of Third Mission and of social impact: there is a clear awareness that "impact" and its evaluation will permeate the Portuguese academia following the contagious spread of the UK model: Impact is coming now...And this very Anglo-Saxon kind of awful term with it. (PT_07). Interviewees noted that this aspect has not yet been reflected in policies and its relevance at systemic level has not yet been truly reached. Thus, interviewees suggest that evolutions in this case might have other origins than the top-down policy drivers, it might relate to an international cross-fertilisation between academies (coming from institutional collaborations with British universities) rather than from policy interventions.

4.3.10 The nudging power in Third Mission evaluation

Interviews conducted for this research suggest that diverse elements are employed as tools to influence academic behaviours at both the institutional and individual levels Di (Bernardino and Corsi, 2018; Mariani et al., 2018). In addition to competitive funding (Derrick, 2018; Bonaccorsi, 2018), from interviews also emerges evaluation as key mechanism. The application of these tools is closely tied to the specific characteristics

of each country's system. Analysing the four countries reveals two major strategic approaches underlying policies related to Third Mission:

- a) **Financial Resources as a Change Catalyst** referring to the use of competitive funds specifically directed toward supporting Third Mission activities.
- b) **Evaluation as a Change Catalyst** referring to the enhance institutional performance through evaluation.

These different mechanisms have been collocated under the umbrella of "competitive elements" used by policy to stimulate changes. However, the goals, the targets and the methods by which these changes are affected differ significantly. In a way of the other, both target the behaviours of individuals and institutions, with observable consequences and specific effects at individual, institutional, and systemic levels (see Section 5). As discussed in previous sections, in Germany and partially in Sweden, Third Mission has been incentivised through project-based competitive funding, which involves an ex-ante evaluation of its quality. Once projects pass the selection process, they are prioritised as high-quality activities and are institutionalised by default. Here, evaluation serves two primary purposes: ensuring the quality of university activities and assessing the effectiveness of policies. Notably, German interviewees have directly stated that there is widespread awareness in federal policy institutions that only the injection of financial resources can drive the desired changes, and there is a certain scepticism about relying solely on policies to achieve the same goals. In Italy, and partially in Sweden, efforts to establish national frameworks for Third Mission evaluation are based on the (unexpressed and non-formalised) belief that evaluation itself serves as a "nudging tool" (IT 05) to achieve desired outcomes. As confirmed by a representative of an Italian national body, the intention to influence behaviour through Third Mission evaluation was evident during the first VQR exercise for 2011-2014. Third Mission was unexpectedly included in this evaluation with a last-minute ministerial decree, causing unrest in the academic community. Only after the National Commission (CETM) evaluators reported that the indicators were unsuitable for proper evaluation did ANVUR clarify that this was a "beta version" of the evaluation, with no impact on fund distribution. The primary goal was to design an appropriate system. Collaboration with CRUI and other representative bodies was sought to redefine the Third Mission evaluation system. At the closing conference of this exercise, university

representatives highlighted that the most significant outcome of the Third Mission evaluation was raising awareness of its strategic relevance. Thus, the "gentle push" or nudging effect of the VQR exercise had some desired outcomes, preparing universities for future rounds of Third Mission evaluation, which would be directly linked to resource distribution.

In Portugal, the interviews did not provide clear or direct evidence on this theme. Instead, they highlighted how resource limitations and the absence of incentives are hindering the development of Third Mission activities and limiting individual engagement. The issue of contractual stagnation was frequently mentioned and was central to all discussions. However, literature suggests that "evaluation" in the public sector can serve as a factor for learning and innovation (Ferrão and Mourato, 2010). Although Portuguese interviews did not offer relevant inputs in this regard, an OECD report (2018) recommended a nudge-like approach, advocating the introduction of competitive elements to steer higher education in desirable directions. The report emphasised that public funding is a key instrument in guiding education and training systems toward achieving governmental policy objectives. It identified multiple funding approaches that serve as nudging tools, which governments use to influence education and training providers. However, there is currently no evidence to clarify the rationale behind each country's choice of approach or a mix of them. Factors such as economic constraints, country-specific financial situations, the characteristics of the higher education system, and the overall evaluation culture within each country appear obvious factors playing a significant role. However, a data-supported answer is not yet available, and the indirect inputs from interviews are not sufficiently focused to provide scientific validity to any assumptions. This aspect is beyond the scope of this research and requires further research. It would also be interesting to compare the effectiveness of each approach.

4.3.11 The grimpact of evaluating Third Mission

These issues align closely with the concept of "grimpact" as introduced by Derrick et al. at the STI Conference in 2018. In this specific case, grimpact would refer to the unintended negative consequences of research evaluation and impact measurement policies on academic practices and institutional integrity. From interviews emerges one significant aspect of grimpact related to the substantial time and public resources

required for national evaluations. Interviewees across all four countries have criticised the administrative burden, which detracts academics from actual research and educational activities, leading to inefficiencies and potential misallocation of resources. Additionally, interviewees argue that the rise of Third Mission indicators in international rankings can drive institutions to prioritise these metrics at the expense of their core missions. This strategic shift can result in an imbalance, with universities diverting attention and resources away from fundamental research and education to activities that improve their rankings but do not necessarily align with their primary objectives. Interviewees have also highlighted the distortion in some cases where institutions invest resources to comply with rankings' indicators but do not invest in formative evaluation. Furthermore, it has emerged across all case-studies a consistent concern about policy interventions undermining universities' integrity, which is also aligned with the grimpact concept. Interviewees have highlighted some negative consequences deriving from the ways governances pressure institutions to conform to external metrics and evaluations. In interviewees' opinion unwanted consequences may compromise academic freedom, discourage innovative and high-risk research, and lead to the homogenisation of university missions.

Evaluation policies GRIMPACT	Consequences	Potential Results	
Administrative burden	detracts academics from actual research and educational activities	inefficiencies and potential misallocation of resources	
International rankings	prioritize these metrics at the expense of their core missions	diverting attention and resources away from fundamental research and education to activities that improve their rankings	
Policy interventions	to comply with rankings' indicators	at the expenses of formative evaluation	
	 compromise academic freedom, discourage innovative and high-risk research, 	leading to the homogenization of university missions	

Table 26 Grimpact of Third Mission evaluation policies

However, the way in which policy interventions are manifested in each case-study country differs. Interviews have made some elucidating examples, that evidence varying approaches across the case-study countries. Each country balances autonomy and control differently, employing unique strategies to steer universities towards national objectives while respecting their independence. Interviews carried out for this research do not provide valuable insights into the effectiveness of different policy instruments and their impact on higher education governance, which could be an interesting area for further research.

Country	Manifestation policy Interventions
Germany	- Use of funds to steer changes within universities - Policy institutions managing funds also manage and design policy evaluation
Sweden	Use of reform to steering universities despite a high degree of autonomy
Portugal	Use of reform to steering universities despite a high degree of autonomy
Italy	- Evaluation is used as policy instrument to allocate resources - Evaluation is perceived as governmental control instrument

Table 27 Manifestation of policy interventions in the four case-study countries

Evaluation Costs

The cost of evaluations, such as REF and VQR, is a hot topic worldwide. It's debated how much these assessments cost and their role in future developments. While institutions view evaluation costs as investments with expected returns, national evaluations are met with scepticism. In Germany, evaluation costs are part of funding program budgets. Swedish and Portuguese discussions revolve around benefits and recipients. In Italy, the VQR evaluation costs are considered unjustifiably high. Comparatively, the VQR costs €70.5 million (Geuna and Piolato, 2015), with Italy containing costs through bibliometrics. REF costs were limited in the UK due to their selective nature (Checchi et al., 2019). Regardless of the model used, quality

assessment is pricey, and the balance between cost and opportunity depends on the effectiveness of assessment methods. Long-term cost-effectiveness relies on institutional resources and capabilities. For interviewees, however, a key question remains open: How will this ongoing funding struggle align with increasing institutional demands in a global market?

Evaluation vs Ranking

The rise of university rankings is reshaping the European academic scene, sparking debates (Hongcai, 2009; Hammarfelt et al., 2017; David, 2019; Kelchen, 2021). Once central to academia, influencing university strategies. obscure, rankings are Montesinos, et al (2008) recommended that ranking systems consider the Third Mission 'services to society' as a key criterion in ranking. Marhl and Pausits (2011) provided relevant indicators to that purpose. Meanwhile, the number of rankings has multiplied and have gained global coverage and relevance. In Germany, where quality was traditionally uniform, rankings initially faced scepticism due to increased competition (Teichler, 2018; Hongcai, 2009; Kreckel, 2018). Despite suspicion from academics, rankings are seen internationally as driving university development and fostering healthy higher education growth. European universities, historically state-led and funded, are influenced by global competition and internationalisation. While rankings are criticised for focusing on competition over quality, scholars predict their enduring presence and evolution (Marginson, 2013). Recent developments include rankings measuring universities' societal impact, reflecting the Third Mission, for example, the *Times Higher Education* Impact Rankings is a global performance table that assesses universities against indicators across three broad areas: research, outreach, and stewardship. Also, the Three University Missions Moscow International University Ranking (shortly known as the Moscow Ranking) is a global ranking of academic universities developed by the Russian Association of Rating Makers, with the participation of the international association IREG Observatory on Academic Ranking and Excellence (published annually since 2017). The ranking evaluates the quality of education, scientific work, and, for the first time in the compilation of global academic rankings, it consistently evaluates the universities' contribution to society. For interviewees, however, a key question remains open: the intersection of rankings and quality assessment will lead to new evaluation methods.

Political interventions

From Swedish interviews emerge a pronounced idea of evaluation as a tool for improving quality, therefore a strong character of formative evaluation:

We do a lot of collaborative work between universities (especially the rectors conference) and evaluating agencies to agree on what kind of mechanisms we should use to provide the best evaluations for long term quality enhancement. (SE 02)

Evaluation is seen as a 'learning process' that helps the institution to identify area for improvement and defining strategies for corrections, enhancement and optimisation. Thus, there is a strong connection between bodies representing universities and governmental agencies. However, as highlighted by the Swedish interviewees the quality assessment agencies have a high degree of independence from the political side. Swedish interviewees also noted that it shouldn't be politically innovation, it should be quality innovation. From German and Italian interviews however, this distinction does not emerge equally clear. On the contrary interviewees noted that the political interference (ministries) is one of the critical aspects of national evaluations systems. However, this one aspect manifest itself in very different ways in the two countries. In Germany, interviewees have highlighted that the federal governmental approach of using competitive funds is generating disparities and inequalities between institutions and risks to create a structure with self-contained levels of universities, whereas some competitive and receive funds, other are not and thus will never be able to upgrade. Conversely, Italian interviewees evidenced that the national evaluation framework with its limited flexibility risks to homologate and flatten to standards without being able to stimulate a real process of elaboration of internal change in many of those institutions that lack of human resources, economic resources and skills to face a real transformation. However, it emerges from interviews across all four case-study countries that policy interventions often hinder innovation in evaluation process:

When I say that it could be further developed, I speak about methodology, there are a lot of new techniques very convincing but not widely used. Statistics, online questionnaires, experts round, case studies... these are the classical instruments which are widely accepted and used. (DE_01)

The interviews almost unanimously conveyed a request to decision-makers - both at the national and EU levels - to support the development of a more balanced relationship among the university's three missions. It emerges that there is a common concern about the fact that the inclusion of the evaluation of Third Mission in national frameworks could generate a distortion in the way the institutions approached foremost its strategic choices and consequently the evaluation procedures. One of the concerns relates to liking the results of evaluations of universities' missions to resources (being these basic or competitive fundings) is that Third Mission may become predominant over the other two missions. When it comes to evaluation, especially if those missions are evaluated separately, there is a risk of creating an "unhealthy imbalance" between the various vocation and missions of universities. Also, there might be a tendency to use the quality of one mission to cover the low quality of the others rather than striving for a balance.

There is a difficult balance, I would say, that you go for Third Mission too strongly and sort of forget your academic roots. You may become the consultancy agency more than a research institution. And I think there is a high risk there, if this is pushed by policies and evaluations. (SE_02)

This would be especially critic if Third Mission would be pushed to be a predominant element so that it would hide the need to improve quality of research and teaching. Universities, pushed by the need to comply standards for the acquisition of funds (especially in the case of share of basic funds), might be tempted to use it as a strategy for an organisation to survive in a very competitive world.

We're good at our Third Mission, but we have a lousy research record. So, I think this to me at least it's important not to push the Third Mission on the expense of academic excellence. And I think that is true both for research but also for the educational offerings (SE_02)

Furthermore, the relationship between the three missions, especially the relationship between the evaluations of the three missions, can hide potential risks of 'public value failures' (Benneworth et al., 2016). This might materialise in different ways. For example, the integrity of universities might be threatened by an excessive and inefficient use of evaluation:

High requirement of integrity of the university is to balance these two things against each other so they cannot replace research quality with Third Mission (SE_02)

Thus, there is a risk that the power of evaluation collides with ethical implications at the institutional and system level:

What if I had really poor research performance but was really good in disseminating this poor research...That's an ethical question. (SE_05)

Participants noted that there is a call for more coherent policies and programs raising Europe wide, which is relevant especially for the other two missions. In fact, it has been noted that specific competitive fundings for Third Mission are going to play a growing role with respect to both other missions. Academic participants have remarked that in front of a trend (or a risk) to decrease basic fundings, the competitive funding to support Third Mission-alike activities become more relevant and will play a significant role also for the other two missions:

In relation to the first and second mission of universities, teaching and research, evaluation of Third Mission is irrelevant in terms of basic funding to universities. Whereas the basic funding is going down while the project funding is going up. In this perspective the funding of Third Mission is also relevant to the first and the second missions. (DE_01)

In conclusion, interviews demonstrate that there's a complex interplay between evaluation, funding, and policy interventions, with a need for careful balancing to maintain academic excellence while fulfilling societal missions. The table below is a visual representation of the 10 main points derived from the aforementioned findings, providing a comprehensive overview of the themes emerged from national interviews.

The quest for flexibility

Interviewees proposing **flexible evaluation** approaches have stressed the need to acknowledge the unique context and objectives of each engagement initiative. Consequently, they raised the need for adaptation of evaluation methods to suit the specific goals, stakeholders, and outcomes of the Third Mission activities. However, it was also remarked that this is very difficult to achieve when evaluation is dealt with at

institutional level, such as in Sweden and Portugal, but it is "impossible" to be dealt with when evaluation is run within national frameworks. German interviewees have highlighted the strong dependencies of form of evaluation from policies bodies (such as in the case of ministries which are at the same time financing institution and contractor of evaluation for those fundings). They have also remarked that funding bodies are less prone to flexibility and innovation. This, consequently, impact on the capabilities of institutions to innovate. They are 'forced' to respond to the criteria imposed by the funding institutions. This is felt by some of the interviewees involved in governmental evaluation agencies, to be limiting institutional autonomy. Italian interviewees, on the other side, have pointed out that a national framework for evaluation of Third Mission activities cannot be as flexible as required by the modern society:

...an elephantine evaluation system does not have the necessary flexibility to respond to the changing needs of updating criteria and indicators in sufficient time to allow institutions not to go blind. (IT_07)

In this respect, interviewees across all four countries have praised the growing adoption of use-cases or impact cases for the evaluation of Third Mission activities. Interviewees have linked the adoption of impact cases as a direct consequence of the REF experience: in Sweden and Italy there has been a step forward in that use cases have been institutionalised and formalised, meaning they have been formally "elected" to best evaluation tool to assess Third Mission - like activities and impact. However, in their opinion this does not suffice to grant the flexibility required. The use of case studies as the more feasible way to evaluate research impact was endorsed by the Swedish Research Council in its national report (2020). And since then, it is not unusual to find instructions and template on how to draft an "impact case study" with the aim of informing evaluation. The Italian agency ANVUR, as seen, has been clearly looking at the REF approach and taking some of the key aspects to be translated into the Italian VQR. Thus, as a result, the mandatory submission of case studies was formally introduced in the last round of VQR for the evaluation of Third Mission and Social Impact of universities and research institutions. The introduction was stimulated by the previous evaluation exercises, where the assessment of impact was far less targeted and formalised. As pointed out by a Swedish interviewee, evaluation expert, flexible evaluation methods imply a cultural shift in organisation at all levels. Flexibility has to permeate the institutions, faculties, staff, and students. However, interviewees in all four case-study countries suggest that universities are not yet ready to accept and elaborate this shift. Their overall administrative (and not yet deeply managerial) approach, as well as the dependencies from their related states, makes this shift an objective still to be reached. In conclusion, the evaluation of Third Mission activities at the institutional level drives a cycle of continuous changes, such as shaping strategic planning, resource allocation, organisational structure, capacity building, communication, and outreach efforts. By leveraging evaluation insights, institutions can optimise their impact, foster innovation, and strengthen their role as drivers of positive societal change. However, interviewees across all four countries have questioned the real capacity (but a few virtuous cases) to fully leverage evaluation results. They have expressed significant doubts about their actual effectiveness in transforming results into meaningful change:

So, I think in order to get a stronger link with evaluation results and doing something about it I think you need a stronger link to funding models and so on. At the moment it depends on the university itself and on the funding agencies that the funding allocation is renewed every fourth year, as this is simply based on indication concerning, publications, investments and so on. But that's to me not a real evaluation. It is rather indicator-based funding allocation. (SE_01)

Interviewees across all four countries acknowledge the potential for evaluation outcomes to serve as powerful catalysts for transformative action. However, they usually mention a "a few virtuous cases" in each country. This suggests that while there are instances where evaluation results have led to positive changes, these cases are relatively rare. This highlights a disparity between the potential impact of evaluation results and their actual implementation. Interviewees suggests that there is a disconnect between recognising necessary changes based on evaluation findings and actually implementing those changes within educational institutions. Interviews evidence the need for institutions to address barriers to effective utilisation of evaluation findings and ensure that evaluation processes lead to tangible improvements in educational practices and outcomes:

Evaluation methodologies have improved a lot in recent years, but I am not sure that the profitable use of the results has improved, apart from a measurable growth in awareness of the potential of the Third Mission (IT_01).

Summary of Section 4.3

The section 4.3 contributes answering the third Research Question, namely how evaluation of Third Mission develops within the specificities of each country context. To do so, this thesis study looks into the broad contexts of each country by analysing the national culture of evaluation, the national approaches to evaluation in HE, the national accreditation and research evaluation paths. This thesis explores the evaluation of Third Mission in each case study country, and it compares them directly. Starting from the acknowledgment that despite the attempts to create a process of European integration, the quality assurance systems of various European nations still vary greatly (Turri, 2012), this section illustrates the key disparities and similarities based on the findings from the interviews. The direct comparison of the four nations reveals an articulated picture, where the European integration efforts have generated common phenomena, however, various contextual factors have shaped those phenomena in distinct ways. For example, in all countries indicators to assess Third Mission activities are included in both accreditation and research assessment processes but the way in which this is done differs in each country. The fine-grained comparison let emerge the linkages between the specificities of each country and their broad contextual determinants. In addition, a direct comparison to the British REF model is included and discussed. This contributes to the understanding of the complexities and nuances involved in assessing Third Mission across different academic contexts. In conclusion, the analysis reports the main criticisms towards Third Mission evaluation as emerged from interviews. The analysis highlights some of the challenges surrounding the operationalisation of Third Mission evaluation, such as time-consuming processes for evaluators and university staff, concerns about value for money, policy-driven evaluations, market-driven evaluation systems, fragmentation of funding, lack of national overview, and conservative evaluation methodologies with a lack of innovation. Additionally, issues such as overlap of competences between federal and state governments, top-down imposition, and non-recognition of the role of national agencies have also been raised across all four countries interviews.

Nr	Emerging thematic	Details
1	Diverse Perspectives on	- Formative for quality improvement
	Evaluation	- Political aim of policy/program legitimation
		- Political control
		- Quest for flexibility in evaluation
2	Policy Intervention &	- Policy interventions may hinder innovation in
	Innovation	evaluation processes
		- Concerns that national frameworks may
		homogenize standards
3	Balancing the 3	Concerns about inclusion of TM evaluation in
	Missions	national frameworks potentially distorting
		strategic priorities
4	Maintaining Academic	Pushing TM too strongly may compromise
	Excellence	research and teaching quality excellence, as
		universities prioritize meeting evaluation
		standards for funding acquisition
5	Public Value	- Excessive and inefficient use of evaluation
		- Pushing TM too strongly risks Public value
		failure
6	Common Criticism	- Evaluations are time-consuming and require
	Across Countries	significant public investment
		- Policy interventions can undermine
		universities' autonomy
7	Evaluation Costs	- Institutions view cost of evaluation as
		investment if evaluation is formative
		- Skeptical views on costs for national exercises
		(e.g. VQR & REF)
8	Evaluation Methods	- Rise of rankings' indicators focusing on Impact
		- Evaluation skills & Professionalisation
9	Ethical Implications	- Compromise research integrity
		- Ethical implication at MESO & MACRO level
10	Balancing Evaluation	Risks related to TM funding becoming
	with Funding	strategically significant considering cuts in basic
		funding

Table 28 Ten key points emerged from national interviews

4.4 National instances within EU ongoing discussions

Section 4.4 addresses the fourth Research Question, which explores the relationship between the country-specific evolution of the Third Mission and the broader European

perspective. By drawing on excerpts from interviews, this section provides indications about how the Third Mission directions taken within individual countries intersect with the overarching European framework. Moreover, by contextualising these insights, the analysis identifies common themes and trends and explores synergies and tensions between national practices, academies expectations and overarching European frameworks

Interviewees from all four countries commonly recognised that the greatest drivers towards introducing evaluative processes at different levels of government (supranational, national, and local) in the last two decades came from the European Union. Interviewees also remarked that importance of evaluating policies at union level has generated virtuous mechanisms of systematic and compulsory evaluation activities in each of the case-study countries. The EU has evolved into a platform representing a sophisticated multilevel system, where the public authorities of member countries are compelled to pursue not only "formal" legitimacy, gained through adherence to regulations, but also "substantial" legitimacy (Giuliani, 2015). The call for assessing policy effectiveness and conducting evaluations is thus integrated forcefully into a European-driven political endeavour, to which the various countries adhere at different speeds (Giuliani, 2015). Interviewees identified the higher education sector as "the one" that better than other sectors can contribute toward the development of a common European evaluation system:

But I must say that the university and the research world is perhaps the sector that could better accept and manage this process more than others. (IT_16)

The recognition that the Bologna process, the creation of the European Education and Research areas, and the framework programs for education, research and innovation have been beneficial for European countries has been widely confirmed in interviews across all countries, each of them reflecting different perspectives: the incident between the Swedish government and ENQA concerning the national evaluation framework; the strict adherence of the various Portuguese governments to European directives as a strategic way forward for the modernisation of the country; the effective implementation of policy instruments as driver of changes in Germany, despite encountering notable cultural and systemic resistance, particularly in areas like research evaluation; the impermeability of the Italian academy to incorporate the

structural innovation dictated by national reforms with a European imprint. The views expressed by the national interviewees in this regard were notably skeptical, particularly concerning the inclination toward standardisation and the imposition of norms and practices that disregard the unique characteristics of individual systems.

Let's face it, Europe today suffers from the fact that we want to standardise or give uniform rules with the culture of data, the distinction between the good and the bad between those who have merit and those who have no merit, between ants and cicadas. (IT_16)

The interviews suggest that the primary challenge lies in devising methods for member states to uphold shared principles and values while safeguarding their distinctiveness. Recognising the importance of measuring activities for comparative purposes or policy enhancement, for targeting gaps and discrepancies, none of the interviewees expressed opposition to the development of indicators. All of them though highlighted the need that indicators for higher education (in general) must be guided by the understanding of diversity at all levels (systemic, national, and institutional) rather than striving for standardisation. And this is even more evident and relevant for indicators concerning Third Mission due to its peculiar nature of being strictly related to the specificity of the economy and society each university relates to. A generic aversion for quantitative measurements of research and related activities has emerged across all four countries:

We should always speak about quality, not quantity! The aim should be to abolish every single quantitative indicator. (PT_13)

From interviews at the EU level emerge a rather unanimous view about two guiding principles, which are shaping developments within the EU: the valorisation of diversity and the enhancement of collaboration. They have underlined several times that linguistic, cultural, and systemic diversities are considered both as a challenge and a source of richness. This implies that the implementation of European policies and strategies must navigate the complexities of reaching agreements among over 40 countries, as represented by an interviewee operating in ENQA. Additionally, EU bodies and intermediary institutions are actively working to foster common understanding and bridge differences:

We have a very deep level of collaboration, which means we need some kind of a common basis. And at the same time, we have to allow for a lot of diversity. So, what happens is we have these European standards and guidelines since 2005. So, it's been already almost 15 years. Thus, it's kind of sufficiently old for that to be taken as a common understanding of what we mean. (EU_06)

This is acknowledged by academics across the four countries, however, while collaboration at the policy level is undisputed, interviewees noted that it has not permeated all levels of stakeholders. Interviewees noted that it remains a gap between policymakers and intermediary bodies, hindering the incorporation of bottom-up requests and suggestions. Interviewed academics across the four countries perceive that decisions are predominantly made and imposed top-down, rather than being inclusive and participated. Third Mission related policies have been given as an explicit and direct example of that political attitude.

When asked what they would see as priorities for EU-level discussions, among the four national sets of interviews the following themes emerged with a clear predominance: incentives for academics taking up Third Mission activities (such as a better balance in calculating the hours worked between the various missions); formalisation of recognition of Third Mission in academic career processes; harmonisation of principles guiding mobilities (especially with regards to Third Mission projects). Furthermore, interviewees stressed the importance of fostering partnerships, networks and cooperation to facilitate best practices and knowledge exchange. It was stressed that this is of relevance for Third Mission evaluation practices. In the interviews at EU level the predominant emerging themes suggest a focus on harmonising policies, preserving diversity, promoting innovation, enhancing collaboration, and ensuring quality assurance. The latter also appears in the national interviews, however with a stronger emphasis on the need that adhering to the same principles, processes and procedures is modelled to fit the purposes and requirements of different contexts. The following figure summarises the key findings emerging by the interviews' comparison between national and European levels:

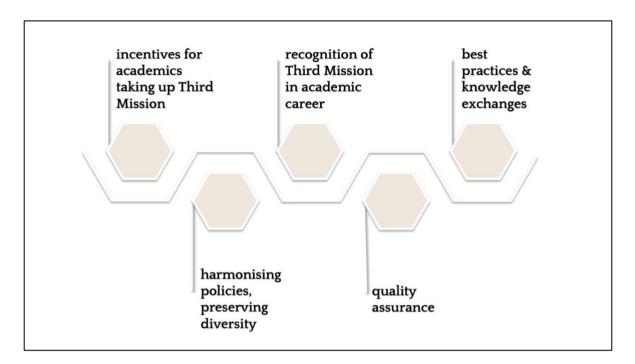


Figure 18 Priorities for EU-level discussions

Interviewees across all four countries referred to the increasingly relevant role of the Third Mission as driver for further changes within universities.

Interviews conducted across all four countries and discussions at the European level reveal a widespread push for further changes within the overall European academic systems. Interviewees working in international bodies suggest that policy advocates, including international university associations, are urging the European Commission to craft policies aimed at reforming academic careers. The European University Association (EUA) articulates its vision for European universities in 2030 in a strategic document (EUA, 2021), outlining various objectives that necessitate action and support from all stakeholders for realisation. The objective of broadening evaluation practices for academic careers, including a wider definition of impact, aligns with interviewees emphasising the importance of respecting biodiversity in research and advocating for diversity in content and methods, not solely based on merit but also on equal dignity among disciplines and sectors. The objective of promoting parity of esteem between different career paths, including research and teaching, and valorising Open Science (Grand, 2012; Vicente-Saez and Martinez-Fuentes, 2018), contrasts with interviewees highlighting a lack of recognition for scientific outreach or community engagement, indicating a divide between traditionalist views of academia and those embracing broader and moderner interpretations. Efforts to enable and valorise Open Science in career (Czarnitzki, 2015) and research assessment face challenges highlighted by interviewees, who note confusion and lack of clarity as a barrier but also the clashes of very different traditions and culture of publishing with countries such as Sweden and UK which have developed a long tradition in publishing in journals while Germany, on the contrary, (and to some extent Italy) has a consolidated tradition in valorising books (Campbell and Felderer, 1997). Incentivising various forms of impact, including innovation, citizen science, dissemination, supervision, and mentoring, varies between countries, as seen in previous sections. with interviewees emphasising a broader and holistic perspective in each of the case study countries compared to what they consider to be a more focused approach implemented in the UK. The objective of making academic careers less precarious and more attractive contrasts with interviewees describing the aftermath of a crisis affecting the academic sector, noting recovery in employment but limited improvement in salary levels and career opportunities. The objective of providing more flexibility for academic careers (Knudsen, 2021), allowing easier transitions between academia and other sectors, is influenced by initiatives such as a federal program in Germany requiring universities to establish tenure track concepts, which affects academic career structures and encounters strong normative barriers in countries such as Portugal and Italy where academics are civil servants. These normative barriers reflect entrenched cultural and bureaucratic traditions that prioritise stability and longevity in academic positions, making it challenging to introduce more dynamic career pathways (Koryakina et al., 2015). Ensuring researchers with non-academic job experience have access to university careers necessitates collaboration between universities and industry, according to interviewees, suggesting a shift towards more collaborative working (in research/teaching/engagement) environments. To show the potential alignment or disparity between political objectives and experiences across the four countries, the Table 25 juxtaposes the policy objectives outlined in Vision 2030 with insights derived from interviews.

While European initiatives concerning Open Science have made significant strides in the last decade (Vicente-Saez and Martinez-Fuentes, 2018), as evidenced by policies, programs, instruments, and campaigns, interviewees noted that progress in the practice is of uneven level. Swedish interviewees have highlighted that Open Science has been integrated discourses surrounding v evaluation so to accelerate uptake in academia. While German interviewees have mentioned that Open Science has been

Portuguese and Italian interviews emerge that the two countries, despite acknowledging the political relevance and including open Science in their priority agendas, in the practice remains behind and the uptake in academia is slower, there are no clear linkages with Third Mission assessment. Also, other themes on the international policy agendas are considered with a diverse degree of relevance in relation to Third Mission. For example, in contrast to the other two case-study countries, German and Swedish interviewees identified 'genre,' 'equalities,' and 'environment' as themes intrinsically linked to the Third Mission. In Sweden, these are formally included in the evaluation areas identifies by AKA when assessing institutional Quality Insurance Systems (SE_02). In addition, the Swedish evaluation approach also foresees some sort of 'schematic evaluations' (SE_13), which look at how universities work with sustainable development, gender equality, internationalisation. The thematic evaluation is then run involving all universities: "Recently, I think they did sustainable development, for instance" (SE_13).

Vision 2030	Research area of interest	Input from interviews
Using a broader set of evaluation practices for academic careers, which include a wide definition of impact, beyond traditional bibliometric indicators.	Definition of impact	In my opinion, the world must respect biodiversity in terms of research and find balances. So, I'm in favour of diversity not only of content and methods in agreement on merit but with respect for equal dignity. (IT_16)
Promoting further parity of esteem between different career paths, including parity of esteem between research and teaching enabling and valorising Open Science in career and research assessment.	Parity between missions	We have prizes for getting funding for projects, but don't have a system for recognizing, acknowledging scientific outreach or community engagement. (PT_08) There are many colleagues who do not interpret the academic profession in this sense, that is, there are the more traditionalists who think I have another profession. (IT_13)

Vision 2030	Research area of interest	Input from interviews
Enabling and valorising Open Science in career and research assessment.	Incentivising TM	This year [2019] we did a big survey in Sweden about science communication and open science to test the general attitude towards them. We can see that the majority wants to be engaged but they are confused by lack of clarity. They don't have time and there is a generic lack of incentives. Why should they do engage?
Incentivising activities with different forms of impact, including innovation or citizen science, dissemination, supervision, and mentoring, while retaining the core goal of research activities, which is the expansion of human knowledge.	Holistic TM	What UK does with impact is very peculiar and very focussed. What we do here in Sweden is different and broader. (SE_03)
Making academic careers less precarious and more attractive as life choices in order to develop and retain talent.	Human resources	After the big crisis the restrictions remained significantly and affected not only the public education, but education in general, and that the private sector because unemployment was very high and there were cuts in pensions, in salaries, in social transfers. So, it was a very tough period for the country. Meanwhile, the country has recovered in some ways more significantly than in others. For instance, an employment rate is now very low. But, for instance, the level of salaries has not improved much. Also, the public sector has recovered in terms of the wage cuts, but not so much in terms of career opportunities, for instance. (PT_03)

Vision 2030	Research area of interest	Input from interviews
Providing more flexibility for academic careers. It must be easier to switch jobs between academia and other sectors, such as startups, industry, or public administration.	Career	Likewise, the Federal Program for Junior Academics demands that if the universities want to get the tenure track professorships, they only can have it, if they have a tenure track concept. To do this, they have to set up the universities, and that changes things at the universities. (DE_02)
Researchers with job experience outside academia must have access to university careers.	Interaction of universities with industry/society	Collaborative can be dramatic. The work does not equal to building strong research environments it also requires that industry can find a place in it. It's not a matter of getting the knowledge from the university to what the industrial sector asks, it is a matter of working together with industry. This changes everything. (SE_01)

Table 29 Comparing policy objectives with instances emerging from interviews

German interviewees have highlighted how attention for themes, such as gender equality, are related to their political relevance (DE_07). This indicates a distinct emphasis in Sweden, and partially in Germany, on these issues as central to the role and responsibilities of institutions in contributing to society beyond their traditional functions of education and research. This perspective highlights a particular focus on addressing societal challenges and promoting inclusivity and sustainability in the context of the Third Mission. However, this does not imply that the other countries neglect these challenges; rather, the interviews reveal a less pronounced awareness of the potential to valorise them through the universities' Third Missions. The most striking difference lies in the visibility and explicit recognition of these themes within the Swedish context compared to the other case-study countries.

Summary of Section 4.4

The benefits of EU initiatives such as the Bologna process, European Education and Research areas, and framework programs for education, research, and innovation were widely recognised across interviews, although perspectives varied. Nowadays challenges include reconciling shared principles with national distinctiveness, particularly regarding concerns about standardisation and imposition of norms that overlook unique system characteristics. Interviewees emphasised the importance of formulating shared standards that accommodate diversity and foster innovation. While recognising the value of measuring activities for comparison and policy improvement, interviewees stressed the need for indicators to acknowledge and respect diversity rather than aiming for standardisation, particularly in relation to the Third Mission of universities, which is closely tied to local economic and societal contexts. A general aversion to quantitative measurements of research activities was evident across all countries, with emphasis placed on quality over quantity. At the EU level, there was consensus on two guiding principles: valorisation of diversity and enhancement of collaboration. However, collaboration was noted to be unevenly distributed among stakeholders, with a gap between policymakers and intermediary bodies hindering bottom-up input. Priority themes for EU-level discussions as emerged from all sets of interviews includes incentives for academics engaging in Third Mission activities, formal recognition of the Third Mission in academic career processes, and harmonisation of mobility principles, especially concerning Third Mission. Emphasis was also placed on fostering partnerships, networks, and cooperation to facilitate best practices and knowledge exchange, particularly in Third Mission evaluation practices. International bodies and university associations are advocating for EU policies aimed at reforming academic careers, as outlined in the European University Association's Vision 2030 document. In summary, there is a widespread push for further changes within European academic systems, with stakeholders urging policy reforms that align with diverse national contexts.

4.5 Effects of Third Mission and its evaluation

The section 4.5 contributes to answering the fifth Research Question by exploring the effects that the evolution of Third Mission and its evaluation has generated in higher education. Interviews have noted that the emergence of the Third Mission has brought about unforeseen consequences, the full extent of which is yet to become apparent (Bonaccorsi, 2008; Zomer et al., 2010). Interviewees have underscored the importance of recognising these phenomena and their interconnectedness. A flexible application of the concept of grimpact (Derrick et al., 2018) is employed here to investigate the unintended and undesirable consequences associated with the rise of the Third Mission and its evaluation. The notion of grimpact offers a critical lens through which we can understand the broader societal impacts of universities' expanded roles. While it is commonly acknowledged that Third Mission aims to enhance the societal contributions of academic institutions, it emerges from interviews that it has also generated some unforeseen consequences, creating new challenges for individuals, institutions, and national systems. While previous sections have focused on a top-down analytical approach, examining how policy directives flow from international bodies down to national, local, and institutional levels, this section takes a reverse perspective. It explores how the Third Mission's effects interact and manifest at various hierarchical levels, from Micro (individual academics and specific projects) through Meso (institutional and community) to Macro (national and international). By analysing interview data across these levels, this section aims to identify the relationships between activities at the micro level and outcomes at higher levels.

4.5.1 MICRO: Individual challenges and tensions

This sub-section focuses on individual (micro) levels by looking at the several key themes emerged by interviews. The complexity of Third Mission impact on individuals is reflected in the following table. Academic interviewees have highlighted the **challenges** in engaging in Third Mission activities. On one side, Third Mission activities offer motivational opportunities for professional development, interdisciplinary collaboration, and a more tangible societal contribution. However, in return engagement brings with it an increase in workload, lack of formal incentives, the pressure of balancing competing demands.

MICRO	Challenges and Tensions	Key Effects	Consequences
Academic	Career	Impact on career trajectories and progression non equal to other two missions	Recognition & valorisation
Non-academic Staff of Universities	Growing importance of admin/ organisational roles with high level of competences Dignity of Management	Challenges to maintaining respect and authority in management Strain or empowerment of non-academic roles	Recognition & valorisation Central to professionalisation and evaluation
Stakeholders	Involvement	Enhanced engagement with external stakeholders	Growing relevance in evaluation Growing relevance in controlling & monitoring Vs Estrangement of communities due to English as lingua franca in academies
Students	Involvement	Students' engagement and participation	Growing relevance of students' role in quality assessment
New Skills	TM relevant Skills Evaluation Skills	Development of new competencies: Need for enhanced TM & evaluation skills	Professionalisation of Competences Professionalisation of Evaluation

Table 30 MICRO level related themes

All of these challenges are mostly represented as factors affecting academic career progression. Despite the increasing recognition of the strategic importance of Third Mission activities at the institutional level, interviewees across all four case-study countries have indicated a lack of institutional recognition and incentives at the individual level. Consequently, there is a tension between the willingness to engaging in Third Mission activities and the need to focus on those elements, which are key to career-building such as research and teaching. From Portuguese interviews emerges also that economic conjunctions exacerbate these difficulties by adding a further complication, namely the lack of funding and the contractual stagnation among the demotivational and thus hindering factors. Interviewees have also noted that Third Mission has also got a significant impact on traditional roles and relationships. In this respect two different observations have been made. The first relates to the fact that Third Mission engaged individuals have been considered "less performing" or "less high-quality" researchers/professors. Academic interviewees have testified that any practical inclination was seen as "not academic" and therefore somehow rejected by the generic opinion. This aspect has been highlighted especially in German and Italian interviews. Also, it has been identified as being prevalent in some disciplines more than others:

So, the attitude of professors is changing and also the reputation. I remember when I used to work in universities in the late nineties, there was a drastic separation between "real professors" and those working on chairs founded by industry. They were doing "inferior" research... This has dramatically changed. (DE_01)

The further consideration concerns the change of relevance that Third Mission activities and their evaluation may play throughout the career of an individual. Third Mission is felt increasingly more as a duty for academics due to the pressure of policy and funds distribution mechanisms. However, this clashes with the legitimate need to build and reinforce its own academic position, as efforts are concentrated on producing those results (namely research) and perform those duties (namely teaching) which are element of assessment in career building and progression. Interviewees suggest that engagement in Third Mission may be prevalent at the beginning and at the end of an academic career, although for very different reasons. They provided the following examples: Third Mission activities are often used as springboard for young

researchers wanting to pursue an academic career (for example by participating in Third Mission projects). They are also characteristics of those professors, which have already reached a consolidated position and reputation and that *can indulge themselves in the luxury of engaging in those types of activities" (IT_07)*, and whose evaluation does not play a role in their career any longer. It is interesting to note that from the wording used by some academic it emerges how Third Mission is considered almost *a "luxury to indulge"*. In between the extreme, the duty and the luxury, it emerges that there is a mix of views and perceptions. As it emerges from interviews across all four countries, the workload imposed by Third Mission activities is significant, it does affect the time and energies devoted to academic activities and it does affect the balance between activities. However, while research plays a significant role in career progression, teaching pays a role as well, Third Mission is considered only partially and marginally:

That is, if the teacher deals a lot with the Third Mission, it is clear that his commitment in research pays the price, but then the evaluation of career progress is absolutely linked to research and from this paradox it is impossible to get out. (IT_07)

Swedish interviewees have reported institutional initiatives, such as Third Mission or Impact prizes, as incentives. In Italy and Portugal, discussions about the benefits of evaluating Third Mission activities and their academic merits often conclude that such engagements are undervalued. Interviewees have often mentioned that there is a "price" to be paid for participating in Third Mission activities:

I paid a high price for being a good teacher, engaged in the society, and an entrepreneur to support my PhD students It has penalised me in the evaluation of my research and thus in my career. (IT_19)

Contrary to these viewpoints, some interviewees advocate for a more 'Anglo-Saxon' approach to the Third Mission. They argue that claims of Third Mission activities hindering the production of high-level publications lack credibility. They question the legitimacy of these activities, suggesting that authentic Third Mission efforts should involve technology transfer rooted in underlying research. Without this thesis foundation, activities like spin-offs are seen as entrepreneurial ventures rather than

true translations of research (Donatiello and Gerardini, 2019). Consequently, they view such activities as distinct and separate from research-driven endeavours (IT 06). Interviewees have also highlighted the different relevance in career building played by various types of Third Mission activities. These can be categorised into a) those related to the valorisation and transfer of research, and b) those with different purposes and characters, such as public engagement or activities with distinct social roles and values, which may not necessarily stem from research but are still considered part of universities' Third Mission in a broad sense. The nature of the activity itself is crucial in determining in terms of relevance for evaluation. For example, the foundation and management of a spin-off or the ability to attract external funding (especially prestigious European projects) have a direct impact on evaluations as they are closely linked to research activities. Both spin-offs and the acquisition of external funds are key indicators used to measure Third Mission performance (Mariani et al., 2018; Donatiello and Gerardini, 2019). Although these indicators are measured at the institutional level, their repercussions at the individual level are significant (Abramo et al., 2022). In countries like Italy and Germany, where the academic system is relatively closed and language barriers limit external engagement, these indicators are becoming increasingly important for the mobility of researchers and professors. As a result, individuals may not be recognised for their achievements domestically but may attract interest in more open international settings. As a consequence, as highlighted by an interviewed German policy maker, this raises concern about the capacity of some academies to retain human capital and to acquire international talents.

Evaluation skills and professionalisation

The lack of specific competences within universities to respond to evaluation criteria has been mentioned widely across many interviews. Universities have generally filled the gap hiring/training science management which, according to recent studies (Henke, 2019; Pohlenz, 2022) is more involved in the production of Third Mission activities than it is usually in comparison to the organisation of teaching and research projects. This can essentially be attributed to the participation of external actors and stakeholders in Third Mission activities, to the need to cover marketing, outreach, and exploitation activities, which require more marked managerial skills than scientific competences (see section 4.4). However, things are different when looking at this

issue with the eyes of evaluators. In countries where the education sector is more market-oriented, such as in Germany, public-driven evaluation is run by specialised agencies, thus, to certain extent professional (as described in previous sections). However, in the other examined countries, interviewees have confirmed that peerreview or informed peer-review are the main 'titled' methods used; thus, evaluators of science are almost exclusively scientists and evaluators of Third Mission societal impact are mostly scientists. Non-academic interviewees have argued that the use of the 'peer review' approach has limited the development of a true professionalisation of evaluation in HE as it has developed in other sectors (e.g., development projects). This is because 'peer review' implicate that a 'peer', thus a professional in a specific scientific sector evaluate the output of the research work. This is more difficult to translate from research to Third Mission considering the complexity, multidisciplinary and extra-institutional aspects of Third Mission activities, which requires competences beyond scientific excellence. Even though peers might be the best experts for evaluating research, they are not professionals in evaluation (Langfeldt and Kyvik, 2011; Castro, 2016; Derrick, 2018; Henke, 2019; Pohlenz, 2022). The traditional peer review model has been integrally translated to the evaluation processes of Third Mission. However, this brings with it additional aspects, which are different but equally important as related to competences and skills, such as that the emergence of societal impact assessments, evaluators have no experience in applying this new, untested and unclear criterion (Samuel and Derrick, 2015; Derrick and Samuel, 2017). There is a risk that the lack of specific competences and expertise in evaluation of impact may expose evaluators to political pressures and audit culture incentives, which would end up influencing peer review evaluation (Langfeldt and Kyvik, 2011; Derrick, 2018). German interviewees noted that the development of new methodologies and theoretical competences is a scientists' domain, the transfer of competences to the application and implementation actors is not as obvious. Things change depending on the system. In Germany, for example this would refer to the transfer from specific competences from research to practice, namely from researchers exploring on evaluation methodologies to accreditation and evaluation agencies. To overcome this barrier, interviewees told that some agencies have established internal academies. In addition, German interviewees noted that innovation in evaluation practices is heavily influenced by political interventions. For example, since the ministries are usually the contractors for ex-ante and continuing evaluation exercises, the ministry would also

indicate guideline for methodologies in the call for tenders. Interviewees hypothesised different reasons why governments rarely ask for innovative evaluation approaches, such as competences within the governmental body or a strong focus on using evaluation to legitimate the policies and programs rather than for improvements of project activities. Italian academic interviewees noted that they feel their profession is changing significantly through the continuous addition of tasks

we are not researchers and teachers any longer, we also have to be project managers, communicators, and evaluators. On top of this, we also have to deal with the bureaucratic burden of all these tasks (IT_ 07)

From interviews across the four countries, it emerges that among non-academic participants there is a widespread call for the acquisition and professionalisation of evaluation. Conversely, some academics especially in Italy and Portugal (only a minority in Sweden but none in Germany), while acknowledging the need for the acquisition of evaluation skills, express more scepticism about professionalisation processes as they associate it with the development of market logic. Academics fear that professionalisation could lead to an overemphasis on measurable outcomes and standardised procedures, which may undermine the academic freedom and creativity essential for research and teaching. Furthermore, there is concern that professionalisation could create barriers to genuine intellectual inquiry, as it might prioritise efficiency and productivity over the intrinsic value of knowledge generation. This tension between the desire for structured evaluation and the fear of market-driven imperatives highlights the complex dynamics at play in the academic landscape, where the pursuit of quality and accountability must be balanced against the preservation of academic integrity and autonomy.

Non-academic (administrative and managerial) staff within universities, which have been interviewed, have emphasised that managerial skills are more crucial for Third Mission activities than for the other two traditional missions of teaching and research. Consequently, their roles have become more central and strategically important within universities. The competencies required to effectively manage Third Mission activities include project management, stakeholder engagement, fundraising, and strategic planning. These skills are essential for initiatives such as industry partnerships, community outreach programs, and the commercialisation of research through spin-

offs and start-ups. However, interviewees noted that there are still academic environments, particularly in countries like Italy and Portugal, where the significance of these managerial roles is not fully recognised. In these settings, what they call the "dignity of management" is often undermined, and the skills, capacities, and contributions of non-academic staff are not adequately reflected in job classifications or career advancement opportunities. This lack of recognition can lead to underappreciation and insufficient support for individuals in these roles, despite their critical contribution to the success of the Third Mission. Moreover, the integration of Third Mission activities blurs the traditional boundaries between academic and non-academic functions within universities. This blending of roles often leads to tensions and shifts in how responsibilities and relationships are perceived and enacted. Academic staff may find themselves engaging in activities that require managerial expertise, while non-academic staff might take on roles that intersect with academic duties. This convergence can create friction as both groups navigate these overlapping responsibilities.

Froestad and Bakken (2004) have highlighted how at micro level, changes in roles and behaviour of individuals, including students, are crucial in evaluating higher education's evolution. Interviews reveal two key aspects pertinent to the Third Mission discourse: a) Student involvement in quality assurance aligns with EU and national policies but lacks substantive impact, particularly in Italy where a sense of subordination to academic power prevails. b) While students increasingly assess teaching quality and university experience satisfaction, their participation in research and Third Mission activities is minimal. The latter has been evidenced especially in Italian and Portugal interviews. Though overall student participation in quality assurance has risen, gaps remain, notably in their role as stakeholders in reviews (Stocktaking report, 2009; EURYDICE, 2020). In Germany and Sweden, students' presence in external evaluation committees enhances universities' connections with society and Third Mission endeavours. Policy makers and scholars are increasingly focusing on students' role in quality assessment, anticipating its growth in coming years (Cardoso et al., 2012; Ibarra-Sáiz et al., 2021). Portugal, despite its emphasis on quality assessment, faces challenges in raising students' awareness of its impact (Cardoso et al., 2012). Future research should delve into student-cantered approaches, empowering them in assessment decision-making (Ibarra-Sáiz et al., 2021). Interviewees noted that Third Mission is the mission that, more than the others,

is congenial for a more substantial than formal involvement of student in evaluation and not only in implementation of engagement activities. In essence, interviewees have responded that addressing these challenges requires, **recognition of Third Mission** contributions, the development of **skills for all actors** involved, and **flexible evaluation** approaches.

1. Recognition of TM:

It is essential to establish clear and transparent criteria for evaluating and rewarding engagement activities. This formal recognition not only legitimizes Third Mission efforts but also aligns them with institutional goals and performance assessments.

2. Skills Development for All Actors:

Effective engagement in the Third Mission depends on the development of a broad array of competencies among all stakeholders, including academic staff, administrative personnel, and external partners. This ensures inclusivity, capacity-building, and long-term sustainability.

3. Flexible Evaluation Approaches:

Evaluation frameworks must account for the unique context and objectives of each engagement initiative. A one-size-fits-all approach risks overlooking the diversity and specificity of TM activities. Flexibility is key to ensuring meaningful assessment and improvement.

Addressing the challenge of academic recognition and reward mechanisms requires to establish clear criteria for evaluating and rewarding engagement activities. Recognition can take various forms, including awards, honours, workload balance between missions, and dedicated funding for Third Mission initiatives. Interviewees have testified that universities are developing reward mechanisms at institutional level and that inter-institutional networks are growing to make efforts more efficient. However, they also underline that seldom Third Mission-alike criteria are incorporated into career advancement opportunities. This partially depends on universities, incorporating them into promotion and tenure processes, in some countries (such s Italy) it requires national policy interventions as career are not dealt with at institutional level (EURYDICE: IT 2023/2024). In Sweden the careers of academics are directly

linked with autonomy of institutions (EURYDICE: SE 2023/2024). In Germany, after 2000 with the increasing autonomy of the higher education institutions, responsibility for staff planning is increasingly devolving on the institutions themselves (EURYDICE: DE 2023/2024). Data extrapolated from all sets of interviews suggest that effective engagement in the Third Mission relies on a broad array of **competencies among all stakeholders** and that there is a need for universities to develop skills in performance management, project administration, and other areas related to Third Mission activities. This includes the professionalisation of management roles (academic and non-academic) (Pohlenz, 2022) and the **development of specific skills** to adapt to the evolving landscape of academia. Professors and researchers must hone communication, collaboration, project management, and interdisciplinary skills to engage with external partners and tackle real-world issues.

In complex and non-flexible organisations such as state-funded universities it is not easy to acquire skilled personnel. The challenge is rather to re-skill the ones you have. It is a fact that not all professors are able to engage. (IT_15)

Furthermore, students, through experiential learning and community projects, develop teamwork, leadership, problem-solving, and cultural competency. Administrators are pivotal in supporting Third Mission endeavours, necessitating skills in strategic planning, resource allocation, partnership cultivation, and impact evaluation. External partners, spanning industry, government, and community sectors, may also benefit from capacity-building assistance to foster effective collaboration and amplify impacts deriving from engagement initiatives with universities.

At **meso** (institutional) level interviews let emerge especially two notable and interesting phenomena that affect institutions and are directly linked with the raise of Third Mission and amplified with the advent of its evaluation. One effect that has emerged is the **blurring of boundaries** between different types of institutions; a trend observed in all four countries but particularly pronounced in Germany and Portugal. The second phenomenon relates to the widespread **adoption of English** as the primary working language in many areas of academic work: a trend that emerges especially in Italian, German and Portuguese interviews.

4.5.2 MESO: Blurring of institutional boundaries

Universities traditionally focused on teaching and research are engaging in entrepreneurial ventures, community partnerships, and social innovation projects. This shift can blur the lines between different types of institutions. While this trend is observable across various countries, its impact is particularly pronounced in Germany and Portugal, where the higher education system operates on a binary model. In Germany, there was traditionally a clear divide between traditional universities and *Fachhochschulen*, but since the early 2000s, both have offered BA and MA courses of equal value, resulting in a levelling effect (Kreckel, 2018). Interviews reveal a growing interconnection between academic and non-academic research institutions in Germany, despite historically distinct roles for each within the system. Unlike other European countries, Germany boasts a diverse and complex research system that extends beyond higher education institutions, incorporating a robust non-academic research sector with specific missions for each actor.

Now that everyone does the same, everyone talks to each other, everyone cooperate with all the other... I think we have lost the sense of differences. There is a slow process of homogenisation of our structures. (DE_04)

In Portugal, despite the consolidated existence of a binary system distinguishing between universities and polytechnics, the missions of higher education institutions have become increasingly overlapping and less distinct over the years. There's a trend for institutions to offer a broad range of disciplines rather than specialising, driven in part by political pressure to emulate academic activities (PT_03). Additionally, universities in Portugal are increasingly engaging with regional stakeholders and companies, leading to a more vocational orientation in some areas. This blurring of institutional missions presents a challenge in distinguishing the unique roles and contributions of each institution.

The tendency has been for the system to become increasingly confused with politicians willing to emulate a more academic activities in polytechnics and universities being more engaged with the region, with companies and so on... I think that's a sensitive issue because in some cases, the fact that the university engage more and more on this, makes it more difficult to distinguish and define their role (PT_03)

Furthermore, while the literature praises the system of research units and acknowledges FCT's intentions to address various challenges (Mc Vicar et al., 2023), interviews have highlighted a specific critical issue. The close relationship between R&D units and the FCT in terms of evaluation practices also leads to a disconnect between these units and universities. From interviews emerges that the proximity between research creators and research evaluators can offer flexibility and bring certain advantages, but it also creates tensions among stakeholders. According to interviewees, this dynamic relegates universities to the role of knowledge distributors rather than knowledge creators. Additionally, this situation directly impacts universities' Third Mission, as they face pressure to engage in Third Mission activities while having limited control over the core research, exacerbating tensions within the system. Overall, it emerges from German and Portuguese interviews that the trends towards collaboration and cooperation in Germany and Portugal has led to a sense of homogenisation within its structured research landscape. As interviewees noted, the proliferation of similar activities has diminished the sense of differences among institutions, fostering a slow process of structural homogenisation. Interviewees also noted that, as a consequence, with more institutions developing their Third Mission, universities may find it harder to differentiate themselves in a competitive higher education landscape.

A paradigmatic cultural shift

The rise of the Third Mission in higher education institutions has led to a reconfiguration of academic roles and responsibilities, expanding beyond traditional teaching and research to include engagement with external stakeholders. While this shift aims to foster greater societal impact and enhance knowledge transfer, it also raises important questions about the cultural and linguistic transformations taking place within academia. One significant aspect of these changes is the increasing adoption of English as the dominant working language, a phenomenon that has emerged within the research domain (Bolton, 2012; Björkman, 2014; Amorim, 2017; Soler, 2018). However, its implications take on a peculiar significance when applied to Third Mission activities. Through interviews, it has become clear that this linguistic shift is not merely a matter of language in research contexts but carries broader cultural consequences, particularly in consideration of the strong role played by

communication with local actors in community engagement and knowledge transfer. The use of English as a "lingua franca" (Marginson and van der Wende, 2009) impacts methodologies, approaches, and strategies in HEIs, leading to cultural changes. An illuminating anecdote from an Italian interviewee sheds light on this shift. The anecdote recounts the Ministry's directive to Italian academics to not only write research proposals in English but to imbue them with an Anglo-Saxon approach to research "please try to write as an English would write, not in the sense of the language, but in the sense of the mentality" (IT 07), highlighting a perceived imposition of an Englishcentric mentality. While interviewees acknowledged that this trend could lead to the standardisation of practices, they also expressed concern about the risks involved. On one side it tends to homologate to standards and flatters originality, which also comes from the use of mother tongue and cultural approaches. On the other hand, in the context of Third Mission activities - such as engaging with local communities and external stakeholders - this linguistic shift poses challenges. It risks estranging universities from the very communities they aim to serve. Interviewees from Italy and Portugal highlighted how the emphasis on English dissemination in academic publishing exacerbates the disconnect between universities and local communities. where the primary recipients of knowledge transfer - such as small and medium-sized enterprises (SMEs), micro-enterprises, and local authorities - often lack proficiency in English. This disconnect weakens the ability of universities to effectively engage and collaborate with these stakeholders, who are central to the success of Third Mission activities. Consequently, this linguistic and cultural shift in research and Third Mission policies undermines academics' orientation towards local contexts, negatively impacting their ability to serve and engage with local communities effectively. Interviewees have noted that this is especially critic in those countries (e.g., Portugal and Italy) where receivers of knowledge transfer from universities are often SMEs, micro enterprises and local authorities, which are the main recipients of knowledge transfer but often lack proficiency in English. Thus, this language and cultural shift in Third Mission policies "negatively affect academics' orientation towards the local community" (Queiròs, 2023).

Interviewees from all four case study countries have referred to this aspect, as a sign of a shared concern that Europe's cultural and linguistic diversity may be at risk. Interviewees argue that Europe's unique identity is deeply rooted in its multilingualism and multiculturalism, and losing this richness could mean losing a significant part of

what makes Europe distinctive. The preservation of diverse languages and cultures in research and academic life is seen as essential to maintaining Europe's unique character and heritage. These interviewees emphasised that while the adoption of English might facilitate international collaboration and standardisation, it should not weaken the ability of universities to effectively engage and collaborate with local stakeholders, who are central to the success of Third Mission activities.

Summary of Section 4.5

Section 4.5 illustrates a composite view of the changes and challenges that Third Mission has brought within the HE systems. To do so, it focusses on analysing changes through the lens of interviewed stakeholders at all levels: systemic, organisational, and individual. Examining the effects on individuals (micro) allows us to understand how engagement in the Third Mission influences personal development, career trajectories, and community involvement. At the institutional (meso) level, aspects such as governance and leadership roles, strategies and priorities, structural changes such as transfer offices, have been addressed in previous sections, here the focus is on the effects of paradigmatic shifts within universities. At the macro level, investigating the systemic changes related to Third Mission provides insights into its broader implications for developments in national Higher Education systems.

Chapter 5 – Discussion

Introduction

This thesis shows that despite taking diverse characteristics in each of the four examined countries, Third Mission is growing in importance in all of them. In the era in which Europe is driving towards European University alliances there are still disparate, divergent, and country-specific considerations of Third Mission, The European and national policies' review highlights that a common understanding of Third Mission is a fundamental requirement to achieve the vision to develop a European framework for comprehensive quality assessment of European universities (ENQA, 2022). The literature review argues that there is a need for research to detect, clarify, and evaluate common and divergent cross-cultural aspects (Secundo, 2017; Frondizi, 2019; Thomas & Nedeva, 2020; Ayoo, 2020). This would also support the development of a common understanding of Third Mission in Europe and eventually of a joint European Third Mission strategy (Hochstein et al., 2022). It is generally acknowledged that in EU member states, factors driving modernisation of universities, have common policy roots (Hunter, 2015; Santos, 2016; Capano et al., 2016). Previous research has acknowledged how Third Mission differs in each country depending upon the embedding in its geographical territory (Laredo, 2007; Dilorenzo and Stefani, 2015; Brennan and Shah, 2000) and that nature and direction of all transformative processes are changeable, varying depending on the specificities of national contexts (Verderame, 2009; Chessa & Vargiu 2014). However, so far research has not fully explained how (differently or similarly) the national implementations of Third Mission are affected by their specific socio-cultural-systemic contexts. One instrument that can serve to pursue this goal is the exploration of Third Mission in its complexity perspective. The added value of this research is given by the systematised analysis of each of the relevant dimensions surrounding Third Mission evolution within one single research framework. In this way, it contextualises each of them in a sort of complex mosaic. The output is a meticulous multi-dimensional comparison that provides a robust foundation for further knowledge growth. This thesis illustrates the diverse ways in which Third Mission is evolving in continental Europe, both conceptually and operationally. It addresses the need for comprehensive and

integrative research on Third Mission, as highlighted by Trierweiller (2021). Additionally, the study underscores the importance of Third Mission evaluation as a tool for fostering and accelerating changes within universities, contributing to their modernisation (Eurydice, 2011; Kwieck et al., 2012; Gorard, 2013; Benneworth et al., 2015; Pinheiro, 2019). This extends the understanding of the cultural and political factors underlying evaluation frameworks, which as noted by Bonaccorsi (2020) have been under explored. It also helps clarifying the positioning of Third Mission and its evaluation within the European modernisation agenda for universities (EC, 2017; Epuran et al., 2016). Furthermore, the study identifies significant correlations across European countries, enhancing the understanding of the interactions at micro, meso, and macro levels, and offers insights into the relationship between the modernisation of European universities and the process of European integration, which have been indicated by scholars as field needing deeper research (Kwiek, 2012; Thomas and Nedeva, 2020b).

The analysis of the interviews provides insights that help addressing the five research questions. The approach taken in the study significantly aids in addressing each research question by providing a nuanced understanding of various aspects related to the "Third Mission". Firstly, by analysing interview data from a range of countries and contexts, the study identifies common themes and perspectives that define the "Third Mission". This analysis helps in establishing a shared understanding of the concept, while also highlighting differences in interpretation, which is crucial for exploring how the Third Mission is understood across different settings. Secondly, the interviews reveal how each country has supported the operationalisation of Third Mission through its institutionalisation. The study uncovers the specific ways in which each case-study country has embraced Third Mission and adapted to its raise, offering insights into the processes and changes that have occurred as a result. Thirdly, the research delves into the presence and functioning of evaluative measures used to assess Third Mission. By examining these measures within their specific contexts, it identifies characteristics of the current evaluation systems. Moreover, the analysis explores how the national developments interact with broader European trends. Finally, the study investigates the effects of Third Mission in each national setting and provides valuable insights into whether these effects are unique to specific settings or can be generalised across the four case-study countries. By addressing each of these aspects it responds to the five postulated research questions.

5.1 Discussion of Research Questions

These questions are central to the study's framework, guiding the investigation toward a comprehensive understanding of the Third Mission and its 'multifaceted nature' (Trierweiller et al., 2021). The research questions were developed through an iterative process – inspired by techniques from Grounded Theory - with the aim of exploring key themes that emerged from the literature. By focusing on these targeted areas, the study ensures a thorough analysis of the complexities surrounding Third Mission, particularly in how it is conceptualised, institutionalised, and evaluated within varying national contexts. The study responds to the five research questions with a mixed method approach which support a comparative analysis of four European countries: Sweden, Germany, Portugal, and Italy. This cross-national comparison enables the identification of common patterns and divergent strategies in the implementation and evaluation of the Third Mission. Additionally, by incorporating a further set of interviews, the study conducts a vertical comparison between data gathered from national interviews and those of a more international character. This approach enhances the depth and scope of the analysis, providing a richer understanding of the Third Mission's role within both national and European contexts. Through this comprehensive and multi-layered examination, the study aims to contribute valuable insights into the research exploring the evolving nature of Third Mission and its significance in contemporary European higher education.

5.1.1 RQ 1 - How is Third Mission conceptualised in the specificities of each country context?

The evidence gathered in this research highlights the nuanced differences that exist in the conceptualisation of Third Mission between the countries examined. As testified by a rich body of scholar literature the Third Mission is broadly understood as the role of universities in contributing to societal development beyond their traditional functions of education and research (Laredo, 2007a and 2007b; Molas-Gallart and Castro-Martínez, 2007; Zomer and Benneworth, 2011; Jaeger and Kopper, 2014; Piirainen, 2016; Trierweiler et al., 2021), although the way this mission is interpreted and implemented varies considerably across different national contexts (Krücken and Meier, 2006; Geuna and Muscio, 2009; Chessa & Vargiu, 2014; Benneworth et al.,

2016). Existing literature has emphasised that the Third Mission is not a one-size-fitsall concept (e.g., Benneworth et al., 2016; Kitagawa et al., 2016; Secundo et al., 2018) but rather a multifaceted and context-dependent phenomenon (Vorley and Nelles, 2009; Predazzi, 2012; Giuri et al., 2019). Furthermore, despite the growing richness of studies surrounding third Mission, remains valid that neither the nature of the mission itself nor its practical implementation have been fully conceptualised (Molas-Gallart and Castro-Martínez, 2007; Jaeger and Kopper, 2014; Piirainen eta al., 2016). By bringing subtleties to light through extensive interviews' analysis, this research enhances understanding of the diversity within the European higher education landscape. These nuances are shaped by a variety of factors, including historical traditions of higher education (e.g., the Humboldtian tradition of German universities), cultural values (e.g., the welfare state model in Sweden), economic conditions (e.g., the prolonged economic crises' effects on Portuguese universities), and the specific needs of the regions in which universities operate (e.g., large regions with low industrial presence such as in the south of Italy). This approach aligns with existing literature that emphasises the importance of clearly defining the scope and purpose of university missions (Goddard, 2018; Laredo, 2007a; Posits, 2015; Taliento, 2022). Inspired by Grounded Theory approaches that encourages the use of mixed exploratory techniques and methods, this research engages a linguistic and terminological analysis based on the interviews' inputs, which reveals critical distinctions that contribute to a more nuanced understanding of the Third Mission beyond its specific labels. Looking at the terms used to define Third Mission in each case study it emerges that while in Sweden 'samverkan' denotates a clear reinforcement of the role that universities already had; in Germany the technology transfer and the economic valorisation of research dominate over any other aspects; in Portugal 'extensão' denotates an extension of what the original - rather closed remit of universities within the society; in Italy, the wide and holistic conception of Third Mission represents a new frontier closely related to the institutional role and impact in its entirety rather than to research-related outputs. Thus, the comparison suggests that each term reflects and defines the peculiar 'nature' of Third Mission in that country. Interviews also suggest that it is also important to attempt unravelling some misleading interpretation of correlated but not equivalent meanings surrounding Third Mission (e.g. Third Stream, Impact and Public Engagement). According to the interviewees, the Third Mission involves a multidirectional relationship with mutual benefits but should not be conflated with purely commercial, financial, or opportunistic activities. They emphasised that Third Mission is distinct from the purely entrepreneurial activities often associated with the concept of the "Third Stream" and extends far beyond the notion of entrepreneurial universities, and this aspect particularly differentiates universities in non-Anglo-Saxon contexts. The interviewees highlighted that the Third Mission of universities transcends merely engaging in business activities, earning supplementary income, or selling expertise. While Third Mission can include financial elements, it is not solely focused on compensation, and its cultural interpretation varies significantly even between countries with common policy roots, such as the EU member states. The interviewees cautioned against reducing Third Mission to low-cost service providers or consultants, though they acknowledged the high risk of this happening amid public funding cuts, which could lead to the exploitation rather than the valorisation of academic institutions. They also noted that activities associated with Third Mission are often influenced by strategic, financial, reputational, or compliance considerations, and should not be expected to be driven by purely altruistic motives. The analysis further situates Third Mission within the broader constellation of related concepts such as 'impact' and 'public engagement' with the aim to delineate the conceptual boundaries of Third Mission. Central to this analysis is the term 'mission,' which carries significant weight in reflecting the institutional dimension and the comprehensive role universities are expected to fulfil. Unlike 'public engagement', which primarily concerns the extension of university influence beyond academic circles (Neresini and Bucchi, 2011; Watermeyer, 2023; Grand, 2012; Ivani et al., 2022; Boon, 2022; Featherstone, 2022), or 'research impact', which focuses on the tangible and measurable outcomes of academic research (Bornmann, 2012, 2013, 2014 and 2017; Derrick and Samuel, 2017; Cooper and Shewchuk, 2017; Bonaccorsi, 2021; Wróblewska, 2021; Kuipers-Dirven, 2023), the Third Mission encompasses a broader, integrative function, which addresses the need for universities to redefine their societal roles in a rapidly changing world (Molas-Gallart et al., 2002; Cinar and Benneworth, 20221). While public engagement and research impact have become essential in demonstrating the value and relevance of academic work (Abel and Deitz, 2014; Breznitz, 2014; Benneworth and Pinheiro, 2017; EUA, 2019) this research argues that they represent specific facets of the university's broader mission. The concept of the Third Mission, despite being less popular or "fashionable" as noted by interviewees from the various countries, is increasingly

recognised as integral to the evolving purpose of contemporary universities (Zomer and Benneworth, 2011). While much of the current literature has focused on the practical implications of public engagement and research impact (e.g., Chubb and Watermeyer, 2017; Boon, 2022; Cyber Valley, 2022; Watermeyer, 2023), this research extends the discourse by arguing for a broader conceptualisation and a more holistic understanding of the Third Mission, as emerges from interviews. By emphasising the comprehensive and integrative dimensions of diversities within the broader notion of Third Mission, this thesis challenges the fragmented perspectives that often dominate the discussion, where public engagement and research impact are treated as isolated elements rather than components of a larger institutional purpose. Several scholars have encouraged a shift away from the siloed approach to university missions (Trencher et al., 2014; Secundo et al, 2017; Knudsen, 2021) and towards a more integrated understanding that can better address the complex challenges facing higher education today (Ansell, 2008; Bölling and Eriksson, 2016; Rubens et al., 2017; OECD, 2020). This thesis not only contributes to defining the Third Mission as a comprehensive paradigm but also positions it as a central concept that encapsulates the university's entire societal engagement.

ТОРІС	Bibliographic references	RESULTS	Knowledge Contribution
Conceptualisati	Krücken and Meier, 2006; Geuna and Muscio, 2009; Chessa & Vargiu, 2014; Benneworth et al., 2016	'samverkan' denotes a clear reinforcement of the role that universities already had 'extensão' denotes an extension of what the original - rather closed - remit of universities within the society in Germany the technology transfer and the economic valorisation of research dominate over any other aspects holistic conception of Third Mission	each term reflects and defines the peculiar 'nature' of Third Mission in that country The term 'third mission' holds considerable significance, encapsulating the entirety of the institution and the comprehensive role that universities are expected to embody with their missions

TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
		represents a new frontier closely related to the institutional role and impact in its entirety rather than to research-related outputs	
Factors influencing conceptualisatio n of TM	Vorley and Nelles, 2009; Predazzi, 2012; Giuri et al., 2019 Molas-Gallart and Castro-Martinez, 2007; Piirainen et al., 2016 Benneworth et al., 2016; Kitagawa et al., 2016; Secundo et al., 2018 Goddard, 2016; Laredo, 2007; Posits, 2015; Taliento, 2022	Examples of factors affecting TM: the Humboldtian tradition of German universities the welfare state model in Sweden prolonged economic crises' effects on Portuguese universities large regions with low industrial presence such as in the south of Italy	nuances are shaped by a variety of factors, including historical traditions of higher education, cultural values, economic conditions, and the specific needs of the regions in which universities operate
Disambiguation s among TM related themes	Laredo, 2007a and 2007b; Molas-Gallart and Castro–Martínez, 2007; Zomer and Benneworth; Trierweiler, 2021	unravelling some misleading interpretation of correlated but not equivalent meanings surrounding Third Mission: Third Stream, Impact and Public Engagement	TM = multidirectional relationship with mutual benefits but should not be conflated with purely commercial, financial, or opportunistic activities

Table 31 Research Question 1 - a synthesis

5.1.2 RQ 2 - How is Third Mission institutionalised in the specificities of each country context?

This thesis reveals significant disparities in how the Third Mission is approached in terms of operationalisation instruments such as policy, funding, and practice, even among countries that are part of a relatively homogenous policy group, such as the European Union. Existing studies hae established the common European policy roots

as a general foundation for Third Mission institutionalisation (Kwiek and Kurkiewicz, 2012; Benneworth eta al., 2015; Pinheiro, 2015; Smidt, 2015; Taliento, 2022). Around the turn of the century, the landscape has dramatically changed: whether under internal or external pressure, when universities have started making conscious decision about them, these relationships have become strategic instruments, and this has determined their institutionalisation. Through them universities have been invested with the duty of maximising the social and economic value of research (EC. 2020) and thus, to take their share of responsibilities in reaching societal goals (Neave, 2000). However, how this process has been induced and sustained, ending with its institutionalisation, differs in each country (Benneworth, 2015; Pinheiro, 2015; Cinar and Benneworth, 2021). This thesis extends current knowledge by evidencing how national contexts and systems affect the shaping and evolution of the Third Mission. The four-country comparison reveals varying levels of Third Mission integration into university systems. Sweden leads with the most advanced integration, having incorporated Third Mission into the university agenda as early as 1975, supported by strong state backing that has deeply embedded Third Mission within its academic institutions. In Germany, attention to Third Mission has surged recently, becoming a significant political priority at both the Land and Federal levels, with dedicated funding accelerating its rapid maturation, despite being in its early stages. Conversely, Portugal shows an undefined and non-codified approach to Third Mission, with limited formalisation in institutional documents, despite governmental recognition of its importance. In contrast, Italy is making substantial efforts to define and enforce Third Mission, with structured legislative support and integration into university strategic plans, highlighting a deliberate political effort to embed Third Mission as a central academic mission. Exploring the relationship between fundings and Third Mission institutionalisation interviewees suggest differentiated approaches in each of the casestudies. For example, Sweden has been increasing the share of funds distributed through competitive schemes, which often include Third Mission -related criteria. This means that universities in Sweden must demonstrate their involvement in Third Mission activities to secure funding through these competitive processes. Germany started focusing on Third Mission later than the other case-study countries but has rapidly institutionalised it. Germany's approach involves new federal funding schemes specifically targeting Third Mission activities, which are part of the broader "German Excellence Strategy" to enhance the quality and international competitiveness of its universities. In Italy and Portugal, the relationship between Third Mission activities and funding is less about securing additional funds through competition and more about ensuring that a portion of the existing state funds is allocated to universities based on their Third Mission activities. This implies that in Sweden and Germany, universities are incentivised to innovate and excel in Third Mission activities to secure more funds, whereas in Portugal and Italy, the focus is on maintaining a baseline of Third Mission engagement to ensure stable funding. This finding emphasises that while overarching European policies provide a broad framework and objectives through initiatives like the European Research Area or the Bologna Process, the specific operationalisation and institutionalisation of Third Mission activities are significantly influenced by the unique characteristics and dynamics of individual countries. For example, the contrasting relationship between Swedish universities and the Bologna Process compared with the immediacy of the implementation of reforms driven by the Bologna process in Germany; similarly, the profound effects of the Bologna inspired reforms in Portugal compared with the resistance of Italian academy to any reform.

This thesis argues that a deeper understanding of these national contexts is essential to grasp how Third Mission is tailored to the unique circumstances of each country. For example, the focus of German interviews when discussing specific characteristics is on the federated system and disparities between Länder, and particularly the uneven distribution of resources among the Länder. Also, the effects of the country reunification after the fall of the wall, has been significantly mentioned. The analysis of Swedish interviews highlights the policy fragmentation within the knowledge triangle and the complexities of its research funding system. In Portugal, it emerges the concentration of public educational institutions in the northern region, and the nature of industrial collaboration. The resource constraints emerge as 'fil rouge' which touches transversally all relevant aspects. Meanwhile, the investigation into Italy uncovers regional economic disparities, political instability, and the impact of limited university-industry relations, particularly in the southern regions. The comparison of these features provide insights into how the institutionalisation of the Third Mission is operationalised in different national contexts, highlighting practices and challenges. Furthermore, the interviews conducted reveal a highly nuanced and contrasting

picture of how different countries have established national agencies and the specific

roles these agencies have been tasked with. Despite some chronological similarities

unique priorities and governance structures. In Sweden, Italy, and Portugal, the decision was made to centralise these functions within dedicated national agencies. Sweden, for example, has established ÄKA and VINNOVA, both of which are tasked with a dual mission of promoting research and innovation. These agencies not only drive the research agenda but also integrate evaluation tasks within their broader mandate. In contrast, Italy and Portugal have founded agencies with a more focused and explicit mission centered on evaluation. The Italian agency ANVUR and the Portuguese A3ES are primarily concerned with assessing the quality and effectiveness of higher education institutions and research activities, although their functioning differs greatly, with the Portuguese agency monitoring and assessing the quality assurance mechanisms of each institution, while the Italian agency runs evaluations itself on all universities. Germany presents a different model altogether. Instead of a single centralised agency, Germany has opted to establish eight sectorspecific agencies, each operating within its own domain. These agencies are predominantly engaged in accreditation, though they also perform some evaluation tasks. Interestingly, these German agencies operate with dynamics akin to market mechanisms, despite being driven by public mandates. This approach introduces a degree of competition and differentiation within the sectors they oversee, contrasting with the more uniform and publicly oriented models seen in Sweden, Italy, and Portugal. In essence, the Swedish, Italian, and Portuguese agencies embody a strong public institutional character, clearly reflecting national priorities and government oversight. On the other hand, the German model, while still publicly mandated, introduces elements of market-alike behaviour into the regulatory framework, suggesting a more diversified and competitive environment for accreditation and evaluation. While the state-oriented nature of the European universities is widely acknowledged (Kromydas, 2016; Bandola-Gill et al., 2021) as well as the specific coexistence of the double nature public/private in the German HE landscape (Orr et Paetzold, 2006; Löwenbein, 2008; Hartmann, 2009; Hoelscher, 2016; Berghäuser and Hoelscher, 2020), this research contribute to the discourse surrounding Third Mission institutionalisation and operationalisation with its cross-country comparison. By highlighting how the approaches diverge, it contributes to the understanding of how the complex interplay between national governance styles, policy objectives, and the broader goals of quality assurance.

TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
Dynamics of institutionalisation	Benneworth, 2015; Pinheiro, 2015; Cinar and Benneworth, 2021	German agencies operate with dynamics akin to market mechanisms, despite being driven by public mandates. This approach introduces a degree of competition and differentiation within the sectors they oversee, contrasting with the more uniform and publicly oriented models in Sweden, Italy, and Portugal.	Despite some chronological similarities across the four countries, each country's unique priorities and governance structures stand out.
Instruments to push institutionalisation	Kromydas, 2016; Bandola-Gill et al., 2021; Orr et al., 2006; Löwenbein, 2008; Hartmann, 2009; Hölscher, 2016; Berghäuser and Hölscher, 2020	Differentiated approaches in each of the case-studies: SE competitive funds and evaluation, DE competitive funds and accreditation, PT reforms, IT evaluation linked to funding distribution.	Contributes to the understanding of how the complex interplay between national governance styles, policy objectives, and the broader goals of quality assurance operates.

TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
Institutionalisation levels	Kwiek et al., 2012; Benneworth et al., 2015; Pinheiro, 2015; Smidt, 2015; Taliento, 2022	Varying levels of Third Mission integration into university systems.	Sweden leads with the most advanced and mature integration. Germany is experiencing rapid maturation, with Third Mission becoming a recent political priority at both regional and federal levels. Portugal demonstrates a low level of institutionalization, with Third Mission remaining largely undefined and uncodified. Italy is making substantial progress, with structured legislative support and integration into university strategic plans, signaling a deliberate and growing effort to institutionalise it.

Table 32 Research Question 2 - a synthesis

5.1.3 RQ 3 - How evaluation of Third Mission develops within the specificities of each country context?

The exploration of the Third Mission evaluation presented in the study draws on extensive bibliographic references to establish a foundation for its analysis. These references include prominent works such as those by Dahler-Larsen (2012), Bonaccorsi (2020), and Viney (2022), which delve into the role of evaluation as a tool for shaping institutional behaviours within academia. The study builds on this literature to present a contribution to knowledge at different levels. The cross-country and multilevel comparison has identified a series of themes related to the evaluation of the Third

Mission, which result in a complex interplay of cultural, economic, and institutional factors that shape how universities engage with their broader societal responsibilities. Crucially, a key new contribution of this research is the identification of evaluation as a strategic tool to nudge institutional behaviours towards specific desired outcomes. This insight reveals that beyond merely assessing performance this strategic use of evaluation as a policy instrument represents a significant shift in how Third Mission activities are being shaped and institutionalised across different national contexts.

At MACRO level, both Bonaccorsi (2018) and Derrick (2018) discuss how competitive funding mechanisms serve as powerful tools to drive academic and institutional behaviours. This thesis expands on this aspect by identifying evaluation as an integral part of national strategies, alongside competitive funding, for nudging universities toward desired outcomes. In the context of interviews, evaluation of Third Mission appears to play a pivotal role in this respect. This insight is particularly evident in the cross-country comparison. For example, results evidence that while Germany privileges the use of competitive dedicated additional funding, in Italy instead, the evaluation framework is deliberately used as policy instruments to steer universities in specific directions. Compagnucci and Spigarelli (2020) and Bonaccorsi (2020) explore how evaluation systems vary depending on cultural, political, and socio-economic factors within different national contexts. The study contributes to this discourse by identifying how each evaluation model is influenced by the unique specificities of its country of origin. This contribution emphasises that the shaping of an evaluation system cannot be disentangled from the broader cultural and political environment in which it is embedded, thus expanding the understanding of how diverse national contexts shape evaluation practices (see Figure 21) through the identification of the main traits of each of the four country-specific system.

At **MESO** level institutional attitudes towards evaluation systems also emerge as a significant area of inquiry in the study, informed by studies from Langfeldt and Kyvik (2011) and Benneworth et al. (2005). These sources examine the tension between viewing evaluation as an opportunity for institutional growth versus a compliance-driven mechanism aimed at securing funding. The study contributes to this debate by showing how Third Mission evaluation is perceived differently across institutional contexts. For example, in the German market-oriented systems, evaluation is often embraced as a formative opportunity for growth. In fact, evaluation services (including paid ones) related to the Third Mission, with a strong educational purpose, appear

precisely in the German context, which is the most open to market dynamics among the four. In Italy, Sweden and Portugal interviewees evidence the existence of compliance mechanisms both at organisational and individual levels.

With regard to the MICRO level, results provided new insights regarding the workload, recognition (or 'recognition deficit' as defined by Derrick, 2018), and incentives for individuals and contribute to the discourse surrounding the effects of evaluation on academics (Bianco, 2016; Bornmann, 2017; Bonaccorsi, 2018; de Rijcke et al., 2019) and how evaluation drives behavioural changes (e.g., Wouters, 2014; Franssen and de Rijcke, 2019). Discourses focused mainly on these three key topics Third Mission evaluation imposes significant burdens on both academic and administrative staff, who often have to manage these additional tasks alongside their core responsibilities like teaching and research. This increased workload is significant, considering that the evaluation processes are complex and time-consuming. Furthermore, there is a widespread absence of motivational incentives and recognition for individuals' efforts in Third Mission activities. Despite contributing to the institution's overall success in Third Mission evaluations, individuals often feel that their work goes unnoticed, receiving little to no tangible rewards, either financial or otherwise. Also, Third Mission evaluation is frequently not considered a meaningful factor in career progression or academic promotion. Unlike research and teaching, contributions to Third Mission activities often do not carry the same weight in performance reviews or promotion criteria, leaving individuals disincentivised to engage in these activities despite their potential societal impact. Interviews let emerge a shared perception across the four academies: namely that even though institutions may have a return on investment from evaluation, this is not the case for individuals. This cross-country comparison provides evidence that the individual discourse is less impacted by country contextual factors compared to the influences they have on MACRO and MESO levels. In fact, interviewees across all four countries have reported the same challenges and encounters. The comparison of interviews underscores a shared request for a more holistic approach to policy design in Third Mission evaluation, aiming to reach a more balanced ratio between institutional objectives and individual priorities. Literature has already recognised that institutions must strive to create an environment where individual needs and motivations are not only acknowledged but actively supported through concrete incentives and recognition mechanisms (Rosli et al., 2016; Torrance, 2019; Bandola-Gill et al., 2021). This analysis contributes by evidencing the request for specific policies to support the transversal alignment between individuals engaged in Third Mission activities, the strategic goals of their institutions, and both national and EU priorities. Moreover, from the analysis emerged a consensus that the MICRO level is the most suitable domain for fostering collaborative work at the EU level. As previously suggested in the literature (e.g., de Rijcke and Dahler-Larsen, 2014), interviewees recommend establishing common guidelines for evaluation of Third Mission. Additionally, interviewees emphasise the importance of sharing best practices among universities. This analysis thus contributes to the ongoing academic and policy discussions (e.g., Schmidt et al., 2010, Verderame, 2009; Yağcı, 2014) by pinpointing where European-level policy could effectively support the advancement of universities' Third Mission by creating a platform for cross-border cooperation.

In its closing, the section draws on European perspectives, including those from Lester and Sotarauta (2007), Pilonato, (2022), and Marginson (2016 and 2017), to frame the challenges of implementing evaluation models across diverse national contexts. The study further contributes to this discussion by identifying the ongoing quest for flexibility in Third Mission evaluation. The study highlights the request (emerged in all four countries) for adaptability in evaluation frameworks, particularly considering the growing involvement of professional evaluators. Whether the expanding jurisdiction of Third Mission evaluations within European higher education systems will be a further push towards market-oriented services remains an open question (Amaral, 2000; Agasisti and Catalano, 2006; Wolter, 2012; Venditti, 2013; Cini, 2018). Ultimately, the study's contribution to knowledge lies in its ability to show how evaluation practices are intertwined with national policies, competitive funding, and institutional behaviours, expanding the discourse on the role of evaluation in shaping the trajectory of higher education institutions. The following table illustrates effects of Third Mission related dimensions across these four European countries and across the different levels.

LEVEL	TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
Intro	Evaluation as driver of changes	Dahler-Larsen (2012), Hansen & Jaspersen (2013), Koryakina et al (2014), Bonaccorsi (2020), Viney (2022)	Identification of nudging traits in Evaluation of Third Mission	Evaluation among the competitive elements as strategic tools to guide academic behaviours

LEVEL	TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
MEGA	National socio- economic context	Fornasari (2016), Derrick (2018), Bonaccorsi (2018)	Use of competitive instruments to guide behaviours	Identification of evaluation as nudging instrument together with competitive funds. Exploration of rationales for choosing between evaluation and competitive fundings requires further research.
MACRO	Models of evaluation systems	Compagnucci & Spigarelli (2020), Bonaccorsi (2020)	Identification of different models of evaluation systems	How each model is affected by cultural, political, economic, and social specificities of the country
MESO	Institutional attitude towards evaluation systems	Langfeldt (2001 & 2004), Derrick (2018), Pingali (2019), Tennant et al. (2020)	Evaluation – Formative opportunities or rules compliancy?	Specific TM related evaluation services in a market-oriented system versus compliance for funds acquisition in state-driven systems
MICRO	Skills requirements	Derrick and Samuel (2016), Castro et al. (2016), Henke (2019), Ayoo (2020), Pohlenz (2022)	The changing role of academics in TM evaluation	Professionalisation of TM evaluation versus traditional peer-review
Closing	European ways towards TM evaluation	Lester and Sotarauta (2007), Pinheiro et al. (2012), Peter Scott (2015), Marginson (2016 & 2017), EUA (2019)	Challenges: market-oriented approaches to evaluation and jurisdiction for professional evaluators within the wide range of diversities of national contexts	Quest for flexibility in TM evaluation

Table 33 Research Question 3 - a synthesis

5.1.4 RQ 4 - How do country-specific evolution and evaluation of Third Mission relate to the European broader perspective?

The objective of the multi-perspective approach in data collection and analysis adopted in this thesis, is to elucidate the correlations and mechanisms shaping the relationship between national university systems and the European Union's institutional framework - a topic of increasing scholarly and political interest (Verderame, 2009). While the European discourse strongly emphasises finding ways to promote a pan-European agreement for "the Europeanisation of higher education" (Schmidt et al., 2010), the picture emerging from the wide range of interviews is that achieving this goal is fraught with challenges. The aspiration for unity in higher education (HE) at the European level encounters several significant challenges related to the diverse economic, social, systemic, and cultural contexts across EU countries. For instance, economic disparities, social inequalities, systemic differences, cultural diversity, policy fragmentation. This thesis has identified how these broad challenges influence the evolution of the Third Mission in higher education. For example, economic disparities between countries or even regions within the same nation can affect the capacity of universities to engage in community engagement and innovation activities, as institutions in regions with higher industrial concentration may have more resources to invest in these areas. Social inequalities can shape the types of Third Mission activities prioritised by universities, with some focusing more on addressing local social issues, while others may emphasise economic development. Systemic differences, such as varying governance models, influence how universities implement and measure Third Mission initiatives, with more autonomous institutions possibly having greater flexibility to innovate in their approach. Cultural diversity also plays a role, as differing national values and attitudes towards community engagement can lead to varied interpretations and implementations of the Third Mission across Europe.

This thesis contributes to the existing scholarly literature surrounding the diverse and complex relationships between national states and the European Union (Giuliani, 2015; Dakowska, 2019) through the vertical comparison of data emerging from four sets of national and one set of international interviews. It illustrates how the varying policies and strategic priorities enacted by the EU significantly influence the implementation and outcomes of the Third Mission within different national contexts.

Two major key themes have emerged from interviews, which are discussed here as empirical examples: Open Science (Vicente-Saez and Martinez-Fuentes, 2018) and gender equalities in research (Perkmann et al., 2013; Teelken and Deem, 2013; Brooks et al., 2014; Sugimoto et al., 2015; Rosa, 2020). Interviewees noted that countries like Sweden and Germany have actively embraced and integrated the concepts of Open Science and gender equality within their Third Mission systems. In contrast, countries such as Portugal and Italy have exhibited a less evolved integration of Open Science and gender equality policies within their Third Mission approaches. Interviewees attributed this divergence to a range of factors, including differences in national research policies, resource allocation, and the level of institutional support for these initiatives. Interviews also suggest that the inclusion of Open Science and gender equality within the Third Mission policies at the national level has played a critical role in their implementation. In Sweden, both priorities have been included as criteria within the assessment of quality assessment frameworks at institutional level. In Germany, instead national funding require compliance with Open Science principles and gender equality standards as conditions for receiving third party grants. A speedy alignment between policy priorities and Third Mission practices, has been noted by a representative of the Swedish Research Council, has created a strong incentive structure that drives universities to adopt and prioritise these policies. On the other hand, in Italy and in Portugal, despite governmental efforts and commitments for Open Science. Notably, the Foundation for Science and Technology (FCT) has been a key driver in promoting Open Science practices (FCT web, 2024) in Portugal, similarly the Ministry for Research and University has done it in Italy. However, interviewees in both countries have noted that the implementation has been more fragmented, and the effects appear more inconsistent. This does not mean that these countries do not address these challenges; rather, from interviews emerges a less evident awareness of the potentialities of addressing them through the universities' Third Missions. In these other contexts, while issues related to genre, equalities, open science and environment may still be present and addressed, they may not appear to be as prominently or explicitly connected to policies on Third Mission. This thesis thus extends the existing literature (e.g. Corbett, 2005; E3M, 2008; Nedeva, 2013; Pinheiro, 2015; Zacharewicz et al., 2019) by providing empirical evidence that the effectiveness and scope of the Third Mission are significantly shaped by external policies, particularly European policies. It underscores the importance of considering the

heterogeneity of relationships between the European Union and each of member states when analysing how universities across different European regions approach Third Mission.

The perspectives shared by the interviewees reveal significant differences depending on their role. At the EU level, there was unanimous recognition of the richness and challenges posed by diversity (Teichler, 2012). International interviewees have evidenced that EU bodies and intermediary institutions (e.g. university associations) have made substantial efforts to build bridges and create a common understanding, a development acknowledged by academics. They testify that there is a deep level of collaboration in Europe that requires a common basis while still accommodating diversity. European standards and guidelines, established since 2005, have provided a common understanding allowing for significant experience to be gathered. Conversely, some academics across all four case-study countries express scepticism, particularly regarding the tendency to homogenise trends and steer countries with norms and practices that disregard the specificities of each system, in line with Teichler's analysis (2012). They further argue that Europe suffers from an overemphasis on standardisation, which often neglects the importance of diversity in higher education. Scholars (e.g., Benneworth et al., 2017; Maassen and Stensaker, 2011) have explored how universities manage the complex interplay between local, national, and European demands, with particular emphasis on their Third Mission activities. Scholars have also largely discussed that Third Mission misses a comprehensive and univocal definition (Laredo, 2007; Derrick, 2018). Results from the analysis of the interviews suggests that the priority would not lie in looking for the 'correct and unanimously accepted definition'. Instead, interviews indicate that across all four countries, there is a shared aspiration to value the richness of European diversity within the higher education sector and that this strictly concerns Third Mission. Interviews also suggest that there is an underlying consensus on the importance of establishing common foundational values for both the operationalisation as well as the evaluation of Third Mission. In fact, academic interviewees across the four case-study countries have called for indicators that reflect this diversity at all levels - systemic, national, and institutional - rather than striving for standardisation. This concern is particularly relevant for indicators related to the Third Mission of universities, which is closely tied to the specific economic and societal contexts of each institution. From interviews emerged a shared strong sentiment that quality, not quantity, should be the focus, with calls to abolish quantitative indicators altogether. It emerges clearly that the modern concept of impact measurement has highlighted the need to reorganise priorities and methods, starting with the realisation that quantitative methods are neither suitable nor sufficient for assessing the non-scientific impact of research. Reflections on the Third Mission have generated new ideas that are materialising into concrete political proposals, such as the European Commission plans for an EU-wide agreement on research assessment, led by the Coalition for Advancing Research Assessment (CoARA), aiming to reform research assessment by rewarding ethics, integrity, teamwork, and diverse outputs alongside research quality and impact, while minimising reliance on quantitative indicators. The agreement also seeks to influence broader academic assessments, including teaching and societal contributions. The European Commission has already begun implementing actions, such as an Erasmus+ funded projects integrating qualitative metrics into existing quality control systems across 19 countries. Interviewees regard the relationship between national and European levels as crucial, particularly emphasising the importance of European engagement in Third Mission matters. They view this involvement as essential for advancing both the Third Mission and broader higher education objectives, as it provides opportunities to overcome fragmentation, enhance coordination. Interviewees regard the relationship between national and European levels as crucial, particularly emphasising the importance of European engagement in Third Mission matters. They view this involvement as essential for advancing both the Third Mission and broader higher education objectives, as it provides opportunities to overcome fragmentation and enhance coordination. The insights gained from the comparison of interviews at both national and international levels significantly contribute to the ongoing discourse on achieving cohesive and collaborative progress in higher education in general (Kwiek and Kurkiewicz, 2012; Bölling and Eriksson, 2016; Corbett, 2016) and specifically in evaluation-alike matters (e.g. CoARA). This contribution is made by providing empirical data that underscores how the modern concept of impact measurement has prompted the need to reorganise priorities and methodologies to comprehensively assess the broader impacts of universities.

TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
'the Europeanisation of higher education'	Schmidt and Tippelt (2005), Giuliani, 2015, Dakowska, 2019	Identified how these broad challenges influence the evolution of the Third Mission in higher education	Achieving this goal is fraught with challenges
Interrelation of TM policies with other EU policy instruments	Open Science: Vicente-Saez and Martinez-Fuentes, 2018 Gender equalities in research: Perkmann et al., 2013; Teelken and Deem, 2013; Brooks et al., 2014; Sugimoto et al., 2015	DE: National funding requires compliance with Open Science principles and gender equality standards as conditions for receiving third party grants SE: Speicy alignment between policy priorities and Third Mission practices PT & IT: Implementation has been more fragmented, and the effects appear more inconsistent	This research underscores the importance of considering the heterogeneity of relationships between the European Union and each of the member states when analysing how universities across different European regions approach Third Mission
Achieving cohesive and collaborative progress in higher education	Kwiek and Kurkiewicz, 2012; Bölling and Eriksson, 2016; Corbett, 2016	Importance of establishing common foundational values for both the operationalisation as well as the evaluation of Third Mission	EU involvement in TM related matters as essential for advancing both the Third Mission and broader higher education objectives, as it provides opportunities to overcome fragmentation and enhance coordination
Standardisation & Indicators	Benneworth et al., 2017; Maassen and Stensaker, 2011	There is a shared aspiration to value the richness of European diversity	Contribution is made by providing empirical data that underscores how the

TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
		within the higher education sector and that this strictly concerns Third Mission	modern concept of impact measurement has prompted the need to reorganise priorities and methodologies to comprehensively assess the broader impacts of universities

Table 34 Research Question 4 - a synthesis

5.1.5 RQ 5 - How is Third Mission and its evaluation impacting on key stakeholders?

The results of this research introduce new knowledge that complements existing literature on changes in higher education institutions, while also revealing unexpected effects and complexities associated with Third Mission activities across different levels - micro, meso, and macro.

At the micro level, the findings expand on the insights of Nedeva and Boden (2012), which had highlighted the need for recognition of Third Mission contributions at individual level. This thesis underscores the importance of a **formal and international acknowledged recognition** of Third Mission contributions, the development of skills for all actors involved, and the adoption of flexible evaluation approaches. At the meso level, the study builds on the work of Laredo (2007), Koryakina et al. (2015), and Perez-Vico et al. (2014 and 2017). Existing literature emphasises the effects of Third Mission at institutional levels, such as governance and leadership (Stolze and Sailer, 2022), specific TTO offices (Brescia, 2016), etc. This thesis highlights a specific phenomenon that links Third Mission with institutional role reconfigurations, namely the blurring of boundaries and role definitions. Universities that have traditionally focused on research or teaching are required to balance societal engagement, which has led to internal conflicts over resources, priorities, and institutional identities (Witte et al., 2008). This shift has also resulted in a growing convergence with institutions such as Fachhochschulen in Germany and Polytechnics in Portugal (Alves, 2015),

which have long been dedicated to social engagement. By extending Witte's conceptual framework to the Third Mission, this research contributes to a deeper understanding of 'de-institutionalisation' - a concept initially used to describe the standardisation of degree types through the Bologna Process (Witte et al., 2008) - by examining how the Third Mission has intensified this blurring of institutional distinctions. Moreover, this research points to the fact that this disruption of traditional roles and boundaries within tertiary education, is particularly significant in countries with dual higher education systems like Germany and Portugal. In this context, different types of institutions are implementing similar missions, diluting their original character and functions, despite these roles being defined by law. At the macro level, the findings the work of Bonaccorsi (2014), and Koryakina (2014), which observed the cultural shifts in academic dimensions through the spreading of the English language as 'lingua franca'. This thesis highlights the effects that the adoption of English as the primary language in academia has on the Third Mission. This shift that originated in research (to valorise research outputs globally) and in teaching (to reinforce internationalisation efforts) brings both opportunities and risks. While the use of English facilitates international collaboration, it also drives significant cultural changes. threatening the local dimension of Third Mission in that transferring outputs of research which is carried out in an international mindset and language into local communities, where there is a lack of English proficiency, represents the risk of a disconnect between the universities as knowledge producers and their immediate societies.

I conclusion, this research identifies three significant unintended consequences of Third Mission policy implementation, which previous literature has not organically addressed. First, the findings suggest that, contrary to policy intentions, the blurring of institutional roles and boundaries through the homogenisation of missions. Second, the gap between universities and their local communities has deepened in some cases, particularly in Portugal and Italy. This effect can be largely attributed to the composition of their entrepreneurial landscapes, where Third Mission activities have not effectively bridged academia and local industry. Third, the study brings to light policy incoherence as a key issue. One notable example is the push for the use of English in research. While this policy enhances the global scientific visibility of research outputs, it simultaneously limits the valorisation of research within local contexts, thus stifling the societal impact in those regions. In identifying these unintended consequences and incoherencies, the study provides a critical perspective

on the complex and multifaceted effects of Third Mission-related policy interventions. In addition, this research also evidences the emergence of a **common concern** that crosses all four case study countries surrounding the fact that the erosion of diversities (e.g., institutional, cultural, systemic) could reduce the unique academic landscape that has historically been a core element of Europe's global influence and intellectual heritage.

LEVEL	TOPIC	Bibliographic references	RESULTS	Knowledge Contribution
MICRO	Need for recognition of Third Mission contributions at individual level	Nedeva and Boden (2012)	Development of skills for all actors involved, and the adoption of flexible evaluation approaches	Importance of a formal and internationally acknowledged recognition of Third Mission contributions
MESO	Effects of Third Mission at institutional levels (e.g. governance and leadership, specific TTO offices, etc)	Laredo (2007), Koryakina et al. (2015), Perez-Vico et al. (2017)	Blurring of boundaries and changes in role definitions	Blurring of institutional roles and boundaries through the homogenisation of missions and introduction of TM
MESO	Institutional identities	Witte et al. (2008)	Disruption of traditional roles and boundaries within tertiary education	Contributes to a deeper understanding of the de-institutionalisation concept
MACRO	Cultural shifts in academic dimensions	Lepori (2012), Bonaccorsi (2014), Koryakina (2014)	English language as 'lingua franca'	Gap between universities and their local communities; policy incoherence as a key issue

Table 35 Research Question 5 - a synthesis

Summary of Chapter 5

Chapter 5 discuss the findings of this thesis by illustrating how responding to each of the 5 Research Questions contributes with new knowledge emerging from the analysis of interviews insights. The discussion highlights that Third Mission 's scope and understanding differ based on each country's national priorities, cultural, and socio-

economic contexts. The study also examines how policy frameworks, governance models, and organisational practices support or hinder Third Mission 's integration within institutions, revealing the varying mechanisms through which it becomes embedded in national systems. A critical component of the analysis is the evaluation of Third Mission activities, which is shown to link closely to national priorities and goals, while also being shaped by broader European policies and funding mechanisms. Through a vertical comparison of national and international data, the study uncovers common patterns and divergent strategies in the implementation and evaluation of Third Mission, ultimately contributing to a deeper understanding of Third Mission 's evolving role in contemporary European higher education and its impact on key stakeholders. This thesis also identifies unintended consequences that have emerged with the implementation of the Third Mission, as well as highlighting key policy incoherences. It brings to light a widespread concern about the risks posed by certain global trends and European policies, particularly in relation to the potential erosion of Europe's rich multilingual and multicultural heritage, which the Third Mission is supposed to protect and promote. Paradoxically, while the Third Mission aims to foster societal engagement and cultural preservation, the push for internationalisation and the dominance of English as the academic lingua franca may inadvertently undermine the very diversity it is expected to support.

Chapter 6 - Conclusions

6.1 Key considerations

The findings of this thesis address the growing challenge of developing a unified, pan-European strategy for the Third Mission by revealing the complex dynamics that exist within each country and highlighting how unique cultural, economic, and institutional factors shape diverse approaches to its implementation. By identifying the unique ways in which national traditions, cultural values, economic conditions, and regional needs influence universities' approaches to the Third Mission, this research provides evidence-based insights into the sources of barriers and challenges within current frameworks. It clarifies how specific aspects - such as fragmented policies, the intensification of competitive approaches, unequal access to resources, and inconsistent evaluation standards - hinder the establishment of a unified strategy that aligns with European ambitions. Previous research has revealed that although there are shared policy foundations, the practical implementation of the Third Mission varies significantly. Building on this groundwork, this research delves into the distinct approaches adopted by universities in Sweden, Germany, Italy, and Portugal, revealing how these variations are shaped by unique historical, cultural, and institutional legacies, as well as differences in economic structures and regional needs. Such differences affect how universities in each country interpret, prioritize, and operationalize the Third Mission, creating a landscape where policies that might be adopted straight forward in one context may falter or require adaptation in another. By examining these differences, the study sheds light on the need for adaptable frameworks that can accommodate local specificities while maintaining consistency with broader European goals. The analysis suggest that policies should consider flexible evaluation criteria, tailored support mechanisms, and localised resource allocation that can effectively address regional disparities and institutional capacities. This thesis underscores the importance of two main principles: on one hand, the request for context-sensitive policy interventions that honor national and regional variations while fostering a unified European vision for the Third Mission; on the other hand, the need for evaluation mechanisms that are not only standardised but also adaptable to contextual differences. A truly adaptable evaluation approach would

enable European policymakers to address disparities, creating more equitable opportunities for universities. Additionally, by highlighting the impact of evaluation on institutional practices, the thesis demonstrates how rigorous and context-sensitive evaluation can act as a catalyst, not only aligning university activities with national priorities but also promoting the institutionalisation of the Third Mission across Europe. The results, therefore, offer actionable insights for policymakers about the necessary steps to mitigate inconsistencies and encourage a system that respects national specificities while advancing European-wide goals. Ultimately, the research advocates for a balanced policy approach that addresses expectations and valorise efforts at Meso (organisational) and Micro (individual) levels; that values local contributions within a unified European framework; that enables universities to maximize their role in societal transformation on both local and continental scales; that strengthens the Third Mission's overall impact on societal transformation and economic resilience across Europe.

6.2 Study Limitations and Future Research Directions

This study, while grounded in a substantial number of interviews collected at national in four case study countries and integrated by international interviews at European level, presents certain limitations that have influenced the findings and left some questions unanswered. The richness of the data has been both a strength and a challenge. While it enabled the identification of a broad range of common themes, the sheer volume and complexity of the data necessitated a focus on only key themes, leading to the exclusion of potentially relevant aspects. Additionally, the study's duration, extended due to unforeseen events such as health issues and the pandemic, could have jeopardised the validity of the data. However, ongoing engagement with current debates and literature has confirmed that the research questions and findings remain relevant and timely. The prolonged period of research, in fact, provided an opportunity to validate the robustness of the results and the overarching approach, underscoring the necessity of a multilinear and multi-layered analysis of the dynamic and synergetic development within the university sector.

Given these limitations, there are several avenues for future research that could build on the current study. Given these limitations, several avenues for future research could be pursued to build on the current study. The data collected could be leveraged to conduct a more in-depth exploration of certain aspects that were only partially addressed within the broader analytical framework. These aspects, while integral to the results mosaic, were not individually fully analysed due to the necessity of maintaining focus and adhering to space constraints. For instance, further investigation into the evolution of university life beyond the Third Mission would be valuable. Additionally, exploring the cultural context and the professionalisation of evaluators (Pohlenz, 2022), as well as the behavioural implications of Third Mission evaluation at various levels of academia (Hoelscher, 2015; Di Bernardino and Corsi, 2018), presents rich areas for further analysis. The cross-country comparative approach employed in this research is particularly valuable, and future research could expand this comparative analysis to include a broader range of European countries. It would also be insightful to examine countries with established national evaluation frameworks, such as the UK, Netherlands, Austria, and Italy, in comparison to others. Moreover, extending the analysis to include extra-European countries, like Australia, the USA, and BRICS nations, would provide a more global perspective on the role of cultural context in shaping universities' Third Mission. Finally, a focused study on the ongoing EU-level discussions and initiatives related to evaluation in higher education, particularly concerning the availability of resources, would be crucial. Understanding the impact of financial resources on evaluation practices could uncover significant insights into potential distortions and their repercussions on both the actors involved and the credibility of the evaluation process itself. This would contribute to a more comprehensive understanding of the challenges and opportunities for Third Mission within the European higher education landscape.

6.3 Surprises

Several unexpected insights emerged during the research, revealing both the complexity and the ongoing relevance of the Third Mission in higher education. One of the most striking surprises was the sheer quantity of existing literature on the subject, which far exceeded initial expectations. This vast body of work, accumulated over decades, indicates the significant and sustained interest scholars have shown in university engagement with society. However, despite this extensive research base, the study uncovered a notable fragmentation in the policies and frameworks guiding

the implementation of the Third Mission across different countries and institutions. This lack of coherence suggests that, while universities worldwide recognise the importance of their societal roles, there is no standardised or universally accepted approach to how these roles should be operationalised. Another surprise was the enduring prominence of the Third Mission in both academic and policy discussions. Despite being a focal point of research and debate for many years, the topic continues to occupy a central position in scholarly discourse and remains a priority on policy agendas at both national and institutional levels. This continued relevance highlights the dynamic nature of the Third Mission, suggesting that as societal needs evolve, so too do the expectations placed on universities. It also underscores the idea that university-society engagement is not a static concept, but it is in continuous evolution. The persistence of this topic signals that the Third Mission remains a critical area for future research.

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APPENDIX – Questionnaire

Three series of structured interviews have informed the analytical framework. In each country, and at European level additionally, the following profiles have been interviewed:

- evaluation experts
- academics/researchers
- policymakers

Chapter 3 details the methodology used to design and run the interviews.

The following table include the original matrix. For each typology the questionnaire has been slightly adapted.

Semi-structured interview:

Questions and Prompts	Focus
1. INSTITUTIONALISATION OF THIRD MISSION	
How would you describe the development of HE system in Europe and in your specific country during the last decades? What aspects were mostly significant? Would you say that changes were originated by internal or external tensions?	
In your opinion, which are the milestones in the HE developments of the last 2 decades? In your opinion which role did governmental bodies and HE institution play?	Defining the CONTEXT
Would you say that the overall HE development process has been participatory? To which extent? What could have been done differently, if anything, with regards to involvement of actors? How would you define Third Mission at the current state? Which, would you say, is a generally agreed definition on Third Mission?	

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Who DECIDES
Who DOES
Acceptance
Defining the
Defining the OBJECTIVES of evaluation

Should you compare evaluation of Third Mission with evaluation of	
teaching and research in your country, which would you say are the	
commonalities and differences?	
How would you define the objectives of the evaluation of Third Mission	
in your country with respect to QUALITY? E.g. directed to quality	
control? Directed to quality development? Why?	
Would you say that the overall assessment approach is adequate?	
Why/why not?	
Which dimensions of Third Mission are considered in the national	
evaluation?	
Which dimension is predominant? E.g. technology (technology transfer), commercialisation of results, etc.?	
To which extent is the social and the cultural dimensions included in	Defining the
the evaluation of Third Mission activities?	OBJECTS of evaluation
How would you say that the evaluation model relates with the	Cvaldation
international and with the local/regional dimensions of Third Mission	
activities?	
In your opinion, do current evaluations address the "impact"?	
Why/why not?	
How?	
How would you describe data collection and data elaboration	Defining the
processes?	evaluation METHODOLOGY
As far as you know, how are comparability issues addressed?	INIZ TITO DO CONT
As far as you know, how are contextualisation issues addressed?	
As far as you know, how are calibration issues addressed?	
How would you describe indicators?	
And the balance between quantitative and qualitative indicators?	
How would describe the role and the work of the evaluators?	
Do you know of any difficulties/obstacles in their work?	
Do you know of any criticism/suggestions about evaluation of HE in your country and/or Europe?	