STRATEGIC INVESTMENT DECISIONS AND OWNERSHIP STRUCTURE: AN EXPLORATORY STUDY IN EGYPT

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How to cite this paper: Elmassri, M., & Abdelrahman, M. (2020). Strategic investment decisions and ownership structure: An exploratory study in Egypt [Special issue]. *Corporate Ownership & Control, 17*(4), 399-416.
http://doi.org/10.22495/cocv17i4siart16

ISSN Online: 1810-3057
ISSN Print: 1727-9232

Received: 10.07.2020
Accepted: 31.08.2020

JEL Classification: D70, D91, G11, G32, M41
DOI: 10.22495/cocv17i4siart16

Abstract

This paper examines how strategic investment decisions (SIDs) are made in the Egyptian context. There is an increasing call to comprehensively explore how social, economic, political, cultural, and organisational influences impact managerial judgement in SID making. In doing so, this paper takes an ontological perspective to understand how SIDs are really made. Given the uncertainty of the political and social climate and the radical changes that have taken place in Egypt, this paper provides a unique opportunity to investigate how SIDs are made in a revolution space. The contextual emphasis leads to a qualitative, interpretive research methodology. Twenty-seven unstructured interviews were conducted from national-owned and multinational companies in Egypt. Twelve organisations out of the twenty-seven that were interviewed were working for multinational organisations, thirteen of them were working for nationally owned organisations and the remaining two are joint venture companies. We found that the uncertainty embedded in the contextual structures cannot be translated through abstracted technical investment appraisal methods, so the role of subjective judgments and personal intuition is emphasized in the making of SIDs. Although both national and multinational companies indicate that in the time of revolution it is more rational to rely on *personal* trust rather than *system* trust. We found that multinational organizations push their Egyptian subsidiaries to articulate technical methods as a taken-for-granted practice, whether it is deemed meaningful or not.

Keywords: Strategic Investment Decisions, Ownership Structure, Investment Appraisal, Managerial Judgement, Ownership Structure, Less Developed Countries

Authors' individual contribution: Conceptualization – M.E. and M.A.; Methodology – M.E.; Formal Analysis – M.E.; Data Curation – M.E.; Writing – Original Draft – M.E.; Writing – Review & Editing – M.E. and M.A.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Strategic investment decisions (SIDs) in institutions are unique, non-repeatable decisions, the information needed to support their evaluation is likely to be similarly unique (Alkaraan, 2020). Alkaraan & Northcott (2006) state that SIDs "are 'strategic' projects [that] are substantial investments that involve high levels of risk, produce hard-to-quantify (or intangible) outcomes, and have a significant long-term impact on corporate performance" (p. 150). SIDs are critical decisions due

to the initial capital costs incurred, but also because they affect future unit production, costs and revenues (Nair, 1995). Corporate performance is also used to support internal decision making by top management and employees (Nigri, Del Baldo, & Agulini, 2020).

Prior SID literature can be divided into two groups. The first group represents the traditional perspective of SIDs, which suggests that technical appraisal methods are the main consideration in taking SIDs. In this category, SIDs are viewed as objective decisions, taken by employing appropriate project appraisal techniques. Basically, many studies (Bosch, Montllor-Serrats, & Tarrazon, 2007; Cary, 2008; Magni, 2009; Bennouna, Meredith, & Marchant, 2010) examined "what" investment appraisal techniques are employed in taking SIDs. The traditional SID perspective aims to economically rationalise SIDs as investment appraisal methods presumably play this role in optimising the attainment of a pre-determined goal. Accordingly, many critics raised against the traditional perspective of SIDS. Morgan (1988) argues that "the existence of techniques and data for evaluating projects in a uni-dimensional way tends to encourage uni-dimensional decision making" (p. 483). Consequently, another stream of research (Slagmulder, Bruggeman, & van Wassenhove 1995; Carr & Tomkins, 1996; Kaplan & Norton, 2000) introduces alternative methods used in evaluating organizational performance (e.g., balanced scorecard and real options) in the SID context. These methods integrate financial and non-financial factors in assessing SIDs. However, integrated approaches may still view SIDs from the technical perspective. These methods quantify non-financial factors and use statistical methods to examine "what" should be employed. This leads certain researchers (Elmassri, Harris, & Carter, 2016; Harris, Northcott, Elmassri, & Huikku, 2016) to explore SID making from a process and people perspective. This perspective does not view SIDs to be objective decisions, but rather considers that these are subjective decisions based on subjective judgements. Thus, while the traditional perspective represents SIDs as objective, technical, and as an analytical tool to "take" SIDs, the process and people perspective represents SIDs as judgemental, based on contingencies. The difference between these two approaches constitutes the introduction of elements of subjectivity, increasing qualitative, non-quantifiable elements, and moving from a "static concept" of decision to a "dynamic concept", which enables us to grasp more in-depth understanding about SIDs.

Although institutional framework outlines the SIDs all around the world, this issue in less developed countries (LDCs) and emerging economies is even more critical. Alam, Uddin, and Yazdifar (2019), Peng, Wang, and Jiang (2008) and Meyer, Estrin, Bhaumik, and Peng (2009) highlighted that institutional framework is more sensitive to firms' SIDs and performance in LDCs. The process and people perspective also enable this study to investigate how the decision makers in an LDC context such as Egypt understand the meaning of Western management accounting systems (MAS), derived from Western culture. It explores how agents in an LDC evaluate the role of Western technical methods, in the Egyptian context; especially in the post-revolution period within a high level of uncertainty. This context provides a unique opportunity to explore how decision makers in Egypt, as an LDC in transition, view the use and adoption of Western MAS for both national and multinational owned companies. This will help us to better understand how SIDs are made in Egypt and how the ownership structure can construct such decisions.

The Egyptian government's economic policies represent an attempt to encourage multinational companies (MNCs) to invest in Egypt, which raises another question. Should the MNCs operating in Egypt continue adopting their Western technical structure in the Egyptian context, especially within this extremely uncertain environment post the revolutions? Ghoshal and Nohria (1989) found that the structures of multinational organisations are not homogeneous throughout the organisation, but flexible to fit the different environmental structures faced by the different national subsidiaries. However, Pfeffer (1981) argues that organisational structures are dependent on internal power relationships within the organisations, not on the organisations' external structures. Thus, we need to understand how the ownership structure can influence the adoption of Western technical methods in the SID context. Therefore, this research addresses the following main research question:

• *How are SIDs[1] really made in the Egyptian context?*

There is also a sub-question:

• *How/does the ownership structure affect the adoption of Western technical structure in an LDC as the Egyptian context?*

This study extends and contributes to both the management accounting and SID literature, as *empirically*, investigating how SIDs are really made is under-presented in the SID literature. Most prior studies (Hickson, Butler, Cray, Mallory, & Wilson, 1986; Carr, 2006; Carr, Kolehmainen, & Mitchell, 2010; Emmanuel, Harris, & Komakech, 2010) investigate the influence of specific factors, either internal or external, on SIDs. This study *comprehensively* explores how SIDs are really made, how social, economic, political, and contextual influences interact with the managerial judgements and personal intuition to shape the decision makers' subjective decisions. In addition, there has been little attention to how SIDs are made in the Egyptian Context. The Egyptian context as an LDC provides a unique context to study how SIDs are made. Given the social and political climate and the radical changes that are happening in Egypt – signalled after two revolutions.

The paper structures as follows after positioning the study in the extant literature, we then present the study and methodology employed. Then, the empirical section examines how SIDs were made in the Egyptian context, how ownership structure impacted the SIDs making process. Finally, we summarise our contributions and conclusion.

[1] This thesis does not examine how a specific SID(s) is made. However, it investigates how the process & people perspective and the Egyptian post-revolution context interact to shape the process of making SIDs.

2. LITERATURE REVIEW

In reviewing SIDs literature, the traditional perspective of SIDs (Haka, Gordon, & Pinches, 1985; Abdel-Kader & Dugdale, 2001; Arnold & Hatzopoulos, 2000) argues that it is rational to employ technical methods (e.g., net present value (NPV) and internal rate of return (IRR)) in the taking of SIDs; it does not matter whether these techniques fit a certain context, as these techniques are objective and universal. SIDs are isolated from social, political, cultural and contextual influences. In addition, this group of studies embodies the positivistic research paradigm. This group views SIDs as objective, and, by focusing on taking the most efficient and effective decision, the research concentrates on what decision tools should be adopted. For the purposes of this study, and due to the nature of internal and external influences in the making of a SID, viewing SIDs as objective, technical decisions are inconsistent with the nature of SIDs and inappropriate for this study.

Strategy is such a complex, contextual idea, with a number of interrelationships, that the technical approach is too simplistic. Thus, concentrating on the SID as technical results in limiting and assuming what is meant by strategy. The meaning of strategy depends on many influences: personal, contextual, organisational, behavioural, economic, and political. These influences change the meaning of strategy contextually, from one person to another. This study aims to investigate "how" SIDs are made, rather than identifying the 'best' or 'most effective' technical approach to SIDs. This research aims to explore the influence of managerial judgements, as well as the political, contextual, organisational, economic, and cultural aspects of SIDs, in addition to the project appraisal and risk assessment tools on making SIDs. The focus is holistic. Equally, this research holds that each SID is particular and unique and holds that particularity and uniqueness.

The process and people SID perspective (Carr & Tomkins, 1996, 1998; Carr & Harris, 2004; Alkaraan & Northcott, 2006; Carr et al., 2010) support the notion of bounded rationality in making SIDs. In making a SID, there are many influences that preclude the taking of an "absolute" rational decision; SIDs are conditional (Scapens, 1985). The role of managerial judgements cannot be ignored, and isolating SIDs from their cultural, social, organisational and political context is meaningless. Kostyuk and Barros (2018) highlight that "the strategic committee should play a more important role in the ex-ante preparation – in conjunction with consultancies and executive directors – of the strategic plans that the board must be discussed more deeply" (p. 26). Furthermore, Caton, Goh, and Ke (2019) find that "firm value tends to increase when equity incentives are combined with a friendly board of directors and conclude that the negative effects of CEO power on firm value reported by others are limited to firms with weak CEO equity incentive compensation plans and arms-length boards of directors" (p. 19).

This research supports the notion that Western management control systems (MCS) must be adapted in application to LDCs, due to unique, particular political, social and cultural aspects in each LDC. These studies (Elmassri et al., 2016) move our understanding of SIDs from "taking" a decision to "making" a decision. However, this work is still not complete. When we examine existing literature for an understanding of how SIDs are made in Egypt, it is clear that there is a range of factors that decision makers need to consider, but not how they influence the decision or why they influence the decision. Further work about 'how' SIDs are made is needed.

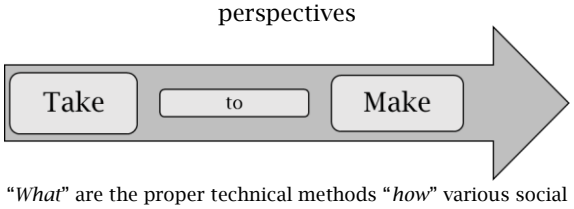
There are four lines of research regarding the prior SIDs literature which show the development of SID literature, and the movement from quantitative to qualitative, objective to subjective decision making.

The first line identifies appropriate technical methods that should be employed in taking SIDs, focusing only on quantitative methods. The second line of research articulates both quantitative and qualitative factors by introducing integrated methods but still views SID as an objective process. The first and second lines of research constitute the traditional/technical perspective on SIDs, representing the SID as an objective decision, identifying 'what' are the appropriate methods that should be used in order to 'take' an economic rational decision. Contrastingly, the third and fourth research approaches construct SIDs as an interrelationship of social, political, economic, cultural and organisational influences.

These influences impact upon the subjectivity of the managerial judgements. Both of these approaches focus more on making SIDs rather than taking them, but they fail, generally, to answer the core question of 'how' SIDs are made. They investigate the impact of a certain influence(s), rather than exploring the complex interrelationships between these social, political, cultural, economic, contextual, and organisational influences and the role of managerial judgement. In addition, the third line of research employs inappropriate research methods in investigating how qualitative aspects can influence SIDs, by using quantitative methods to examine a qualitative characteristic.

Consequently, this perspective constitutes a movement from a positivist-informed paradigm to a socially constructed paradigmatic approach. Adopting a socially constructed paradigm enables researchers to interpret and understand how complex interrelationships between various aspects influence and construct a SID. Figure 1 depicts the main differences between traditional and process & people perspectives.

Figure 1. Traditional vs process & people perspectives



"*What*" are the proper technical methods "*how*" various social actors can influence SIDs

Quantitative	Qualitative
Positivism	Social constructionism
Static "strategy"	*Dynamic* "strategy"
A focus on *objectivity*	A focus on *subjectivity*

This study holds that SIDs should be viewed from the people and process perspective. This perspective explores the strategic context of SIDs, which enable us to investigate how SIDs are really made. This research extends prior research by *comprehensively* exploring how social, economic, political, cultural, organisational and contextual influences impact upon managerial judgement. These complex interrelationships will help us to understand better how SIDs are made. This cannot be achieved by investigating the impact of a specific influence in isolation from other influences. Equally, the abstraction and simplification of the positivist philosophy are inappropriate. It is therefore necessary to investigate how SIDs are made by employing unstructured approaches to collecting and analysing data. This study also extends this analysis, as Egypt is less a developing country, but rather is a developing post-revolution context following the revolution. As recent events in Egypt demonstrate, the re-development process is extremely unstable when compared to prior developing country studies.

Thus, this research is situated within management accounting literature that views SIDs from a process and people perspective, not the technical perspective. However, this study extends this by investigating how SIDs are really made and comprehensively exploring how social, economic and political influences impact managerial judgement. In addition, this thesis extends the group of studies (Uddin & Hopper, 2001; Wickramasinghe, Hopper, & Rathnasiri, 2004; Tsamenyi, Noormansyah, & Uddin, 2008; Hopper, Tsamenyi, Uddin, & Wickramasinghe, 2009) that argue that MAS in LDCs should differ from those in advanced capitalist countries. Those studies were conducted in a relatively stable environment compared to the current extremely uncertain post-revolution context.

There has been little attention to how SIDs are made in the Egyptian context. Such a focus is needed given the current social and political climate and the radical changes that are happening in Egypt. The government is introducing a new social system aimed at narrowing the gap between rich and poor. How do these new social, political and economic policies influence SIDs in the Egyptian context? How do these complex interrelationships between the new social, political and economic reforms influence SIDs in Egypt? How does the 'new hope' as signalled by the revolution influence SIDs? This context provides a unique opportunity to explore how Egypt, as an LDC in transition, views the use and adoption of Western MAS. This will help us to understand better how SIDs are made in Egypt. Elmassri et al. (2016) explore the SIDM in the Egyptian context from the 25th January 2011 to the 30th June 2013. However, this study extends that by covering a period from June 2016 to August 2018 with more focus on the ownership structure influence on making SIDs. This enables us to observe how SIDs are made in an extremely uncertain post-revolution periods and in a quiet politically stable period.

Therefore, Section 4 empirically answers these addressed questions in relation to the prior literature. However, before presenting the empirical analysis it is worth discussing the appropriate research methodology and methods for the study. The next section addresses what, how and why questions, to identify the appropriate research paradigm, methodology and methods.

3. RESEARCH METHODOLOGY

This study focuses on how decision makers interact with various social actors, how their intuition and managerial judgement is socially constructed by the political, social and economic structures. Consequently, social constructivism is an appropriate epistemological position for this study. A hermeneutic paradigm, which is one strand of interpretivism, enables an understanding of how SIDs are made. A hermeneutic paradigm holds that subjective judgements cannot be isolated from understanding the process, which is suitable to explore how various structures can shape the subjective judgements of the agents. In addition, there is a link between hermeneutics and social constructivism. Both embrace the idea of intersubjectivity; the role of cognitive psychology; and understanding of social phenomena with a socio-cultural context.

Accordingly, to fit with the research paradigm a constructivist methodology is employed. This methodology allows a critical evaluation that enables interviewees' responses, to explore how SIDs are socially constructed. It also allows a move between data analysis and relevant literature to guide the thematic development and subsequent data collection. This facilitates the process of hermeneutics and generated in-depth understanding of how SIDs are really made.

The current study employs a mix of data collection methods. A combination of unstructured interviews and document analysis was employed. Unstructured interviews provided descriptions about how SIDs are really made and, a subjective understanding of social reality.

Unstructured interviews are an appropriate method for this study for the following reasons:

1) Subjectivity is an important aspect in making SIDs. Therefore, there is a need to employ a method which has the ability to explore the subjectivity dimension. Unstructured interviews are based on interviewees' subjective responses which reflect the situation in which they are involved (Gray, 2009). Howarth (2004, p. 338) argues, also, that unstructured interviews are appropriate in gaining a subjective understanding of social reality.

2) In order to understand how SIDs are made in the Egyptian context, there is a need to gain, from interviewees' views, qualitative, in-depth descriptions about SIDs. Howarth (2004) argues that unstructured interviews provide an in-depth description of events and processes. In addition, it is crucial to understand SIDs from the interviewees' views; how they understand SIDs from their own time frames. May (1997) argues that with unstructured interviews:

"*Interviewees talk about the subject in terms of their own frames of reference. By this, I mean drawing upon ideas and meanings with which they are familiar. This allows the meanings that individuals attribute to events and relationships to be understood on their own terms*" (p. 113).

3) The study is an exploratory study that aims to explore how SIDs are really made. May (1997) suggests that for general exploratory and phenomenological studies unstructured interviews are the most appropriate.

Twenty-seven unstructured interviews (seventeen males and ten females) were conducted; each one took from sixty to ninety minutes. Twenty-one interviews and were conducted from the 1st of April 2013 until the 30th of June 2013 and six interviews were conducted from the 1st June 2016 to the 30th August 2018. Thus, interviews were conducted before and after the second revolution on the 3rd of July 2013. With the interviewees' permission, most interviews were tape-recorded. The average managerial experience of each interviewee was around 27 years. Managerial experience is an important aspect of investigating how such critical decisions "SIDs" are made. Twelve organisations out of the twenty-seven that were interviewed were working for multinational organisations, thirteen of them were working for nationally owned organisations and the remaining two are joint venture companies. At the beginning of each interview, we briefly explained the research objective and clarify that this study is only for academic purposes. Each interviewee was asked an open question about how SIDs are made The topics might include questions about how the new political regime, in Egypt, could influence these decisions, and how the new Egyptian government programme, concerning social and economic development, could influence SIDs, as well as if and how Western technical methods were adopted.

The combination of research methods is used to strengthen confidence in the study's findings. Decrop (1999) argued that "using multiple methods paves the way for more credible and dependable information" (p. 159). This research used both unstructured interviews and document analysis. Each method contributed to fulfilling the research objectives. Document analysis, as a secondary source, provided non-reactive information about the features of the political, social and economic regimes in the Egyptian context. This analysis enabled us to critically evaluate the interviewees' responses across all the interviews. Thus, unstructured interviews and document analysis are complementary and not replacement methods.

Given the uncertainty embedded in the political, economic and social structures since the revolution, it is not sufficient to use a single method in collecting the data. The combination of methods is an effective way to overcome the weakness of each used method (Gray, 2007). There are inconsistencies between various documents, governmental reports and the interviewee's response. Therefore, there is a need for multiple data collection methods to grasp thick understanding of the Egyptian uncertain context in order to be able to analyse and interpret the research data.

This study employs thematic analysis, a form of discourse analysis. Unlike content analysis, thematic analysis interprets both implicit and explicit meanings. It is crucial to understand how various internal and external factors influence SIDs. Namey, Guest, Thairu, and Johnson (2008) argue that thematic analysis "moves beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas" (p. 138).

Although this study depicts a research framework based on prior literature, this did not prevent us from being open to revising this framework based on the data collected. In addition to the a *priori* themes, new themes emerged through the empirical data. During the field work, we wrote down field notes based on observation and interviews. We were keen to critically evaluate the interviewees' responses, through presenting other interviewees' opinions, findings of prior literature, some quotations from the media, newspaper, or government reports. This helped us to develop the preliminary ideas that emerge from interviews and observations

After each interview, a continuous comparison was made between the empirical data and the key themes from the literature. The comparison explored the similarities or differences between the empirical material and literature, so new themes emerged. We avoided reaching premature conclusions at this stage, so no leading questions relating to the summarised themes were addressed. As additional interviews were conducted and analysed, both the pre-existing and the emergent themes were further modified and more field notes were made.

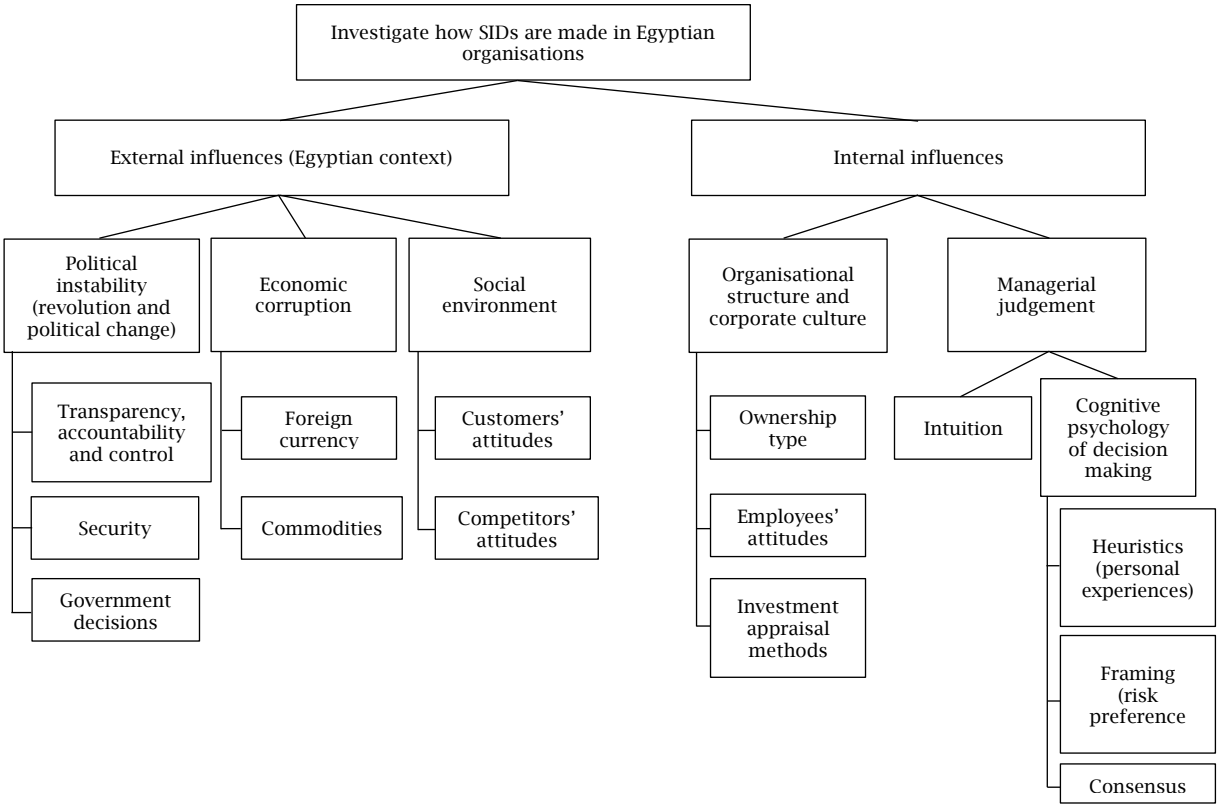
The data are analysed in relation to prior literature, resulting in an empirical section analysis, as explained in the next section.

4. EMPIRICAL ANALYSIS

In the light of prior literature first, we focused the interviews on two groups: 1) the external influences; and 2) the internal influences. This approach explored how various structures shape the interviewees' judgement in making their SIDs. Then, these two groups were analysed in accordance with ownership structure: 1) multinational organisations; and 2) nationally owned organisations[2]. These types of ownership structures allowed us to capture multiple versions and interpretations of how the power of parent companies and certain subordinates can 'produce/resist' technical investment appraisal methods.

[2] We do not mean that nationally-owned companies are state-owned companies, however, we mean by this private-owned companies that owned by Egyptian persons or institutions

Figure 2. Final thematic map



Through the process of initial coding the categories, an initial thematic map was produced, containing many themes (e.g., security, social influence, government regulations, instable political situation, economic conditions, currency issues, employees' rights, new regime and others), with few interrelationships between the themes. However, through the field work, the initial thematic map was refined, and a number of themes were grouped into one theme, so there are themes and sub-themes with many complex interrelationships. After the completion of the field work, we started writing-up and recording the findings, resulting in a final thematic map (see Figure 2) with two main themes and many sub-themes. The two main themes are internal and external influences presented in Table 1 with the themes the interviewees explicated.

Table 1. Summary of preliminary thematic analysis

Themes	***Source (interviewees)***
External influences	
Political instability	
Transparency, accountability and control	1,4,7, 8, 11, 17,18,19
Security	1,2,3,4,7,10,13,14,16,20
Government decisions	1,2,3,5,10,,11,12,13,17,20,21
Economic corruption	
Foreign currency	2,5,9,12,13,18,20,22
Commodities	4,17,18,21
Social environment	
Customers' attitudes	3,4,6,11,12,15,17,21,27
Competitors' attitude	2,3,6,8,9,12,13,15,18,21
Internal influences	
Organisational structure and corporate culture	
Ownership type	1,3,5,8,11,14,16,,19,20,21,24,26
Employees' attitudes	1,4,5,6,8,9,11,13,14,16
Investment appraisal methods	5,6,7,9,10,11,13,19,20,21
Managerial judgement	
Intuition	1,2,4,7,8,9,10,14,18,19,20,24
Cognitive Psychology decision making	
Heuristics (personal experiences)	1,2,3,4,5,6,7,9,10,12,13,14,18,19,21
Framing (risk preference)	1,8,9,14,19,25
Consensus	1,2,5,8,9,14,18,19,21,26

It is also important to mention that the influence of the Egyptian culture, as an LDC, is emphasised through its effect on certain internal factors. For instance, the empirical data show that the Egyptian culture prevents Western MASs, especially technical methods, from being adopted in

the Egyptian context. It was also found that personal intuition and managerial judgement are shaped by the Egyptian culture. This emphasises the importance of the cultural aspect in the SID context.

4.1. External influences

Investment decisions are significant but sometimes are affected negatively by some external factors. For instance, Kostyuk, Mozghovyi, and Govorun (2018) highlight that the investment decisions are negatively influenced by the disclosure of a press release on corporate governance. Furthermore, many studies (Carr & Tomkins, 1996; Arnold & Hatzopoulos, 2000; Carr, 2005; Emmanuel et al., 2010, Harris & Elmassri, 2011; Elmassri et al., 2016) highlight the influence of the socio-political context in making investment decisions. Almost all the interviewees in our study stated that the political, economic and social aspects, since the revolution, create an uncertain business environment. This uncertainty seems to be extreme, as the political situation is unstable and changes rapidly. The next sections explain each theme of the external factors and how they influence SIDs and other internal factors.

4.1.1. Political influences

Since the revolution, three government cabinets have taken over. Two of them were caretaker cabinets and the third was appointed by the elected president. This creates an unstable political environment. There are unclear governmental plans, rapid changes in government regulations, and a lack of security, transparency, governmental control, and reliable information.

The Vice President of a nationally-owned automobile company stated that the lack of governmental transparency influenced SIDs. The company was planning to open a new showroom; and some government institutions announced that they might issue a new tax law that would increase the tax on the automobile sector.

"*There is no transparency; no one knows whether there is new tax legislation or not, so there is a doubt of making a decision to open a new showroom. We have to wait*" (Vice President).

The interviewee stated that, within the expected increase in the fuel prices, the government plans to issue new tax legislation. He argued that the lack of transparency and the ambiguity of the government regulations increase the level of uncertainty. Consistently, Delmas and Tokat (2005) argue that the political and regulatory environment is an important source of uncertainty for organizations. The government might create uncertainty by changing the regimes that govern organisations' abilities to capture the profits of their operations (Teece, 1986). Thus, government regulations might increase the level of uncertainty since the revolution, which influences the process of making SIDs.

In addition, the owner of a nationally owned pharmaceutical company argued that the new health and safety assessment rules influence SIDs. He stated that "after considering the new health and safety standard, we have postponed the decision". Thus, government practices influence the process of making SIDs. This is consistent with Grundy and Johnson's (1993) proposed framework of context categories that potentially affect the SID process. One of these categories is political & governmental influences. They investigated how managers understand the linkage between financial/strategic approaches in making investment decisions, in a group learning approach with eight managers from UK companies, and found that political activities can influence investment decisions.

In addition to the lack of security, most interviewees mentioned that the lack of accountability and government control led to the absence of a reliable source of information, which is a crucial dimension in making SIDs. The Vice President of an automobile company stated that how SID is made without relying on a reliable source of information. He mentioned that there is an independent government institution that provides current and future information about all the automobile companies that operate in Egypt. This institution has various sources of information, including the numbers, types and models of cars the companies have sold each month. Before the revolution, each company was keen to provide this information as it received information about competitors. There were legal sanctions on companies that refused to provide this type of information. The interviewee mentioned that since the revolution, and due to the absence of governmental control, unfortunately, most of these companies have either stopped providing this information or provide inaccurate information, which influences the process of making SIDs. Similarly, Duncan (1972), Lawrence and Lorsch (1967), Davis, Marino, Aaron, and Tolbert (2011) argue that since information about external changes is intrinsically difficult to predict, managers cannot understand what the major events or changes in their business are and when they feel unable to predict something accurately, it influences the decision making process.

Arguably, political uncertainty has its economic and social consequences, as many interviewees stated that political instability results in economic and social corruption. The next section presents how economic and social aspects are influenced by the political climate and how they influence SIDs.

4.1.2. Economic and social influences

Since the revolution, the economic situation, arguably, has had social consequences. Some interviewees stated that the economic situation has changed customers' taste and pushed them to stop buying some commodities. The Marketing Director of a company that manufactures hygiene products stated:

"*Before joining this company, I was working in a toy company. After the revolution, our sales rapidly went down. From our market studies, we realised that customer taste has changed. Customers' behaviour is altered toward political issues; they are no longer keen to buy toys for their kids (I think this is due to the economic situation as well), so we were thinking to open a new branch, but the decision was postponed*" (Marketing Director).

The toy company was planning to expand through opening a new branch. However, toys as a commodity are no longer in sufficient demand by customers. Arguably, the change in customers' preferences in the Egyptian context can be illustrated through the concepts of international economics theory. It explains that differences in consumers' preferences in different countries may be due to political and economic aspects (Krugman & Obstfeld, 1997).

The political situation also influences the social dimension in the Egyptian context. Many interviewees stated that the lack of security and governmental actions changed many customers' behaviour.

"*Unfortunately, due to the lack of security, we are thinking to stop opening new stores now*" (Investment and Planning Director).

The Investment and Planning Director of a multinational communication company stated that the lack of security encouraged some customers to behave in a dysfunctional way. This company was planning to expand and open new stores. However, the behaviour of some customers was one of the influences that pushed them to abandon this plan.

Since the revolution, political and economic aspects have resulted in a change of competitor behaviour. The Middle East sales director of an MNC that produces hygiene products mentioned that political and economic instability influences competitors' attitude. Some competitors behave differently and do not follow the market price rules. They reduce their products' selling prices to be able to continue operating in the market. These actions exist in the absence of accountability and a government control mechanism. It was also noticed that most of this group of interviewees worked in national owned companies (NOCs), which need to continue operating in the market. This leads NOCs to act differently in order to survive. Miller (1993) argues that the perceptions and interpretations of managers in an uncertain context can change due to their personal characteristics and motives. Due to the current economic climate, the need to survive and keep operating in the market might change the decision makers' behaviour and actions.

In brief, the empirical data show that since the revolution, political instability has influenced economic and social aspects, which creates an uncertain environment that influences SIDs. Schneider and De Meyer (1991) argue that strategic actions depend upon perceptions and interpretations of the external environment. Thus, the role of personal interpretations and subjective judgements is crucial in understanding the influence of the external environment on the process of making SIDs. The next sections discuss the influence of managerial judgements and other internal factors on such decisions and how these factors are affected by external pressures.

4.2. Internal influences

This section analyses the internal factors that emerged from the empirical data in accordance with the psychological constructs presented in the descriptive framework of Emmanuel et al. (2010). The internal influences are classified into two themes, managerial judgement and organisational structure and corporate culture. However, the influence of internal factors on SIDs has different meanings than prior literature, as this study, unlike prior literature, considers the influence of both external and internal factors on SIDs. The effect of external factors and the Egyptian culture re-construct the relationship between the internal factors and SIDs, which changes the meaning of these internal factors. Consequently, this section discusses each theme and examines how it influences SIDs. These sections also investigate the relative values of certain internal factors since the revolution for both MNC and NOCs. Finally, the interrelationships between internal themes and external influences are highlighted.

4.2.1. Organisational structure and corporate culture

There is a line of research (Emmanuel et al., 2010) that raises the importance of organisational structure throughout the process of making SIDs. However, the empirical data raise many patterns to explain the influence of organisation structure and corporate culture from different perspectives than those in the literature. The following sections discuss these themes and explain how these patterns influence SIDs and how they are influenced by external aspects.

Ownership structure

Ten organisations out of the twenty-one that were interviewed are multinational companies; nine of them are nationally-owned companies and the remaining two are joint venture companies. MNCs and joint venture companies have almost the same properties, and the empirical data do not highlight any dichotomy between these two types of organisations. However, there is a difference between NOCs and MNCs in the SIDs context. The main difference is that NOCs have only two choices, either to continue operating by making new investment decisions in order to survive or to shut down. On the other hand, MNCs have additional options; for instance, they can hold any SIDs and operate in Egypt relying on support from the parent companies, or they can shut down the Egyptian subsidiaries and still survive, as they have many subsidiaries all over the world. The empirical evidence shows that this difference is the main factor in constructing the meaning of SIDs in both types of organisation.

A Director of Investment of a multinational construction company stated that making SIDs in this company was different than in his former company.

"*This is a multinational company that can easily move its investments from one country to any other country. This happened in in Iraq and Syria*" (Director of Investment).

This interviewee was working in a NOC, although his former company is one of the leading companies in the Egyptian market, the motive to keep operating in the market pushed it to accept some SIDs, regardless whether these decisions were the best. However, MNCs take their time in making SIDs and these decisions are based on the strategic

plan of the company. MNCs can stop operating in unstable markets, if necessary, as they have the option to operate in other international markets. This enables MNCs to keep their strategies and structures, whatever is the external environment in their subsidiaries. On the same note, Morsicato and Radebaugh (1980) argue that subsidiaries' can make decisions in accordance with the standardised system of their parent companies, rather than their own special environment. In contrast, Ghoshal and Nohria (1989) argue that the structures of MNCs are not homogeneous throughout the organization; however, they are flexible enough to be adapted to different environmental influences faced by the different national subsidiaries. The empirical analysis of this study shows that due to power relationships, MNCs keep certain structures and change others; for instance, they keep Western technical investment appraisal methods and change the rewards system.

On the other hand, most interviewees of NOCs mentioned that they needed to make SIDs:

"*We still have to make investment decisions, we must survive …. If we shut down this business, you know how many workers and employees' redundancies will be…. In this chaos, you cannot control employees' reactions*" (Chief Financial Officer).

This interviewee works at an Egyptian leading glass processor company in the Middle East and Africa. It has a strong competitive advantage as it is unique in bending and processing larger than normal glass dimensions. It employs approximately 1,850 employees. He stated that since the revolution, his company had to make SIDs not only to increase its market share or maximise its profits but to survive and keep operating. He mentioned that they had to keep operating; there was no other choice. Even if the decision makers did not believe that they had to make SIDs because of the employees. This huge number of employees will have a severe reaction if the company stopped operating or even cut some jobs.

Therefore, as NOCs need to survive and keep operating they have to consider the employees' opinions in making their SIDs. Perrow (1970) found from a case study, that sales department employees are the most influential, as they have the most power in the company which enables them to influence management decisions. Guy (2003) argues that power that makes a difference in the process means '*bargaining power*'. Bargaining power is derived from dependence; that is, the more *A* depends on *B*, the more bargaining power *B* has over *A* (Bacharach & Lawler, 1981). Since the revolution, NOCs depend more on their employees, as they are the key drivers of survival. Also, MNCs depend on their subsidiaries as they have more information about the current Egyptian context, especially in the absence of reliable information sources since the revolution. Thus, as subordinates are influential, they might gain more bargaining power in the process of making SIDs.

Therefore, it is important to understand how, since the revolution, the subordinates' attitude has been changed and how the influence of ownership structures can affect the subordinates' power capacities. The next sections show how ownership structure influences the role of subordinates' attitude and Western investment appraisal methods in making SIDs.

The attitude of subordinates

In 2012 there were 1,969 protests by employees – in public and private sectors – compared with 530 protests in 2010 (Al-Ahram, 2013). Given the chaos and lack of security, most interviewees mentioned that the attitude of employees has dramatically changed. The extremely uncertain political, economic and social climate shapes subordinates' attitude.

Since the revolution, the role of labour unions is more important. This encourages many employees and workers to criticise their social and economic conditions. They use the new space of democracy to raise their objections, especially within the absence of security. This leads subordinates to change their attitude.

Arguably, the influence of subordinates in making SIDs depends on the ownership structure. The need to survive for NOCs gives employees more bargaining power, so their opinions are considered in making SIDs. On the other hand, subsidiaries cannot exercise their bargaining power in MNCs, as they know that such corporations could shut down the Egyptian subsidiary, so they have little influence in making SIDs.

A business owner of a NOC that constructs metal products mentioned that workers exert pressure to increase their salaries and reduce their working hours. This puts the company under constant pressure, which influences managers' judgement about prospective projects. Although some projects are not ideal, the company may accept them in order to survive and meet its commitments to the workforce. This interviewee had received an offer from an Italian company to buy his company. Despite his desire to sell the business, he was worried about the reaction of employees to this decision. Thus, he decided to continue and try to make SIDs be able to survive and pay the employees' salaries, which have been raised twice since the revolution. The employees' bargaining power pushed the decision makers to consider their opinions in making SIDs. The interviewee mentioned that since the revolution he had changed his management strategy. Each month there was a meeting with the employees, and it had become easier for employees to access his office. He was keen for them to feel that they are close to each other. He, many times, spent his lunch break with the employees, eating and chatting informally. Employees have started to notice the difference in treatment and appreciate this; they feel that their voices are heard. There is a need to build trust among employees, they are the only group that can support the company in keeping operating; all other parties (e.g., the government, customers, and competitors) push it to shut down. The owner of the business stated that he consulted the employees before making any SIDs, and involved them in making decisions because even if a decision was not profitable, they could make it profitable. Thus, the role of subordinates in making SIDs has expanded since the revolution. Their bargaining power pushes decision makers to consider their opinions in making SIDs.

Parent companies also need to consider their subsidiaries' opinion in making SID, in this highly political uncertain context. Ring, Lenway, and Govekar (1990) argue that the political risk for MNCs is increased when the host (subsidiary) government changes its regulations, which affect the company's

ability to operate and transfer key resources into or out of a country. Post the revolution, Egyptian behaviours and norms have changed; even the government behaviour in terms of laws and regulations are challenged as well. Kostova and Zaheer (1999) claim that subsidiaries violating country's laws and regulations might create tremendous legitimation problems for MNCs, which enhances the subsidiaries' institutional power. Equally, Dörrenbächer and Gammelgaard (2011) argue that if there a difficulty in understanding the host-country institutional settings, because to do so effectively requires some understanding of host-country norms and values, this increases subsidiaries' institutional power.

In the absence of reliable sources of information, parent companies become more dependent on their subsidiaries to provide them with information. Once the subsidiaries have strategic information, they have the ability to act in a manipulative way. Surlemont (1998) argues that if subsidiaries can exercise their influence on headquarters through a combination of their strategic information and manipulative behaviour, then subsidiaries have micro-political bargaining power. Such power leads parent companies to consider their subsidiaries' opinions.

"*After the revolution, the parent company asked us in preparing any business proposal to provide detailed narratives about the political, social and economic situation; in addition to our judgement about how can we evaluate the business proposal, as we are more involved with the Egyptian context*" (Director of the Middle East and Africa planning and logistics).

This interviewee worked in a multinational oil company, where she had ten years' experience. She mentioned that since the revolution, the parent company asked them to report their judgement about the current situation in Egypt. Through many informal meetings, the Egyptian subsidiary realised that the parent company needed to grasp as much information as possible about the Egyptian context from the people who are engaged in day-to-day operation with the Egyptian people and the Egyptian government, especially in an extremely uncertain context, with a very little reliable information available. Thus, the parent company understood that the subsidiary could exercise its micro-political bargaining power and institutional power to shape SIDs, so its opinion should be considered in making such decisions.

However, the ownership structure enables/constrains the influence of subordinates in making SIDs. One interviewee highlighted the difference in employees' attitudes in different types of organisation.

"*Based on my experience from a NOC, some employees have more power to change management decisions. They might have the ability to stop any decision or revise it*" (Vice President Exploration and New Ventures of Multinational Oil Company).

NOCs' employees know that the company wants to operate and its last option is to shut down. The NOCs have to operate in Egypt and rely on the Egyptian market, especially after the decline of exports since the revolution, due to the economic situation and the weakness of the Egyptian pound. This gives NOCs' employees bargaining power to exercise over the management and making SIDs. However, MNCs have other options; they can hold their investment in Egypt or even maintain their level of activity and close their branch in Egypt. Although post the revolution subsidiaries have gained more power, the ownership structure and the ability to operate outside Egypt prevent the subsidiaries from exercising such power.

The interrelationship between the ownership structure and the subordinates' role raises some important questions. Due to the need to survive, does the role of subordinates overcome all other aspects? Does the role of employees have more relative value than employing investment appraisal techniques? Is this role the same for NOCs and MNCs? The next section discusses these questions and explains how the external influences and the power capacities of certain factors shape the relative values of technical methods in the making of SIDs. It also explains how Egyptian culture affects the adoption of Western MAS.

Investment appraisal methods

There is a debate in the literature on the role of investment appraisal methods in the making of SIDs. Some studies (Jog & Srivastava, 1995; Bosch et al., 2007; Cary, 2008; Magni, 2009) that view the SID from a traditional perspective consider the investment appraisal methods as the main influence in accepting or rejecting an investment proposal. However, the process and people perspective emphasises the role of political, social, economic, contextual and intuition aspects in making SIDs.

The prior literature also raises the issue of adopting Western MAS in LDCs. Some studies (Hopper & Armstrong, 1991; Uddin & Hopper, 2001; Wickramasinghe et al., 2004; Tsamenyi et al., 2008) argue that MAS in LDCs should differ from those in advanced capitalist countries due to different cultural, economic and socio-political circumstances. As this debate is one of the main arguments of this research, we examine how investment appraisal methods influence SIDs in an LDC like Egypt, how the unstable political aspects influence the relative value investment appraisal method, and whether the influence of technical methods is the same in NOCs and MNCs. Accordingly, the empirical data examines, in a post-revolution context:

- whether decision makers rely only on the technical methods in making SIDs or not;
- how decision makers understand the meaning of technical methods as one tool of Western MAS, and what is their relative value in making SIDs; and
- how the ownership structure influences the adoption of Western investment appraisal technical methods.

Most interviewees argued that the investment proposal should include information about the NPV and IRR of the projects, but these are not the only criteria for acceptance or rejection of projects. Employing technical methods does not mean ignoring, for instance, personal intuition and managerial judgement.

"*Doing numerical studies is quite important. However, positive numbers do not mean accept the project, and in the same way, negative numbers do not mean reject the project. Numbers are only a guide to make a decision. I cannot deny the role of our board's experience and their judgement in deciding whether to accept a project or not… making decisions is not a mathematical equation*" (Vice President).

This interviewee was a Vice President of an automobile company. His company was planning to open a new showroom; the board of directors (BOD) asked the finance department to prepare an investment proposal. This proposal included the expected rate of return for the next five years of the project. However, these numbers were only used as guidance in making the decision; the interviewee stated that positive numbers are not the sole criterion for project acceptance; numbers are only part of the judgement process. There are many factors to be considered in making a judgement, such as the current political and social situations, economic conditions, competitors, customers' demand and their ability to pay. Individual experience and intuition should not be ignored in evaluating the contextual influences and employing technical tools cannot be the key driver in making SIDs. In this respect, Shank (1996) argues that NPV cannot be a driver for decisions in manufacturing. There are many contextual and non-quantifiable aspects that must be considered, and most technical tools fail to embrace these aspects. Many studies (Pike, Sharp, & Price, 1989; Carr & Tomkins, 1996; Dempsey, 2003; Madhani, 2008) claim that technical tools ignore non-financial aspects, for instance, future competitive advantage in evaluating investment projects. Grundy and Johnson (1993) argue that the problem with technical methods is that they subject non-financial factors to financial analysis, which causes such factors to lose their meaning.

Most interviewees in both NOCs and MNCs stated that technical methods are based on subjective judgements that are derived from Western culture, which is completely different from the LDCs' culture.

"*One size fits all! This never works in making any SIDs. Each decision has a different situation, so how can I adopt the same methods for each decision? In addition, they are Western, so they may fit Western culture, but never fit our culture as they are based on Western concepts*" (Chief Financial Officer).

This interviewee worked as CFO at a construction company. Before he worked in a corporate setting, he had worked in the academic field. He did his Master's degree in a US university and attended many academic conferences, so he had both academic and practical experience. He stated that any technical model mainly depends on predictions and estimations, which are to a great extent based on managerial judgements. For example, to calculate the NPV, it is necessary to estimate the discount rate, which is calculated through estimating the cost of capital and estimating the required rate of return. Thus, numbers cannot be "pure", cannot be isolated from personal judgement. This interviewee mentioned that the concepts of the investment appraisal technical model are based on the Western developed economic environment. For instance, the Western market is an efficient market, there are multiple reliable sources of information, the competition is different and the size of the companies that operate in the market is different from the Egyptian market. Thus, the concept of rate of return is defined according to these economic factors, not the Egyptian one. Even if Egyptian companies would like to adopt this model, it must be customised to fit the Egyptian culture, which means it will be totally changed after considering the influence of political, social and economic factors, and also the personal intuitions and managerial judgements of the Egyptian people, which are different from Western people's judgement. After considering these aspects the technical model will no longer be an objective model. The interviewee called into question the suitability of an abstracted Western model as the main driver in making SIDs in Egypt as an LDC. This consistent with the view of Berry, Zeithaml, and Parasuraman (1985), Uddin and Hopper (2001), Wickramasinghe et al. (2004), Kattan, Pike, and Tayles (2007), Efferin and Hopper (2007), Tsamenyi et al. (2008), Hopper et al. (2009) who argue that different political, social and cultural aspects in LDCs prevent Western MAS being adopted in such contexts.

The empirical evidence is inconsistent with studies (Bosch et al., 2007; Cary, 2008) that view SIDs from a traditional perspective and consider that SIDs are objective decisions. Most interviewees mentioned that SIDs were subjective decisions based on managerial judgements, and they thought that technical methods can be only a part of the process of making SIDs. However, since the revolution, interviewees from both NOC and MNC stated that the relative value of technical methods is dramatically decreased.

"*Numbers can be important but alone are not sufficient to make a decision. Moreover, In the case of uncertainty, they lose their importance as it becomes very difficult in this extremely uncertain situation to express most influences in numbers*" (Chief Financial Officer).

This interviewee was a CFO in a national paper company. He mentioned that numbers can be helpful to some extent in a relatively stable environment. However, in an unstable political environment they do not work. In making a SIDs the company relied heavily on government regulations, but it was not possible to be sure that governmental regulation would be the same within the coming five years, to calculate NPV and IRR. Political instability and the ambiguity of government's regulation cannot be reflected through numbers. This interviewee worked for three years in Iraq from 2004-2007. In this period, his company tried to rely on the technical model in making SIDs but it did not work. He mentioned that in this politically unstable period in Iraq, even if his own experience was not helpful; the Iraqi directors knew more than he did, and their judgements were very helpful in making SIDs. The Iraqi people understand their country and what project can be suitable for their context; they know the nature of the customers, competitors and suppliers. Since the revolution in Egypt, this interviewee reported to the BOD and raised the importance of personal intuition in making SIDs, especially as the Egyptian people have a much better understanding of the Egyptian context than any foreign directors. Technical tools also at this time seem to be almost irrelevant and sometimes misleading.

Equally, in the MNCs context, a Vice President of exploration and new ventures of a multinational oil company states that information about the political, economic and social aspects plays a vital role in making SIDs after the revolution. The

company was studying an investment proposal to buy an asset, and he noticed that the BOD changed the approach they used to follow in evaluating projects.

"*Using investment appraisal techniques comes after screening the prospective project. Screening means evaluating the qualitative influences (market demand, security, contract terms and conditions, technical challenges, and the skills needed) for the project. This screening is mainly based on our experience and judgements, in addition to the company board's vision and their desire to accept or reject the project. If there is a preliminary acceptance, then the planning and investment director prepares the technical part of the proposal*" (Vice President of Exploration and New Ventures).

He stated that under the original system any investment proposal had to pass through a screening phase and a technical phase, which took place side by side to end up with a comprehensive investment proposal. In the technical phase, the planning and investment director prepared a numerical report using technical methods. However, the screening phase evaluated the qualitative influences, including the market demand, security, information about the new government regulation, security, the expected labour law, tax legislation, customer taste, the government's new economic reform system, government future plans, and the new social system whereby upper and lower limits are set for salaries. Since the revolution, his company board had asked managers to perform two actions. The first was to include extra aspects in the screening phase, as far as possible. The second was to perform the screening phase before the technical one and if there is no preliminary acceptance the proposal should not proceed to the technical phase and should be rejected.

In uncertain contexts relying on technical numbers may not be worthwhile. Several studies (Gordon & Narayanan, 1984; Gul & Chia, 1994; Kattan et al., 2007) argue that in case of high uncertainty, the evaluation process should not be restricted to the application of quantitative techniques. Rather than, an organisation's survival relies on its adaptability and flexibility of the company's MCS in responding to the various aspects that influence the organisation. Kattan et al. (2007) in a study conducted in Palestine, note that as the degree of uncertainty increases, making decisions becomes more complex and accounting numbers less reliable. Chapman (1997) argues that in an uncertain context, accounting information becomes unreliable and accounting numbers seem to have little value. Equally, Prietula and Simon (1989) claim that intuition overcomes the limits of economic rationality that are introduced by rational-analytic models in an unstable environment.

Although most interviewees mentioned that in an uncertain context the technical numbers have very little relative value in making SIDs, MNCs still employ them in their business proposals.

"*We are a multinational organisation, we have a global system, we must prepare investment appraisals and follow the company's rules and regulations. Stakeholders are happy with numbers, they are convinced by them*" (Director of MENA region, planning and logistics).

This interviewee worked as Director of MENA region planning logistics in an MNC, based in Germany, which produces laundry and home care and beauty care products. The interviewee mentioned that there is a need for numbers to be a part of the justification process, in order to justify decisions to the parent company or the stakeholders, because numbers convince various stakeholders (e.g., government agencies, shareholders, banks, etc.) and they are unhappy without numbers. Although the parent company needed the subsidiary company's judgements about the political, social and economic situation since the revolution, the subsidiary company knew that the parent company could easily transfer its investment from Egypt to any other country. They had to follow the parent company's rules and regulations to keep their jobs, even though they knew that technical methods are almost irrelevant to this post-revolution context.

Technical tools seem to be a constraint on the decision makers rather than a driver in making SIDs. Equally, Shank (1996) argues that "NPV is more a constraint than a decision tool" (p. 47). It claims to be also a constraint on parent companies themselves. Stakeholders push them to articulate numbers. Despite the uncertainty embedded in the external environment in Egypt, due to power relationships, technical methods are still used. Similarly, Pfeffer (1981) argues that organisational structures do not depend on the organisations' external environment; rather, they depend on the internal power relationships within the organisations. Powerful stakeholders can push the company to report their needs and desires (Deegan & Unerman, 2006).

On the other hand, most NOCs, since the revolution, do not employ technical methods. This is due to internal power relationships as well; the employees' bargaining power dominates in this case.

"*During one of my informal meetings with the employees, the finance department manager told me there is no more need to adopt the NPV or IRR in our business proposals. These methods are totally irrelevant for the current situation*" (Business owner).

This is a business owner of a nationally owned metal construction company who mentioned that the need to survive predominates over all other factors in making SIDs. Any factor that contradicts with the target of keeping the company operating should not be considered. This interviewee mentioned that his employees did not believe in the role of technical methods in making SIDs, since they are based on Western political and economic factors, and also based on numerical expectations, which are very hard to predict in a post-revolution context. The employees are more important to business owners than adopting technical methods, as employees have the ability to enable the company to survive. The power of employees as the key driver to survival pushes the decision makers to devalue Western technical methods and agree to stop adopting such methods. This is consistent with Otley's (1994) argument that in a context where chaos is common and surprises are expected, organisations must be able to match their capabilities to the changing needs of the environment to be able to survive.

In brief, the empirical data show that decision makers do not rely on Western technical methods in

making SIDs, as these methods are abstract and are not able to take account of contextual influences. Technical methods reflect the Western political, social and economic factors and so do not fit an LDCs context. The ownership structure through power relationships determines the adoption of Western technical structures in the SIDs context. Since the revolution, technical methods have lost their relative value; conversely, personal intuition and managerial judgement seem to be more relevant to the SID context and post-revolution context as well. Therefore, the next section focuses on the influence of managerial judgement on SIDs, and how the cognitive psychology concepts of heuristics, framing and consensus shape SIDs. How does personal intuition construct the meaning of SIDs?

4.2.2. Managerial judgement

Many aspects of managerial judgements have been mentioned in prior literature; cognitive psychology constructs of decision making (Emmanuel et al., 2010); and decision makers' intuition (Pike, 1989; Grundy & Johnson, 1993; Papadakis & Barwise, 2002).

Emmanuel et al. (2010, p. 483) argue that the three main cognitive psychological constructs, heuristics, framing and consensus, have various properties and dimensions. Heuristics can be the individual experiences that affect decisions, either by use in the industry or other benchmarks. Framing can be expressed through risk preferences. Consensus is group decision making that can be achieved through corridor meetings and coalitions. In addition, Kahneman (2003) defines intuition as "thoughts and preferences that come to mind quickly and without much reflection" (p. 697). Such intuitive processes evolve from long experience and learning (Seboo, 1993).

The empirical data show that most interviewees claimed that psychological concepts influence SIDs. A CFO of a national-owned glass company was in a panel to analyse an investment proposal to open a new branch, he stated:

"*I told the top management about my opinion as I have written in my report. They said, Forget about this report and based on your experience how can you judge about that, and we will start to discuss it with you and all the directors to reach a consensus about the decision*" (Chief Executive Officer).

This interviewee stated that since the revolution, there is a need for group discussion to reach a consensus. No one alone can, in this uncertain context, make a decision. There are very few reliable sources of information decision makers can use to build up their judgements. There is a need to reach a consensus around the decision, he argued, this is an incentive to the departmental managers, as they are involved in making the decision. If managers support the decision, in the case of possible failure, they would also have the motive to exert more effort to make the project succeed. Consistent with this view, Marsh, Barwise, Thomas, and Wensley (1988) found, from analysing three investment decisions in the UK, that consensus is an important aspect of the managerial judgement for making decisions. Equally, Smith and Murray (1997) found that involving interest parties (consensus) in making investment decisions is very important. Harris (1999) also claims that formal team meetings and group knowledge sharing processes are important aspects in making investment decisions.

In addition to consensus, the interviewee revealed that the owners are also keen to benefit from their managers' experience in making SIDs. On this note, Eisenhardt and Bourgeois (1989) found from case studies of eight micro-computer firms that the "greater the use of experienced counsellors the greater the speed of [the] strategic decision process" (p. 559). Counsellors are experienced executives, and the CEO takes account of their opinions in making investment decisions. Findings of Smith and Murray (1997) support the use of "experience" and "checking out" mechanisms in framing investment decisions.

A group of studies (Huff, 1990; Walsh, 1995; Porac & Thomas, 2002) explores the influence of cognitive framing on the process of making strategic decisions. Bower (1970) argues that environmental turbulence creates a challenge for making strategic decisions, an action that requires managers to understand the external environment. In this situation, cognitive frames are the means by which managers sort through these ambiguities (Walsh, 1995). Consistent with this view, the empirical data show that decision makers rely more on cognitive framing since the revolution.

The Chief Financial Officer of a NOC that deals in metal stated that "since the revolution, the board of directors differently act, and interpret the same business proposal in a different way". This interviewee had worked in this company for ten years, and he had personal contact with the BOD. He mentioned that before the revolution the company had prepared a business proposal to buy new machines. The BOD at that time had postponed the decision. One reason for postponing was that the project had a negative NPV. Post the revolution, the BOD had used the same information from the previous business proposal, but this time the company accepted the decision. The information was the same but due to the uncertainty of the external environment the BOD acted differently. In this regard, Huff (1990) argues that cognitive frames, especially during periods of high uncertainty, should be central to the strategic decision making process as agents attempt to make sense of ambiguous signals from the external environment. Decision makers extend their cognitive frame to new issues or transforming frames to align with new circumstances (Snow, Rochford Jr, Worden, & Benford, 1986).

Since the revolution, decision makers in NOC give more weight to their experience and intuition than Western technical structure. On the other hand, MNCs adopt cognitive framing to legitimise the adoption of Western technical methods. Benford and Snow (2000) identify legitimacy claims and frame realignment as two such framing practices. Furthermore, MNCs use their powerful capacities and technology to frame their subsidiaries to articulate Western technical methods as a part of the company's system (Abdelrahman, Masri, & Skoumpopoulou, 2019; Abdelrahman & Papamichail, 2017).

One of the properties of framing is risk preferences. The owner of a nationally owned waiver company insisted that his risk appetite influenced his SIDs. He stated:

"*I am a risk taker. I cannot change myself, I like to have risk, in any risk investment, I like to accept it. I have experience and I believe in my judgement. However, in this corrupt political and economic situation, I have to stop what I used to do*" (Business owner).

He stated that he used to accept any risky investment, as his propensity to take risk dominated other influences. Likewise, Kannadhasan and Nandagopal (2010) found that risk propensity influence managers' judgmental decision. External dimensions also influence managers' risk preferences; the unstable political and economic environment shapes the owner's risk preference and pushes him to avoid taking risks in making SIDs.

The political, social and economic climate post the Egyptian revolution emphasises the influence of managerial judgement in making SIDs. This does not mean that managerial judgement can only influence SIDs in an unstable political and economic environment, characterised by extreme uncertainty. The prior literature that explored the influence of managerial judgement did so in a stable context, for instance, the UK (Pike, 1989; Grundy & Johnson, 1993; Emmanuel et al., 2010) and the US (Khatri & Ng, 2000). However, in an extremely uncertain context, the influence of managerial judgement and personal intuition is highly emphasised.

5. CONCLUSION

The empirical data are consistent with recent prior literature (Kattan et al., 2007; Emmanuel et al., 2010; Elmassri et al., 2016), arguing that an economic/rational approach does not work on its own, especially in uncertain times. Since the revolution, the influence of political, social and economic aspects is emphasised. The change in governmental regulations, lack of security, transparency and control, and the absence of reliable sources of information contribute to political instability that influences the economic and social environment in the Egyptian context.

The foreign currency crisis arose due to the lack of accountability and government control over the currency market, and also the inappropriate reaction of the central bank to face this crisis. The lack of security also pushes some customers to change their attitude and act differently. The economic situation and government control push some competitors to breach the market rules and lower selling prices. Thus, political instability and the change of political regime after the revolution have led to an unstable economic and social situation. This creates a highly uncertain environment that influences SIDs and internal aspects.

The Egyptian context affects the relative value of various internal factors in the framing of SIDs. Personal experience, subjective intuition and other cognitive psychology concepts, since the revolution, are emphasised in the making of SIDs. The role of subordinates is also emphasised, and their opinions are given more weight in making SIDs. The empirical data show that the relative value of technical methods for both NOCs and MNCs has declined. In Egypt as an LDC, its culture prevents the Western MAS from being adopted. However, the adoption of Western technical methods is based on the power relationships. The need to survive and the desire of employees to stop the adoption of technical methods have pushed the decision makers in NOCs to consider the power of employees to enable the company to survive and stop adopting technical methods.

However, the ability of MNCs to operate elsewhere prevents their subsidiaries from resisting the adoption of technical methods. MNCs still articulate the technical methods, due to the power relationships of stakeholders. Thus, the ownership structure influence also is an important aspect in making SIDs. The different motives underlying NOCs and MNCs construct the meanings of SIDs. There are many complex interrelationships among all aspects. Thus, SIDs cannot be simplified as objective decisions based on employing technical tools.

It was found that the technical methods are derived from Western political, social and economic regime which is completely different from the Egyptian culture as a LDC. Thus, even adopting a Western technical model in the Egyptian context needs customisation in order to fit the Egyptian culture, which means it will be totally changed after considering the influence of political, social and economic aspects. In addition, due to the Egyptian culture, personal intuition and managerial judgements for the Egyptian people are different from Western people's judgement.

In summary, SIDs, ultimately, are judgemental decisions that are affected by various influences. SIDs are not isolated from the political, social and economic aspects. Personal experiences and intuition are crucial to translate external and internal influences into SIDs. The role of the process and people are crucial in making SIDs in the Egyptian context.

There are some limitations of this research as this study investigates how SIDs are made in the Egyptian context through exploring the influence of the internal and external factors on SIDs. The internal factors (e.g., managerial judgements) are framed by the Egyptian culture, as most interviewees are Egyptian and accumulate their experience from working in the Egyptian context, whereas the external factors represent the Egyptian post-revolution context. Accordingly, the study's findings represent how SIDs are made in a specific context at a specific period of time which might constrain its findings for any other context. However, this research does not examine how a specific SID is made, rather than it explores how the complex interrelationships between various factors frame the decision makers' judgements in making such decisions. The meanings underpinning these interrelationships enable us to understand better how SIDs are made in any context.

Another limitation of the study is that all interviewees are working in private-owned companies (either NOC or MNCs); no one works in state-owned companies. The rules and regulations of state-owned companies are different from private ones; also, the role of the decision makers and their degree of flexibility in making SIDs might be different. Thus, exploring the SID in a state-owned company would highlight the influence of public ownership on the process of making SIDs.

Therefore, one idea for future research is focusing on alternative ownership structures such as

state-owned companies; these companies have different structures (e.g., rules and regulations) from private-owned companies. The political aspects and the state intervention affect the process of making SIDs. In addition, conducting in-depth qualitative studies in the Egyptian context for different aspects of MAS. This methodology is under-presented in the Egyptian context and enables us to explore how the Egyptian socio-political context shapes various types of MAS.

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