

Good Governance and Economic Efficiency: The Flooding Risk and Its Economic Impacts on SME in Developing Countries

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Abstract

The financial management of a disaster risk creates significant tasks and responsibilities for governments, economic agents, individuals and businesses. Among other disasters, flooding is seen to be a significant risk which has the potential to disrupt SME's operations because the (SMEs) are the backbone of the developing economies and also developed economies. The main goal of this study is two-fold: First, to provide a general overview of the contributions to the literature on the good governance and economic efficiency with a special focus on the financial adaptive capacity of SME to face a natural disaster, second, to identify the reasons for their weakness on adaptive organizational behaviors. Business continuity process is vital aftermath of a flood event. Affected SME's experiences are discussed drawing upon interviews conducted in local case studies. Acknowledgment: The author thanks to financial support by Galatasaray University Research Foundation under project grant BAP/ 16.103.001

Key-Words: SME, Financial resilience, Business Continuity, Good Governance, Economic efficiency, Flood response

1. Introduction

This study begins with a review of the literature on good governance and economic efficiency because this relationship has been much debated in the study, with some arguing that good practices and good orientations of the public institutions can overcome any natural disasters constraint and increase resilience of the developing countries Small and Medium Enterprises (SMEs) to face the economic meltdown after the disasters. The

relationships among good public practices, education, environmental protection, resource allocation, fight against poverty, resilience of enterprises to natural disasters now recognized in the literature on sustainable development.

Among the 6 dimensions of governance measured by the Worldwide Governance Indicators [22]. Government effectiveness is defined as “captured

perceptions of the quality of public services, the quality of civil services and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies". [22] Michel Camdessus, former IMF Managing Director, in his speech on the United Nations Economic and Social Council in 1997 pointed out that good governance is important for countries at all stages of development [13]. James M. Buchanan [7] Gordon Tullock [7] Gary Anderson, [2,3]. Mark Crain, William Shughart and Robert Tollison [10], have studied institutional problems of governance [21].

As it is mentioned before the effectiveness of public resource management and quality of public services are vital for the business environment. Actually, many developing countries in their most affected regions have weak preventive business system, with a low capacity for averting and controlling disasters outbreaks. The World Development Report 2015 summarizes some of the measures needed for sustainable businesses practices [20,23]. To manage lands which highly open to natural disasters this report notes the need for politically daunting measures about it. It is evident that we face increasing threats and uncertainty from climate change and associated extreme weather events. Flash floods are very significant disasters globally; as a result the mortality rate is very high and no flash flood warnings in many countries and also lack of local and regional cooperation around the world. As it is reported by the WMO (World Meteorological Organization), among 139 countries, 105 indicated

that flash floods were among the top most important hazards and require special coordination of warning and disaster management strategies for effective response [24]. Among other disasters, flooding is seen to be a significant risk [1] which has the potential to disrupt SME's operations because the (SMEs) are the backbone of the developing economies and also developed economies. They account nearly for 99 % of the total businesses. Increasingly flash floods become a global threat nevertheless there are limited researches concerned with the impacts of flooding on SMEs in developing countries. Although our study identified how various reasons influence their response, recovery and weak adaptation capabilities.

The purpose of the paper is to identify the reasons for the weakness of the SME on adaptive organizational behaviors. Business continuity process is vital aftermath of a flood event. So because of extreme weather events business continuity management (BCM) has emerged as a process to improve organizational and financial resilience of SMEs [6]. Since millennium BCM provides a useful plan for flood risk management.

In this study, affected SME's experiences are discussed drawing upon interviews conducted in local case studies. The flood concept which is the main issue of the paper is an important risk factor for our country but it does not consider important enough. Nevertheless every year it causes deadly losses. Rapid urbanization is the most important reason of the flood damages [5,16].

Table1. Economic Effects: Primary Effects

Loss of Life	
Damage to buildings and structures	Loss of residence and business areas
Bridges	No acces
Sewerage systems	Swere water contamination, diseases
Roadways	No acces
Canals	No acces
Power transmission	Loss of power
Power generation	Loss of power supply
Water treatment	Loss of drinking water

Source: Elaborated by author

Table 2. Long Term Economic Effects

Secondary Effects	Long Term Effects
Temporary decline in business	Economic hardship
Temporary decline in tourism	Economic hardship
Rebuilding coast	Excessive unwanted depenses
Food shortage	Prices increase
Psychological damage	Because of deaths, serious injuries and loss of property
Chronically wet buildings	Respiratory problems and related illnesses
Monetary value losses	Lower property value of the wet basements
Small business closed	Never reopen their doors

Source: Elaborated by author

Table3. A Flood History of World: Ten Deadliest Floods

Rang	Dead Toll	Event	Location	Date
1	1.000.000-4.000.000	China floods	Chine	1931
2	900.000-2.000.000	Yellow River (Huang He)flood	Chine	1987
3	229.000	Result of Typhoon Nina	Chine	1975
4	145.000	Yanagtze river flood	Chine	1935
5	< 100.000	St.Felix's Flood, storm surge	Pays-Bas	1530
6	100.000	Hanoi and Red River Delta flood	N,Wietnam	1971
7	> 100.000	Yangtze river flood	Chine	1911
8	50,000-80,000	St.Lucia's flood, storm surge	Pays-Bas	1287
9	60,000	North Sea flood, storm surge	Pays-Bas	1212
10	36,000	St. Marcellus flood	Pays-Bas	1219

Source : Bennassar (1993). Les catastrophes naturelles dans l'Europe médiévale et moderne [4].

2. Research Methods

This paper draws on data from a geographically based case study in Turkey. A qualitative approach has been taken to data collection. A series of semi-structured interviews has been conducted with SMEs which located and highly affected in this area from previous flooding between 2009 and 2013. The data collected in the paper is drawn from a 30 in dept-interviews which range in duration from 45 minutes to one and half hours.

3. SME's experience of flooding: a local case Study

3.1 Presentation of the Geographical Base

Among the most destructive types of natural disasters in Turkey floods are cited on second rang after earthquakes. Nearly 30 % of all the natural disasters in the country consist of flood event. Between 1950 and 2007, 34 flood event have been reported and nearly 1000 people died and 1.5 million people were affected [11].

Flash floods associated with intense rainstorm are a common phenomenon especially in coastal parts of Turkey. Istanbul is a one of the most affect city of the country because of highly urbanized costal part. For example during Marmara floods in Istanbul (7-10 September, 2009) the North Western coastal areas suffered from a series o floods during 3 days with 32 human losses and more than Dollars 100 million of economic damage. The 9 September flood event is categorized as an even greater than the 500 year return period.

The city of Istanbul has grown rapidly over the last 40 years due to the international migration. In order to absorb the increasing population, new settlements have been built illegally on the outskirts and this rapid illegal urbanization is a great threat for the city.

The geographical basis of this study is Kağıthane District which is one of the most affect districts of the Istanbul, because it is situated just Kağıthane Rivers. Enterprises interweaved are located in this district and they are on the SMEs category.

3.2 Analysis of Interviews

This paper focuses on the transcripts of interviews conducted with business. Three sources are considered when defining the attributes and behaviors rules of SME agents. Interviews conducted on the basis of 19 questions with affected businesses; ISO 22301 on Business Continuity Management Systems requirements [15]; As a good referred example for a small local business preparedness, a guideline prepared for businesses to prepare for floods by City of San Antonio-Texas Municipality [9].

3.2.1 Normative References

ISO 22301: As it is well know, ISO as an independent, non-governmental international organization since 1946, with a membership of 162 national standards bodies, brings together experts to share knowledge and develop market relevant international standards. ISO 22301 was prepared by Technical Committee ISO/ TC 223, societal security and defines normative references, terms

[14]. ISO 22301 -2012 is the latest and corrected version. (ISO online browsing platform)

BCM (Business Continuity Management): BCM defines a management process that identifies potential threats to an organization and the impact to business operations those threats. BCM provides a framework for building organizational resilience. The main purpose is to create within the businesses a response capability to the disrupted events and strength their resilience. BCB builds a framework [6]: “Plan, do, check, act, it is a useful template for organizations to build a management capability. Business Continuity Management is a part of the table of content of ISO 223b01 (ISO online browsing platform) [14].

3.2.2 A Good Practice Example

City of San Antonio Flood Emergency Safe System, San Antonio-Texas, USA: The web page of the Flood Emergency Safe System of this small city (San- Antonio, Texas) draws our attention to the up - dated and well instructive information about the weather events and early warning prevention measures for their community and their business [9,12]. We consider it as a successful action plan of a local administration. Among the significant information, you may find there a helpful link :Make a Plan; Built a Kit; Presentation of Regional Mitigation Plan; Coastal Construction Manual; Elevating your Flood Prone House; National Flood Insurance Program; National Weather Services; Protecting Manufactured Homes from Flood Damage; Protecting Building Utilities from Flood Damage; Protecting Flood Plain Resources.

In the study a flood event has been divided into two main themes

- The awareness and risk assessment of business agents, especially to flood risk.
- Organizational and adaptive capability to the risk of SMEs pre-flood and during flood phase. Although research has identified various characteristics of SMEs, notably lack of organizational behavior, weak adaptation capabilities in the case of

flash flood. The principal concern of the paper is to understand the reasons of this low priority of the risk awareness and related preparedness in their business agenda.

4. Findings

Two themes are highlighted, which have emerged from the analysis of the case study: risk awareness of SMEs agents and early preparedness for disruptive events through a BCM which represent a significant adaptive capacity. The questionnaire has been divided into two parts and the distribution of the questions between two parts is equitable:

- First part is about the awareness of the SMEs agents on the risk management of their local administration for the city (Questions 1-8) On the basis of first part risk awarenesses of SMEs agents and related institutional preparedness awarenesses are very weak.
- Second, is about their awareness and knowledge about the preparedness of their business (Questions 9-19). On the basis of the second part safety plan for employees are weak.
- On the basis of the third part (Questions: 15-19) lack of organizational behavior, weak adaptation capabilities have been observed.
- Findings from the case study indicate that the large majority of SMEs did not have formal BCM plan in their premises. When we asked why this was the case, after a large flooding experience since recent decade, typical responses from deep interviewees show us, a lack of conscience, knowledge and weak control from the local administrative institutions. Many interviewees expressed the view that since the last tragic flood experience in 2009, their businesses have no yet an emergency case plan.

5. Conclusion

Flooding can be disaster for any business, especially damages of the premises or equipments and losses of stock and suppliers also losses of contacts could be very serious for the SMEs. Floods are the second most destructive types of natural disasters in Turkey, after earthquakes. In this study, we consider that the developing countries SMEs are faced to three constraints: Risk awareness problem, financial constraint and lack of good governance. Business continuity process is vital aftermath of a flood event. Affected SME's experiences are discussed drawing upon interviews conducted in local case studies.

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