## CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY-LED INNOVATION

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#### Abstract

Building on large-scale resource-based expansion in manufacturing sectors, China has enjoyed Yet its related social and environmental costs are becoming unprecedented growth. overwhelmingly high to the extent that sustainability has become a major concern for policymakers and management practitioners home and abroad. We explore the nexus between corporate social responsibility (CSR) practice and sustainability-led innovation (SLI) in automotive joint ventures (JVs) in China. Building on institutional theory, we envisaged a multiple-case study to investigate whether/how the practice of CSR fosters the development of sustainability-led innovation in three leading automotive JVs in China - BMW Brilliance, Fujian Benz and SAIC Volkswagen. Drawing from the publicized disclosure contents of the CASS-CSR 4.0 and Global Report Initiative 2019, cast study results suggest that firms apply a hybridization approach to practice CSR, nurturing the operational optimization in the development of SLI, but not the organizational transformation and system change levels. Theoretically, our study contributes to two interrelated literatures - CSR and sustainability-led innovation. It offers the first (to our knowledge) CSR in China into the development of sustainability-led innovation. Empirically, our study sheds light in how joint venture actors with different cultures and social values, practice CSR in a cooperative manner that eventually leads to sustainability-led innovation, providing an alternative option to policymakers and managers who used to divorce CSR from business/economic objectives.

## 1. Introduction

The awareness of corporate social responsibility (CSR) has been leaped in an incredible speed lately. While some companies consider social responsibility as important only when economic security is guaranteed (Chu, Chen and Gan, 2020); others deem social and sustainability issues as drivers for innovations, contributing to their economic security (Bekun et al. 2019; Chu et al. 2020). Building on large-scale resource-based expansion in manufacturing sectors, China has enjoyed unprecedented growth. Yet its related social and environmental costs are becoming overwhelmingly high to the extent that sustainability has become a major concern for policymakers and management practitioners (Zhang, 2021). This article explores the association between corporate social responsibility (CSR) practice and sustainability-led innovation in automotive joint ventures (JVs) in China.

Building on institutional perspective together with legitimacy, stakeholder and resource-based theories (Matten and Moon, 2020), we envisaged a multiple-case study to explore the link between the practice of CSR and the development of sustainability-led innovation (SLI) in three leading automotive joint ventures (JVs) in China - *BMW Brilliance, Fujian Benz and SAIC Volkswagen.* Three unique case studies allowed us to observe the complex institutional factors in social, economic and political dynamics (Bekun et al., 2019). Data were mainly drawn from the publicized disclosure contents of the CASS-CSR 4.0 and Global Report Initiative 2019. Content analysis was employed to analyse data, following an iterative process of skimming, reading and interpretation (Landrum and Ohsowski, 2018). Results then constantly compared with data from phone interviews, company collaterals and relevant websites to increase research validity.

Theoretically, our study contributes to a continuous conversation upon two streams of research – CSR and sustainability-led innovation. It offers the first (to our knowledge) CSR study into the development of sustainability-led innovation. Empirically, our study sheds light in how the CSR practice leads to the development of SLI in cross-national joint ventures in one of the world's largest emitters of greenhouse gases major actors practice CSR - China. We evidence how a cooperative manner can be formed and conflicts can be managed in such a challenging endeavour.

Next section provides a review of the relevant literature, particularly in the cross-national studies. We then present our three cases, followed by findings and discussion. This paper is concluded by two major propositions together with the implications to theory and practice, limitations and recommendations of future research.

## 2. Literature

In the extant literature, institutional theory<sup>1</sup> offers a useful lens to understand cross-national cooperation of corporate governance, providing valuable insights into the exploration and comparison nature within idiosyncratic national, cultural and institutional contexts (Tempel and Walgenbach, 2007). Neo-institutional theory further provides a helpful framework to understand cross-national JV cooperation, highlighting how regulative, normative and cognitive processes lead to increasingly standardized and rationalized practices in organizations across national boundaries. Driven from the neo-institutional theory, Scott (2001) suggests three-level analyses: (a) institutions in the society, (b) governance mechanism, and (c) actors. Upon which, societal/global institutions are at the top level, guiding the direction and motions of the lower levels. Following this line of study, Matten and Moon (2008) propose the concept of explicit and implicit CSR, deepening the understanding of the practice of CSR in different market economics. Explicit CSR stresses corporate policies that assume and articulate responsibility for some societal interest, where firms often involve voluntary programmes and strategies to combine social and business value. Implicit CSR, on the other hand, underlines corporations' role within the wider formal and informal institutions for society's interests and concerns. In studying cross-national CSR practice, the explicit and implicit CSR framework outlines the institutional differences in the economics between liberal market and coordinated market in three major dimensions: (1) culture/value, (2) actors and (3) political governing (Scott, 2001). Along this research, Matten and Moon (2008) suggest that institutions encouraging individualism and providing discretion to private economical actors in liberal markets would be considered national systems in which one would expect to find strong elements of explicit CSR. In contrast, institutions fostering collectivism and highlighting systemic and obligatory actors in *coordinated markets* would be considered to have strong inclination of implicit CSR. In this way, political governing in liberal markets tends to have policies allowing discretion, whereas in cooperated markets tend to have policies enforcing obligations.

Three notable themes are of importance. First, the explicit *commitments* to culture/value (democracy, capitalism, or communism) have historically grown institutional frameworks (Pasquero, 2004; Matten and Moon, 2020). Prior studies suggest management commitment to CSR practice is highly related the ruling party's agendas and leaders' interests (e.g. Muttakin Second, given its societal orientation, the importance of stakeholders' et al., 2018). interdependence and collaboration in CSR practice is highlighted, given its societal orientation (Aguilera et al. 2007). This is particularly the case when firms face significant public and media attention (Schmidheiny, 2006). Finally, while SCR has long been associated with philanthropy (i.e. the desire to do good for others), new rationale is emerged. For example, Moon et al., (2017) show firms increasingly adopts a market orientation (with knowledge about customers and competitors) to present innovative business models with respect to benefits and firms' performance to the extent that some firms (e.g. Uniever) are now integrating CSR into their core business strategy. This stream of studies underpin that commitment (either from governing entity or from management) guides stakeholders' cooperation and market/customer orientation, while stakeholders cooperation are interrelated to market/customer orientation. Intriguingly, these features appeared as key dimensions in the CSR regulations in China.

CSR is a relatively new concept in China. It is only until the mid-2000s, the Chinese Central Government has been actively urging firms in China to practice CSR policies (Chu et al., 2020).

<sup>&</sup>lt;sup>1</sup> See Augilera and Jackson (2003) and Tempel and Walgenbach (2007) for more details.

The Corporate Social Responsibility Research Centre of the Chinese Academy of Social Sciences (CASS) was established in 2008. In November 2009, the Centre released the first CSR Report Guidance (CASS-CSR) for Chinese enterprises - an important milestone in sustainable development in Chinese history. The guidance was then revised (CASS-CSR 4.0) along with the GRI (Global Reporting Initiative) standards, and released in 2018 and a revised version in 2020. In China, companies observe the CSR Report Guidance by releasing the CSR disclosure contents. The disclosure contents provide detailed information and description about how the firm observe key dimensions under the CSR guidance from management economic responsibility to customer/market orientation and technology capacity. Notably, CASS-CSR follows the Chinese authority guidance; the GRI standards on the other hand provide the international Sustainability Reporting Standards. Similarities as well as differences exist between The GRI standards and CASS-CSR. Briefly, the disclosure content of the report preface remains the same. Notably, the dimensions of economic responsibility (which entails the sub-dimensions in management commitment and technological capacity) and customer orientation (or market orientation) are included in both CASS-CSR and GRI. Nevertheless, two key dimensions are highlighted in GRI (2019), but not in CASS-CSR (2018 and 2020): Shareholders and Equality. Table 1 provides more details about the CSR dimensions.

- Insert Table 1 near here -

On the other hand, 'sustainability' is increasingly becoming a major and growing driver of business change. Sustainability-led innovation (SLI) raises incentives and opportunities 'for doing what companies do better', and engaging in finding new and more efficient ways of 'doing more with less' (Seebode, Jeanrenaud and Bessant, 2012). Interestingly, in managing SLI, the topics of management commitment, stakeholder, and market/customer have also drawn much research interests. For example, Klein, Spieth and Heidenreich (2021) show management committing to sustainability provides an opportunity to foster new opportunities and to enhance innovation activities. Fliaster and Kolloch (2017) show that network ties among stakeholders can be both conductive and detrimental to the sustainability-led innovation. And Albino et al (2012) find that collaborations with actors both within (customers and suppliers) and outside (government and NGOs) the supply chain facilitate firms' endeavours in green Equally importantly, while the dynamic of management commitment, innovation. stakeholders' cooperation and market orientation has been highlighted in managing sustainability-led innovation, an additional factor is emerged in SLE literature - a firms' technology orientation. For example, Hall and Vredenburg (2003) have pinpointed that a company's success in brining sustainability-led innovation to market depends on how the company deals with the impact of new technology on its stakeholders (e.g. customers). Thus, prior literature point to the importance of management commitment, stakeholder cooperation and market/technology orientation in the study of CSR as well as SLI.

To study how CSR practice affects the development of sustainability-led innovation, the extant literature provides a useful framework (see Tidd and Bessant, 2022) involving three evolving phases: (1) Operational optimization (2) Organizational transformation and (3) System building. Three levels of innovation development are different from their approach, objective, outcome and the relationship to the firm. We hereby provide a summary of these three levels. The first phase '*operational optimization*' is realized through an eco-efficiency approach. The innovation objective at this level aims at 'doing the same things better'. It focuses on

compliance and efficiency. As a result, the outcome at this level focuses on reducing harm with incremental improvements to business as usual. The second phase '*organizational transformation*' is undertaken in seeking new market opportunities through novel products/services or business models. Its innovation objective is 'doing good by doing new things, seeking to create shared value as an ultimate outcome. At his level, firms achieve fundamental shift in firm purpose. The third phase '*systems building*' is embarked on a societal change, highlighting cooperation and co-evolution of innovative solutions across stakeholders. The innovation objective at this level is 'doing good by doing new things with others' through novel products/services or business models that are impossible to achieve alone.

## 3. Three Case Studies

To explore the association between the practice of CSR and the development of SLI, we carried out case-study research that allows us to gaining in-depth understanding of the empirical phenomenon (Yin, 2014; Eisenhower 1991). Three unique case studies allowed us to observe the complex institutional factors in social, economic and political dynamics (Bekun et al., 2019). The fact that all three cases were established in Sino-German joint ventures and in the automotive industry granted our study with better reliability and vitality to investigate crossnational cooperation in the topics of CSR and sustainability-led innovation. Notably, the automotive industry which is under the manufacturing industry, plays an important role corporate social responsibility for protecting the environment, including ensuring employee protection, product safety, and contributing the society overall. Furthermore, three studied JVs have rich experiences in operating in Chinese market. In this regard, SAIC Volkswagen has been operated in China for 35 years, which is the longest among three JVs. BMW Brilliance and Fujian Benz have 17 years and 13 years, respectively. Three JVs' are comparably more familiar with regulations, rules and social norms in China, contributing to our study in the topics of CSR practice and sustainability innovation.

Data were mainly drawn from the publicized disclosure contents 2018 and 2020 where the CAS-CSR 4.0 guidance and Global Report Initiative 2019 were observed. To analyze a huge amount of CSR disclosure contents, we first carried out a systematic procedure to review and evaluate disclosure contents through an iterative process of skimming, reviewing and interpreting. We then searched cross-case patterns to shape propositions (Eisenhardt 1991; Yin 2014).

Three JVs

BMW Brilliance Automotive Ltd. (BMW Brilliance)<sup>2</sup>:

<sup>&</sup>lt;sup>2</sup> See Company Overview of BMW Brilliance Automotive Ltd:

http://investing.businessweek.com/research/stocks/private/people.asp?privcapId=11712807.

On 27 March 2003 BMW and Brilliance Auto agreed to form a joint venture to produce BMW cars for the Chinese market, with BMW holding a 50 per cent stake, Brilliance Auto 40.5 per cent and the Shenyang municipal government 9.5 per cent. BMW and Brilliance agreed to invest an initial €450 million (US\$483 million) in the venture. The first Chinese-made BMW, a BMW 325, was sold in October 2003. Table 2 provides examples of how BMW-Brilliance practices CSR in different dimensions and sub-dimensions.

- Insert Table 2 near here -

*Fujian Benz Automotive Co., Ltd. (Fujian Benz)*<sup>3</sup>:

Founded in June 2007, Fujian Benz is a light commercial vehicle manufacturing company based in Fuzhou, and a joint venture between Daimler Vans Hong Kong Limited (a joint venture of the Mercedes-Benz Group and China Motor Corporation of Taiwan) (50%), BAIC Motor Corporation Limited (35%), and Fujian Motor Industry Group Co., Ltd (15%). More details about how Fujian-Benz practices CSR in key dimensions and sub-dimensions are provided in Table 3.

- Insert Table 3 near here -

SAIC Volkswagen Automotive Co., Ltd. (SAIC Volkswagen)<sup>4</sup>:

AIC Volkswagen Automotive Co., Ltd., formerly known as Shanghai Volkswagen Automotive Co., Ltd. is an automobile manufacturing company headquartered in Anting, Shanghai, China and a joint venture between Volkswagen Group and SAIC Motor. It was founded in 1984 and produces cars under the Volkswagen, Škoda and Audi marques. It is the second automobile manufacturing joint venture in China after American Motors and the first German car manufacturer to enter China. Table 4 provides examples of how S-V practices CSR in different dimensions and sub-dimensions.

- Insert Table 4 near here -

<sup>&</sup>lt;sup>3</sup> See Company details of Fujian Benz: <u>https://www.fujianbenz.com</u>.

<sup>&</sup>lt;sup>4</sup> See Company website for more details: <u>https://volkswagengroupchina.com.cn/en/partner/saicvolkswagen</u>.

#### 4. Findings and Discussion

This study explores the practice of CSR in three automotive JVs, looking into how the CSR practice facilitates the development of sustainability-led innovation. Cross-case pattern analysis results emerges important findings.

First, much evidence show that under clear managerial leadership, cross-national JVs sensibly infuse a bidirectional integration balancing different cultures, values and political governing systems. In a strong societal and regulatory culture such as China, we in effect did not anticipate a hybridization approach in firms' CSR practice in China, let alone a consistent pattern from three cases. Yet our case studies provide testimonies. For example, Dr JonannWieland (President and CEO of BMW-Brilliance) has clearly stated: 'The European Union submitted an updated and enhanced Nationally Determined Contribution with a target to reduce greenhouse gas emissions by at least 55% by 2030 from 1990 levels, while the Chinese government committed to achieving carbon neutrality by 2060. BMW Brilliance fully supports both of these goals, and will continue to create world-leading sustainable mobility technologies that accelerate the world towards a greener future.' (BMW-Brilliance Sustainability Report, 2020:02). Second, the multiple-case study results points to the notable importance of cooperation among shareholders and stakeholders in the practice of CSR, although the endeavours towards shareholders and stakeholders is mainly under global CSR standards but not under CASS-CSR guidance. For example, SAIC-Volkswagen stresses the 'partnership' for the goal where full integration CSR into supply chain management is explicitly specified (Dimension: Shareholders & Stakeholders, SAIC-Volkswagen, CSR Report 2020). Finally, a cross-examination further reveals that the above endeavours further benefit firms in seeking market orientation and in enhancing technological capacity. For example, BMW-Brilliance explicates that the company's offers to their customers is a result of a 'customer-centric focus' on delivering a premium experience (Dimension: Customer orientation, BMW-Brilliance CSR Report 2020). The emphasis upon creating an innovative environment through the IT and digital technology is a pivotal key to enhancing customer orientation (Dimension: emphasize technology & Innovation, BMW-Brilliance CSR Report Notably, the company's (BMW-Brilliance) strategic cooperation with the local 2020). government on the areas of mutual interest and cooperation could be the key driver to shaping both technological and market orientations. Similar phenomena are found in the cases of Fujian-Benz and SAIC-Volkswagen. For example, SAIC-Volkswagen has boasted its costeffective and high-quality products and services that met local market requirement in China (Dimension: Customer orientation, SAIC-Volkswagen, CSR Report 2020).

Drawing from three case studies, the comparative evaluations of CSR practice reveal that actors, who have institutionalized under their idiosyncratic culture/value and political governing system, tend to adapt to change in their business environment, resulting in deinstitutionalization of CSR practice. This finding echoes prior studies (e.g. Kim et al., 2013; Reddy and Hamann, 2018) highlights that there exists new implicit/explicit balances of CSR practice when tensions appeared between existing and new regulatory demands. Research (see e.g. Jamali and Karam, 2018) in this area further suggests that the roles of implicit (coordinated market economics) institutional factors tend to share the way explicit (liberal market economics) CSR is adopted, in developing and emerging markets in particular. Indeed, our three case studies suggest that while CASS-CSR regulations are clear and well observed, our

JVs have (sensibly) adopted the dimensions from the global CSR standards in maintaining the balance between the orientation of market/technology and harmonized society in local market. To this end, Li (2016), who applied the concept of harmonious society influenced by Chinese historical tradition of Confucianism, highlights the significance of the interaction of people in both scientific and harmonious development. Aligned with this line, Wang and Juslin (2009) used both Confucianism and Taoism suggest a harmony approach to CSR, underlying the features of respecting nature and loving people. In this paper, we borrow the term 'hybridization' from Matten and Moon's (2020) work where the twin processes of the underlying explicitization and implicitization is depicted. We propose that, cross-national JVs apply a hybridization approach in their practice of CSR, where a balanced integration (of idiosyncratic culture/value/governing system) guides the managerial leadership and commitment (Grayson and Kakabadse, 2013). Following this balanced and integrated managerial commitment, firms adopt strategic cooperation among their networked actors to strengthen their market orientation, to enhance technological capacity and to maintain a harmonized society.

In order to examine whether/how CSR practice leads to the development of sustainability-led innovation, this study is guided by the development of sustainability-led innovation model in three phases – operational optimization, organizational transformation and systems building. Results of our multiple-case study suggests that the practice of CSR facilitates our sample firms to do well in the first phase – *operational optimization*, underlying the objective of 'doing the same thing better' and the outcome of 'reduces harm' through incremental innovation. For example, BMW-Brilliance explicitly stated in their CSR report that to observe the economic responsibility dimension, the company '*explores innovative technologies that optimize production and non-production areas. Creating an innovative environment, through the use of digital production, intelligent data analysis, intelligent logistics and innovative automation to improve the flexibility and quality of production*' (Dimension: Economic responsibility, BMW-Brilliance CSR Report 2020). Fujian-Benz highlights their CSR practice: '*The corporation insists on continuously boosting the technological progress of the supply chain with its own technological advantages and provides technical support for the industry to effectively promote the technological development of China's automobile manufacturing industry*'.

In the extant literature, the notion that firms commit to and integrate social and sustainability issues into their business processes and operations is increasingly recognized (e.g. McKinsey, 2011; PriceWaterhouseCooper, 2014). For example, Adams and colleagues (2016), who study 100 scholarly articles in sustainability-led innovation and 27 grey sources (e.g. government) during 1992, 2002 and 2012, conclude that management commitment to sustainability has a positive relationship with business performance, improving the competitive advantage of differentiation from competitors. Similarity Foss and Saebi (2017) who study 150 relevant articles between 2000 and 2015, suggest that a firms' commitment to sustainability drives the innovation, resulting in a new business model. Unexpectedly, our study reflects somewhat different results. Our three cases suggest that, in observing CSR, companies (cross-national JVs) commit to CSR and sustainability helps the development of innovation in business operations. Yet, the innovation development mainly confines within incremental innovation and only up to the level of operational optimization. Results of our case study however do not support that the practice of CSR helps firms for sustainability-led innovation to achieve the organizational transformation, nor systems building stages. Prior studies (e.g. Cambell, 2007) have suggested that companies are 'pressurized' by governmental regulations and public influence to integrate a comprehensive understanding of sustainability as the balancing of social, environmental and economic goals (Hall et al., 2010, Klein, Spieth and Heidenreich, 2020). This raises the question of the extent of firms' commitment in sustainability to the business performance. The existing literature however provides little research to this enquiry, leading to an important area for further research.

## 5. Conclusion

Three implications derived from our study are noteworthy. First, in a setting of cross-national JVs in China, the practice of CSR leads to sustainability-led innovation up to the operational optimization stage, facilitating the development of incremental innovation, yet remaining business as usual. Second, while CSR regulations and public influence may pressurize firms' commitment to sustainability, the practice of CSR does not guide companies' sustainabilityled innovation to achieve organizational transformation for business model innovation and new market opportunities (Foss and Saebi, 2017). This implication is of importance. As discussed earlier, the commitment to sustainability contributes to firm's business performance through new business model for new market opportunities. Whereas new market opportunity often lies in 'organizational transformation' in the development of novel innovation. Third. while stakeholders' cooperation is specified as a key dimension under CSR standard (in GRI but not in CASS-CSR), no sufficient evidence to support that firms' CSR practice serve as a pathway towards systems building (doing good by doing new things with others) for societal change through novel innovations. Based on the study results from the cross-national JVs in China, we propose:

**Proposition 1**: A balanced and integrated approach guides firms' managerial commitment in the practice of CSR. Within which, strategic cooperation in business networks is adopted to strengthen market/technology orientation and to maintain a harmonized norm in society.

**Proposition 2**: The practice of CSR mainly results in incremental innovation, fostering the operational optimization, but not contributing to organizational transformation and systems building in the development of SLI.

Figure 1 illustrates these propositions.

- Insert Figure 1 near here -

This multiple-case study contributes to knowledge in three main aspects. First, it explores an important yet under-explored research area. It deepens the understanding of the practice of CSR and its effects on sustainability-led innovation between different culture/value and

political governing system, contributing three propositions to this body of literature. Second, it sheds light in how cross-national joint venture actors practice CSR in a highly regulated market, contributing several empirical messages to managers who seek to harvest from CSR and sustainability-led innovation. Finally, it offers a first study (to our knowledge) into three key automobile international JV's in China, contributing a systematic review into social and sustainability issues to policy makers and environmental lobbyists who concern with environmental and green economy.

One of the key limitations of this study is the fact that three case studies are built from public data (e.g. CSR report and company website), which often are for promotion and public relation purposes. While the current study has it exploratory nature, it requires further research in expanding the understanding through the actual empirical evidence. In this endeavour, our three propositions can be considered. Furthermore, this study is mainly based on the institutional perspective. While the institutional theory is viewed as appropriate for cross-national studies, it limits the capacity to study complex issues in CSR and sustainability-led innovation. To this end, research into key dimensions such as employment and social stability are notably important, contributing to topics such as organization-innovation and social-innovation.

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Figure 1: Corporate Social Responsibility and sustainability-Led Innovation

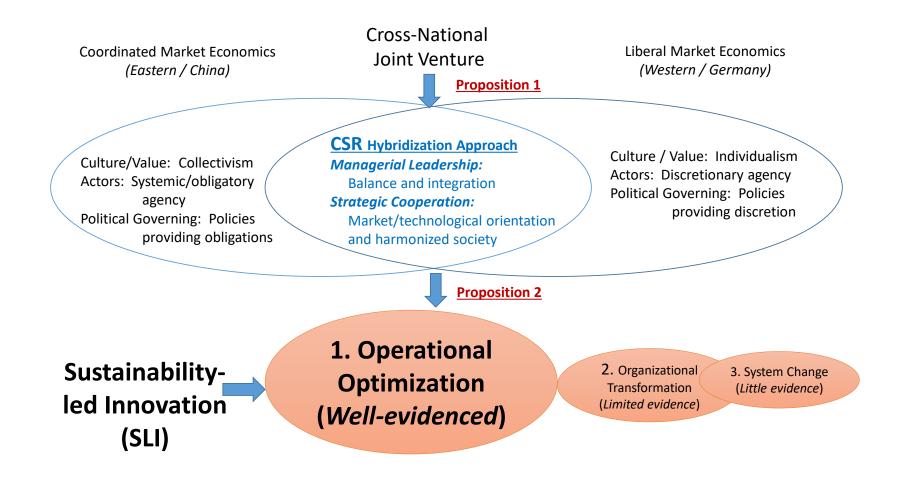


 Table 1: China CSR dimensions and additional dimensions from Global Report Initiative (2019)

China's CSR dimensions	China's CSR sub-dimensions
Economic responsibility	Promote national and local economic development
Economic responsibility	Emphasize technology capacity and innovation
Legal responsibility	Pay taxes
Environmental protection	Conserve resources and boost resource utilization rate
Customer orientation	Quality is the life of corporation
Customer orientation	Genuine goods at fair prices
	Ban on child labor
People focused	Staff's legitimate interests, welfare, and insurance
	Union and human rights
	Increase job opportunities
amployment	Reemploy lays-off
employment	Ease national employment pressure
	Provide job for the disabled
Good faith	Comply with business ethics
	Operate in good faith, honor contracts
	Ensure social stability and harmony
Social stability and progress	Serve and repay society, promote social progress
	Patriotism, promote national prosperity
Additional dimensions	
from Global Report Initiative	
	Create profit for shareholders
Shareholders/Stakeholders	Information transparency, prevent trade corruption
	Protect the interests of small and medium shareholders
	Improve governance structure
	Racial equality
	Gender equality
Equality	Equal opportunity for underprivileged groups
	Equal opportunity for regional development

CSR dimension	CSR sub-dimension	CSR practice examples
		Becoming a good corporate citizen of the local and China, stimulating economic development through the three strategic production goals.
		Encouraging the suppliers to move to the local near the production base to contribute to local <b>economic development</b> .
	Promote national, local	Creating a workplace that promotes employee health and pays attention to employee welfare, promotes vocational education, and contributes to the realization
	economic development	of local economic growth. Our strategy is to support non-genetic inheritors and protect cultural heritage, so that intangible cultural heritage can regain its
		vitality in modern society and achieve economic growth.
Economic		Adopting <b>innovative technology</b> , sustainable production and industry 4.0 technology at the production base.
responsibility	Emphasize technology & innovation	Using <b>digital technology</b> to create smart solutions, optimizing business processes, and ensuring long-term competitiveness in the entire value chain.
		Using IT technology to improve business efficiency and productivity. Innovatively using intelligent interconnection technology to create an excellent driving
		experience. Our joint teams is implementing the ChaoJi high-power charging standard and technology cooperation
		Using Narrowband Internet of Things (NB-IoT) technology for in-plant traffic control to improve transportation efficiency.
		Exploring innovative technologies that optimize production and non-production areas. Creating an innovative environment, through the use of digital
		production, intelligent data analysis, intelligent logistics and <b>innovative</b> automation to improve the flexibility and quality of production.
Legal responsibility	Pay taxes	Contributing 31 billion RMB in taxation in 2018.
	Company and and and	Our sustainable development goals include the improvement of resource utilization efficiency; factory uses groundwater to adjust temperature to save energy.
Environmental	Conserve resources and	Protecting the environment and reducing the demand for natural resources through advanced manufacturing systems. Using more renewable energy and
protection	boost resource utilization	emphasize reasonable and prudent use of natural resources. Actively seeking new ways to reduce resource consumption, increase resource recycling, and
	rate	use renewable energy. Committing to continuously improving the efficiency of water useand employees' domestic water use.
Customer Orientation	Service quality	Customer can now access more than 300,000 changing pillars, to achieve our zero-emission goal. The sustainability, convenience, and luxury we offer our
Customer Orientation	Service quality	customers is a result of our customer- centric focus on delivering a premium experience.
	Ban on child labor	Strictly following the standards of the United Nations Global Compact and the International Labor Group, protecting human rights including the prohibition
		of child labor. Conducting regular audits of suppliers to assess child labor risks
	Staff's legitimacy	Committing to providing attractive benefits and the competitive and flexible benefit plan to employees, continuing to expand health plans and projects to
People focused	welfare, and insurance	provide more employee <b>benefits</b> .
r copre rocused	Union and human rights	The BMW Brilliance Union was established in 2007 to provide an effective channel for the dialogue between employers and employees and represents the
		rights and interests of all employees and mediates disputes between employees and the company.
		Human rights governance is based on internationally recognized principles. Incorporated respect for human rights into our business practices, committing to
		respecting the <b>human rights</b> of all personnel related to the company's operations and avoid infringing on the <b>human rights</b> of others.
	Increase job opportunities	Through the upgrading and expansion of the production base, we expect to create more new <b>employment opportunities</b> . Becoming a good corporate citizen
Employment		locally and in China and <b>promote local employment</b> .
		Cooperating with two Tsinghua non-inherited students to promote and expanding Qiang embroidery Business and <b>promote local employment</b> .
0 1 1 1 1 1 1 1	Serve and repay society, promote social progress	BMW Brilliance actively fulfils its corporate social responsibilities, benefits the community and gives back to the society. By supporting non-genetic inheritors
Social stability and		and protecting cultural heritage, intangible cultural heritage can regain its vitality in modern society and realize social development
progress		Following the '3P' principles for sustainable development strategy, namely People, Planet and Prosperity, covering the company's current efforts for <b>social development</b> and the blueprint for the future.
		Strategic cooperation with State Grid EV service. We work closely with the government on areas of mutual interest and cooperation, such as local economic
Shareholders	Create profit for shareholders	development and our green transformation. Wefocused on the theme of opportunities and challenges for Sino-German cooperation in post COVID-19
& Stakeholders		eraWeto discuss the development of a finance ecosystem built on trustand a win-win focus between BMW Brilliance and our dealer partners, contributing
		to their success and our company's continued development.
		By building a company culturefrom diversity, inclusion, and equality, we ensure the dedication and loyalty of our employees and our customers, so we can
Equality	Equality & inclusion	continue to thrive and grow together

 Table 2 BMW-Brilliance CSR practices (source: BMW-Brillian Sustainability Report Download 2020)

# Table 3: Fujian-Benz CSR practices (source: Fujian Benz Corporate Social Responsibility Report, 2020)

CSR dimension	CSR sub-dimension	CSR practice examples
Economic responsibility	Promote national and local economic development	As the ranked first corporation in local industrial tax paying, the corporation has made outstanding contributions to the <b>local economic development</b> .
	Emphasize technology and innovation	In terms of product design and R&D, Fujian Benz continues to <b>introduce advanced technology</b> through strengthening cooperation with Daimler Group, and continuously improves the technical level of localization transformation. Through the R&D of <b>intelligent driving assistance technology</b> and the <b>safety protection technology</b> of blind spot assist system improving products' safety performance. Continuing to develop new fuel consumption reduction technology.
		Corporation's values include <b>innovation</b> . In order to innovate, employee <b>innovation incentive systems</b> and staff <b>innovation studios</b> are established. We stick to independent innovation and cutting-edge technologies to advance intelligent logistics and product.
		The corporation insists on continuously boosting the <b>technological progress</b> of the supply chain with its own technological advantages and provides <b>technical support</b> for the industry to effectively promote the <b>technological development</b> of China's automobile manufacturing industry.
Legal responsibility	Pay taxes	According to regulation, paying the full amount of taxes.
Environmental protection	Conserve resources and boost resource utilization rate	Advocating green office, <b>saving electricity, saving paper, saving water</b> , strengthening the <b>recycling of reusable resources</b> , installing reverse osmosis pure water equipment, <b>recycling the produced concentrated water</b> in the paint workshops.
Customer orientation	Genuine goods at fair prices	Continuously launching <b>cost-effective</b> after-sales products and service.
	Ban on child labor	Pursuing equal employment, resolutely opposing the use of child labor both in the corporation and suppliers
People focused	Staff's legitimate interests, welfare, and insurance	Protecting the legitimate rights and interests of the employees, providing benefits, social insurance and employers' liability insurance.
	Union and human rights	The <b>union</b> participation rate is 97.99%. <b>The labor union</b> supervises the company's labor safety and occupational health management and has the right to put forward suggestions for improvement and handling.
Employment	Increase job opportunities	Fulfilling the duty of <b>driving employment and job creation</b> . In 2018, Fujian Benz provided more job opportunities, increasing 900 employment positions.
Social stability and progress	Ensure social stability and harmonyUnderline	Serving the public security system conscientiously and efficiently helping to maintain social stability, helping to build a harmonious society.
	Serve and repay society, promote social progress	Actively participating in public welfare activities to achieve the goal of <b>repaying to society</b> and <b>promoting social progress</b> .
Shareholders Stakeholders	Cooperation	Build a green supply chain and urge partners to fulfill their responsibility for the environment and society. Team up with partners across the value chain to achieve mutual growth and social sustainable development.
Equality	Equal opportunity	Employees right protection and benefits

CSR dimension	CSR sub-dimension	CSR practices (source: SAIC-Folkswagen CSR Report, 2020)
Economic responsibility		Adopting new <b>production and automation technology</b> in green manufacture factory, greatly improve the automation rate & production efficiency.
		Using eight <b>safety technology</b> patents to upgrade products safety features.
	Emphasize technology and innovation	Exploring and innovating in the field of <b>intelligent driving technology</b> which includes pedestrian detection and avoidance, high-precision map application, dynamic path planning.
		Vigorously strengthening the R&D of products' fuel-saving technology (environmental technology innovation).
		Continuously exploring more eco-friendly innovative practices in terms of materials for auto parts.
	Promote national and local economic development	Under the premise of meeting quality requirements, the local auto parts' procurement will be prioritized to promote local economic development.
Environmental protection	Conserve resources and boost resource utilization rate	Using solar photovoltaic power generation, renovation of plant equipment, <b>saving electric energy</b> , adopting different measures to <b>improve energy efficiency</b> according to the characteristics of the factory location.
		Using waste classification process to maximize recycling rate.
		Installing water flow monitors in the factory and recycling rainwater to save water resources and improve recycling rate.
		Simplifying the packaging of auto parts, saving carton, reducing wood consumption.
Customer orientation	Quality is the life of corporation	Quality is the life of SAIC Volkswagen, continuous improvement of the whole value chain <b>quality management system</b> , the formation of on-site standardized <b>quality management framework</b> and the development of complete <b>product recall process</b> .
	Genuine goods at fair prices	Continuously creating <b>cost-effective</b> and high-quality products which meet the requirements of Chinese customers. Based on the new energy platform of Volkswagen Group, SAIC VOLKSWAGEN developed suitable new energy vehicles for the Chinese market according to local requirements.
People focused	Staff's legitimate interests, welfare, and insurance	Always adhering to the principles of equal employment and fair distribution to <b>protect legitimate rights and interests</b> of employees and earnestly fulfil the provisions of the labor contract (for instance, creating a pleasant working environment). Maintaining 100% social insurance coverage and
	Union and human rights	The proportion of <b>unionized employees</b> was 100%, the comment of employees was fully valued. The supplier responsibility management includes the improvement of <b>human rights</b> standards.
employment	Provide jobs for the disabled	Increasing employment rate of the disabled and providing employment security fund for the disabled.
Social stability and progress	Ensure social stability and harmony	Extensively devoting to <b>social welfare</b> undertakings in the fields of science, education, culture, health, etc., and carrying out social welfare pro- such as the construction of Hope Primary School and the SAIC Volkswagen Children's Medical Assistance Special Fund to <b>serve and repay soc</b> Supporting the United Nations Sustainable Development Goals (SDGs) to <b>promote the progress of harmonious society</b> .
	Serve and repay society, promote social progress	
Shareholders / Stakeholders	Cooperation	Partnerships for the Goal: always adheres to responsible procurement, fully integrates CSR into supply chain management, and continuously carries out active communication and responsibility training to improve partners' ability to fulfill responsibilities and realize coordinated development. Coordinated development with dealers: SAIC VOLKSWAGEN also helped dealers achieve operational compliance and improved dealer management system. In view of the new requirements set forth in information security laws and regulations, the company continued to improve the relevant management documents and rules, and strengthened the requirements for customer information, data security and risk control, among others
Equality	n/a	n/a

 Table 4: SAIC Volkswagen unique Chinese CSR practices (source: SAIC-Volkswagen CSR Report, 2020)