# Host government impact on the logistics performance of international humanitarian organisations<sup>†</sup>

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## Abstract

Host governments severely impact international relief operations. An openness to assistance can lead to the timely delivery of aid whereas a reluctance to receive assistance can have devastating consequences. With lives at stake and no time to lose in humanitarian crises, understanding the host government's impact on the logistics performance of international humanitarian organisations (IHOs) is crucial. In this paper, we present an in-depth multiple-case study that explores this aspect. Results show that host government actions are explained by their dependency on IHOs and the levels of tensions between their interests (i.e., conflicting strategic goals). In addition, a host government's regulatory and enforcement capabilities are important for ensuring that they can safeguard their interests. We derive four stances that host governments can adopt in regulating logistics-related activities: non-restrictive, opportunistic, selectively accommodating and uncompromising. Each of these has different implications for the logistics performance of IHOs.

**Key words:** Humanitarian logistics; host governments; delivery performance; complex emergencies

## 1. Introduction

Host governments are political actors with a major impact on the inventory management and transport activities of international humanitarian organisations (IHOs) (Kovacs and Spens, 2008; Long and Wood, 1995; Tomasini and Van Wassenhove, 2008; Menkhaus, 2010). In fact, "government" is by far the most frequently mentioned topic in humanitarian logistics research (Kunz and Reiner, 2012). While some host governments facilitate good performance by declaring a state of emergency and relaxing regulations, others impose barriers that impede performance (Long and Wood, 1995; McLachlin et al., 2009; Menkhaus, 2010; Pettit and Beresford, 2005; Toole and Waldman, 1997). Understanding why host governments display such heterogeneity in dealing with IHOs is crucial for enhancing delivery performance in humanitarian operations.

This research seeks to understand the impact of host governments on humanitarian logistics in complex emergencies. The World Health Organisation (WHO) defines a complex

emergency as a "situation with complex social, political and economic origins which involves the breakdown of state structures, the disputed legitimacy of host authorities, the abuse of human rights and possibly armed conflict, that creates humanitarian needs". Complex emergencies constitute the majority of disasters worldwide and are increasingly the backdrop against which major natural disasters occur. They are characterised by large-scale multifaceted humanitarian needs that are worsened by major security issues, population displacement and the hindering of humanitarian assistance by political or military actors<sup>1</sup>.

We posit that host government actions are best explained by the strategic-level dynamics of their interactions with IHOs. Host governments and IHOs are governed by divergent institutional logics (Alford and Friedland, 1985). They inherently have conflicting strategic interests (i.e., tensions between interests) but, nevertheless, high interdependency (Thornton and Ocasio, 2008). Since tensions between interests and dependency are not mutually exclusive, this raises the question as to how the two interact and impact on the delivery performance of IHOs in day-to-day (operational level) and medium term (tactical level) planning and activities.

An in-depth multiple-case study approach is used to identify the core drivers and effects of host government actions on delivery performance, to establish patterns of linkages between them and to develop explanations for those linkages (Voss et al., 2002). The research logic is theory building, and we employ institutional theory to develop an initial understanding of the phenomenon. This approach of incorporating foundational theories in this type of research is highly recommended (e.g., Colquitt and Zapata-Phelan, 2007).

The main contributions of this research are that we develop a typology of host government stances in international relief operations and offer novel explanations for actions taken by host government relation to humanitarian logistics. We achieve "closeness to reality" and generate important insights into the humanitarian context by employing institutional theory (Kauppi, 2013; Kovacs and Spens, 2011). Consequently, this research also has major practical relevance for managers operating in this "high stakes" environment (Balcik et al., 2010).

## 2. Research Background

## 2.1 Logistics decisions and delivery performance

Delivery performance in terms of lead-time and timeliness is a major priority in logistics, and it is strongly influenced by the quality of managerial decisions (Brown and Vastag, 1993; Gunasekaran et al., 2001; Vachon and Klassen, 2002). At the tactical and operational level, decisions regarding transport (including mode, the movement of aid workers, routing and scheduling) and inventory management (including sourcing) are important (Gunasekaran et al., 2001). Good delivery performance is especially crucial in a humanitarian setting given the high stakes associated with meeting beneficiary needs (Balcik et al., 2010).

#### 2.2 The role and impact of host governments in humanitarian logistics

Host governments and international actors have obligations in major humanitarian crises that

<sup>&</sup>lt;sup>1</sup> <u>https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/definition-of-hazard/complex-emergencies/</u> Accessed on 31 July 2015.

are outlined in various legal frameworks (for an overview, see Haider, 2013). In a crisis, host governments are obligated to adequately protect and provide for the affected populations within their borders. If they do not fulfil this obligation, they should allow international actors to intervene. Host governments then become responsible for coordinating and facilitating the operations of international actors by implementing the relevant (inter)national regulations. International actors are obligated to be impartial and provide assistance solely for humanitarian purposes. A myriad of international actors become involved in major crises, often including non-governmental and private organisations, United Nations agencies, donors, militaries and the International Committee of the Red Cross (Balcik et al., 2010). The focus of this study is limited to IHOs that offer direct material assistance to affected populations. Other important actors, such as the military and donors, fall outside the scope of this research.

Complex emergencies occur in fragile states where governments are usually weak and incapable of providing an appropriate response, or are autocratic and unwilling to fulfil their obligations (Albala-Betrand, 2000). Put simply, state fragility relates to a host government's incapacity or unwillingness to provide public goods (Ziaja, 2012). Although fragility does not absolve host governments of their obligations, there are provisions within legal frameworks for shifting responsibility from host governments to more capable and/or neutral international actors. Therefore, IHOs can play a pivotal role in complex emergencies, especially in areas of international armed conflict. Various legal frameworks apply in complex emergencies depending on the scale of the conflict. When there is no armed conflict, the international disaster response laws, rules and principles apply (as they do in natural disasters). Human rights law and international humanitarian law apply in civil armed conflicts and international armed conflicts are the sovereign consideration of declaring a state of emergency and the obligation to allow free passage of supplies for humanitarian assistance.

The declaration of a state of emergency is a necessary condition for immediate IHO involvement in non-armed and civil armed conflicts. When declared, IHOs can provide material assistance with limited bureaucracy. If a state of emergency is not declared, IHOs are essentially not welcome but can still intervene under non-emergency regulations. A consequence of this is that they likely face logistical challenges such as lengthy and complicated customs procedures for internationally sourced goods (Long and Wood, 1995; Pedraza-Martinez and Van Wassenhove, 2013; Van Wassenhove, 2006). The diversion of relief supplies by host governments or by other parties to the conflict can also be a problem (Menkhaus, 2010; Toole and Waldman, 1997). In international armed conflicts, there is no legal provision for government derogation based on sovereignty considerations. Consequently, the declaration of a state of emergency is not necessary for immediate IHO involvement. Security constraints then become the primary limiting factor.

The obligation to allow free passage of IHO supplies to affected areas varies under each of the legal frameworks. In unarmed conflicts, it is the host government's sovereign right to forbid passage- regardless of the humanitarian situation, and IHOs need to find ways to persuade the host government to grant it. In civil armed conflicts, human rights law obligates host governments to allow free passage of supplies on the basis of the right of civilians trapped in war zones to have access to life-sustaining supplies. In international armed conflicts, host governments are automatically obliged to allow free passage of supplies because there is no provision for derogation. However, the legal framework provisions related to armed conflict do not prevent host governments from imposing procedures that can slow response efforts. For example, they can hamper relief efforts by making it difficult to obtain travel permits to affected areas (Kovacs and Spens, 2009; Pettit and Beresford, 2005).

Despite the provisions made in the legal frameworks, several practical limitations are still faced in humanitarian logistics. First, as the International Disaster Database (EM-DAT) shows, the declaration of a state of emergency or a call for international assistance is rare. To date, the database captures only 14 complex emergencies since 1932 and just two since 2010 (Yemen and Central African Republic, both in 2012). Second, the anarchic nature of conflict and/or the weakening of structures leave little room for the rule of law in weak states while in autocratic states, host governments can inhibit IHO activity in ways that cannot be easily proven to violate the law. For instance, autocratic governments may impose blockades on materials for humanitarian assistance citing lack of IHO impartiality. This was the case in 2009 when the government of Sudan stopped relief activities by abruptly expelling 13 IHOs.

#### 2.3 Drivers of host government impact on logistics decisions and delivery performance

In humanitarian logistics research, it is argued that IHOs intervene because the host government lacks capacity to respond to a disaster yet political interests are identified as primary drivers of host government actions (Balcik et al., 2010; Kunz and Reiner, 2012; Pettit and Beresford, 2005; Tomasini and Van Wassenhove, 2009). These views are in line with the some of the underlying reasons for the provisions made in the humanitarian assistance legal frameworks. However, the evidence is mostly anecdotal and there is no clear understanding of the nuances that lead to heterogeneity in host government behaviour.

The preceding review contains elements that are encompassed in two core branches of institutional theory: the three pillars of institutions and institutional logics. The choice of this theory, and of elements related to our inquiry, was determined in an iterative process as described in Section 3. Governments have a regulatory role and, when applicable, sovereign power to apply their jurisdiction in extraordinary situations. These (regulatory role and sovereign power) are embedded in the three pillars of institutions as proposed by Scott (2001): regulative, normative, and cultural-cognitive. The regulative pillar relates to how governments enact their regulatory role to control behaviour of those subordinate to their authority; the normative aspect concerns the moral base for assessing the legitimacy of rules; and the cultural-cognitive aspect relates to legitimacy that stems from a shared understanding of the situation. This branch of institutional theory assumes there are widely accepted values that inform the behaviour of the various actors (Greenwood et al., 2008).

In reality, governments purposefully act to balance their inherent dependency on notfor-profit organisations against the tensions between their interests (Mcloughlin, 2011; Najam, 2000; Young, 2000). For instance, IHOs conducting cross-border relief operations interfere with host government interests as borders are a highly sensitive issue in international relations (Bratton, 1989; Najam, 2000). Such tensions between interests have caused host governments to close or stall IHO programmes regardless of their dependency status in certain instances (Albala-Bertrand 2000; Bratton, 1989). Although this tension does not significantly affect the application of the regulatory function of host governments, it does mean that the other two pillars are less useful when it comes to understanding the strategic aspect of host government actions that go beyond widely accepted values.

As such, the normative and cultural-cognitive aspects are inappropriate for explaining behaviour in complex emergencies. For the normative aspect to function, the government has to demonstrate commitment to doing what they are supposed to do in the right way (Stinchcombe, 1997). In complex emergencies, this is rarely the norm. Further, the belief that government regulations are often intended to hinder relief efforts has led to the rise of IHOs that sometimes undermine state sovereignty in their efforts to reach affected populations (Natsios, 1995). Regarding the cultural-cognitive aspect, a shared understanding of the situation between host governments and IHOs rarely exists; suspicion and mistrust prevail (Kunz and Reiner, 2012). The institutional logics branch of institutional theory was adopted because of its relevance in addressing purposeful action by host governments and for accommodating the divergent views of actors. Here the dependency-interests paradigm and the host governments' endeavours to respond to it are also recognised (Alford and Friedland, 1985; Thornton and Ocasio, 2008).

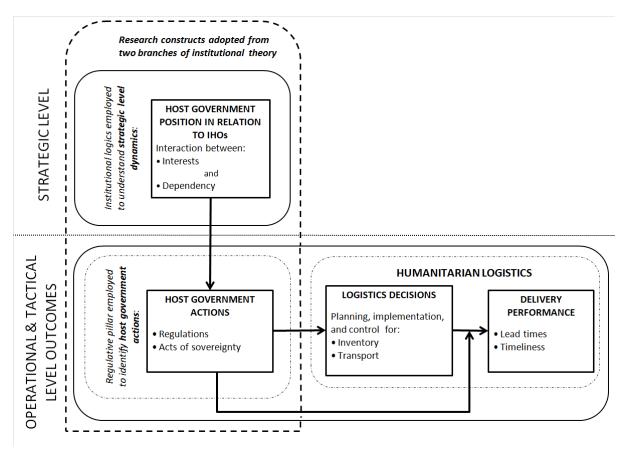


Figure 1: Research framework

Despite the richness of institutional theory and the multiple perspectives taken to understand government relations with not-for-profit institutions, research has so far paid little empirical attention to government – IHO relations (Mcloughlin, 2011; Moran, 2006; Najam, 2000) and

their implications for humanitarian logistics. In response, we address this gap using empirically grounded research. Furthermore, since the theory adopted in this research was identified through iterative data analysis, no a priori hypotheses have been made. Figure 1 shows the framework that guides the research with an emphasis on the theory and the constructs that were eventually adopted.

#### 3. Methodology

#### 3.1 Research setting and design

The research design is a multiple-case study as this is the most appropriate approach for answering how and in what circumstances questions (Voss et al., 2002; Yin, 1994); here, the impact of host governments on delivery performance in humanitarian logistics is of interest. Furthermore, since international relief in complex emergencies constitutes a highly complex setting, an emphasis on the real-world context is crucial (Eisenhardt, 1989a; Eisenhardt and Graebner, 2007).

The research entails an embedded design with two levels of analysis. First, we focus on the operational and tactical level, where host government actions affecting logistics decisions and subsequent delivery performance are analysed. Second, we work back to the strategic level to draw inferences about the drivers of host government actions that impact humanitarian logistics at the operational and tactical level. This two-level analysis enables the generation of reliable and rich models (Eisenhardt, 1989b) of the underlying causes of observed patterns at the operational and tactical level by taking the strategic level into account. The research process was iterative with four rounds of analysis (Figure 2).

#### 3.2 Case selection

The unit of analysis is a country in an ongoing complex emergency situation. Six cases were selected (Table 1), thereby fitting the recommended range of 4 to 10 cases for theory building research (Eisenhardt, 1989a). To control for multiple external factors and closely link delivery performance to host government actions, the cases were selected from a single focal IHO that has an established presence in complex emergencies.

The IHO is a leading medical organisation that spends about three-quarters of its operational budget in countries affected by complex emergencies. It has Dunantist roots (i.e., it is rule-averse and strives for independence from host government influence in its operations) (Stoddard et al., 2009). As such, it could invoke behaviour that might otherwise be latent in host governments (Baruah, 2007; Najam, 2000) and therefore constitutes an extreme example in the complex emergency response landscape from which much can be learned (Bamberger and Pratt, 2010).

We selected cases from countries in which the IHO had a presence of at least ten years in order to achieve a good understanding of the context. The identities of the focal IHO and the cases are not revealed because of data sensitivity. Since we sought to make general statements about host government behaviour, it was important to select cases that were "polar types" (Eisenhardt and Graebner, 2007; Miles and Huberman, 1994). However, polarity could not be established upfront, so we conducted a two-phase selection procedure. First, cases were selected on the basis of the countries' economic states and their fragility in order

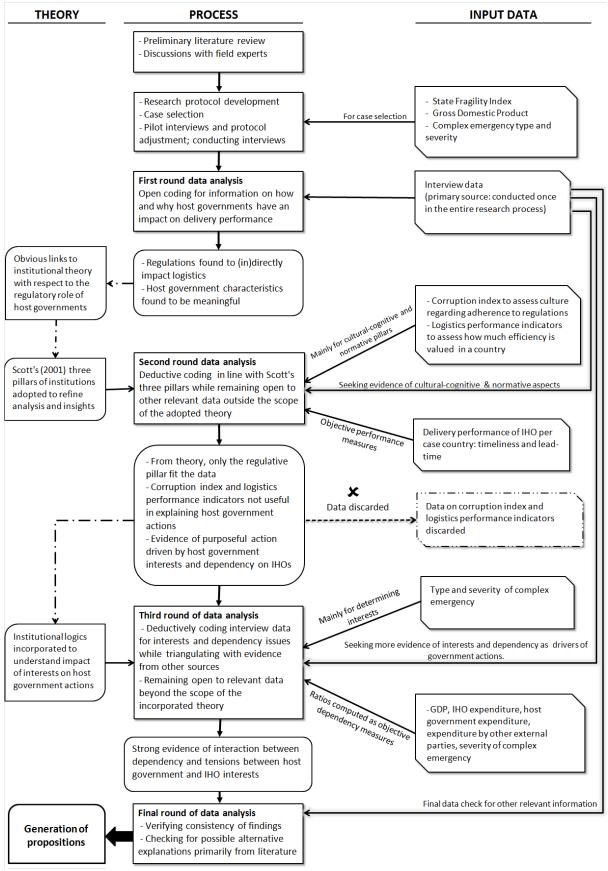


Figure 2: Research process

	MAIN CASE S	ELECTION CRITERIA	COMPLEX EMERGEN	CY
Case (Country)	Gross Domestic Product (GDP) <sup>1</sup>	State fragility <sup>2</sup>	Nature / type	Level of severity <sup>3</sup>
U	Low	Extreme	Long-term civil war with widespread armed conflict within the country.	Medium # Dis: 2 - 5 million #NFA: > 5 million
V	Low	Extreme	Post-war country with recent official end to war but full stability yet to be achieved.	Low # Dis: 2 - 5 million #NFA: 2 - 5 million
W	High	Extreme	Long-term civil war with pockets of armed conflict within the country.	Medium # Dis: < 0.5 million #NFA: 2 - 5 million
X	High	Extreme	Post-insurgency: conflict officially ended but remains in those areas where rebel groups are still fighting for independence from the country. Complete stability yet to be achieved in the post- insurgency region.	Low # Dis: 1 - 2 million #NFA: >> 5 million
Y	Low	High	Political and economic crisis characterised by political instability and high levels of inflation but no armed conflict.	Low # Dis: << 0.5 million #NFA: 2 - 5 million
Z	High	High	Insurgency: conflict with violence that is confined to areas where certain groups are rebelling against the government and/ or fighting for independence from the country.	High # Dis: 1 - 2 million #NFA: >> 5 million

1. High/Low GDP countries defined as countries that are in the top/bottom 90 worldwide in terms of GDP.

2. Based on the State Fragility Index (SFI): Extreme = SFI between 20 and 25; High = SFI between 16 and 19.

3.High/Medium/Low based on ConflictMap measure related to number of displaced people and level of violence, and on the general status of the country at the time of data collection.

# Dis is the approximate number of internally displaced peope plus nationals assuming refugee status in other countries.

#NFA is the number of people needing food assistance due to experiencing severe food shortages.

*Table 1: List of selected cases* 

to ensure significant variation among them. The economic state of a host country was measured using Gross Domestic Product (GDP) estimates from the World Bank and Trading Economics (tradingeconomics.com). Although GDP is only a crude measure of a country's economic situation, it provides a good indication of the resources at the disposal of a government. Considering GDP estimates made it easier to draw inferences about incapability or unwillingness of host governments to provide public goods. A distinction was made between low GDP countries, which we defined as countries in the bottom 90 worldwide, and high GDP countries (the top 90).

The State Fragility Index (SFI) (Marshall and Cole, 2008) was used as a measure of state fragility. The SFI ranges between 0 (not fragile) and 25 (extremely fragile). Since complex emergencies occur in fragile states, only countries with SFIs ranging from 16 to 25 (highly fragile to extremely fragile) were considered (Marshall and Cole, 2011). We also checked for evidence of multicollinearity between the GDP value (which is used as a measure of economic effectiveness in the SFI score calculation) and the SFI score and found none (Pearson correlation value = .807, p<.01).

In the second phase, further variation among cases was ensured by selection on the basis of the type and severity of the complex emergency. The British Broadcasting Corporation (BBC) news country profiles (bbc.co.uk) and ConflictMap (conflictmap.org) were used as primary sources.

#### 3.3 Data collection

Interviews were the primary source of data. An interview protocol with semi-structured questions was developed and piloted (Voss et al., 2002) with three respondents in December 2012. It was then adjusted accordingly (Yin, 1994) before the second round of interviews in March 2013. All the interviews were conducted by the first author. Questions covered general aspects of the complex emergency and how the host government affected inventory management and transport-related decisions and outcomes.

Fifty interviews, between 6 and 11 per case, were conducted with highly knowledgeable and experienced respondents who (had) worked for the IHO. The second round of interviews was conducted during a gathering of the IHO's logistics personnel (both those working in the field and at headquarters). Respondents who had first-hand knowledge of more than one country were interviewed more than once, with each interview focused on a specific case to ensure separation of country-specific information. In total there were 22 respondents (R#1 to R#22) from various backgrounds and with 6 to 25 years (mean 13.1 years) of work experience. This mix of respondents had diverse perspectives which reduced the likelihood of "convergent retrospective sensemaking" and biased recollections of events (Eisenhardt and Graebner, 2007). Time spent with a respondent ranged between 16 and 105 minutes (mean 47.4 minutes).

Data from seven other sources (Table 2) were used to complement and triangulate evidence from the interviews in order to ensure internal validity (Eisenhardt and Graebner, 2007; Voss et al., 2002). In addition to being used in the case selection, the nature of the complex emergency and GDP data were later incorporated in the analysis as they were useful for understanding the emergent constructs of dependency and tensions between host government and IHO interests.

#### 3.4 Data measures, coding and analysis

#### 3.4.1 Quantitative data

Quantitative measures for each case were derived from five data sources (Table 3). Since the dependency of an institution tends to be measured in financial terms (Young, 2000), we followed the traditional approach of measuring government dependency (Oliver, 1991) by comparing host government funds to funding provided by the focal IHO and other external sources. In particular, we considered expenditure on healthcare to capture dependency on the medical focal IHO and other external sources involved in, or funding healthcare. A limitation of this approach is that due to missing data in the WHO database, it is possible that the host government expenditure measure (Table 3) includes funding from external sources that is channelled through the host government.

#### 3.4.2 Qualitative data

Interviews were transcribed and a qualitative content analysis conducted (Miles and Huberman, 1994; Schrier, 2014). We began by deductively coding for four types of information based on the theoretical framework (Figure 1). Inductive codes were developed for emerging themes that helped to refine insights into host government actions. The codes

DAT	A SOURCES AND TYPES		US	E <mark>D TO A</mark>	SSESS:	
DATA SOURCE	DATA TYPE	OPE	RATI	ONAL	STRA	TEGIC
		Logistics decisions	Delivery performance	Host government actions w.r.t logistics	Host government dependency	Host government interests
IHO Interviews	Interviews	✓	✓	✓	~	✓
International sourcing	International sourcing data		✓	~		
Archival	IHO financial expenditure per case country				✓	
Trading Economics, World Ban	k Gross domestic product				✓	
ConflictMap, BBC News IHO interviews	Nature and history of complex emergency					~
World Health Organisation*	Healthcare expenditure by host government and other external sources				✓	

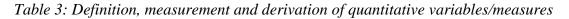
Data source used a key source of evidence

\* Data for country Y not available

Table 2: Data sources and use

VARIABLE	DEFINITION/ MEASURE
DELIVERY PERFORMANCE <sup>1</sup>	
Lead time	Measured as the average time between order receipt by the focal IHO's sourcing department and the actual delivery of the ordered item to the requesting country.
Timeliness	Measured as the percentage of deliveries that arrive on or before the <i>requested</i> delivery date specified by the ordering country.
HOST GOVERNMENT DEPENDE	NCY <sup>2</sup>
1. Gross Domestic Product (GDP)	) (as used in case selection)
2. Source expenditure as a perce	ntage of total healthcare expenditure in a case country <sup>3</sup>
Host government expenditure as a percentage of total healthcare expenditure	Level of net host government's own contribution to expenditure on health expressed as a percentage of total expenditure on health in the host country (source: WHO).
Focal IHO expenditure as a percentage of total healthcare expenditure	Total focal IHO expenditure in a host country expressed as a percentage of total expenditure on health in that country. This includes the IHOs direct expenditure on health (e.g. medicines, medical personnel) and other activities (e.g. storage and transportation costs).
Expenditure by other external sources as a percentage of total healthcare expenditure	Other external resources for health in the host country expressed as a percentage of total expenditure on health. This indicator reflects the origin of the resources used to purchase healt services. Some of these external sources will be channelled through the government's budget, some through insurance agencies and some through the private or NGO sectors (source: WHO).

3. Total healthcare expenditure, in addition to host government expenditure, focal IHO expenditure and expenditure by other external sources as defined above includes voluntary health insurance payments, government social security schemes and other schemes for compulsory health insurance, and direct payments by households. These three additional indicators were also taken from WHO data.



		AND EMERGENT CODES PLUS EXAMPLE REPRESENTATIVE QUOTES
	rgent second-order nd categories	First-order concepts (representative quotes)
	el dynamics	····· ································
	sion in interests‡	
Low/ I		"They don't obstruct, or they don't obstruct yet. The need for NGOs is obvious, or they
(Logica	al extension)	simply lack the capacity to obstruct NGOs." **
High		"[These people] are systematically oppressed (). There is a lot of hostility from the other
		ethnic groups which clearly shows that the NGOs and the UN are the ones who have actually enabled this group to survive. If the NGOs would not be there, this group would not have survived, so then they say like they want all the NGOs to go ()."
(Level of) Dep	endencv‡	
Low	enderioj i	"[This IHO] is a drop in the ocean for authorities."
High		"But the cooperation [in country V] is extraordinary. They (the host government)
		understand that they do need humanitarian organisations. And at the field level we are incredibly popular [as an IHO] ()."
Regulation an	d enforcement capa	bilities*
Low*		"They did not have human resources to impose regulations. So you could at the time do
		whatever you want according to your internal policies and procedures."
High*		"Not clear to us was that regulations had always been there but the authorities didn't have the means [to enact them] but, the regulatory authority now had means of supervising the implementation of these rules."
Operational	level	
Host governm		
Regula	itions	
	Inventory	"Country X in itself is not so complex for getting through customs. What has made it
	management	complex over the years is that the country has started implementing a quality scheme for pharmaceuticals and later expanded it to medical devices."
	Transport	"[We have to apply for project visits ] five weeks in advance (). So if I mention I want to travel to [3 places] and they don't want me to go to one of those 3 places, they will reject that travel authorisation. They will not say you can't go to this one but you can go to those two. They will absolutely reject the whole thing. Then they will ask you to apply again ()."
Acts o	f sovereignty	
	Inventory	N/A
	management related	
	Transport related	"We are free to move in [country X] but tied to our own security route. But then, in the [insurgency] region, it was of course the only road which we were allowed to use (). But then this is a highly militarised area with full blown insurgency so once again I would consider access control to be a military standard operation ()."
Decisions and		
Decisio		
	Limited decision space - supplier selection	"[In order to bring a product into country X, it] must be registered, the manufacturer must be validated, the importer must have an agency agreement with the manufacturer, and it must be a licensed importer (). [Local purchase] was a bit disappointing (), they were not having their whole range of products all the time ()."
	Deflection of intended	"Predictability, repeatability of these processes, is what allows you to prepare and to really make things happen one shipment after another. But if it always depends on who we
	performance outcomes (Logical extension)	speak to, and maybe whether we can convince them to allow us this time, then you are actually not getting anywhere. Then it's not predictable anymore."
Delive	ry performance	
	Lead time	"The projects who want to intervene, who need to treat people, who have nurses and medical staff standing by, they are () waiting, waiting, waiting."
	Timeliness	"() They could not manage to clear it on time. There were some difficulties with some papers."

\*\* Some quotes represented multiple codes, this is one example. The same quote suggests high host government dependency and low regulatory and enforcement capabilities.

## Table 4: Examples of a priori and emergent codes and representative quotes

and sample quotes derived from the data are presented in Table 4. The qualitative data were coded by the first author and, to ensure validity, the second author blind coded a sample of quotes using a coding scheme provided by the first author. The percent agreement level was 0.94, comfortably within the highly acceptable range (0.9 - 1.0) (Neuendorf, 2002). This simple measure was used as an alternative to traditional reliability measures since these do not cater for a situation in which a concept is represented by multiple codes in qualitative content analysis (Scott et al., 2012). Further, the third author verified the coding and scoring undertaken by the first two authors.

The coding and analysis of data were conducted in two stages. First, in order to determine host government impact on delivery performance at the operational and tactical level, interview data were coded and analysed for: (i) host government actions related to regulations and acts of sovereignty (i.e. policies, procedures, rules and laws) that impact upon delivery performance; and (ii) related logistics decisions and delivery performance for inventory management and transport (first-order analysis). Thereafter, we established links between (i) host government actions and (ii) logistics decisions and delivery performance through an iterative process (second-order analysis).

In the second stage, open coding was used to obtain an initial impression of the dynamics of host government – IHO interactions at the strategic level. This was then refined based on the identified relevant constructs of dependency and tension between interests (first-order analysis). In the second-order analysis, the focus was on how the interaction between dependency and interests influenced host government actions. Since other unforeseen relevant institutional aspects could not be ruled out, the coding was open to further refinement and extension of key factors. This led to two important additions. First, in triangulating the financial and interview data, it emerged that extensive external funding relative to host government expenditure dampened host government dependency, and so we refined host government is able to guard its interests when tensions arise if it has sufficient regulation and enforcement capabilities, an aspect recognised in institutional theory (Giddens, 1984; Scott, 2001).

Next, a within-case analysis was conducted in order to identify unique case patterns followed by a cross-case analysis to mitigate the risks of exaggerating meaning, improve groundedness and enhance the generalisability of the findings (Eisenhardt, 1989a; Miles and Huberman, 1994; Voss et al., 2002).

#### 4. Results and analysis

Table 5 shows the delivery performance results derived from the focal IHO's sourcing data. A negative timeliness value indicates that deliveries arrived before the requested delivery date while positive values reflect delays. Triangulation of the interview data with delivery performance results indicated that respondents had a realistic perception of the actual delivery performance.

## 4.1 Within case analyses

## 4.1.1 Country U

At the operational level, Country U had an average lead-time of 98.6 days and a timeliness rate of 49.5%. The host government did not impose any extraordinary regulations or invoke sovereign considerations that would impact on logistics decisions. However, it emerged that delivery performance was heavily influenced by corrupt practices (R#6, R#16, R#17). Physical capacity and infrastructure constraints were also reported to play a significant role (R#3, R#6, R#19).

At the strategic level, the host government received substantial institutional funding from external sources who contributed 46.1% towards the country's healthcare budget (including 1.2% from the focal IHO). The host government's contribution was about 5.6% of the total budget. The remaining 48.3% was raised in-country through various means including private funds and insurance (Table 3).

_					FOCAL IHO DELIVERY PERFORMANCE	
	Lead	time	Time	liness <sup>1</sup>	(Corroborating) evidence fro	om interview data
Case	Mean	Std. Dev	Mean	% ≤ 0 <sup>2</sup>	Representative quotes related to delivery performance	Unprompted cross-case comparisons
U Civil war, medium severity	98.6	37.2	-4.2	49.5%	"Clearance time at the ports of entry is highly unpredictable We now have 2 new containers on the way [to country U] and I am just holding my breath" (R#3)	
V Post war, low severity	77.1	31.0	-7.4	83.6%	"They did not have human resources to impose regulations. So you could at the time do whatever you want according to your internal policies and procedures." (R#10)	"Compared to my previous missions I should say country V is a paradise I have never been in a country like that" (R#13)
W Civil war, medium severity	117.1	37.8	12.4	41.9%	"Getting an import permit takes 3 to 6 months Once you get the permit it is valid for 3 months but you can extend it for 3 months 3 times." (R#5)	" Countries like X,, Y, W nightmares to import goods, nightmares to bring people in" (R#19
X Post insurgency, low severity	108.7	65.9	35.4	31.7%	"The information to be found is not clear, it changes, it is not well maintained, it is not easily published, it is interpreted by different people in different ways and that makes it very unpredictable." (R#3)	Country X has the reputation that it is quite a complex environment to work in Even now there are more states like that, country Z." (R#4)
Y Political & economic crisis, low severity	112.6	48.1	12.0	58.6%	"You may have an incident where things have already been shipped but you get to the airport and then you're just told this drug cannot come into the country. So it's either is has to be shipped back or quarantined for testing once they approve that it can come in, then it may be released maybe in about 3 months" (R#22)	"Country Y was not comparable with country X, country Y was [easier]." (R#8)
Z Insurgency, high severity	164.2	60.8	27.9	42.1%	"We have got quite a lot of restrictions and sometimes you have no problems for 8 months and then the problem starts They have got their rules, they are changing them, and it has influenced our importation which for me now is the biggest problem." (R#15)	

Table 5: Delivery performance by case

It emerged from the interviews that the large number of external sources meant that the host government was less dependent on individual funding sources, i.e., the spread had a dampening effect on dependency. With multiple funding options, the host government had little incentive to facilitate a good delivery performance for individual IHOs. The level of tension between interests was generally perceived as low even though its existence was not ruled out. It could have been that the government's need to deal with multiple armed forces was a higher priority than its relationships with IHOs or, as some respondents put it, the host government "don't care" about the work of IHOs (R#3, R#6, R#16, R#17, R#19). The relatively low level of dependency coupled with a low tension between interests resulted in the host government being indifferent towards IHO activities. As a result, opportunism and the lack of timely action by government officials were key challenges.

"The government is very corrupt. People are only interested in money, and not what happens really on the ground. (...). I don't know how our relation really is but, as I see it, we are there to try to reach those most in need... There are very few people [within the government] who are really interested in the wellbeing of the population (...)." (R#6)

Country U's low dependency, despite its low GDP and extreme fragility, was surprising. Nevertheless, despite the virtual absence of restrictive regulations, the actions of host government officials still caused uncertainty that affected logistics decisions and outcomes.

#### 4.1.2 Country V

In country V, the average lead-time was 77.1 days and the timeliness rate was 83.6%. The host government neither imposed exceptional regulations nor exercised its sovereign powers and, as such, did not affect the IHO's logistics decisions and delivery performance. Financial and interview data revealed that, at the strategic level, the host government was highly dependent on the focal IHO.

"They try to play a strong state, but they aren't [one] because they don't have infrastructure, and they know that without [the focal IHO] they can't do anything. We are not a drop in the ocean, we are a serious player." (R#15)

Although there was no evidence of tensions between interests, some respondents argued that it could be latent because of the host government's high dependency and limited regulation and enforcement capabilities. The level of dependency was high with about 27.5% of the total healthcare budget coming from external institutional sources (including 4.3% from the focal IHO). The host government's own contribution was approximately 14.2% of the total budget and the remaining 58.3% was raised through various in-country sources. For a country with an extremely low GDP, these figures imply serious gaps in healthcare funding.

Given the high level of dependency coupled with very low or latent tensions between interests, the host government did not restrict the IHO's logistics activities. The focal IHO freely made decisions; leading to good delivery performance.

"Compared to my previous missions (...), country V is a paradise (...). I have never been in a country like that where almost all my requests for customs [clearance] are agreed. I have all my tax exemptions." (R#13)

#### 4.1.3 Country W

In country W, the average lead-time was 117 days and the timeliness rate was 42%. The host government imposed significant limitations on logistics. The IHO's decision space was limited in terms of annual order quantities, order cycle times and frequency of travel to affected areas. Approval times were long and unpredictable. The quantity restrictions

appeared to be imposed as a way of reducing the scale of the focal IHO's operations. Transportation of supplies was not highly regulated but a request for travel by individuals to controlled areas had to be made five weeks in advance with no guarantee that the request would be granted.

At the strategic level, there was a low level of host government dependency. The host government was the largest institutional spender on healthcare, contributing about 10.9% of the total budget with 77.5% coming from in-country sources. The focal IHO contributed 3.5% towards the total budget whereas other external sources contributed an additional 8.1%. Tensions between interests were high, mainly because the focal IHO served a population group that the host government "systematically oppressed" (R#5). IHO presence was believed to be mostly due to the host government's lack of "political will" to serve the group.

"What we are trying to cover is not about lack of boxes of drugs (...). If there was a political will, we don't need to be there (...). It's a rich country; they have enough resources, including the most important resources... capable, skilled manpower." (R#5)

The low level of host government dependency coupled with the high tension between interests translated into an uncompromising stance in regulating humanitarian logistics. Regulations were imposed without explanation, and there was limited room for negotiation.

## 4.1.4 Country X

The average lead-time in country X was 109 days and the timeliness was 32%. The host government severely limited the decision space of the focal IHO. Key challenges were in terms of limited supplier selection options, stringent paperwork requirements and the requirement to supply drugs with a near-maximum shelf-life. Transport activities in insurgency areas were also controlled with respect to routing options. As part of the customs pre-clearance procedures, supplies to be brought into the country were supposed to be purchased before they could be approved. Sometimes, purchased products were rejected resulting in serious delays.

At the strategic level, the host government contributed 4.2% towards the host country's total healthcare budget. About 47.2% came from external sources (including 0.5% from the focal IHO). The diverse sources of external funding had a dampening effect on host government dependency. The host government dictated the rules of engagement.

"Country X has the reputation that it's quite a complex environment to work in, partially as a result of the government (...) being a strong, or ever stronger, state." (R#4)

The tensions between interests were high. The major issues that emerged were the misalignment between quality schemes and the occasional control of access to insurgency areas. The low level of host government dependency coupled with high tension between interests translated into an uncompromising stance in regulating humanitarian logistics.

## 4.1.5 Country Y

Country Y had an average lead-time of 112 days and a timeliness rate of 59%. Two regulations limited the decision space of the focal IHO. First, internationally sourced supplies had to be purchased before a customs pre-clearance request could be made. Second, there was a requirement to obtain local vendor approval for internationally sourced supplies. Although

this contributed to long lead-times, the focal IHO still opted for international sourcing because of quality concerns.

"So can you imagine? You are running a business in [this] country and I come to you, you have this stuff in your shop and I say, well actually it's nothing, quality-wise it's nothing. But please sign here a statement that says that you don't object that I go and get it somewhere else because the authorities need it, otherwise I cannot import." (R#2)

At the strategic level, the interview, GDP, and BBC news data strongly suggested that country Y is highly dependent on external funding. Considerable tensions between interests were evident regarding medical treatment protocols and local purchasing. The high level of host government dependency coupled with these high tensions translated into a selectively facilitative stance in regulating humanitarian logistics. For instance, the host government was unwilling to compromise on medical protocols, but would allow international sourcing if the IHO obtained local vendor approval. It was initially surprising that the country was able to regulate logistics activities despite its major financial crisis. However, upon reflection, it emerged that the country had developed low cost monitoring and enforcement mechanisms through random checks of shipments, imposing high penalties for failure to follow the regulations and by requiring IHOs to seek approval from local vendors.

## 4.1.6 Country Z

In country Z, the average lead-time was 164 days and timeliness was 42%. Lead-times were severely impacted by stringent paperwork requirements for internationally sourced supplies and the banning of supplies from certain major manufacturers. Transport activities were heavily regulated in insurgency areas, limiting the focal IHO's routing options and transport frequency. The focal IHO sometimes had no physical access to certain areas for months on end. Occasionally, the host government exercised its sovereign powers and ordered the focal IHO to indefinitely cease activities.

At the strategic level, the host government had a low dependency on external sources of funding. Its expenditure on healthcare relative to the total budget was by far the highest compared to other institutional sources at 25.8%. External sources contributed 5.7 % toward the budget (including 0.1% from the focal IHO). The remaining 68.5% came from in-country sources (Table 3). The tensions between interests were high, notably regarding operating in insurgency areas and sourcing from certain manufacturers. The host government's low dependency coupled with the high tension between interests resulted in an uncompromising stance in regulating humanitarian logistics.

"We are a small fish. We can't even change the regulations!" (R#12)

## 4.2 Cross-case analysis

Table 6 summarises the main findings for each of the six cases. An initial cross-case comparison revealed that tensions between interests only affect humanitarian logistics if a host government has regulatory and enforcement capabilities to influence outcomes. However, in the two cases where the host governments did not have high capabilities (countries U and V), the respondents commented that it was difficult to conclusively attribute the relative absence of restrictions to low tensions. If regulatory and enforcement capabilities are low, the host government has no systematic way of monitoring and controlling IHO

		STR	STRATEGIC LEVEL DYNAMICS	IICS OPERATIONAL	OPERATIONAL LEVEL IMPLICATIONS	MPLICATIONS		
			Host government	Interaction: interests -				
	Host gov	Host government interests		dependency***	Host government actions	Humanitarian logistics	an logistics	
	Evidence	Capabilities* Level of enforcement					IHO Delivery performance ranking	performance ina
Case	of tension?	capabilities to address tension	Overall dependence on focal IHO	Host government stance Dominant stance towards IHO	Regulations/ acts of sovereignty impacting performance	Logistics decisions Limited decision space?****	(disregarding stability of outcomes) Lead time Timeliness	ility of outcomes) Timeliness
U Civil war, medium severity	No/ latent	Low Lack of financial and human resources	Low Dependency dampened by multiplicity of external funding sources	Indifferent Neither displays a strong disapproval of, nor delight in, IHO activity	None	2	Rank #2 Mean 98.6 days	Rank #3 On time 49.5% of the time
V Post war, low severity	No/ latent	Low Major lack of financial and human resources	High Host government desperately needs assistance	Non-restrictive Generally does not monitor/regulate IHO activity	None	92	Rank #1 Mean 77.1 days	Rank #1 On time 83.6% of the time
W Civil war, medium severity	Yes	High Due to financial and human resources availability; reducing scale of IHO operations	Low Host government is largest institutional spender on healthcare; high income status; funding gaps due to "lack of political will"	Uncompromising Generally imposes tough regulations with little or no room for compromise	Regulations Related to both inventory management and transport.	Yes Order quantities, order cycle time, travel frequency	Rank #5 Mean 117.1 days	Rank #5 On time 41.9% of the time
X Post insurgency, low severity	Yes	High Due to financial and human resources availability	Low High income status; abundance of funds from other external sources	Uncompromising Generally imposes tough regulations with little or no room for compromise	Regulations: Inventory management and transport	Yes: Supplier selection, order cycle time, purchase precedes import approval, routing	Rank #3 Mean 108.7 days	Rank #6 On time 31.7% of the time
Y Political & economic crisis, low severity	Śe	High Achieved by reducing monitoring costs and discouraging defiant behaviour	High Crippled by financial crisis; very little support from external funding sources	Selectively accommodating Accommodates focal IHO over certain issues but is uncompromising on poicy related issues	Regulations: Inventory management	Yes: For internationally sourced supplies: purchase precedes import approval: at least 3 local vendors should approve of international sourcing decision	Rank #4 Mean 112.6 days	Rank #2 On time 58.6% of the time
Z Insurgency, high severity	Yes	High Financial and human resources available	Low By far the largest institutional contributor to healthcare compared to all other funding sources	Uncompromising Generally imposes tough regulations with little to no room for compromise	Regulations: Inventory management and transport Acts of sovereignty: Transport	Yes: Supplier selection, travel frequency, routing	Rank #6 Mean 164.2 days	Rank #4 On time 42.1% of the time

Table 6: Summary of findings

activity and any existing tensions may consequently become latent. Further, when tensions between interests are low, the host government's desire to strictly monitor and control IHO activity is likely to be low, even if it has good regulatory and enforcement capabilities. Thus,

distinct from the high tension – high capabilities combination, the overall implications for the other three combinations (high/low, low/high and low/low tension/capabilities) are the same.

Based on the above reasoning, in Figure 3, we combine the tensions between interests dimension with the regulation and enforcement capabilities dimension, and juxtapose this new dimension against dependency. This leads to four broad categories of predominant stances that host governments can assume which we label as non-restrictive, opportunistic, selectively accommodating and uncompromising.

## 4.2.1 Non-restrictive host governments

A distinguishing feature of the one case in this category (country V) is the amount of freedom the focal IHO had in decision-making. All decisions crucial for delivery performance are at the IHO's discretion. Recognising that a host government's lack of restraint could be because it lacks the capabilities to control IHO activities (see Olson, 2006) or because it welcomes IHO involvement (see Bratton, 1989), our characterisation of the host government as nonrestrictive includes both these scenarios. This finding leads to our first proposition:

Proposition 1: Non-restrictive host governments exert little influence on humanitarian logistics activities, thereby paving the way for good decisions and delivery performance.

<ul> <li>In general, the host government highly limits IHO decision space through regulations and acts of sovereignty; little to no room for compromise.</li> <li>Tight control on inventory management related aspects, notably imports. Although these tend to increase lead times, they generally have a high level of predictability.</li> <li>Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas.</li> </ul>	<ul> <li>In general, the host government imposes some limitations on IHO decisions through regulations and acts of sovereignty; can be accommodating/ facilitating of certain outcomes.</li> <li>Moderate control on inventory management related aspects which tends to increase lead times. Overall lead-time is not always predictable.</li> <li>When applied, control on transport affects scheduling decisions (largely due to regulations and much less frequently due to acts of sovereignty).</li> <li>NON-RESTRICTIVE - least challenging</li> </ul>
sovereignty; little to no room for compromise. - Tight control on inventory management related aspects, notably imports. Although these tend to increase lead times, they generally have a high level of predictability. - Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	and acts of sovereignty; can be accommodating/ facilitating of certain outcomes. - Moderate control on inventory management related aspects which tends to increase lead times. Overall lead-time is not always predictable. - When applied, control on transport affects scheduling decisions (largely due to regulations and much less frequently due to acts of sovereignty).
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aspects, notably imports. Although these tend to increase lead times, they generally have a high level of predictability. - Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	<ul> <li>Moderate control on inventory management related aspects which tends to increase lead times Overall lead-time is not always predictable.</li> <li>When applied, control on transport affects scheduling decisions (largely due to regulations an much less frequently due to acts of sovereignty).</li> </ul>
<ul> <li>increase lead times, they generally have a high level of predictability.</li> <li>Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas.</li> <li>OPPORTUNISTIC</li> </ul>	related aspects which tends to increase lead times Overall lead-time is not always predictable. - When applied, control on transport affects scheduling decisions (largely due to regulations an much less frequently due to acts of sovereignty).
of predictability. - Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	Overall lead-time is not always predictable. - When applied, control on transport affects scheduling decisions (largely due to regulations an much less frequently due to acts of sovereignty).
- Both regulations and sovereign considerations can limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	- When applied, control on transport affects scheduling decisions (largely due to regulations ar much less frequently due to acts of sovereignty).
limit routing and scheduling options and can lead to unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	scheduling decisions (largely due to regulations ar much less frequently due to acts of sovereignty).
unpredictable outcomes regarding timing of movements (scheduling) in controlled areas. OPPORTUNISTIC	much less frequently due to acts of sovereignty).
movements (scheduling) in controlled areas. OPPORTUNISTIC	
OPPORTUNISTIC	NON-DESTRICTIVE least challenging
	NON-RESTRICTIVE least challenging
	NON-RESTRICTIVE - least challenging
- In general, the host government does not actively	- In general, the host government does not contro
affect IHO decision space. However, delivery	or regulate the bulk of IHO activities. There is
performance is occasionally negatively impacted by	considerable room for compromise and the IHO h
random acts attributable to opportunistic	a large decision space and a wide span of control.
behaviour.	- There are no regulations or acts of sovereignty the
- There are no regulations or acts of sovereignty that	have a major impact on inventory management a
have a major impact on inventory management and	transport decisions/outcomes.
transport decisions/outcomes.	
	random acts attributable to opportunistic behaviour. - There are no regulations or acts of sovereignty that

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\* Low if regulation and enforcement capabilities are low <u>OR</u> if tension between interests is low High if both tensions between interests AND regulation and enforcement capabilities are high.

Figure 3: Host government responses to humanitarian logistics and performance implications

## 4.2.2 Opportunistic host governments

Only Country U fell into this category. Although the country has some regulations, these

have not negatively impacted delivery performance. The challenges the IHO faces are largely attributed to the government authorities' indifferent attitude. Their actions can go either way, and this generates uncertainty. For instance, the lack of customs regulations can lead to fast clearance times, but the latter was sometimes hampered by officials seeking bribes or being absent from work. Nevertheless, as argued earlier, the host government would be severely constrained by its limited regulatory and enforcement capabilities even if it desired control to address tensions in interests. In either case, host governments, or at least their representatives, can resort to opportunistic behaviour by seizing opportunities to their own advantage. This causes uncertainty for IHOs.

**Proposition 2:** Opportunistic host governments take random actions that hamper decisionmaking and performance in humanitarian logistics.

## 4.2.3 Selectively accommodating host governments

Country Y stood out from the other low GDP cases because it had a clear desire and ability to control IHO logistical activities. It is "a very sophisticated bureaucracy" with many regulations in place (R#14). However, despite clear tensions between interests over several issues, the host government was relatively accommodating on logistical issues.

*Proposition 3:* Host governments that are selectively accommodating limit IHO logistics decision options to an extent, thereby partially affecting outcomes and delivery performance.

## 4.2.4 Uncompromising host governments

All the high GDP countries (W, X, and Z) fell into this category. There is some variation in the specific regulations imposed by each host government, but they share a generally uncompromising stance regarding regulations. Negotiations with authorities often fail. In these countries, longer processing times are experienced because of unusual requirements that are unique to the settings. However, the duration of these processes is largely predictable. Uncertainty mostly relates to the control of movement. Not knowing when a transport ban will be lifted or if one will be imposed creates challenges in making inventory management decisions about when to replenish and how much inventory to keep in areas where access is limited.

*Proposition 4:* Uncompromising host governments severely limit the logistics decision space of IHOs, and this has a major impact on delivery performance.

## 5. Discussion

## 5.1 Key research insights

The most significant insights from our research relate to the strategic level dynamics that inform host government actions. Tensions between host government and IHO interests create a desire for control in host governments. Host governments can then use regulations and acts of sovereignty and this affects delivery performance in humanitarian logistics. However, enforcement capabilities are essential for their successful enactment.

If a host government is not overly dependent on an IHO and there are strong tensions between their interests coupled with regulation/decree enforcement capabilities, it adopts a generally uncompromising stance. If such tensions and enforcement capabilities exist but the host government is dependent on IHO involvement then it is likely to adopt a selectively accommodating stance. In this scenario, host governments are open to compromise on certain issues affecting delivery performance. Where there are low tensions between interests, or they remain latent due to limited regulatory and enforcement capabilities, host governments tend to be opportunistic if their dependency is low or adopt a non-restrictive stance if their dependency is high.

Two additional insights are worth discussing. First, the availability of financial resources is not a prerequisite for host government control. We found host governments that had developed subtle ways of regulating humanitarian logistics without using significant financial resources. For example, random checks and high penalties for non-compliance are common, relatively low-cost, tactics employed by institutions (Sutinen and Kuperan, 1999). Second, although political motives are widely cited as the reason for host governments imposing tight regulations (Balcik et al., 2010; Kunz and Reiner, 2012; Pettit and Beresford, 2005; Tomasini and Van Wassenhove, 2009), we found substantial evidence of genuine reform leading to tight regulations. For example, several respondents mentioned that host governments receiving in-kind assistance for healthcare increasingly impose stringent quality control measures in response to the massive influx of counterfeit medicines in developing countries (Fernandez et al., 2008). This perhaps partially explains why the bulk of regulatory challenges in inventory management relate to international sourcing.

#### 5.2 Implications for research and practice

As reflected in the four stances towards IHO logistics activities derived in this paper, the actions by host governments in complex emergencies are more systematic and foreseeable than previously assumed. Our study shows that host governments have a negative impact on delivery performance through either limiting the decision space of IHOs or by deflecting expected outcomes once decisions have been made. The former has a largely deterministic character whereas the latter generates uncertainty. Understanding the distinction between the two modes of impact is important in developing appropriate response strategies.

We also contribute to the ongoing debate in the economic development and political science research fields about governmental strategic responses to activities by international humanitarian and other non-governmental organisations (Najam, 2000; Young, 2000). Our empirically grounded findings can add value to these fields where the research has been largely conceptual or anecdotal (Mcloughlin, 2011). Furthermore, the way we have adopted institutional theory validates the pressing need to integrate different branches of the theory to enhance its explanatory power (Hall and Taylor, 1996) thereby boosting its ability to explain complex phenomena.

In terms of practice, although our findings for IHO logistics relate to complex emergency situations, they may also apply to other disaster settings since host government considerations about tension and dependency are ever present. Furthermore, they could apply in the broader relief context. If a host government is uncompromising on logistics, it will probably also be uncompromising when it comes to regulations and decrees concerning IHO registration, visa procedures, policies and so forth. Turning to humanitarian logistics, operational and tactical decisions should be tailored to the host government's stance. We now offer recommendations for each of the four stances. When facing non-restrictive host governments, practitioners can focus on best practice as decisions and outcomes will not be influenced by the host government. Effectiveness and efficiency can be achieved by, for example, carefully selecting distribution channels, modes and frequency of transport, minimising buffer stocks, and adopting just-in-time delivery strategies. However, with opportunistic host governments, it is important to take account of practices that cause uncertainty and thus affect timeliness. Just-in-time approaches are unlikely to work and it is advisable to create buffers in anticipation of random impacts. At the strategic level, a potential solution is to form alliances among international actors to reduce the impact of random encounters on delivery performance, e.g., by lending supplies to those whose goods are held up at customs.

In countries with a selectively accommodating host government, it is advisable to seek maximum gain by making the best possible decisions for those matters fully at the discretion of the IHO. Wherever possible, practitioners should base decisions on the options that are available to them in matters where the host government is uncompromising, and reserve negotiations for matters of paramount importance. With such governments, there is potential to influence certain host government choices at the strategic level because of the government's high dependency levels.

Most regulations imposed by uncompromising host governments result in longer leadtimes but a reasonable level of certainty can be achieved if compliance is prioritised by practitioners. This implies the need for advance planning on both inventory management and transport. Investing resources in becoming aware of, and compliant with, host government regulations is worthwhile as this will reduce uncertainty. At the strategic level, developing ways to minimise the impact of actions that generate uncertainty is probably the best approach. For instance, if host governments restrict IHO access to certain areas, establishing close partnerships with local organisations and building their capacity to respond can be an appropriate strategy. However, care should be taken, especially in relation to preserving the humanitarian principles of impartiality, neutrality and independence.

We also caution that IHOs should be aware that the predominant stance of a host government depends on the general level of tensions between interests and its dependency on IHOs. However, different IHO mandates and resources could lead to different outcomes where regulations are applied on a case-by-case basis. For instance, an uncompromising host government may issue more travel permits to IHOs with whom the tensions are lower while applying the same customs regulations to all IHOs. Therefore, an IHO should understand how the host government perceives it specifically, and how it perceives IHOs in general, in order to improve the quality of its decisions.

#### 6. Conclusions, research limitations and future research

By focusing on IHO-led relief operations in complex emergency settings, we have unravelled the underlying complexities that inform host government actions and their impact on humanitarian logistics. We derived four main host government stances from six cases, namely: non-restrictive, opportunistic, selectively accommodating and uncompromising (Figure 3) and developed four key propositions based on these stances that can be tested and verified in future research.

In developing the propositions, the underlying logic was that restrictive behaviour is most likely if tensions are high and a government has the necessary regulation and enforcement capabilities. This premise was corroborated by all our six cases although one should note that only two (countries U and V) had other than this high tension - high capabilities combination. Given that interviewees found it difficult to attribute the less restrictive behaviour in these two cases to either low tension and/or low capabilities we combined these variables. Since we combined these variables on the basis of two cases, this is a limitation of this research. It would be worthwhile to conduct further empirical research into the extent to which high capabilities are relevant when tension and dependency are low. Admittedly, such a combination will be rare in complex emergencies since it reflects stable conditions where IHO involvement is unwarranted. If this situation exists, our typology suggests that it is opportunism (perhaps in the sense that the host government has shifted obligations that they are able to fulfil to IHOs). However, it may happen that governments take an uncompromising stance with IHOs that choose to intervene instead. Future research could try to identify such cases and explore whether this could lead to the refinement or alteration of the proposed stances.

There are two other limitations that lead us to suggest further lines of inquiry for future research. First, although we were able to measure performance impact precisely in terms of lead-times and timeliness, we were not able to pin-point exactly the actions that have the most impact and the extent of that impact. Future research could employ more rigorous quantitative methods to establish the real extent to which identified host government actions impact on delivery performance. Second, although we were able to draw valuable insights by focusing on a Dunantist IHO, the decision to focus on a single IHO was also partly driven by the problems in accessing IHOs (Ehrenreich and Elliott, 2004). We expect that this does not fundamentally alter our proposed host government stances but it might be worthwhile to establish if faith-based/religious IHOs or Wilsonian IHOs (i.e., those that have an inclination to work in close partnership with host governments) (Stoddard et al., 2009) perform better/ worse than Dunantist IHOs when dealing with governments who adopt each of the identified stances. Establishing the role of IHO identity in determining performance under varying host government stances may help to further improve humanitarian operations in a world where humanitarian space is shrinking.

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