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Entrepreneurial behaviour and firm performance of Ethiopian tour operators

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Entrepreneurial behaviour and firm performance of Ethiopian tour operators

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Entrepreneurial behaviour and firm performance of Ethiopian tour operators

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List of abbreviations and acronyms

AAU	Addis Ababa University
ABRI	Amsterdam Business Research Institute
CSA	Central Statistics Agency (Ethiopia)
ECCT	European Council on Tourism and Trade
EFA	Exploratory Factor Analyses
ETOA	Ethiopian Tour Operators Association
EU	European Union
GDP	Gross Domestic Product
GNI	Gross National Income
GTP	Growth and Transformation Plan (Ethiopia)
HDI	Human Development Index
IMF	International Monetary Fund
MoCT	Ministry of Culture and Tourism (Ethiopia)
MoFED	Ministry of Finance and Economic Development (Ethiopia)
MoUDC	Ministry of Urban Development and Construction (Ethiopia)
RCA	Revenue and Customs Authority (Ethiopia)
NUFFIC	The Netherlands organisation for international cooperation in higher education
OECD	Organization for Economic Development
SBA	Small Business Administration of America
STOA	Society of Tour Operators in Addis Ababa
SPSS	Statistical Packages for Social sciences

STRONGBOW	Sustainable Tourism based On Natural resource management with Gender Balance towards Women
UNESCO	United Nations Education, Science and Culture Organization
UNDP	United Nations Development Programme
USA	United States of America
WB	World Bank
WTTC	World Travel and Tourism Council

To **Lelo Gemene Gobu**, who is second to none.

"She was without equals."

(Napoleon Bonaparte describing his mother)

Chapter 1
Introduction

1.1 Introduction

Adimasu Tours LTD (named after its founder Adimasu Gebeyehu, a 31 years old man from Southern Ethiopia) was formally established in May 2012 after he operated independently in the tour business as a tour guide over a longer period. The first tour he conducted was with a professional German photographer, who had previously published various books with photographs from remote areas of the African continent. The photographer was interested in visiting traditional ethnic groups in inaccessible regions of Southern Ethiopia for his new book entitled “McMullen in Africa”. The owner of Adimasu Tours was asked to assist the photographer. At that time few tour operators had provided services in this part of Ethiopia and the excursion was challenging and not without danger. For example, car rental firms were unwilling to provide the required four-wheel drive due to fears of the car being damaged or not returned. After purchasing their own four-wheel drive, the tour was conducted which eventually resulted in the desired book for the professional photographer. The owner of Adimasu Tours realized the touristic potential of such adventure tours and using money borrowed from the professional photographer commercialized the tour. With the growing interest in Ethiopia as a tourist destination and improvements of roads in Southern Ethiopia, Adimasu Tours is now a successful firm owning ten four wheel drives for tours to the South. Moreover, the owner of Adimasu Tours is actively involved in lobbying for the development of more roads in Southern Ethiopia, in order to facilitate further tourism development in this region (based on an informal discussion with the owner of Adimasu Tours, 12 November 2013).

Above presented is the experience of one tour operator about his pursuit of a new opportunity and the process of his new business development as an example relevant to the topic of this PhD study, which is about entrepreneurial behaviour and firm performance of Ethiopian tour operators. This chapter describes entrepreneurship in a context of developing

countries and the research gaps that are addressed in this PhD thesis. After introducing the research setting, it also introduces each of the empirical chapters of the thesis.

1.1.1 Entrepreneurship in the context of developing countries¹

The developing countries in Africa, Asia and Latin America (where two-thirds of the world's population live) are characterized by a prevalence of extreme poverty. However, many of these countries are developing rapidly, leading to increased wealth for their inhabitants. These countries have pursued a number of policies and strategies for poverty reduction and economic development (Dollar and Kraay 2002). Nevertheless, in the 20th Century, many of the policies developing countries promoted for addressing poverty failed and the period between 1980-1998 is described as "the lost decades" as far as their economic development is concerned (Easterly 2001).

After re-evaluating the role of small businesses in economic development in the 1980s and 1990s, a renewed attention has been paid to entrepreneurship (Thurik and Wennekers 1999). In the new millennium, entrepreneurship has begun to be considered as one of the vehicles for economic development (Bruton *et al* 2013). In Africa, for example, Tobias *et al* (2013) consider entrepreneurship as a process through which entrepreneurial individuals strive to remove economic and social constraints by creating new possibilities for themselves and others within society. In 2005, the World Bank proposed an entrepreneurship-based development strategy to achieve economic development (Acs and Virgil 2010). Following this

¹In this PhD thesis, we have used the phrase "developing countries" to refer to those countries, which are characterized by a low living standard, an underdeveloped industrial base and a low Human Development Index (HDI) as compared to their counterparts called developed countries. The meaning of developing countries is discussed in detail in Section 3.2.4 of the PhD thesis.

development prescription, a number of developing countries have shifted to a more entrepreneurial economy by launching programmes to assist privately owned small businesses (Virgil 2006). In other words, entrepreneurship has been seen as an important strategy for new business and job creation in the private sector in many developing countries. However, to date, there is only limited entrepreneurship research in the context of developing countries available.

Bruton *et al* (2008) report that only 43 articles addressed entrepreneurship in developing countries out of the 7482 articles they reviewed in the period between 1990-2006. In the two most widely cited entrepreneurship journals (*Journal of Business Venturing* and *Entrepreneurship: Theory and Practice*), less than 3% of the articles focused on developing countries in this period. These few articles focused on post-socialist economies and there is "a total absence of investigations focused in sub-Saharan Africa, Latin America, and the Middle East" (Bruton *et al* 2008: 4). Although similar meta-analytic reviews are unavailable for the period after 2006, until recently, the lack of attention to entrepreneurship research in developing countries remained. However, the launching of the *Journal of Entrepreneurship in Emerging Economies* in 2014 (previously published as the *Journal of Chinese Entrepreneurship* as of 2009) and *Africa Journal of Management* in 2015 are positive moves towards entrepreneurship research in such a context.

Bruton *et al* (2008) argue that a theory becomes more powerful if its applicability is recognized in different settings, also in non-Western settings. A non-Western research setting offers new insights for theory development and fine-tuning of existing entrepreneurship theories, which have been established based on research conducted in a Western context. Indeed, scholars have called for more entrepreneurship research in developing countries

(Bruton *et al* 2008). For example, the entrepreneurial behaviour of small business owners and the determinants of their firm performance, which has been widely studied in a Western context, have hardly been studied in a non-Western context. Hence, PhD studies like this one conducted in non-Western settings, such as African societies, provide new empirical evidences to further clarify and narrow the ongoing debate on the implication of entrepreneurial behaviour on firm performance. It is also imperative to conduct entrepreneurship research in a developing country context as well to link it to economic development. Besides, entrepreneurial research in such a context also adds new knowledge and insights to the advancement of the field itself.

This PhD thesis aims to play a role in understanding the field of entrepreneurship in a developing country context, as the empirical data were gathered in Ethiopia. By collecting empirical evidence from small tourism firms in an African context, it is hoped to make both practical and theoretical contributions to the field of entrepreneurship. In its theoretical contributions, the study adds knowledge to the entrepreneurship literature by testing existing entrepreneurship theories in a non-Western context. Moreover, it is also relevant for policy-makers in Ethiopia and other African countries in designing their entrepreneurship-based development strategies (see e.g., Ethiopia's *Strategies for Micro and Small Scale Enterprises Development*, MoUDC 2011). The results of this PhD thesis also provide input for training manuals for small business owners to enhance their managerial and entrepreneurial skills in Ethiopia and other African countries.

The general aim of this PhD study is to investigate the entrepreneurial behaviour of small business owners² in a developing country context in their pursuit of profitable opportunities and the effects of such behaviour on the eventual firm performance.

1.1.2 Research gap and main research questions

The main focus of this PhD study is the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities. Hence, it can be said that "opportunity" is a central theme. The selection of an opportunity theme is drawn from the definition of entrepreneurship itself. The most widely cited definition of entrepreneurship research sounds "a scholarly study of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane and Venkataraman 2000: 218). According to Shane and Venkataraman (2000), entrepreneurship encompasses three aspects: (1) the sources of entrepreneurial opportunities; (2) the processes by which these opportunities are discovered, evaluated, and exploited; and (3) the individuals who pursue these opportunities and the actions they take to do so. Later, Shane (2003) developed his famous theoretical framework (i.e., "individual-opportunity nexus"), which became germane in the field of entrepreneurship. At the heart of this framework is the concept of opportunity. Nonetheless, opportunity has been a relatively unexplored theme in entrepreneurship (Holcombe 2003, Plummer *et al* 2007) compared to other themes such as individuals or organizations, particularly before 2000 (McMullen *et al* 2007). Busenitz *et al* (2003, 2014) and Short *et al* (2009) provided a review

²Small business ownership is viewed as a form of entrepreneurship in this PhD thesis. Therefore, we use the terms "small business owners" and "entrepreneurs" alternatively.

of opportunity research. Recently, Gartner *et al* (2017) presented the history of opportunity as a research theme in entrepreneurship.

Stemming from the seminal work by Shane and Venkataraman (2000), opportunity has emerged as a prominent subject in the field of entrepreneurship in the new millennium. There are two commonly conceived sources of opportunities: new knowledge creation through creative destruction and new combinations (Schumpeter 1934) and market imperfections due to information asymmetries (Kirzner 1979, 1997). These two sources are respectively referred to as Schumpeterian opportunity and Kirznerian opportunity (De Jong and Marsili 2011), or creation opportunity and discovery opportunity (Alvarez and Barney 2007). These two sources are metaphorically described as "mountain building" and "mountain climbing" processes. According to Alvarez and Barney (2007), creation opportunity is like building a new mountain through iterative actions and reactions of the entrepreneur, whereas discovery opportunity is like climbing an already existing mountain which is "just waiting to be discovered and exploited" by unusually alert individuals (Alvarez and Barney 2007: 11).

Holcombe (2003) used an analogy of finding "lost money on the side walk" to the discovery of an entrepreneurial opportunity. Unlike the individuals who walk right past the money without seeing it, alert ones pick up the money and profit from it. On the other hand, Hjørth and Johannisson (2008: 343) used an analogy of "constructing a new path" to a creation opportunity instead of "searching the brushy woods for a choice of path." In the first analogy, the "lost money on the side walk" is an objective reality, whereas "constructing a new path" is a subjective reality. Do opportunities exist as objective realities independent of the entrepreneur (discovery) or are they socially constructed realities with the actions of the entrepreneur (creation)? Are these distinctions between creation and discovery approaches

relevant for theory development and advancement of the opportunity theme in entrepreneurship? Do small businesses established by entrepreneurs with mainly creation behaviour eventually perform higher than entrepreneurs with mainly discovery behaviour or vice versa?

Gaglio and Katz (2001) emphasized the need for empirical research rather than descriptive studies for theory development in the subject of opportunity identification and pursuit. Both conceptual and empirical research has been conducted on the theme of opportunity since then. Nonetheless, it should be noted that almost all of this research³ draws on conceptual and empirical evidence from Western economies and that research on the theme of opportunity identification and exploitation is lacking for developing countries. It is, therefore, important to study how small business owners pursue profitable opportunities that exist in the market. Furthermore, for a sustainable entrepreneurial activity, it is imperative to study the factors that affect the performance of the newly established firms. The entrepreneurial behaviour of small business owners in their new business development process may have an effect on eventual firm performance. For instance, Dew *et al* (2009) asserted that the effectiveness of the entrepreneur at the beginning stages of new firm formation is highly significant for the eventual performance of the firm.

Hence, this PhD thesis addresses two research gaps. First, there is a lack of knowledge in extant literature about the behaviour of small business owners in developing countries in their pursuit of profitable opportunities. Second, there is a lack of explanation about the effects of entrepreneurial behaviour that small business owners exhibit while starting-up a new

³Interested readers about entrepreneurship research on opportunity and opportunity related processes, such as discovery, creation and recognition conducted in Western contexts, can refer to the meta reviews of Busenitz *et al* (2003, 2014), Short *et al* (2009) and Crump *et al* (2011).

business on the eventual performance of their newly established firms. This PhD study therefore attempts to answer two basic research questions:

- 1) *What does the entrepreneurial behaviour of small business owners look like when starting-up new businesses in a developing country context?*
- 2) *What effect does the entrepreneurial behaviour of small business owners have on the subsequent performance of their new businesses in a developing country context?*

Discovery and creation opportunities⁴ (Alvarez and Barney 2007) as well as causation and effectuation decision-making logics⁵ (Sarasvathy 2001) are used to study the entrepreneurial behaviour of small business owners. Further, the implication of such behaviour on firm performance is researched in an African context.

1.2. Introducing Ethiopia

The empirical research for this PhD thesis was conducted in Ethiopia. This section briefly presents Ethiopia's history, culture, people and business environment in relation to opportunities and challenges for entrepreneurial activities.

⁴Gaglio and Katz (2001) viewed opportunity as a cognitive process that involves mental simulations and thinking. Similarly, Sarasvathy (2001) viewed opportunity as a behaviour entrepreneurs exhibit in their new firm formation. This view of opportunity as a behaviour is also in line with the outlines of *behavioural theory of the firm* (e.g., the behaviour of entrepreneurs and the firms they founded) in extant literature (Dew *et al* 2008). In this PhD thesis, discovery and creation are, therefore, viewed as the behaviour small business owners exhibit in their pursuit of profitable opportunities. Thus, the terms "discovery behaviour" and "creation behaviour" are used in the remainder part of the thesis to denote "discovery opportunity" and "creation opportunity".

⁵The use of the term "behaviour" is not uncommon in entrepreneurship literature to refer to entrepreneurial actions in early stages, such as decision-making of small business owners. For instance, Sarasvathy (2001) used the term "behaviour", whereas Hindle and Senderovitz (2010) used the terms "patterned modes of behaviour" in explaining the decision-making logics of entrepreneurs in their early stages of new firm formation.

Ethiopia is a landlocked country in the Northeast African region known as the Horn of Africa (see Figure 1 below), with a total size of 1,104,300 square kilometers. It is a federal republic with nine administrative divisions and two city administrations. With altitudes that range from 116 meters below sea level at *Dallol* in the northeast to 4600 meters in the *Semien* mountains, the climate exhibits a wide topographic-induced variation from cool temperate in the mountains to arid and semi-arid climate in the lowlands. As a result, Ethiopia has one of the most diverse environmental resources in Africa, with varied fauna and flora, which provides multiple opportunities for both tourism and resource utilization.



Figure 1 Map of the Horn of Africa⁶

More than half of the country (56.0%) consists of highlands where roughly two thirds of the Ethiopians live, due to its conducive climate (an average annual temperature of 20°C). However, due to a long settlement history, land degradation is a major problem in the

⁶Source: <http://www.mapsland.com>

highlands and drought frequently affects the lowlands. The world's attention was drawn to the 1984/85 Ethiopian famine, which coupled with the civil war and political instability at that time: this severely affected the tourism sector.

Ethiopia is also culturally and ethnically diverse with two major religions (Christianity and Islam) and some 80 ethnic groups having their own distinctive culture and language. According to the last census conducted in 2007, ten of the ethnic groups have a population of more than a million people. The *Oromo* (34.5%) and the *Amhara* (26.9%) are the dominant ethnic groups (CSA 2009).

Ethiopia is an ancient state with a long history and an ancient cultural heritage. It is the only African country, which has never been colonized. Ethiopia is often described as a "cradle of mankind" due to the discovery of the oldest (3.2 million years) hominid on the planet named *Lucy* (*Australopitcus afaransis*) in 1974. Up to as recently as forty years ago, Ethiopia was a society most commonly described as *feudal* until the last monarchy of the "Solomonic dynasty" (one of the oldest dynasties in the world) was deposed in 1974. It then had a prolonged period under military rule devoted to a command economy for nearly two decades of committed socialism. Ethiopia only began to emerge from an economically devastating period in 1991 when the socialist military regime known as *Derg* (1974-1991) was overthrown.

Socialist ideologies, particularly among African societies, hold negative views towards capitalism and adversely affected the development of private enterprises and entrepreneurship, as seen in Tanzania and Nigeria (Heilman and Lucas 1997). Immediately after the collapse of a socialist system, there is often rapid development of private enterprises. For example, following the disintegration of the former Soviet Union, McMullen and Woodruff (2002)

observed that "there were high rates of new firm start-ups". Likewise, in Ethiopia, many new firms in various sectors including tourism (e.g., tour operators) have begun flourishing since early 1990s.

With a population of nearly 100 million people, Ethiopia is the second most populous country in Africa and is one of the largest domestic markets in Africa. However, the market is limited due to a low purchasing power of the population, which has an annual per capita income of only \$ 573.50 in 2014 (World Bank 2016). The Ethiopian economy has shown an average Gross Domestic Product (GDP) growth rate of 10.8% in 2003/04 - 2013/14, which is about double of the average growth for Sub-Saharan Africa and triple of the world average growth (World Bank 2016, UNDP 2016). This makes Ethiopia one of the fastest growing economies in the world. Yet, Ethiopia is a poor country, with 29.6% of its population living below a poverty line of \$1.25 a day (UNDP 2016).

Agriculture is the mainstay of Ethiopia's economy, which accounts for 46.6% of the GDP and 85.0% of total employment. The service sector accounts for 38.9% of the GDP and 10.0% of the labour force. Currently, the tourism sector accounts to 4.5% of the GDP (WTTC 2016, MoCT 2016). Ethiopia is still an agrarian society with an urban population of only 17.0% (CSA 2016). The low urbanization rate might have diminished an entrepreneurial culture in Ethiopia. Shane (2003: 29) argues that "urbanization is a source of entrepreneurial opportunity", since urban areas enable the transfer of information and knowledge and facilitate the vicarious learning of individuals by observing and following entrepreneurial role models.

In sum, this empirical research has been conducted in the context of a developing country, where entrepreneurial culture is limited due to social, cultural, economic and political factors. Entrepreneurial activities are recent phenomena in Ethiopia. Only since 1992 has

Ethiopia begun moving towards a market economy. As the main focus of this study is concerned (i.e., tour-operating firms), there was only a single state owned firm (i.e., the National Tour Operation) before 1991. The next sub section introduces the sector focused in the study.

1.3 Introducing the tour-operating sector in Ethiopia

In this study, small businesses from the tourism sector⁷ are considered for the following reasons. Nowadays, the tourism sector has become an important sector globally (Lerner and Haber 2000). The tourism sector in Ethiopia has grown by 5.0% over the last ten years (WTTC 2015). According to the Ethiopian Ministry of Culture and Tourism (MoCT), the tourism sector in Ethiopia generated a foreign exchange value of about \$2.9 billion in 2015 from 770,000 tourists, who visited Ethiopia (MoCT 2016). Due to its ever increasing contribution to the macro economy, the tourism sector has recently attracted the attention of the Ethiopian government, which hopes to triple the number of foreign visitors to more than 2.5 million by 2020 and to make Ethiopia among the top five tourist destinations in Africa by 2025 (MoCT 2016). However, there are still challenges in the Ethiopian tourism sector, which include lack of infrastructure, capable human resources, facilities, accommodations and hotels. This study will inevitably have practical implications for policy-makers as discussed above under Section 1.1, particularly in addressing the entrepreneurial and managerial skills of owner-managers of small tourism businesses through training.

⁷The focus of this study on the tourism sector is partly prompted by the aims of the STRONGBOW (Sustainable Tourism based On Natural resource management with Gender Balance towards Women) project, which funded this PhD study.

The focus of this study is on Ethiopian tour operators for three reasons. First, tour operators play a significant role as intermediaries in the Ethiopian tourism market by arranging itineraries to the tourists to destinations. Second, there are more than 300 privately owned tour-operating firms in Ethiopia. This number allows a significant number of responses from small business owners for research purposes. Third, the tour operators are formal small businesses since they are registered and licensed by the Ethiopian Ministry of Culture and Tourism (MoCT 2016). One of the license requirements is to have a permanent address (i.e., an own office) allowing easy access to the tour operator at his office to conduct survey research. In this study, the unit of analysis is the owner-manager who has founded the tour-operating firm, and thus can provide relevant information about the new business development process. The use of individuals as units of analysis has been a long tradition in entrepreneurship research (Davidson and Wiklund 2001, Chandler and Lyon 2001).

The Cambridge Business English Dictionary defines a tour operator as a firm that "makes arrangements for travel and places to stay, often selling these together as package holidays". The Ethiopian tour operators sell their services as package holidays, combining two or more travel services (e.g., transport, accommodation, meals, entertainment, sightseeing, etc.). They prepare itineraries for mainly international tourists to sites of attraction throughout the country. Their work includes organizing car rentals, guiding tours and arranging hotel bookings, often as tailor-made packages, which include transport with a driver, accommodation, meals, entertainment and sightseeing. Like most other firms in Ethiopia, a tour-operating firm is a male dominated business, which can be attributed to the social, economic and cultural aspects of the country. For instance, according to the 2011 national labour force survey, figures for employment at a managerial level puts participation of women

at five times less than that of their male counterparts (CSA 2012). This low degree of entrepreneurship among Ethiopian women merits further study.

According to the information obtained from the Ministry of Culture and Tourism (MoCT), almost all of the international tourists who visit Ethiopia come from the developed world. Americans, Germans, French, Spanish and Italians are among the top five visitor groups. Many of the Ethiopian tour operators have their own web page, most with a similar design. Nonetheless, in most cases, the tourists approach a particular tour operator through acquaintances. A particular tour operator is often recommended by a third party, who has been served previously. It seems that many Ethiopian tour operators have a specialty in serving tourists from a particular country, which is often related with the language the tour operator speaks. For example, if a tour operator speaks German, then most of his clients are Germans and so on. The Ethiopian tour operators rarely liaise with large tour-operating firms in the West.

After establishing contact, the two parties (i.e., the tour operator and the potential client) negotiate the price, which is determined by the tour package types, transportation means and accommodation type. For instance, a single tour package to visit the historical routes to the North of Ethiopia takes 12 nights and 13 days by surface and 6 nights and 7 days by air. It is beyond the scope of this study to provide a detailed account of a typical tourist holiday in Ethiopia.

As the case for Adimasu Tours, which is presented at the beginning of this chapter, most of the Ethiopian tour-operating firms are established with a financial support from acquaintances such as international tourists. Unlike most other small businesses in Ethiopia, tour operations are capital-intensive enterprises. For example, to get a license for tour

operators, an individual should have a four-wheel station wagon car not older than five years (MoCT 2016). A tour operator trying to enter into the business may find it difficult to finance the purchase of car with his own resources.

1.4 Introduction to the chapters

This thesis is composed of six chapters. The last chapter draws conclusions from the empirical Chapters 2, 3, 4 and 5. Each chapter deals with a separate (but related) research question, stemmed from the two main research questions mentioned under Section 1.1.2.

In the study of the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities, discovery and creation approaches have an increasing popularity among entrepreneurship scholars (Vaghely and Julien 2010, Edelman and Yli-Renko 2010). However, discovery and creation approaches have hardly been used to provide evidences about the entrepreneurial behaviour of small business owners in a non-Western context. Chapter 2, 3 and 4, therefore, use the discovery and creation approaches (as conceptually described in Alvarez and Barney (2007)⁸ to make a distinction between them, examine their applicability in a developing country context and their effect on eventual firm performance.⁹ The empirical evidence drawn from these chapters advances our understanding of the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities in a developing country context and their eventual effects on firm performance. Hence, this

⁸Gupta *et al* (2015) have also recently applied the description of discovery and creation opportunities by Alvarez and Barney (2007) to explore entrepreneurial behaviour during industry emergence under uncertain and ambiguity conditions.

⁹ Although Chapter 2, 3 and 4 are interrelated, they deal with clearly distinct research questions (see below in this section and in Table 1.1).

study extends the scope of opportunity research in the domains of entrepreneurial behaviour and firm performance. The study also contributes to the advancement of theories such as discovery and creation by fine-tuning ongoing theoretical debates in the entrepreneurship field. In Section 6.2, the theoretical contributions of this study are presented in detail.

In extent literature, the entrepreneurial behaviour of small business owners, particularly their decision-making logics in pursuit of profitable opportunities and new business development, is also described as causation and effectuation (Sarasvathy 2001). Conceptually, causation is more or less parallel with discovery behaviour, whereas effectuation is more or less parallel with creation behaviour (Welter *et al* 2016, Hechavarria and Welter 2015, Welter 2012). From the onset of the new millennium, causation and effectuation approaches have also been widely applied in the study of the entrepreneurial behaviour of start-ups (Read *et al* 2009a, Chandler *et al* 2011, Perry *et al* 2012). However, there is limited empirical study conducted on these approaches to provide insights on their effects on firm performance (McKelvie *et al* 2013).

As a continuation of the preceding chapters, Chapter 5 applies causation and effectuation behaviour of small business founders or owners with the aim of investigating their effect on eventual firm performance. By drawing empirical evidence from a dynamic and uncertain environment, like an African context, this chapter adds knowledge about the determinants of firm performance. The chapter also develops effectuation and causation research further by validating an existing scale (i.e., Chandler *et al* 2011) to measure causation and effectuation in a non-Western context.

These four empirical chapters are based on two surveys conducted in the field among Ethiopian tour operators. Chapters 2, 3 and 4 are based on the data collected from 102 owners

of small tour-operating firms in the first fieldwork conducted between September 2013 and February 2014. The survey instrument was mainly based on the conceptual description of Alvarez and Barney (2007) about discovery and creation. In the second phase of fieldwork, survey data were collected from 118 owners of small tour-operating firms between February 2015 and August 2015. The analysis of Chapter 5 is mainly based on a validated scale developed by Chandler *et al* (2011) on the measurement of causation and effectuation. A detailed explanation about the data collection procedures is given in each chapter.

1.4.1 Introduction to Chapter 2

The entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities is central in the field of entrepreneurship (Shane and Venkataraman 2000, Shane 2000, Shane 2003, Busenitz *et al* 2014). As a result, the number of studies focusing on the processes that form and exploit opportunities has increased in the last decade (Alvarez *et al* 2013). Discovery and creation emerged as distinct, but internally consistent approaches, in the study of the entrepreneurial behaviour of small business owners (Alvarez and Barney 2007). As compared with the discovery approach, the creation approach is not well articulated in literature (Alvarez and Barney 2007, Alvarez *et al* 2010). Alvarez and Barney (2007: 14) assert that there is a growing interest in the creation approach, which is regarded as a logical alternative to the discovery approach for "explaining the actions that entrepreneurs take to form and exploit opportunities." Alvarez and Barney (2007) provide a conceptual comparison of the discovery and creation approaches by using seven entrepreneurial actions (leadership, decision-making, human resource practices, strategy, finance, marketing and sustaining competitive advantages).

There is an ongoing debate in entrepreneurship literature on the type and form of behaviour entrepreneurs employ to identify and pursue entrepreneurial opportunities. For instance, Murphy (2011: 369) questioned the suggested dichotomy between discovery and creation by Alvarez and Barney (2007), labelling the attempt as a “forced trade off and ambiguous middle ground”. Recent publications also depart from the dichotomous consideration of the discovery and creation approaches in explaining entrepreneurial behaviour at the start-up phase arguing that “decision-making context ranges along a continuum from risk to uncertainty” (Hmieleski *et al* 2015: 3). Such a pervasive debate in literature on the form and nature of discovery and creation behaviour of start-ups could be attributed to the lack of empirical studies to make a distinction between them (i.e., are they in fact dichotomous, or do they exist along a continuum line?).

Delineating a boundary between discovery behaviour and creation behaviour is important to advance our understanding about the nature of the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities. However, the debates on the form and type of the two entrepreneurial behaviour draw conceptual and empirical evidences from literature in a Western context and there is hardly any empirical research in a non-Western context. This chapter attempts to bring greater clarity to the theme of opportunity and opportunity related processes such as discovery and creation in entrepreneurship. With an aim of assessing a distinction between the discovery behaviour and the creation behaviour that small business owners exhibit while pursuing profitable opportunities, Chapter 2 attempts to answer the following research question and also partly to answer the first main question of this PhD study raised in Section 1.1.2:

- *Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context?*

Despite their current popularity in entrepreneurship studies, there are hardly any developed and validated scales to measure discovery behaviour and creation behaviour in extant literature. Chapter 2 serves as a stepping-stone in such an effort by providing validated items to develop a measurement scale. The novel aspect of this chapter is that it starts with research in a developing country context to develop a measurement scale, instead of the more or less normal approach of research in a Western context, followed by testing generalizability to the non-Western contexts. In addition, Chapter 2 adds new knowledge and insight to the field of entrepreneurship on the theme of entrepreneurial behaviour by providing empirical evidences from small business owners in a developing country context. This is a plausible claim given the fact that the study is thought to be one of the first of its kind in a non-Western context. Only a recent study among Mexican social entrepreneurs that attempted to statistically confirm that discovery and creation are two different constructs, even though this finding is based on a small sample size (n=62) and a limited number of items (Gonzalez *et al* 2017). Even in the developed world, little empirical research has been undertaken to make a distinction between discovery and creation approaches to opportunity and opportunity related processes (Welter 2012, Hechavarria and Welter 2015, Dencker and Gruber 2014, Hayton *et al* 2011). Hence, Chapter 2 enhances our understanding and insights in the nature and form of discovery behaviour and creation behaviour of start-ups.

1.4.2 Introduction to Chapter 3

In extant literature, creation behaviour is one of the least studied concepts in entrepreneurship (Alvarez and Barney 2007, 2013). In contrast, discovery behaviour has received much more attention than creation behaviour in the process of new business development (Venkataraman 1997, Shane 2000, Gaglio and Katz 2001, Shane 2003, Aldrich and Reuf 2006). Hence, discovery behaviour can be perceived as predominantly applied among start-ups in the Western context (where these studies have been conducted). It is only recently (over the last ten years) that creation behaviour has attracted the attention of scholars in the field as a logical alternative to discovery behaviour in a pursuit of profitable opportunities (Alvarez and Barney 2007).

Scholars argue that the entrepreneurial behaviour of small business owners in developing countries is quite different from the Western context (Kiggundu 2002, Acs and Virgil 2010). For example, unlike start-ups in developed countries, small business owners in developing countries may find it costly to incur additional costs in searching for a new opportunity in the market (Hausmann and Rodrik (2003). As Mambula (2002) noted among Nigerian small businesses, the identified opportunities through such costly efforts are even easily copied and imitated by others. As a result, small business owners in developing countries tend to apply creation behaviour more than discovery behaviour in their pursuit of profitable opportunities.

This can be illustrated with an example from the informal discussion presented at the beginning of this chapter with the owner of *Adimasu Tours*. Adimasu may be considered primarily as a creation entrepreneur or a mountain builder, to use the metaphorical terminology of Alvarez and Barney (2007). His lobbying for more roads in Southern Ethiopia

for further development is a clear example of his mountain building strategy. He developed such radically different tours that he created a service for satisfying needs that previously could not be met. A discovery entrepreneur would have chosen to offer more conventional tours for the more commonly travelled northern tracks in Ethiopia; discovering opportunities to satisfy commonly existing tourist needs and gaining ideas from established tour-operating practices. Moreover, as will be discussed in detail in Chapter 3, Ethiopian tour operators may tend to apply more creation behaviour than discovery behaviour since searching for a new opportunity in the market would incur them additional costs, time and analytical efforts (Sarasvathy 2001, Hausmann and Rodrik 2003).

The entrepreneurial behaviour, which small business owners often apply in their pursuit of profitable opportunities, has hardly been empirically tested in a developing country context. Therefore, as a continuation of Chapter 2, Chapter 3 tests whether creation behaviour or discovery behaviour is more applied among small business owners by comparing the entrepreneurial actions they employ in their pursuit of profitable opportunities. Hence, the research question of Chapter 3 is:

- *Which entrepreneurial behaviour is more applied by small business owners in a developing country context: creation or discovery?*

The aim of Chapter 3 is to test whether creation behaviour is more applied than discovery behaviour among Ethiopian tour operators. As argued above, the choice for conducting this study in a developing country is with the expectation that creation behaviour is more likely to be found in such a context than in Western settings. Thus, the chapter enhances our knowledge of creation behaviour in the field of entrepreneurship by drawing evidence from a developing country. Most previously conducted studies in the Western context

concentrated on the dominant application and use of discovery behaviour among start-ups (Kizner 1997, Gaglio and Katz 2001, Shane 2003, 2012, Venkataraman 2003, Zahra 2008, Murphy 2011). This chapter is again one of the first to research the creation behaviour in an African context and thus advances our insight in the application and use of creation behaviour in entrepreneurship. The answer to the above question also contributes to answer the first main question raised in Section 1.1.2.

1.4.3 Introduction to Chapter 4

Entrepreneurship scholars have been dealing with the question how new firms come into existence by studying how opportunities are identified and acted upon (Shane and Venkataraman 2000, Shane 2003, Casson and Wadesson 2007). Important is also the question how these established firms exploit the identified opportunities in the post-entry phase of the entrepreneurial process (Hmieleski *et al* 2015). Scholars assert that early stage strategies and decisions have an impact on later-stage firm performance (Baron *et al* 1999). Likewise, the process through which start-ups identify and pursue new opportunities may have a considerable effect on the subsequent performance of their newly established firms. Hence, it is important to understand eventual differences in terms of outcomes such as firm performance among small businesses.

Despite its relevance as a key construct to advance our understanding how entrepreneurs establish a new firm, researching the behaviour of entrepreneurs has been greatly overlooked in extant literature (Bird *et al* 2012). To date, even in the Western context, few scholars have attempted to operationalize opportunities or define entrepreneurs in terms of their behaviour at the start-up phase to examine eventual effects on firm performance (see a

discussion of these studies in detail in Section 4.3.2). Nonetheless, there is hardly any empirical research that has examined the effects of different entrepreneurial actions or types of entrepreneurs (e.g., creation entrepreneurs and discovery entrepreneurs) on firm performance in developing country contexts, at least in an African context. This chapter addresses this gap and partly answers the second research question of the PhD study raised in Section 1.1.2, by answering the following research question:

- *Do the small firms of creation entrepreneurs show a higher level of firm performance than the small firms of discovery entrepreneurs in a developing country context?*

The main aim of this chapter is to investigate the different effects of entrepreneurial actions and types of entrepreneurs on eventual firm performance. As aforementioned, scholars such as Hausmann and Rodrik (2003) and Mambula (2002) remark that entrepreneurial success through discovery behaviour is difficult and costly in developing countries. That is, small business owners become more successful if they exhibit creation behaviour, rather than discovery behaviour, in their entrepreneurial actions while starting-up a new business. In this chapter, therefore, we hypothesize that entrepreneurial actions through discovery behaviour are negatively associated with firm performance, whereas entrepreneurial actions through creation behaviour are positively associated with firm performance. We also hypothesize that creation entrepreneurs (i.e., start-ups with mainly creation behaviour) become more successful than discovery entrepreneurs (i.e., start-ups with mainly discovery behaviour) in a developing country context. The chapter contributes to the literature of entrepreneurship by applying entrepreneurs' actions and behaviour types as determinants of small firms' performance in a developing country context.

1.4.4 Introduction to Chapter 5

The decision-making logic of small business owners in their pursuit of profitable opportunities has also attracted the attention of scholars in entrepreneurship. In her groundbreaking work, Sarasvathy (2001) introduced "effectuation" as an alternative to "causation" (Sarasvathy 2001, Perry *et al* 2012). Causation serves novice entrepreneurs (Brettel *et al* 2012) who have a given goal and search for means to reach their goal, whereas effectuation serves expert (Read *et al* 2009a) or habitual (Chandler *et al* 2011) entrepreneurs who start with the means at their hand and look for potential goals.

There is a wealth of literature describing the distinctive points of causation and effectuation (see the meta review of Perry *et al* 2012 about effectuation research). However, few empirical studies have been conducted on the effects of these forms of entrepreneurial behaviour on firm performance (Read *et al* 2009a, McKelvie *et al* 2013, Smolka *et al* 2016). Although there is no definitive claim whether causation or effectuation leads to a higher firm performance, McKelvie *et al* (2013: 1) argue that, there is a "tacit undertone in the literature that the use of effectuation is superior". Similarly, Read *et al* (2009a) provide evidence through a meta-analysis that effectuation may lead to a "superior outcome" in new firm performance. Therefore, this chapter attempts to provide an answer to the following research question and thereby partly answering the second main research question raised in Section 1.1.2:

- *Which decision-making behaviour of small business owners leads to a higher firm performance in a developing country context: causation or effectuation?*

The main aim of this chapter is to investigate the effects of causation and effectuation on the performance of small businesses in an African context. The chapter contributes to the advancement of causation and effectuation concepts in entrepreneurship in two ways: by providing empirical evidence on their effects on firm performance and by further validating one of the operationalized measures of causation and effectuation (i.e., the scale of Chandler *et al* 2011) in an African context.

1.5 Overview of the chapters

In general, the thesis is composed of four sequential empirical studies conducted with 220 respondents¹⁰ in Ethiopia collected in two field works over two years (September 2013 - August 2015). Table 1.1 presents an overview of the chapters discussed in the preceding section: their subjects, research questions, instrument designs, statistical analyses, dependent variables and independent variables. Finally, Chapter 6 concludes the overall study, identifies limitations and shows future research areas.

¹⁰There is obviously an overlap between the groups of respondents interviewed during the first survey (n=102) and the second survey (n=118). As a result, the actual number of the interviewed Ethiopian tour operators is less than 220 even though we collected data from 220 respondents during the two field surveys. Aiming at identifying the overlap, we included questions related to the name of the firm and the respondent (owner-manager) in the first survey questionnaire. However, we excluded these questions after we received complaints about confidentiality, neither did we include them in our second survey questionnaire. A detailed discussion about the two field surveys is presented in Section 2.3.1 and Section 5.3.1.

Table 1.1 Overview of the six chapters of the dissertation

Chapter	1	2	3	4	5	6
Subject		Types of entrepreneurial behavior	Application of creation and discovery behaviour	Explanation of firm performance	Explanation of firm performance	
Research question		Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context?	Which entrepreneurial behaviour is more applied by small business owners in a developing country context: creation or discovery?	Do the small firms of creation entrepreneurs show a higher level of firm performance than the small firms of discovery entrepreneurs in a developing country context?	Which decision-making behaviour of small business owners leads to a higher firm performance in a developing country context: causation or effectuation?	
Instrument design		Alvarez and Barney (2007)	Alvarez and Barney (2007)	Alvarez and Barney (2007)	Chandler <i>et al</i> (2011)	
Statistical analysis	Introduction	Explanatory Factor Analysis (EFA)	Paired samples t-tests	Hierarchical regression	Hierarchical regression	Conclusions
Dependent variable(s)		Not applicable	Not applicable	Firm performance (change in sales, employment, profit and assets)	Non- financial performance (change in employment) and financial performance (change in sales, profit and assets)	
Independent variable(s)		Not applicable	Not applicable	First, 13 entrepreneurial actions under discovery and creation behaviour, Second, "mainly discovery" entrepreneurs and "mainly creation" entrepreneurs	Causation and the four dimensions of effectuation (experimentation, affordable loss, flexibility and pre-commitment)	

Chapter 2

Climbing and building entrepreneurial mountains in developing countries: Discovery and creation behaviour amongst Ethiopian tour operators¹¹

¹¹The earlier version of this chapter was presented at the conference of the United States Association of Small Businesses and Entrepreneurship (USASBE), held in San Diego (USA, 10-12 January 2016). Major changes have been made in the presented version of the paper, mainly because of language editions and addition of literature.

Abstract

The metaphors of "mountain climbing" and "mountain building" are used in the literature to distinguish entrepreneurial behaviour of small business owners. This chapter provides empirical evidence to delineate boundaries between discovery and creation behaviour. Scales are prepared based on the seminal paper by Alvarez and Barney (2007), by using a unique dataset from a formal small-sized sector in Ethiopia. Based on a survey questionnaire (n=102), we found support for the distinction between discovery and creation behaviour. Further scale development and validation is needed, particularly on creation behaviour. This chapter contributes to the field of entrepreneurship research, by fine-tuning existing Western theories in a developing country context and serving as a stepping-stone to develop a validated scale to measure discovery behaviour and creation behaviour of small business founders and owners.

2.1 Introduction

Opportunity identification has a central place in the field of entrepreneurship (Shane and Venkataraman 2000, Shane 2000, 2003). Schendel and Hitt (2007) have also commented that “entrepreneurship is a process centrally concerned with the notion of opportunity, its recognition, discovery and/or creation.” However, the opportunity theme has been less emphasized as compared to other themes, such as individuals or organizations in entrepreneurship (Busenitz *et al* 2003). Scholars, such as Murphy (2011), advocate the importance of opportunity-based theories rather than person-centric theories for the advancement of entrepreneurship research. The number of research projects focusing on the processes that form and exploit opportunities has increased in the last decade (Alvarez *et al* 2013). Interested readers can refer to Gartner *et al* (2017) for details about the history of opportunity in entrepreneurship. In the study of the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities, the discovery and creation approach has an increasing popularity among entrepreneurship scholars (Vaghely and Julien 2010, Edelman and Yli-Renko 2010). This chapter attempts to demonstrate measurable differences in the two approaches in a real world setting.

The discovery approach has received much more attention in the entrepreneurship literature (Venkataraman 1997, Shane 2000, Gaglio and Katz 2001, Shane 2003, Aldrich and Reuf 2006). Alvarez and Barney (2007) presented "creation" as an alternative approach using the metaphors of mountain climbing (discovery) and mountain building (creation). They attempted to conceptually identify and examine differences between the two approaches. They argue that discovery and creation are separate but internally consistent approaches (Alvarez and Barney 2007). However, scholars, such as Murphy, questioned the suggested dichotomy

between these two approaches, labelling the attempt as a “forced trade off and ambiguous middle ground” (Murphy 2011: 369). Recent publications also depart from the dichotomous consideration of two distinct approaches to early stages entrepreneurial behaviour by Alvarez and Barney, such as decision-making arguing that “decision-making context ranges along a continuum from risk to uncertainty” (Hmieleski *et al* 2015: 3). This could be attributed to the fact that there has been hardly any empirical study conducted to demonstrate measureable differences in a real world setting between the two approaches, whether or not they are dichotomous. This chapter aims to make a significant contribution towards bringing greater clarity to this theme of study.

Currently, there is a growing interest towards the creation approach in “explaining the actions that entrepreneurs take to form and exploit opportunities” (Alvarez and Barney 2007: 14). The distinction between discovery and creation approaches in explaining the entrepreneurial behaviour of start-ups has implications for theory building and theory testing in the field of entrepreneurship (Ireland 2007). Entrepreneurship scholars (e.g., Chandler and Lyon 2001) have also advocated the importance of testing theories in entrepreneurship. Delineating a boundary between discovery behaviour and creation behaviour is, therefore, important for the advancement of opportunity theories in the field of entrepreneurship. Hence, the main research question of Chapter 2 is: Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context?

Despite their popularity in the literature, there is hardly any scale developed so far to measure opportunity related processes, such as discovery and creation. Nelson and Goldsby (2011) assert that having a theoretically and empirically sound scale would benefit scholars to conduct more empirical research in entrepreneurship. This chapter can, therefore, serve as a

stepping-stone in such an effort by providing validated items to develop a new scale to measure the discovery and creation behaviour of entrepreneurs.

The aim of this chapter is twofold: first, to demonstrate measureable distinctions between discovery behaviour and creation behaviour in a real world setting. Secondly, we provide validated items, which will serve as a stepping-stone for the development of a new scale in entrepreneurship for measuring the discovery behaviour and creation behaviour of start-ups. This chapter of the PhD thesis is one of the few studies that attempts to provide empirical evidence about the difference between the two entrepreneurial behaviour types in a context of developing countries in particular and in the efforts to develop a new scale to measure discovery and creation behaviour.

To date, few studies have attempted to provide empirical evidence that discovery and creation are distinct constructs. Even in the Western context, little research has been conducted in order to distinguish between discovery and creation behaviour (Welter 2012, Hechavarria and Welter 2015, Dencker and Bruger 2014, Upson *et al* 2017). A recent study, conducted among Mexican social entrepreneurs, attempted to confirm that opportunity discovery and opportunity creation are "mutually exclusive constructs" (Gonzalez *et al* 2017: 5). However, these prior studies are not complete, as discussed below in Section 2.2 of this chapter. Hence, the chapter enhances our understanding about the nature and form of discovery and creation behaviour in entrepreneurship. Besides, it adds new knowledge and insight to the field about the entrepreneurial behaviour of small business owners in a developing country context.

The novel aspect of this chapter is that it starts with research in a developing country context to develop measurement scales instead of the standard approach of research in a

Western context, followed by testing generalizability to the non-Western contexts. We followed this approach because in extant literature, creation behaviour is the least studied concept (Alvarez and Barney 2007). This is because discovery behaviour has been perceived as predominantly applied in the Western context (where these studies have been conducted). Alternatively, creation behaviour can be perceived as predominantly applied in non-Western contexts since the entrepreneurial processes in developing countries are different from the developed countries (Acs and Virgil 2010). Hence, it is appropriate to start researching creation behaviour in real world settings of developing countries such as Ethiopia rather than developing a new scale in a context where it is understudied. In the next section, we review the literature on discovery and creation behaviour of small business founders and owners.

2.2 Discovery and creation behaviour of entrepreneurs: An overview

Entrepreneurial discovery (also known as "individual-opportunity nexus") is defined as "the perception of a new means-ends framework to incorporate information, incompletely or partially neglected by prices, that has the potential to be incorporated in prices and thereby efficiently guide the resource allocation decisions of others" (Eckhardt and Shane 2003: 338). In this approach, an opportunity is "just waiting to be discovered and exploited" by unusually alert individuals (Alvarez and Barney 2007: 11). For these authors, the discovery behaviour of start-ups is like climbing an already existing mountain. Start-ups with a discovery behaviour view new opportunities like "lost luggage in a train station; they exist, just waiting to be claimed by alert individuals who know of their existence" (Alvarez *et al* 2010: 26).

Prominent proponents of the discovery approach include Kirzner (1997) and Shane (2003). They explain that entrepreneurial opportunities can be found by discovering

unsatisfied needs and wants in the economy brought about by changes in technology, consumer preferences, market, demography and industry. According to them, prior knowledge or previous experience in an industry or market helps an entrepreneur to combine information in new ways to discover, find, or search for a new opportunity and then exploit it (Shane 2000, Eckhardt and Shane 2003, McMullen *et al* 2007, Casson and Wadeson 2007). Without this prior knowledge or experience, an opportunity could not have been discovered. As a result, there is a marked difference between an entrepreneur and a non-entrepreneur, *ex ante* (Alvarez and Barney 2007). The development of information asymmetries between an entrepreneur and a non-entrepreneur due to prior knowledge and experience within an industry or market leads to “alertness” (Kizner 1997, Foss and Klein 2010) or “recognition” (Baron 2004 and 2008). Those individuals who “discover” or “find” the opportunity are therefore labeled as “alert individuals” or entrepreneurs (Shane 2000 and 2012, Aldrich and Ruef 2006, Fiet *et al* 2006). While some have criticized the discovery approach in explaining entrepreneurial behaviour in the early stages in the extant literature, a discussion of this debate goes beyond the scope of the current chapter. Readers who are interested in a thorough review are referred to Korsgaard (2013).

The phrase “entrepreneurial creation” refers to the exploitation of a previously untapped market or a current market that is not being completely penetrated. It is suggested that the entrepreneur creates these market opportunities in an abductive process (Sarasvathy *et al* 2010). Creation behaviour is manifested when individuals engage in an iterative process of action and reaction to create or make new opportunities. The enactment process is thus central to the pursuit of profitable opportunities through creation (Alvarez and Barney 2007). Entrepreneurs with creation behaviour view that opportunities develop through a path

dependent and emergent process (Alvarez and Barney 2005, 2007, 2010 and 2013). In other words, entrepreneurs first act and then wait for, or observe, responses from the market and react again, as opposed to the discovery behaviour which is to first recognize opportunities (be “alert” and then act). In this iterative process of acting, observing, learning and reacting, entrepreneurs “create” (also “make” according to Sarasvathy *et al* 2010) the opportunities they ultimately exploit. Regarding the nature of entrepreneurs with creation behaviour, an assumption is made that there is not any systematic difference between entrepreneurs and non-entrepreneurs, *ex ante*. The path dependent process of enacting may result in differences, *ex post* (Alvarez and Barney 2007).

Alvarez and Barney (2007) made a distinction between discovery and creation behaviour in terms of the nature of opportunity (exogeneity versus endogeneity of the opportunity itself), the nature of the entrepreneur and the decision-making context (risky versus uncertain). They conceptually described the implications of seven entrepreneurial actions under discovery and creation, which is extensively used in this chapter and presented under Table 2.1. These actions are leadership, decision-making, human resources practices, strategy, finance, marketing and sustaining competitive advantages.

However, as Ireland (2007) predicted, the Alvarez and Barney (2007) conceptualization of discovery and creation has generated a significant amount of scholarly debate. There is still an ongoing debate about the dichotomy of these two types of entrepreneurial behaviour. For instance, Murphy (2011) contested the dichotomous distinction between discovery and creation, labelling the attempt as a “forced trade off and ambiguous middle ground” (Murphy 2011: 369). In recent publications, the dichotomy view of entrepreneurial behaviour, such as with decision-making, is also challenged arguing that

"decision-making context ranges along a continuum between risk and uncertainty" (Hmieleski *et al* 2015: 3). As a result, scholars like Ireland (2007) have called for an empirical exploration of the dichotomy between discovery behaviour and creation behaviour.

Table 2.1 A comparison of entrepreneurial actions under discovery and creation behaviour¹²

Entrepreneurial Actions	Discovery behaviour	Creation behaviour
Leadership	Based on expertise and (perhaps) experience	Based on charisma
Decision-making	Risk-based data collection tools; Risk-based decision-making tools; Importance of opportunity costs	Iterative, inductive, incremental decision-making; Use of biases and heuristics; Importance of affordable loss
Human Resource Practices	Recruitment: Specific human capital recruited broadly	Recruitment: General and flexible human capital recruited from pre-existing social networks
Strategy	Relatively complete and unchanging	Emergent and changing
Finance	External capital sources: Banks and venture capital firms	"Bootstrapping" and "friends, families, and fools"
Marketing	Changes in marketing mix may be how new opportunities manifest themselves	Marketing mix may fundamentally change as a result of new opportunities that emerge
Sustaining Competitive Advantages	Speed, secrecy, and erecting barriers to entry may sustain advantages	Tacit learning in path dependent process may sustain advantages

Nonetheless, an empirical distinction between the two entrepreneurial behaviour types has hardly been carried out, even though there are a few studies, which attempted to operationalize opportunity. For example, Welter (2012) attempted to empirically classify

¹²This table is taken from Alvarez and Barney (2007: 17).

opportunities by using descriptions of firms as rated by experts. In another study, the opportunity type was operationalized using a single question: whether the idea for the business or the decision to start the business came first (Hechavarria and Welter 2015). These prior attempts, which have used either an expert rating or "yes" or "no" questions, lack statistical sophistication. The recent study of Gonzalez *et al* (2017) in a non-Western context (Mexico) has also at least two limitations. First, their finding was based on a small sample size (n=62). Second, they used only two items on discovery ("I discovered the solution to the problem" and "I found a solution for the problem") and two items on creation ("I created a solution for the problem" and "I made a solution for the problem") to confirm discovery and creation are dichotomous constructs (Gonzalez *et al* 2017: 7).

A lack of methodological and statistical sophistication has been an issue in entrepreneurship literature (Wortman 1987, Chandler and Lyon 2001, Short *et al* 2009). For the advancement of entrepreneurship theories, scholars such as Chandler and Lyon (2001) advocated for the importance of testing theories in the field of entrepreneurship. Empirically testing existing entrepreneurship theories has been a longstanding call from scholars to advance entrepreneurship as a scholarly discipline and a field of research having its own theories and domains (Ireland 2007, Short *et al* 2009, Crump *et al* 2011, Busenitz *et al* 2003, 2014).

This study is, therefore, hoped to address methodological and statistical issues in the entrepreneurship field as well as delineating a measureable boundary between discovery and creation behaviour with new data from a real world setting. Through this, more insights will be provided in the theoretical and empirical distinction between discovery and creation. Given the criticisms on opportunity research that it is "theoretically attractive, but empirically

elusive" (Dimov 2008: 1), this study also aims to stimulate empirical research on opportunity and opportunity related concepts.

In this chapter, therefore, we used the seven entrepreneurial actions conceptually described by Alvarez and Barney (2007) to empirically distinguish discovery and creation behaviour. In this chapter, we expect a distinction between discovery behaviour and creation behaviour of small business owners in their identification and pursuit of profitable opportunities with evidences drawn from formal small-sized businesses in the context of a developing country. Hence, the single hypothesis of Chapter 2 is stated as follows:

Hypothesis: *There is a measurable distinction between the discovery behavior and the creation behaviour of small business owners in a developing country context.*

2.3 Methodology

As mentioned in Section 1.4, the research for this PhD study was carried out among Ethiopian tour operators. Hence, this section introduces the sampling techniques, the instrument used for data gathering and the statistical tools used for data analyses. Readers of this PhD thesis can witness the major difficulties researchers encounter while collecting primary data in an African context.

2.3.1 Sampling

As discussed in Chapter 1 (Section 1.2), the empirical fieldwork for this PhD thesis was conducted amongst Ethiopian tour operators by considering owner-managers as subjects of the study. The use of individuals as units of analysis has been a long tradition in entrepreneurship

research (Davidson and Wiklund 2001, Chandler and Lyon 2001). The Ethiopian tour operators sell their services as package holidays, mainly to international clientele, combining two or more travel services (e.g., transport, accommodation, meals, entertainment, sightseeing, etc.). Therefore, the analysis in this chapter is based on primary data collected from Ethiopian tour operators.

The document obtained from the Ethiopian Ministry of Culture and Tourism (MoCT) showed that the ministry registered 333 tour operators. However, some of the tour operators registered and licensed by the ministry were not operational during the data collection process. The exact figure of these inactive tour operators was not available. The email and telephone numbers for about 89 of the tour operators did not work. It is possible that among these tour operators some of them were registered and licensed to benefit from the incentive package of the government, which allows tour operators to import duty free cars. Some of the active tour operators declined to take part in our study, although they clearly understood the academic purpose of the study. This could be related to the conflict¹³ that the tour operators had with the government around the time of data collection. The tour operators were first allowed to import duty free cars. However, eventually, the Ethiopian Revenue and Customs Authority (ERCA) accused them that they had not been using the imported cars for the intended purpose (i.e., only for tourism).

Nevertheless, the list of tour operators obtained from the MoCT has served as a suitable sample framework during the first field study. First, the owner-managers were

¹³The local English newspaper *Addis Fortune* covered the story of this conflict in detail, which was published on 22 October 2013, titled "Impounded Cars Spark Debate with Tour Operators". Interested readers can retrieve the news at <http://addisfortune.net/chapters/impounded-cars-spark-debate-with-tour-operators/>.

contacted via telephone and asked to participate in the study. Then, those who replied positively were considered for the study (about three calls were made to each of them). A total of 102 responses were collected in the fieldwork carried out between September 2013 and February 2014. Since complete and up to date lists of companies are often hard to find, especially in developing countries, a 41.8% response rate obtained from the tour operators whose phone was working. About 142 tour operators on the list of the MoCT either refused to cooperate or were unavailable to participate in this field study. The analysis has thus been based on the responses obtained from these 102 individuals, as collected through direct interviews. The mean age of the respondents was 40.9 years. About two-thirds of the respondents had attended tertiary education and were in possession of tertiary education qualification, i.e., either a diploma (two years training after high school) or a bachelor degree. Only three of the respondents were women, which can be attributed to the social, economic and cultural aspects of the country. The average firm age was 9.2 years, 8.1 being the median year. Many of the businesses have flourished recently, with a modal age of 5.5 years. On average, the surveyed tour-operating firms created jobs for an average of 10.7 full time equivalent employees as of 1 January 2013.

2.3.2 Questionnaire

A questionnaire was prepared as the main data gathering tool (in English first), based on the statements of Alvarez and Barney (2007), who described seven entrepreneurial actions under discovery and creation (see also Table 2.1). Then, the questionnaire was translated into Amharic, the working language of the federal government in Ethiopia. Then, it was back translated into English to verify the correctness of the translation by a professional translator from the Department of English Language and Literature at Addis Ababa University (AAU),

who speaks both Amharic and English fluently. Next, we conducted a pilot study asking fifteen tour operators (including the presidents of Ethiopian Tour Operators Association and Society of Tour Operators in Addis Ababa) to complete the questionnaire, prior to administering it to the other members. They were asked to indicate any vagueness, or lack of clarity, in the questionnaire items. Few concerns were raised, so only minor refinements were required.

Nonetheless, these fourteen dimensions (seven entrepreneurial actions under discovery behaviour and seven entrepreneurial actions under creation behaviour) have not been operationalized, at least as checked from the 1382 citations of Alvarez and Barney (2007) in Google Scholar as observed per 30 September 2017. We reviewed the literature for existing scales for operationalizing these dimensions. For some of the dimensions we found scales, but these scales suffered from serious drawbacks.

First, the existing scales are not always linked to the direct context of entrepreneurial discovery or creation behaviour. For example, for measuring charismatic leadership, an attribute mentioned by Alvarez and Barney (2007) for creation leadership style, the Conger-Kanungo Scale of Charismatic Leadership (Conger *et al* 1997) could be used. However, the charisma construct referred to in the Conger-Kanungo Scale measures the charisma of an individual in general. A charismatic person does not necessarily have to rely on charisma in a specific entrepreneurial situation. It is not unthinkable that a charismatic person follows an expert-based leadership style for the business he has started. Hence, it is more effective to measure charisma in direct relationship to the leadership style that the person implements when running his firm. This is in line with the discussion that dimensions should be domain-

specific when explaining attitudes or behaviour that individuals have (Van Raaij and Verhallen 1994).

Second, existing scales may be similar (but not identical) to the concepts defined by Alvarez and Barney (2007). Using existing dimensions may cause a divergence from the original definitions of Alvarez and Barney (2007). For instance, as discussed above in Section 2.2, existing scales have used either an expert rating (Welter 2012) or "yes" or "no" questions (Hechavarria and Welter 2015) and were based on a small sample size or few items (Gonzalez *et al* 2017).

We, therefore, developed 14 multiple-item measurement scales by deriving operational questions for each of the 14 dimensions. Five items under each dimension have been carefully worded and rated by a five point Likert scale (1=strongly disagree, 2=disagree, 3=moderately agree/disagree, 4=agree and 5=strongly agree).

While designing the 70 items, we adapted the statements of Alvarez and Barney (2007) to fit to the sector studied (i.e., tour operating firms). We have also taken into account the three assumptions made by Alvarez and Barney (2007) about discovery and creation (i.e., the nature of opportunities, the nature of entrepreneurs and the decision-making contexts). For instance, we have considered a "risky" decision making context and an "uncertain" decision-making context while designing the items to measure the seven entrepreneurial actions under discovery behaviour and creation behaviour, respectively.

The process of the development of the 70 items in this chapter can be exemplified with one of the seven entrepreneurial actions (e.g., marketing) under discovery and creation behavior. According to Alvarez and Barney, "entrepreneurs operating in a discovery context

can effectively specify the product, price, distribution channel, promotion strategy, and customer service strategies they are likely to pursue" (Alvarez and Barney 2007: 20). Based on this statement and a "risky" decision making context, we formulated five items to measure marketing strategies of entrepreneurs with discovery behaviour. Alvarez and Barney asserted that "a decision making context is risky if, at the time a decision is being made, decision makers can collect enough information about a decision to anticipate possible outcomes associated with that decision, and the probability of each of those possible outcomes" (Alvarez and Barney 2007: 14). Hence, discovery entrepreneurs implement their entrepreneurial actions based on research using "risky data collection tools".

Accordingly, we formulated one item to measure how they identified the services they provide to tourists (i.e., *we have introduced tourism services in new areas of the country based on information derived from marketing research*), one item to measure how they set a price (i.e., *we have established our prices based on existing market research and is almost the same with other similar establishments*), one item to measure the channel they use to reach tourist destination sites (i.e., *we use modern cars to sell our services*), one item to measure their promotion strategies (i.e., *before we advertise about our service on local media, we try to gain much information as much as possible to reach our target groups.*) and one item to measure their customer service strategies (i.e., *we have developed our customer services based on information provided by our customers and our competitors*).

In a similar fashion, we formulated five items to measure marketing strategies of creation entrepreneurs. According to Alvarez and Barney, creation entrepreneurs operate under uncertain decision-making contexts. They asserted that "a decision making context is uncertain if, at the time a decision is being made, decision makers cannot collect the

information needed to anticipate either the possible outcomes associated with a decision nor the probability of those outcomes" (Alvarez and Barney 2007: 14). Moreover, creation entrepreneurs may use "attributes of the marketing mix to explore possible opportunities to create" their marketing strategies. These attributes of marketing mix, which are important tools in designing marketing strategies for creation entrepreneurs, are "product, price, distribution, promotion, and customer service" (Alvarez and Barney 2007: 21). We, therefore, developed one item for each of these five attributes of the marketing mix. Besides, these five items focused on the tendency of creation entrepreneurs towards experimentation. Unlike discovery entrepreneurs, creation entrepreneurs cannot anticipate about the outcomes of their decisions. Hence, they often rely on trial and error in their entrepreneurial actions.

Accordingly, we developed one item to measure product (i.e., *when we extend our tourism services to different parts of the country, we follow different paths and directions other than the established ones to attract a lot of customers*), one item to measure price (i.e., *we experimented different prices varying with season to get the highest profit*), one item to measure distribution (i.e., *we selected our tourism destination based on trial and error experimentation*), one item to measure promotion (i.e., *we have advertised about our tour operating services under different channels until we get sufficient customers*) and one item to measure customer service strategy (i.e., *when we provide customer services , we try various options changing until it works for us*).

Table 2.2 presents the designed 70 items (14 times five items) for measuring the discovery behaviour and the creation behaviour of Ethiopian tour operators. Each of the items was rephrased in a past tense form to direct respondents to score each of the items based on the entrepreneurial behaviour they exhibited while pursuing new opportunities.

Table 2.2 Items¹⁴ used for measuring discovery behaviour and creation behaviour among Ethiopian tour operators

Table 2.2.1 Items used to measure discovery behaviour among Ethiopian tour operators

Entrepreneurial actions	Items measuring discovery behavior
Leadership	Number of working years in tour-operating business before start ¹⁵
	Had prior information on tour-operating business
	Had prior knowledge about the market and products of tour operators
	Had prior expertise and managerial experience about tour-operating
	Had prior professional training on tour-operating and related business
Decision-making	Gathered pre-existing information about tour-operating business
	Gathered information from potential customers using interviews, questionnaires etc.
	Gathered information from relevant government agencies
	Gathered information from trade associations
Human resource practices ¹⁶	Made cost-benefit analysis on tour-operating businesses
	Employees recruited based on their specific expertise for the position
	Explained about the nature of the business to potential employees
	Employees recruited to work only on a specified job
Strategy	Anticipated about the type of skills employees should have
	Employees hired with an advertised vacancy from an open labour market ^b
	Set out specific targets and goals about the new business
	Had full knowledge about the size of tour-operating market
	Prepared financial projections about the new business
Finance	Strictly followed the business plan prepared
	Modified some of the business strategies in due time without redefining the objectives ^b
	Had easy access to credits from government commercial banks
	Had easy access to credits from private commercial banks
	Had easy access to credits from development banks
	Relied on financial sources obtained from credit associations
	Relied on financial sources obtained from government support

The Table continues on the next page.

¹⁴Items which failed to meet convergent validity criteria and discriminant validity criteria are marked with superscripts of "a" and "b" respectively in Table 2.2.1 and Table 2.2.2. below. This scale validation process is presented in the next section of the chapter and discussed in Section 2.5.

¹⁵ The number of years the respondents have worked in tour-operating business were measured using five categories (i.e., 1=No any experience, 2=Less than 1 year, 3=1-3 years, 4= 3-5 years and 5=longer than 5 years).

¹⁶Alvarez and Barney (2007) specifically focused on only one aspect of the human resource practices (i.e., recruitment). Accordingly, we designed our items focusing on the actions small business owners employed while hiring their employees.

Marketing	Used marketing research to introduce tourism services in new areas ^b
	Prices established based on existing market research
	Used modern cars to sell services
	Tried to collect much information prior to advertisement about the firm's services on local media to reach target groups
	Customer services developed based on information provided by customers
Sustaining competitive advantages	Operated the new business secretly to avoid imitation ^a
	Kept secret about own business performance ^a
	Tried to identify a new tourism destination and prepare a new itinerary
	Thought about litigating trade mark and patent infringement
	Usually made innovation to stay competitive

Table 2.2.1 Continued: Items used to measure discovery behaviour

Table 2.2.2 Items used to measure creation behaviour among Ethiopian tour operators

Entrepreneurial actions	Items measuring creation behavior
Leadership	Followed different paths and directions other than the established tourism routes to attract a lot of customers
	Experimented with different prices varying with seasons to get more profit ^a
	Tourism destinations selected based on trial and error experimentation
	Made advertisements under different channels until getting sufficient customers
	Tried various options until getting a working model for the provision of customer services ^a
Decision-making	Often made business decisions without historical trends, previous levels of performance and market information ^b
	Made decisive business decision on the spot without calculating/ anticipating about the outcome ^a
	Revised business actions based on intuition ^a
	Did not complain for acceptable losses to the business
	Dared to engage in a business with outcome unknown, even if this could be a loss
Human resource practices	Employees recruited not based on their expertise
	Employees recruited among own social network (such as friends, relatives and family)
	Employees recruited with a great deal of flexibility on several posts ^a
	Employees recruited in an informal way without vacancy advertisement
	Employees recruited without any explanation given to them about the nature of the new business opportunity

The Table continues on the next page.

Strategy	<p>Asked a lot of questions at business start-up due to a lack of business knowledge^a</p> <p>Designed new experiments to shape own goals through time^a</p> <p>Was flexible in own business strategy</p> <p>Was always ready to learn about expanding the business</p> <p>Having a business plan was less important to the entrepreneur^a</p>
Finance	<p>Obtained financial aid from relatives and parents for career development</p> <p>Obtained financial aid from friends for career development</p> <p>Obtained financial aid from spouse for career development</p> <p>Obtained financial aid from social organizations like <i>equb</i>¹⁷ for career development^a</p> <p>Obtained financial aid from own wealth for career development^a</p>
Marketing	<p>Followed different paths and directions other than the established tourism routes to attract a lot of customers</p> <p>Experimented with different prices varying with seasons to get more profit^a</p> <p>Tourism destinations selected based on trial and error experimentation</p> <p>Made advertisements under different channels until getting sufficient customers</p> <p>Tried various options until getting a working model for the provision of customer services^a</p>
Sustaining competitive advantages	<p>Not worried about potential competition because of acquiring more knowledge about the business</p> <p>No challenge came from business imitators</p> <p>Shared information that enabled to identify the new business opportunity</p> <p>Issuing a logo and trade mark to own business not important^a</p> <p>Adjusted own prices based on the price of competitors^a</p>

Table 2.2.2 Continued: Items used to measure creation behaviour

2.3.3 Data Analysis

The collected data were analyzed using SPSS software version 23. The scale validation was conducted in a stepwise manner using Exploratory Factor Analyses (EFA). This novel application of EFA was conducted to accommodate for the small sample size (n=102). Simultaneously analyzing the reaction of 102 respondents to 70 items would lead to highly instable EFA results. For instance, Hair *et al* (2010) recommend a sample-to-variable ratio of

¹⁷*Equb* is an indigenous informal financial institution in Ethiopia. It is a self-help association, in which members cooperate to pool a periodically rotating fixed amount of money, mainly for a business purpose (e.g. for business start-up or expansion of existing business). The meaning of *equb* is further discussed in Section 2.5.

20:1 for robust factor analysis. Prior to EFA, the factorability of the data was assessed. Convergent validity was first assessed through the application of 14 separate factor analyses, one analysis for each of the seven entrepreneurial actions under discovery behaviour and creation behaviour. We expected that all of the five items under each entrepreneurial action would have high loadings on a single factor, supporting convergent validity. Items failing to fulfill convergent validity are to be removed from further analysis.

As a next step in the scale validation, we assessed whether discriminant validity applies with regard to the discovery versus creation behaviour distinction. Accordingly, seven different EFA are run in order to assess discriminant validity between the discovery and creation behaviour for each of the seven entrepreneurial actions. This helps us to test our hypothesis. In this analysis, we expect items purporting to measure an entrepreneurial action under discovery behaviour and items purporting to measure the same entrepreneurial action under creation behaviour to fall under two components separately. If so, we confirm that discriminant validity exists, as the discovery items load on another factor than the creation items. Cross loadings would contradict discriminant validity (Hair *et al* 2010) and thus items failing to meet discriminant validity are removed. Finally, we tested the internal consistency of the validated items for the 14 dimensions by using Cronbach's Alpha.

2.4 Results

We found a high level of convergent validity for the seven entrepreneurial actions under discovery behaviour, but to a much smaller extent under creation behaviour. Out of the 35 items designed to capture the concept of creation behaviour, 14 of them failed to meet the convergent validity criteria due to loadings in two components (see Table 2.2.2). In contrast,

only two items from discovery behaviour failed to meet a convergent validity requirement, as can be seen from Table 2.2.1.

After dropping the items that do not fulfill convergent validity, a discriminant validity test was run for the seven entrepreneurial actions discussed under Alvarez and Barney (2007). In this second step of the EFA, we also dropped three items of discovery behaviour and one item of creation behaviour due to cross-loadings. Such a small number of cross-loadings support discriminant validity between discovery and creation behaviour. The discriminant validity results for the seven entrepreneurial actions are presented under Table 2.3. Our results support that there is discriminant validity between discovery behaviour and creation behaviour for all the seven entrepreneurial actions. Hence, it can be said that the EFA results support our hypothesis, which suggests that there is a measurable distinction between discovery behaviour and creation behaviour in a developing country context.

Table 2.3 Discriminant validity results for the seven entrepreneurial actions

	Component	
	Discovery	Creation
Number of working years in tour-operating business before start	0.741	0.082
Had prior information on tour-operating business	0.774	-0.081
Had prior knowledge about the market and product of tour operators	0.753	-0.211
Had prior expertise and managerial experience about tour-operating	0.823	-0.193
Had prior professional training on tour-operating and related businesses	0.708	-0.050
Sought cooperation of an experienced person in tour-operating	-0.426	0.498
Dedicated to the business even under uncertain conditions	0.332	0.821
Relied more on own interaction ability with people than on expertise in tourism	-0.383	0.523

Table 2.3.2 Discriminant validity results for decision-making

	Components	
	Discovery	Creation
Gathered pre-existing information about tour-operating business	0.736	-0.118
Gathered information from potential customers using interviews, questionnaires etc.	0.744	-0.023
Gathered information from relevant government agencies	0.846	0.082
Gathered information from trade associations	0.784	0.159
Made cost-benefit analysis on tour-operating businesses	0.823	0.134
Did not complain for acceptable losses to the business	0.012	0.782
Dared to engage in a business with outcome unknown, even if this could be a loss	0.069	0.806

Table 2.3.3 Discriminant validity results for human resource practices

	Component	
	Discovery	Creation
Employees recruited based on their specific expertise for the position	0.752	-0.332
Explained about the nature of the business to potential employees	0.690	-0.386
Employees recruited to work only on a specified job	0.861	-0.072
Anticipated about the type of skills employees should have	0.810	-0.116
Employees recruited not based on their expertise	-0.270	0.752
Employees recruited among own social network (such as friends, relatives and family)	-0.202	0.818
Employees recruited in an informal way without vacancy advertisement	-0.159	0.754
Employees recruited without any explanation given to them about the nature of the new business opportunity	-0.118	0.760

Table 2.3.4 Discriminant validity results for strategy

	Component	
	Discovery	Creation
Set out specific targets and goals about the new business	0.823	0.095
Had full knowledge about the size of tour-operating market	0.732	0.199
Prepared financial projections about the new business	0.878	0.138
Strictly followed the business plan prepared	0.824	0.125
Was flexible in own business strategy	0.036	0.867
Was always ready to learn about expanding the business	0.265	0.770

Table 2.3.5 Discriminant validity results for finance

	Component	
	Discovery	Creation
Had easy access to credits from government commercial banks	0.870	0.089
Had easy access to credits from private commercial banks	0.827	0.037
Had easy access to credits from development banks	0.876	0.065
Relied on financial sources obtained from credit associations	0.756	0.038
Relied on financial sources obtained from government support	0.621	0.046
Obtained financial aid from relatives and parents for career development	-0.193	0.788
Obtained financial aid from friends for career development	0.088	0.739
Obtained financial aid from spouse for career development	0.266	0.595

Table 2.3.6 Discriminant validity results for marketing

	Component	
	Discovery	Creation
Prices established based on existing market research	0.688	0.018
Used of modern cars to sell services	0.587	0.514
Tried to collect much information prior to advertisement about the firm's services on local media to reach target groups	0.678	0.453
Customer services developed based on information provided by customers	0.859	0.118
Followed different paths and directions other than the established tourism routes to attract a lot of customers	0.119	0.822
Tourism destinations selected based on trial and error experimentation	0.090	0.837
Made advertisements under different channels until getting sufficient customers	0.529	0.561

Table 2.3.7 Discriminant validity results for sustaining competitive advantages

	Component	
	Discovery	Creation
Tried to identify new tourism destinations and prepare a new itinerary	0.699	0.162
Thought about litigating trade mark and patent infringement	0.715	-0.075
Usually made innovation to stay competitive	0.810	0.099
Not worried about potential competition because of acquiring more knowledge about the business	0.147	0.779
No challenge came from business imitators	-0.130	0.832
Shared information that enabled to identify the new business opportunity	0.473	0.571

In the two EFA steps, we have validated a total of 50 items (71.4% of the total developed items) to measure the concepts of discovery and creation behavior by using entrepreneurial actions as proxies. That is, from the total 70 items we developed, 20 of them were dropped during scale validation (16 of them during convergent validity test and four of them during discriminant validity test). Nonetheless, among the validated 50 items, the Cronbach's Alpha value for the three items of a creation leadership style was low ($\alpha=0.332$), which made them unreliable for measuring the leadership style of entrepreneurs with creation behaviour. The reliability tests for the other dimensions meet the requirements (Hair *et al* 2010, Pallant 2010). A further discussion on these reliability tests is presented in Chapter 3.

In general, in this chapter, we have contributed 47 items (both valid and reliable) to entrepreneurship literature, which will serve as stepping stones to develop operationalized scales to measure discovery and creation behaviour of entrepreneurs in their pursuit of profitable opportunities.

2.5 Discussion

We developed items for measuring the extent to which entrepreneurs have shown discovery behaviour or creation behaviour. The results of this chapter provided empirical evidence for the discovery behaviour versus creation behaviour distinction that was conceptualized by Alvarez and Barney (2007). However, we have not been able to grasp the exact nature of the creation behaviour; perhaps, due to limited knowledge about the understudied creation behaviour.

Further, fourteen items of creation behaviour failed to meet the convergent validity tests. For all of the seven entrepreneurial actions, items purported to capture creation behaviour fell in two components, which raised a question of validity. This implies that further operationalization of creation behaviour is necessary. The underlying reasons for this lack of uni-dimensionality of each of the dimensions under creation behaviour could be related with the nature of small businesses and partly the sector studied. For example, one of the items we developed to measure finance under creation behaviour reads that: *We relied on finance obtained from "equb" for career development*, since entrepreneurs with creation behaviour finance their activities through bootstrapping or from the “wealth of those closely associated with them” (Alvarez and Barney 2007: 20). *Equb* is an indigenous informal financial institution in Ethiopia, where it is not uncommon to find cooperative activities among small business owners to pool resources, since informal self-help institutions like *equb* have existed for a long period of time. However, owing to its formal business nature with a relatively large capital investment, the owner-managers of Ethiopian tour-operating firms rarely pool finance through *equb*.

Moreover, the three items of leadership under creation behaviour yielded a very low Cronbach's Alpha value ($\alpha = 0.332$). Hence, we were unable to provide reliable items to measure the creation leadership style of small business owners in Ethiopia, as an example of a developing country. We carefully worded these items based on the descriptions provided by Alvarez and Barney (2007). This raises a question about the applicability of the conceptual description by Alvarez and Barney (2007) of a leadership style based on charisma in the context of developing countries. We believe this low internal consistency could also be related with the context of this research. Ethiopia is a diverse country, with a varied culture,

manifested through diversified ethnicity, language and religion. Hence, further probing on the charismatic leadership style of small business owners in such a diverse context is needed. We recommend that the leadership styles of the entrepreneurs with mainly creation behaviour in a developing country context should be redefined.

On the other hand, the convergent validity for much of the discovery behaviour items (except for the variable of sustaining competitive advantages) implies that this concept has been well developed in the literature. From this, we can safely deduce that the dimensionality of entrepreneurial actions discussed in the work of Alvarez and Barney (2007) seems to apply more for the discovery behaviour, although we found support for the distinction between discovery behaviour and creation behaviour.

2.6 Conclusion

The main attempt of this chapter was to answer the following question: Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context? The EFA results implied that there is discriminant validity between the entrepreneurial actions under discovery behaviour and creation behaviour. We conclude that discovery and creation behaviour are dichotomous constructs. However, fourteen of the developed items to capture creation behaviour were dropped after the convergent validity tests. This implies that there is lack of validity among the seven entrepreneurial actions under creation behaviour, as conceptually described by Alvarez and Barney (2007). Hence, further scale development and validation are necessary, particularly in the creation behaviour.

Chapter 3

Entrepreneurial behaviour of small business owners in a developing country context: Application of discovery and creation behaviour among Ethiopian tour operators¹⁸

¹⁸The original draft of this chapter was presented at the "International Conference of Small Businesses" (ICSB), held in Dublin, Ireland (11-14 June 2014). Major changes have been made after incorporating the comments provided during the Doctoral Consortium and the presentation sessions.

Abstract

There is mounting interest among entrepreneurship scholars on the origin, form and nature of opportunities. This is evident from an ongoing debate in entrepreneurship literature about whether entrepreneurial behaviour can be typified as discovery or creation in a pursuit of profitable opportunities. The debate is not only about one entrepreneurial behaviour being right or wrong, but also about the contexts under which these behaviours are dominantly applied in early stage entrepreneurial actions in small businesses. In a developing country context, there is little empirical evidence about the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities. This chapter attempts to address this gap by assessing the extent to which discovery and creation behaviours are applied in the context of a developing country. We used the operationalized scales from Chapter 2 of the PhD thesis. Based on survey data (n=102), we provide evidence that both creation and discovery behaviours exist among small business owners in a developing country context, even though creation is the often-applied behaviour in early stages entrepreneurial actions. Paired sample t-tests reveal the applicability of creation behaviours in entrepreneurial actions such as decision-making, strategy and finance, whereas small business owners do apply discovery behaviours in their human resource practices. There is no marked difference between creation entrepreneurs and discovery entrepreneurs in their marketing and sustaining their comparative advantages. This chapter contributes to the development of the entrepreneurship field by testing the applicability of existing Western theories in the domain of entrepreneurial behaviour in the context of a developing country.

3.1 Introduction

Entrepreneurship, as a field of research, has often been criticized for lacking its own theories. Despite such criticisms, opportunity theories such as discovery, creation and bricolage as well as effectuation theory have emerged as dominant theories in the field (Alvarez *et al* 2016). In the new millennium, opportunity has become a central theme in the field of entrepreneurship, particularly after the work of Shane and Venkataraman in 2000 (the most cited work in entrepreneurship research according to Crump *et al* 2011). The research question (i.e., "where do opportunities come from?"), which focuses on the "distinction between discovery and creation", has narrowed the field's research agenda (Acs and Audretsch 2010: 6). Nonetheless, there is an ongoing debate about the nature and sources of entrepreneurial opportunities. This debate about the nature and form of opportunity related processes such as discovery and creation has sparked a significant interest among entrepreneurship scholars.

Scholars such as Shane (2003) and Venkataraman (1997) argue that the subjective or socially constructed nature of opportunity makes it impossible to separate it from the individual, whereas other scholars contend that opportunity is an objective construct which is visible to or created by the knowledgeable or attuned entrepreneur (Alvarez and Barney 2007, Alvarez *et al* 2013). Often these two approaches are respectively referred to as discovery and creation. Leyden and Link (2014) have associated the discovery and creation approaches to early stages entrepreneurial behaviour with the earlier works of Kirzner (1985) and Schumpeter (1934). For example, De Jong and Marsili (2011) called these approaches the Kirznerian opportunity and the Schumpeterian opportunity, respectively. McMullen and Shepherd (2006) also compared the limitations and assumptions of three influential

behavioural approaches of the entrepreneur as promoted by three prominent theorists (Schumpeter, Kizner and Knight).

Alvarez and Barney (2007) distinguished between the discovery and the creation approaches with the metaphors of "mountain climbing" and "mountain building", as discussed in Chapter 2. In the discovery approach, entrepreneurial behaviour are viewed as a function of a tangible reality (e.g., mountains), just waiting to be discovered or to be searched and exploited (i.e., mountain climbing), whereas in the creation approach, entrepreneurial behaviour are viewed as a function of enacted actions that occur during the entrepreneurial process. In the latter approach, entrepreneurial behaviour are manifested by the actions of the entrepreneurs; they build the mountains.

Much entrepreneurial research has focused on the discovery approach of early stages entrepreneurial actions (Kizner 1997, Gaglio and Katz 2001, Shane 2003, Venkataraman 2003, Aldrich and Reuf 2006). However, in comparison to the discovery approach, the creation approach is not well articulated in literature (Alvarez and Barney 2007, Sarasvathy 2001, Baker and Nelson 2005, Alvarez, *et al* 2010, Korsgaard 2011). Currently there is a growing interest towards the creation approach, which is regarded as "a logical theoretical alternative to discovery theory for explaining the actions that entrepreneurs take to form and exploit opportunities" (Alvarez and Barney 2007: 14). Prior research on discovery and creation has also largely focused on explaining mainly the nature of business opportunities (e.g., Edelman and Yli-Renko 2010, Vaghely and Julien 2010).

Gupta *et al* (2015) argue that prior research has not explicitly used discovery and creation "in the realm of entrepreneurial behaviour, moving beyond their limited application to business opportunities" (Gupta *et al* 2015: 4). This inability to apply discovery and creation in

the theme of entrepreneurial behavior is, therefore, observed as an "important shortcoming" in entrepreneurship literature (Gupta *et al* 2015: 4). Hence, examining and expanding the scope of discovery and creation approaches in the domain of entrepreneurial behaviour is vital in contemporary entrepreneurship research.

It can also be argued that entrepreneurial behaviour of small business owners in a developing country situation is quite different from developed economies (Kiggundu 2002, Acs and Virgil 2010). Hence, it is imperative to assess the extent to which discovery and creation behaviour are applied among small business owners in the context of a developing country. Accordingly, the main research question of Chapter 3 is: *Which entrepreneurial behaviour is more applied by small business owners in a developing country context: creation or discovery?*

The study in this chapter was prompted by the research of Bruton *et al* (2008) who advocate for the inclusion of emerging economies and other developing countries in sub-Saharan Africa, Latin America and the Middle East to the mainstream of entrepreneurship research. They state that entrepreneurship research in the context of these geographic areas allows for "the extension and revision of theories through the consideration of new contextual variables. This in turn enables researchers to fine-tune theories by developing context-specific conditions and operationalization of key constructs that are generalizable to research in other contexts" (Bruton *et al* 2008: 11-12). In response to such a scholarly call, in this chapter, we therefore apply the conceptual description of Alvarez and Barney (2007)¹⁹ on discovery and

¹⁹Gupta *et al* (2015) have also recently applied the description of discovery and creation theories by Alvarez and Barney's (2007) "with the goal of comparing and contrasting them to advance our understanding of entrepreneurial behavior under conditions of uncertainty and ambiguity" (Gupta *et al* 2015: 2).

creation theories to explore the dominant entrepreneurial behaviour of small business owners in uncertain and dynamic conditions, such as an African context (Ethiopia). By doing so, we not only extend the scope of discovery and creation to the theme of entrepreneurial behaviour but also provide novel insights in these two popular theoretical perspectives of opportunity in a non-Western context, by drawing evidences from a real world setting.

In Chapter 3 of the PhD thesis, our main aim is to test whether creation behaviour is more applied than discovery behaviour (as distinguished by Alvarez and Barney 2007) among Ethiopian tour operators. Thus, we enhance knowledge on the application of discovery and creation approaches in the theme of entrepreneurial behaviour. We believe that Chapter 3 of this PhD thesis is one of the first to research entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities in a developing country, at least in an African context. We chose to conduct this study in a developing country, as we anticipate that creation behaviour is more likely to be found among small business owners in such a context. In the next section, we discuss the relevant literature and concepts in more detail. We then present quantitative empirical study results, followed by discussion and conclusion.

3.2 Literature review

This section is divided into five sub-sections. The first is about the definition of opportunity and entrepreneurial opportunities; the second provides a brief overview of the application of discovery and creation behaviour; the third is about the concept of small businesses; the fourth is about the definition of developing countries; and the fifth introduces the hypotheses.

3.2.1 Definition of opportunity and entrepreneurial opportunities

The lexical meaning of the word "opportunity", as defined in Oxford English dictionary, is "A time, juncture, or condition of things favourable to an end or purpose, or admitting of something being done or effected." In the field of entrepreneurship, the term "opportunity" is defined as "a situation in which a person can exploit a new business idea that has the potential to generate profit" (Shane 2003: 4). Likewise, Baron (2004) asserts that an opportunity occurs when an idea or product is successful in the market and generates profit. He defines opportunity as "perceived means of generating economic value (i.e., profit) that have not previously been exploited, and are not currently being exploited by others" (Baron 2004: A1). Thus, opportunity involves three attributes: potential economic value, newness and perceived desirability (Baron 2004). For Busenitz *et al* (2003), opportunities involve the creation of new means-ends relationships that develop from the interactions between markets and environments. The central place of "opportunity" in entrepreneurship can be summarized from the statements of Short *et al* (2009: 1) who wrote, "without opportunity, there is no entrepreneurship".

Hansen *et al* (2011) have reviewed the definitions of "entrepreneurial opportunity" over a period of 19 years and came across fragmented definitions. Although there is no agreed-upon definition in literature, we follow Eckhardt and Shane (2003: 336), who define entrepreneurial opportunities as "those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their costs of production." Shane (2003: 18) defines an entrepreneurial opportunity, as "a situation in which a person can create a new means-ends framework for combining resources that the entrepreneur believes will yield a profit". In sum, entrepreneurship as a scholarly field "seeks to understand how

opportunities to bring into existence future goods and services are discovered, created and exploited by whom and with what consequences" (Venkataraman 1997: 120). Thus, opportunity is a central concept in entrepreneurship research.

Discovery and creation have emerged as two prominent approaches in researching opportunity. In both approaches, the sources of opportunities are competitive imperfections that exist in factor or product markets (Hechavarria and Welter 2015, Welter and Alvarez 2015, Alvarez and Barney 2014, Alvarez *et al* 2013). Small business founders differ in their assumptions about the sources of these competitive imperfections (Alvarez and Barney 2007). They apply either discovery behaviour or creation behaviour depending on their assumptions and understandings of the sources of the opportunities they identify and pursue, which is discussed in the next sub-section.

3.2.2 Application of discovery and creation behaviour: An overview of theory and context

As discussed in the preceding section, small business owners differ in their assumptions about the contexts in which they operate. Hence, their application of either discovery behaviour or creation behaviour in the start-up phase varies depending on the contexts in which they operate. For instance, they apply discovery behaviour to pursue new opportunities brought about by changes in technology, consumer preferences, market, demography and industry (Shane 2003). Prior knowledge or previous experience in an industry or market helps them to combine information in new ways to discover, find or search for unsatisfied needs and wants in the economy (Shane 2000, Eckhardt and Shane 2003, McMullen *et al* 2007). Due to this prior knowledge and experience, there is information asymmetry between entrepreneurs and non-entrepreneurs, ex-ante (Alvarez and Barney 2007). Those individuals who are capable of

pursuing new opportunities in the market or industry are, therefore, referred as discovery entrepreneurs (Kizner, 1997, Foss and Klein 2010, Baron 2004 and 2008).

Small business owners apply creation behaviour to pursue new opportunities they observe in a previously untapped market or a current market, which is not being completely penetrated. They pursue profitable opportunities in an iterative process of action and reaction (Alvarez and Barney 2007). In other words, creation entrepreneurs first act and then wait for or observe responses from the market and react again (as opposed to discovery entrepreneurs, who first recognize opportunities and then act). This path dependent iterative process of acting, observing, learning and reacting results in a difference between creation entrepreneurs and non-entrepreneurs, ex post (Alvarez and Barney 2007).

In sum, discovery entrepreneurs pursue profitable opportunities through inductive processes, while creation entrepreneurs pursue profitable opportunities through abductive processes (Sarasvathy *et al* 2010). Small business owners apply discovery behaviour when only demand or supply is known, while they apply creation behaviour when both supply and demand are unknown (Sarasvathy *et al* 2010). Ignorance or radical uncertainty, according to McMullen and Shepherd (2006), is a key to creation entrepreneurs, whereas prior knowledge and experience is very important to discovery entrepreneurs (Shane 2003).

3.2.3 The concept of small business

It is known that small businesses play a very important role in economic development. According to the Organization for Economic Cooperation and Development (OECD), small businesses account for over 95% of all firms, 60% - 70% of the total employment and generate a large share of new jobs in the OECD economies (OECD 2005). As a result, in

entrepreneurship literature, the notion of small business is a central concept (Senderovitz 2009).

A number of definitions of small business exist, arising from various government and official sources, mainly defined with a purpose to assess and limit the firms that should be included in various small business policy support programs. Some of these definitions are offered by national or regional governments, such as the European Union (EU) and the Small Business Administration (SBA) in the United States of America (USA), and are commonly cited in small business literature. According to the European Commission (2005), the definition of small business encompasses the division into “micro”, “small” and “medium-sized” enterprises in quantitative terms. Micro firms employ up to 10 full-time employees and an annual turnover or a balance sheet of maximum € 2 million, whereas small firms engage up to 50 full-time employees and an annual turnover or a balance sheet of a maximum € 10 million. The medium-sized enterprises hire up to 250 full-time employees and show an annual turnover of maximum € 50 million or a balance sheet of maximum € 43 million. On the other hand, the SBA only mentions “small firms”, covering all firms up to a maximum threshold of about 500 employees in manufacturing firms (SBA 2014).

The definition of small business in Ethiopia varies between manufacturing and service sectors. The Ministry of Urban Development and Construction (MoUDC) defines a small business in the service sector as a business entity engaged in economic activities with six to thirty employees, with registered total assets of a maximum of 500,000 Ethiopian *birr*, which is more or less equivalent to \$ 30,000 or € 23,000 (MoUDC 2011). The sector being focused under this study (i.e., tour operators) belongs to this definition of a service sector.

Researchers have criticized the definitions that use the size of a firm as the only criteria to differentiate small and large firms. It is argued that using simple quantitative criteria like the number of employees or the amount of yearly sales or the amount of total assets as a measure of small businesses may not be adequate to divide true differences between large and small firms. Hence, qualitative definitions should also be taken into consideration (Brytting 1991, Chen and Hambrick 1995, Senderovitz 2009, Kubsza 2007, Gibson and van der Vaart 2008). Brytting (1991) asserts that a key feature with a small firm (as opposed to a large firm) is small-scale decentralization and a flat organizational hierarchy. Likewise, Senderovitz (2009) argues that smallness should be seen as a multi-dimensional concept where the organizational structure, the management and the legal independence define the firm. Furthermore, Senderovitz (2009) proposed five characteristics that differentiate smaller firms from larger firms: 1) a comparatively limited number of products, technologies and knowhow; 2) comparatively limited resources and capabilities; 3) less developed management systems, administrative procedures and techniques; 4) unsystematic and informal management styles; and 5) senior management positions held by either the founders of the firm and/or their relatives.

3.2.4 Definition of developing countries

There are various country classification systems defined by different organizations such as the International Monetary Fund (IMF), the United Nations Development Programme (UNDP) and the World Bank. According to the IMF, countries are classified as advanced, emerging, and developing countries. The latter group is sub-categorized as (1) low-income developing countries and (2) emerging and other developing countries (Nielsen 2014). For the World

Bank (2014), the main classification criterion is income, which puts countries as high-income countries with a Gross National Income (GNI) per capita of \$12,616 or more. The rest countries are categorized in two groups, (1) low-income countries (\$1,035 GNI per capita or less) and (2) middle-income countries (\$1,036 to \$4,085 GNI per capita as lower-middle income and \$4,086 to \$12,615 as upper-middle income countries). The World Bank refers to low- and middle-income economies as developing economies. For the UNDP, the country classification system is built around the Human Development Index (HDI). Based on the HDI, the UNDP classifies countries as (1) low human development countries, (2) medium human development countries, and (3) high human development countries (UNDP 2015).

In general, those countries which are referred to as developing countries or developing economies are characterized by a low living standard, an underdeveloped industrial base and a low HDI, as compared to their counterparts called advanced or developed or high-income countries.

The research of Chapter 3 was conducted amongst tour operators in Ethiopia. According to the IMF, Ethiopia is a low-income developing country (Nielsen 2014). According to the World Bank's recent classification of countries (for the fiscal year of 2015), Ethiopia is one among the 47 sub-Saharan African countries designated as low-income economies, with a GNI per capita of \$ 470 (World Bank 2014). Ethiopia falls under the category of low human development countries (UNDP 2015). That is, Ethiopia is one among the developing countries of the world (Nielsen, 2014).

3.2.5 Hypotheses

In developing countries, entrepreneurship is considered as a solution for poverty (Bruton *et al* 2013), particularly in the African context, where the entrepreneurship culture is small. Some socio-cultural factors that hinder entrepreneurship in sub-Saharan Africa have been reported earlier (Takyi-Asiedu, 1993). Tobias *et al* (2013) also consider entrepreneurship in Africa as a process through which entrepreneurial individuals strive to remove economic and social constraints by creating new possibilities for themselves and others within society. This is particularly true among African transformational countries that have recently opened up to private ownership (Frese *et al* 2007). Ethiopia is among the transformational countries where the business climate has changed for the private sector only recently (McDade and Spring 2005).

The empirical study of Chapter 3 begins with the assumption that entrepreneurs can create (as opposed to discover) opportunities in which resources can be combined into a potential profit. That is, creation behaviour is hypothetically to be more applied in the entrepreneurial actions among Ethiopian tour operators. Many of the tour-operating firms in Ethiopia have flourished recently. Previously there was only one tour-operating firm run by the government (i.e., National Tour Operator), since Ethiopia remained a socialist country before 1991. In this chapter, therefore, we hypothesize that in a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their entrepreneurial actions at the start-up phase. This applies for all of the seven entrepreneurial actions or practices presented under Table 2.1 (Section 2.2). Therefore, we hypothesize:

H1: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their leadership.

H2: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their decision-making.

H3: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their human resource practices.

H4: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their strategy.

H5: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their finance.

H6: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in their marketing.

H7: In a developing country context, small business owners exhibit more creation behaviour rather than discovery behaviour in sustaining their competitive advantages.

3.3 Methodology

In this section, we briefly describe the methodological procedures of Chapter 3. First, we describe the subjects of the study. Second, we state the measurement scales. Third, we describe the statistical analysis used in this chapter.

3.3.1 Subjects of the study

As mentioned in Section 1.4, this PhD research was conducted among Ethiopian owners of tour- operating firms, which are formally established small businesses. Most are stationed in

Addis Ababa, the capital city of Ethiopia and are run by their founders, which put them in the category of small businesses (Kubsa 2007). The definition of small business in our case denotes both quantitative and qualitative dimensions. The management system of the tour operators is basic and practical: these firms are usually owned and managed by the founder, use limited technologies, and have few resources; further, each firm has a limited share of the market in Ethiopia. This type of business is a recent phenomenon in Ethiopia. Before 1991, Ethiopia was a socialist country and the entrepreneurial culture was at a standstill. After a regime and policy change, the entrepreneurial culture started to revive.

3.3.2 Measurement scales

Like the empirical research in Chapter 2, the main data gathering tool of Chapter 3 of this PhD thesis is also based on the statements of Alvarez and Barney (2007). In Chapter 2 (Section 2.3), the fourteen entrepreneurial actions (seven under discovery and seven under creation) from Alvarez and Barney (2007) have been operationalized. Hence, the data analysis of Chapter 3 is based on the operationalized items from Chapter 2.

In Chapter 2, we have developed a total of 47 valid and reliable items (67.1% of the total developed items) to measure the concepts of discovery and creation behaviour in entrepreneurship by using entrepreneurial actions as proxies. Table 3.1 provides the descriptive statistics and Cronbach's Alpha value of the validated 14 dimensions in Chapter 2. The lists of these dimensions are sorted out in descending order based on their mean scores. The words “discovery” and “creation” are added before each of the seven entrepreneurial actions to distinguish between those dimensions measured under discovery behaviour and those measured under creation behaviour, respectively. The abbreviations of the

entrepreneurial actions under discovery and creation behavior are also given between brackets. For instance, “CRN_STR” stands for creation strategy; “DSC_STR” for discovery strategy, etc. These are used later in Table 3.2.

Table 3.1 Descriptive statistics and Cronbach’s Alpha values for the seven entrepreneurial actions under discovery and creation behaviour among Ethiopian tour operators

Dimensions	No of items	Mean score	Std. Dev.	Cronbach’s Alpha
Creation_Strategy (CRN_STR)	2	4.23	0.07	0.530
Discovery_Strategy (DSC_STR)	4	3.78	0.08	0.832
Discovery_Sustaining competitive advantages (DSC_SCA)	3	3.75	0.79	0.628
Discovery_Human resource practices (DSC_HRP)	4	3.68	0.91	0.827
Creation_Sustaining Competitive advantages (CRN_SCA)	3	3.63	0.84	0.615
Creation_Decision-making (CRN_MKT)	2	3.53	0.90	0.674
Creation_Leadership ²⁰ (CRN_LDR)	3			0.332
Creation_Marketing (CRN_MKT)	3	3.29	1.06	0.718
Discovery_Marketing (DSC_NKT)	4	3.28	1.26	0.762
Discovery_Leadership (DSC_LDR)	5	3.01	0.90	0.823
Discovery_Decision-making	5	2.84	1.04	0.848
Creation_Human resource practices (CRN_HRP)	4	2.61	1.01	0.809
Creation_Finance (CRN_FNC)	3	2.60	1.07	0.509
Discovery_Finance (DSC_FNC)	5	1.82	0.84	0.868

As can be seen from Table 3.1, the Cronbach’s Alpha values for two dimensions of creation behaviour (i.e., strategy and finance) are below the recommended threshold level of

²⁰ This dimension of creation leadership is included in Table 3.1 to show only its Cronbach's Alpha value. The mean score and standard deviation of this dimension are not computed due to a low Cronbach's Alpha value ($\alpha=0.332$).

0.6 in exploratory research (Hair *et al* 2010). This is mainly attributed to the small number of items tested for reliability (i.e., only two items of strategy and three items of finance). Pallant (2010) asserts that Cronbach's Alpha is sensitive to the number of items to measure reliability. In a case of dimensions with small number of items, inter-item correlations ranging between 0.2 and 0.4 is recommended to measure their internal consistency (Pallant 2010). In our data set, the mean inter-item correlations of the two items of strategy under creation and the three items of finance under creation are 0.261 and 0.391, respectively. Therefore, we considered both dimensions in the statistical analysis in this chapter. Nonetheless, on the basis of the Cronbach's Alpha test, we excluded the dimension of creation leadership from further analysis owing to a low Cronbach's Alpha value ($\alpha=0.332$), which is far below the recommended 0.6 level.

We also performed Pearson's correlation analysis to determine the correlation between one entrepreneurial action and the other. We computed bi-variate correlations among the 13 valid dimensions (except creation leadership). Table 3.2 presents the correlation matrix of all the dimensions as listed and abbreviated in Table 3.1. As is evident from Table 3.2, there are significant positive correlations between most of the dimensions.

Table 3.2 Bi-variate correlation of the entrepreneurial actions under discovery and creation behaviour among Ethiopian tour operators

No	Dimensions	1	2	3	4	5	6	7	8	9	10	11	12	13
1	CRN_STR	1												
2	DSC_STR	0.325**	1											
3	DSC_SCA	0.438**	0.407**	1										
4	DSC_HRP	0.394**	0.650**	0.625**	1									
5	CRN_SCA	0.283**	0.435**	0.255**	0.371**	1								
6	CRN_DMK	0.102	0.218*	0.165	0.175	0.260**	1							
7	CRN_MKT	0.388**	0.399**	0.584**	0.599**	0.249*	0.260**	1						
8	DSC_MKT	0.441**	0.475**	0.548**	0.643**	0.313**	0.249*	0.638**	1					
9	DSC_LDR	0.249*	0.429**	0.268**	0.233*	0.268**	0.313**	0.233*	0.332**	1				
10	DSC_DMK	0.360**	0.500**	0.403**	0.508**	0.203*	0.268**	0.371**	0.582**	0.269**	1			
11	CRN_HRP	-0.211*	-0.391**	-0.313**	-0.489**	-0.142	0.203*	-0.319**	-0.582**	-0.219*	-	1		
12	CRN_FNC	0.119	0.084	-0.036	-0.068	0.086	-0.142	-0.144	-0.061	0.139	0.036	0.126	1	
13	DSC_FNC	-0.029	-0.002	0.039	0.153	-0.075	0.086	0.148	0.039	-0.027	0.208*	-0.138	0.123	1

Pearson Correlation Coefficients. ** $p < 0.01$ and * $p < 0.05$ level (2-tailed).

3.3.3 Data Analysis

The data analysis in Chapter 3 was conducted using *SPSS* software version 23. As a continuation of the statistical analysis in Chapter 2, in Chapter 3, we computed the mean scores and standard deviations for 13 dimensions from the operationalized items in Chapter 2. In the subsequent statistical analysis, we considered those dimensions which displayed convergent and discriminant validity according to the conducted EFA and reliability based on the calculated Cronbach's Alpha. As mentioned before, we did not compute the mean score of creation leadership due to low reliability. As a result, our first hypothesis (H1) was not tested.

We tested the other six hypotheses by using paired sample t-tests. Paired sample t-tests are used when there is a paired design and it is most useful to detect the difference between two dimensions. By performing paired t-tests, we can convey whether the difference between two dimensions (in our case six entrepreneurial actions under creation and discovery behaviour) is due to sampling error or a true effect. These tests allow us to state if there is a difference between the values in the two samples (the t-value) and tells us how likely it is that such a difference would appear in two samples from the same population (the p-value).

The use of mean score differences to compare entrepreneurs' behaviour has become a popular approach in entrepreneurship literature. For instance, Hayton *et al* (2011) measured mean scores on two opportunity identification conditions to compare the behaviour of entrepreneurs in family businesses and non-family businesses. They used t-tests to compare mean score differences between entrepreneurs who identified opportunities in a sudden insight and those entrepreneurs who identified opportunities in a creative process. Similarly, Smolka *et al* (2016) recently used mean score differences on causation and effectuation to define entrepreneurs in terms of their decision-making logics.

Consistent with recent research, we, therefore, conducted six paired sample t-tests, to see whether creation behaviour is more often applied than discovery behaviour, as expected on the basis of the hypotheses that were formulated in Section 3.2.4. For example, a paired t-test compares whether the mean score of the dimension of creation marketing is significantly higher than the mean score of the dimension of discovery marketing.

3.4 Testing Hypotheses

In this chapter, we aimed to test whether creation behaviour is more often applied than discovery behaviour among Ethiopian tour operators. Following the approach of Eijdenberg and Masurel (2013) that used mean scores to compare the push factors and pull factors among MSEs in an East-African country (Uganda), we first compared the mean scores of each entrepreneurial action under creation behaviour and discovery behaviour based on their list as presented in Table 3.1 in descending order. We followed this approach to make simple visual comparisons on the six entrepreneurial actions under discovery and creation behaviour. Then, we present the mean score comparisons by using paired sample t-tests to statistically support on the visual comparisons.

As can be seen from the lists in Table 3.1, strategy is the highest rated entrepreneurial action, whereas finance is the lowest rated entrepreneurial action. Nonetheless, the mean score of creation strategy is rated higher than the mean score of discovery strategy. That is, creation strategy is more applied than discovery strategy. Similarly, we see that creation finance is more applied than discovery finance, even though both dimensions are found at the bottom list of Table 3.1.

Two entrepreneurial actions of creation behaviour (decision-making and marketing) are also among the dimensions listed in the middle, as can be seen from Table 3.1 and Table 3.2 (ranked sixth and seventh respectively), whereas marketing and decision-making dimensions under discovery behaviour are listed in the lower middle (ranked eighth and tenth in Table 3.2, respectively). As a result, we can expect more application of marketing and decision-making under creation behaviour than under discovery behaviour. Nonetheless, the mean score for creation marketing is only slightly greater than the mean score for discovery marketing (i.e., only a difference of 0.01, values at 5-point scores). That is, there may not exist a significant difference between the application of creation behaviour and discovery behaviour among Ethiopian tour operators in terms of their marketing activity.

Two entrepreneurial actions of discovery behaviour (i.e., human resource practices and sustaining competitive advantages) are among the dimensions listed in the top. On the contrary, the mean scores of these dimensions under creation behaviour put them on the lower list. Therefore, we can say that discovery behaviour is more applied than creation behaviour among Ethiopian tour operators in terms of their human resource practices and sustaining their competitive advantages.

As discussed in Section 3.3, we also used paired sample t-tests to assess whether the application of creation behaviour is statistically different from the application of discovery behaviour among Ethiopian tour operators in terms of the six validated entrepreneurial actions. Hence, the six hypotheses formulated in this chapter (Section 3.2.4) were tested using paired samples t-tests.

We checked the suitability of our data for this test and confirmed that our data meets the paired sample t-test requirements. First, the data are generated from a single sample drawn

from the same population (i.e., Ethiopian tour operators). Second, there are two scale measurements for each person (i.e., creation versus discovery) on a 5-point Likert scale. Third, the sample size (n=102) confirms the normality of our data. According to Pallant (2010), the normal distribution assumption is not problematic for large enough sample sizes (e.g., 30+). Hence, our data are suitable for conducting paired sample t-tests.

After the data are tested for suitability, paired sample t-tests with two-tailed direction were used to compare the mean score differences between creation and discovery behaviour. The paired sample t-tests at a 0.01 significance level show that there is a significant difference between entrepreneurs who exhibit creation behaviour and those who exhibit discovery behaviour at early stages of their entrepreneurial actions. As is evident from the paired t-tests presented under Table 3.3 below, the *p* value for four entrepreneurial actions (i.e., decision-making, human resource practices, strategy and finance), is significant ($p < 0.01$). For marketing and sustaining competitive advantages, the *p* value is above 0.01, implying insignificance difference between creation and discovery.

Table 3.3 Application of discovery and creation behaviour among Ethiopian tour operators: Mean scores and Paired t-test results for six entrepreneurial actions

Entrepreneurial actions	Mean score creation	Mean score discovery	Mean score difference	t-value	p-value
Decision-making	3.53	2.84	0.69	5.446	0.000
Human resource practices	2.61	3.68	-1.07	-6.493	0.000
Strategy	4.23	3.78	0.45	4.880	0.000
Finance	2.60	1.82	0.78	6.216	0.000
Marketing	3.29	3.28	0.01	0.099	0.921
Sustaining competitive advantages	3.63	3.75	-0.12	-1.156	0.250

The two tailed paired sampled t-tests revealed that creation decision-making ($m = 3.53$, $s = 0.83$)²¹ is more applied than discovery decision-making ($m = 2.83$, $s = 1.04$), $t(101) = 5.446$, $p < 0.01$). Thus, Hypothesis 2 (H2) is supported. Similarly, creation strategy ($m = 4.2255$, $s = 0.72312$) is more applied than discovery strategy ($m = 4.233$, $s = 0.07$), $t(101) = 4.880$, $p < 0.01$. Hence, Hypothesis 4 (H4) is supported. The same is true for creation finance ($m = 2.60$, $s = 1.073$) versus discovery finance ($m = 1.82$, $s = 0.84$), $t(101) = 6.216$, $p < 0.01$. That is, Hypothesis 5 (H5) is also supported.

The mean score of creation human resource practices ($m = 2.61$, $s = 1.01$) is significantly smaller than the mean score of discovery human resource practices ($m = 3.68$, $s = 0.91$), $t(101) = -6.493$, $p < 0.01$. Hence, Hypothesis 3 (H3) is rejected. As is evident from Table 3.3, our t-test values for two entrepreneurial actions (marketing and sustaining competitive advantages) are insignificant. Thus, Hypothesis 6 (H6) and Hypothesis 7 (H7) are also rejected.

In general, if our main premise is correct, then the mean score differences (creation minus discovery) should be greater than zero and significant for all entrepreneurial actions. Among the significant four entrepreneurial actions, the mean score of creation behaviour is larger than the mean score of discovery behaviour in three entrepreneurial actions (decision-making, strategy and finance), whereas the difference is negative, but significant, for human resource practices. Hence, we can say that the main premise of this chapter is partially supported. In other words, we cannot fully claim that creation behaviour is always more applied than discovery behaviour in the entrepreneurial actions of small businesses in this developing country context.

²¹The "m" and the "s" shown in parenthesis in this section denote the "mean score" and the "standard deviation" values of the tested 12 dimensions respectively.

3.5 Discussion

There was no internal consistency in the items of creation leadership, so the first hypothesis was not tested due to a low reliability. Hence, we were unable to test whether the creation or discovery behaviour is more applied among small business owners in their leadership in Ethiopia, as an example of a developing country. As discussed in Section 2.5 before, this low reliability could be related with the context of the research setting. Ethiopia is a diverse country with a varied culture manifested through diversified ethnicity, language and religion. Hence, further probing on the charismatic leadership style of small business owners in such a diverse context is needed. We recommend that the leadership style of entrepreneurs with mainly creation behaviour in a developing country context should be redefined.

Our findings also show that the human resource practices of Ethiopian tour operators are mainly characterized by discovery behaviour. This could be related with the nature of the tour-operating business itself, which is a formal small-sized sector with a relatively large capital need. The sector hires individuals with specific skills, such as tour guides, drivers, cooks and interpreters, which may not be easily available from the existing social networks. Hence, employers must look to the formal labour market for these specific skills.

Amongst the six entrepreneurial actions tested, marketing and sustaining competitive advantages show no significant difference between creation and discovery behaviour among Ethiopian tour operators. This may be related with the marketing tools they apply. For example, almost all of the tour operators have their own web page and advertisements about their business through internet. In addition, “word of mouth” is an important marketing tool for most of them. Some of the tour operators have been established with the assistance of friends and former clients from the West (developed countries), who make recommendations

to friends and relatives. This marketing practice seems to be prevalent for most of the tour operators.

Similarly, there is no any marked difference between creation and discovery behaviour among Ethiopian tour operators in sustaining their competitive advantages. This may be ascribed to the fact that the legal framework and the institutional set up to protect business innovations are not well developed in Ethiopia. As a result, the entrepreneurs copy each other and use similar products to sustain their competitiveness. Further examining is necessary, in a different country or in a different sector, about the lack of differentiation between creation entrepreneurs and discovery entrepreneurs in their marketing and sustaining their competitive advantages.

In a nutshell, despite its relevance as a key construct to advance our understanding how entrepreneurs establish a new firm, examining the behaviour of entrepreneurs has been an overlooked theme in entrepreneurship research (Bird *et al* 2012). In their meta analytic review, Bird *et al* (2012) revealed that the behaviour of entrepreneurs is poorly defined in many studies and researched fragmentally with measures lacking validation. This warrants extending the scope of opportunity research in the domain of entrepreneurial behaviour.

Our study in Chapter 3 makes significant contributions to the entrepreneurship literature on the opportunity concept, which has been perceived as difficult to measure empirically (Dimov 2011). We have also provided novel insights in the two popular theoretical perspectives of opportunity (i.e., discovery and creation) in a non-Western context by drawing evidences from a real world setting. We believe that the relatively new approach using mean scores to compare entrepreneurial behaviour is an important methodological contribution to future research in the entrepreneurship field. Finally, our study provided an

encouraging finding that the creation approach is also relevant in the pursuit of profitable opportunities. There has been a long-standing concern among entrepreneurship scholars about a bias towards one type of behaviour (i.e., discovery) in explaining early stages entrepreneurial actions (Alvarez and Barney 2007, Hechavarria and Welter 2015).

Notwithstanding its methodological contribution for entrepreneurship literature by providing directions to measure the behaviour of entrepreneurs at the start-up phase, our comparison of creation and discovery behaviour using mean scores computed from varying numbers of items is not perfect. It should be recalled that in the two steps of the EFA tests in Chapter 2, we dropped a number of items, particularly the items intended to measure creation behaviour. Because of this dropping of items, our scales lack perfection. The mixed findings in our study can be ascribed to this limitation, even though the findings are encouraging and give directions for future research. Therefore, we emphasize on a call for further investigation on the differences among entrepreneurs in their application of creation behaviour and discovery behaviour while pursuing profitable opportunities.

3.6 Conclusion

In recent entrepreneurship literature, discovery versus creation is a debatable issue in describing the behaviour of small business owners. The debate is not only about one entrepreneurial behaviour being right or wrong, but also about the contexts under which these behaviours are dominantly applied in early stages entrepreneurial actions. This by itself has ramifications on the effectiveness of businesses according to Alvarez and Barney (2007). For effective entrepreneurship, small business owners have to make assumptions about the nature of the context in which they are operating. Nonetheless, the entrepreneurial behaviour that

small business owners exhibit in their pursuit of profitable opportunities has hardly been empirically tested in a developing country context. Chapter 3 of the PhD thesis attempted to provide an answer to the question “Which entrepreneurial behaviour is more applied by small business owners in a developing country context: creation or discovery?”

The findings of Chapter 3 revealed that there are significant differences between small business owners in four of their early stages entrepreneurial actions under creation behaviour and discovery behaviour. Ethiopian tour operators exhibit more creation rather than discovery behaviour as measured in terms of entrepreneurial actions such as decision-making, strategy and finance, whereas the tour operators are characterized by discovery behaviour in their human resource practices. There is no difference among Ethiopian tour operators in their marketing and sustaining their competitive advantages. We therefore conclude that both creation and discovery behaviour exist among small business owners in a developing country context, at least among Ethiopian tour operators, even though creation is the often-applied behaviour.

Chapter 4

Entrepreneurs' behaviour as determinant of firm performance: Empirical evidence from Ethiopian tour operators

Abstract

Entrepreneurship scholars have been dealing with the question how new firms come into existence by studying the entrepreneurial behaviour of small business owners and founders in their pursuit of profitable opportunities. However, there is a gap in the literature on the effect of start-ups' entrepreneurial actions and their behaviour on eventual firm performance. This chapter of the PhD thesis aims to fill this gap by investigating a unique data set from a formal small-sized business sector (tour operators) in a developing country (Ethiopia). Based on a survey questionnaire (n=102), hierarchical regression results show that mainly creation entrepreneurs perform more effectively than mainly discovery entrepreneurs in terms of changes in sales, profit and assets size. Notwithstanding the overall higher effect on eventual performances of small firms founded and owned by entrepreneurs with mainly creation behaviour, there is no significant difference between the separate effects of each of the entrepreneurial actions under creation behaviour and discovery behaviour on eventual firm performance. This chapter contributes to the literature on entrepreneurship and the field of tourism by analyzing the entrepreneurial behaviour of small business owners at the start-up phase as determinant of the eventual performance of their newly established firms in a developing country context.

4.1 Introduction

Entrepreneurship scholars have been dealing with the question how new firms come into existence by studying how opportunities are identified and acted upon (Shane and Venkatraman 2000, Shane 2003, Casson and Wadesson 2007). Equally important is the question about the eventual outcomes of the pursued opportunities in these newly established firms in the post-entry phase of the entrepreneurial process (Hmieleski *et al* 2015). Scholars assert that early stage strategies and decisions have an impact on later stage firm performance (Baron *et al* 1999). Likewise, the entrepreneurial behaviour of start-ups in their pursuit of profitable opportunities may have a considerable effect on the subsequent performance of their established firms. Davidson *et al* (2006) accentuate that firm performance is a topic of relevance in economics and management studies. Hence, it is of much importance to understand eventual differences in terms of outcomes like firm performance among small businesses.

Stemming from the “2010 *AMR* Decade Award” work by Shane and Venkataraman (2000), the examination of opportunities has become one of the new themes in the field of entrepreneurship (Busenitz *et al* 2003, 2014; Short *et al* 2009). Discovery and creation have emerged as two prominent approaches in researching the entrepreneurial behaviour of small business owners (Gupta *et al* 2015). However, there is hardly any empirical research that has examined the effect of behavioural types of small business owners (creation entrepreneurs versus discovery entrepreneurs) on the eventual performance of their newly established firms. This chapter addresses this gap by providing an answer to the research question: Do the small firms of creation entrepreneurs show a higher level of firm performance than the small firms of discovery entrepreneurs in a developing country context?

Chapter 4 of this PhD thesis is a timely response to a scholarly call for a study of the effect of discovery versus creation behaviour of small business owners on firm performance (Hmieleski *et al* 2015) in the context of a developing country (Bruton *et al* 2008). Moreover, scholars such as Lerner and Haber (2000) and Li (2008) argue that the extant literature of entrepreneurship has paid little or no attention to the service sector, particularly to the tourism industry, as compared to the manufacturing sector while dealing with factors affecting small firm performance. This chapter attempts to contribute to fill this gap in the literature by focusing on the performance of small tourism firms, i.e., tour operators, in a developing country context.

The main purpose of Chapter 4 is, therefore, to investigate the effects of early stage entrepreneurial actions under discovery and creation behaviour as well as behavioural types of entrepreneurs (creation entrepreneurs versus discovery entrepreneurs) on the eventual performance of their newly established firms. We conducted our research among Ethiopian tour operators, which are formally established small firms. As illustrated in Chapter 3 of this PhD thesis, creation is the often-applied behaviour among small business owners in a developing country context, rather than discovery behaviour, even though both behaviour types exist. It has also been noted that for entrepreneurs in developing countries, the pursuit of profitable opportunities through discovery behaviour is costly (Hausmann and Rodrik 2003) and even the identified opportunity is easily copied and imitated, as Mambula (2002) noted among small businesses in Nigeria. In this chapter, we argue that entrepreneurs who pursued new opportunities through creation behaviour rather than through discovery behaviour show a higher firm performance.

4.2 Literature review

This section is divided into two sub-sections. The first is about the effects of entrepreneurial behaviour on firm performance and hypotheses development and the second is about firm performance measures.

4.2.1 Entrepreneurs' behaviour and firm performance: Theory and hypotheses

Small business owners exhibit different forms of entrepreneurial behaviour in their pursuit of profitable opportunities. Focusing on the difference between discovery and creation behaviour is one way of researching opportunities in entrepreneurship (see Section 2.2 and Section 3.2 for details). Alvarez and Barney (2007) argue that it is always possible to interpret entrepreneurs' behaviour and the actions they take at the start-up phase as either discovery or creation. They state that "the actions that entrepreneurs actually take can be thought of as a manifestation of the assumptions they make about the nature of the context within which they are operating- is it a discovery context or a creation context" (Alvarez and Barney 2007: 17). These assumptions have implications in due course of pursuing the new opportunity. In certain contexts, creation behaviour is more likely to be effective than discovery behaviour and vice versa (Alvarez and Barney 2007). In the field of entrepreneurship, explaining entrepreneurial behaviour through creation is more recent than discovery (Alvarez and Barney 2007, Sarasvathy *et al* 2010). The effects of the different forms of entrepreneurial actions under discovery and creation behaviour, particularly the under researched area of "creation behaviour", on eventual outcomes such as firm performance have yet to be fully articulated.

Gupta *et al* (2015: 4) have recently observed an "important shortcoming" in prior research on discovery and creation theories, which failed "to explore the broader domain of

entrepreneurial behavior". In this chapter, therefore, we narrow this research gap by applying the conceptual description of discovery and creation for seven entrepreneurial actions by Alvarez and Barney (2007) as well as using these actions as proxies to define entrepreneurs' behaviour types to examine their effects on firm performance in an African context (Ethiopia). By doing so, we not only expand the scope of discovery and creation behaviour in the domain of firm performance but we also move forward the application of discovery and creation concepts beyond opportunity theories by drawing empirical evidences from a real world setting.

There is a scholarly call to investigate the effects of entrepreneurial actions on business growth, see for instance Hmieleski *et al* (2015). Nonetheless, few empirical studies have been carried out to investigate the effects of entrepreneurial actions under discovery and creation behaviour on eventual outcomes such as firm performance (Dencker and Gruber 2012, Hechavarria and Welter 2015, Welter and Alvarez 2015). To date, there is hardly any study undertaken in a context of developing countries to investigate the effects of the behavioural types of entrepreneurs on firm performance. To the best of our knowledge, Chapter 4 of the PhD thesis is one of the first to study the effects of the behavioural types of entrepreneurs (i.e., creation versus discovery) on firm performance in developing countries. There are few studies conducted in Western contexts to operationalize opportunity aimed at defining entrepreneurs on the basis of their actions or behaviour while pursuing profitable opportunities (Welter 2012, Dencker and Bruger 2014, Hechavarria and Welter 2015). In Chapter 2, we briefly discussed these studies. A further discussion of these studies is presented in Section 4.3.2.

Scholars argue that the entrepreneurial behaviour of small business owners in developing countries is quite different from the Western context (Kiggundu, 2002, Acs and

Virgil 2010). For example, unlike start-ups in developed countries, small business owners in developing countries may find it costly to incur additional costs in searching for a new opportunity in the market (Hausmann and Rodrik 2003). The identified opportunities through such costly efforts are even easily copied and imitated by others as Mambula (2002) noted among Nigerian small business owners. Hence, success for entrepreneurs with mainly discovery behaviour is difficult in developing countries (Hausmann and Rodrik 2003, Alvarez *et al* 2014). Given these premises, therefore, in Chapter 4 of the PhD thesis, we pose that small business owners in a developing country become more successful if they apply creation behaviour rather than discovery behaviour in their pursuit of profitable opportunities.

The main premise of Chapter 4 is that in a developing country context, entrepreneurs' behaviour at the start-up phase has an effect on eventual firm performance, which is approached in two ways. First, we investigate the separate effects of each of the seven entrepreneurial actions under discovery and creation behaviour (see Table 2.1). Second, we investigate the effects of the type of entrepreneurs (discovery versus creation) by using these entrepreneurial actions under discovery and creation behaviour as proxies. Hence, we have formulated three hypotheses:

Hypothesis 1: *In a developing country context, the entrepreneurial actions of small business owners in discovery ways at the start-up phase will be negatively related with a higher level of firm performance.*

Hypothesis 2: *In a developing country context, the entrepreneurial actions of small business owners in creation ways at the start-up phase will be positively related with a higher level of firm performance.*

Hypothesis 3: *In a developing country context, being mainly creation entrepreneur rather than mainly discovery entrepreneur at the start-up phase will be positively related with a higher level of firm performance.*

4.2.2 Measuring performance of small firms

Firm performance is a reliable measure of the success of newly established small businesses (Brush and Vanderwerf 1992, Wiklund 1999, Davidson *et al* 2006, Hmieleski and Baron 2008). Hence, an accurate and appropriate measure of small firm performance is needed in entrepreneurship research, since the choice of firm performance as a dependent variable affects the resulting model and theoretical development. Chandler and Hanks (1993: 392) assert that “relevant, reliable, and valid measures of new venture performance are essential to explore vital relationships between independent variables and venture success and develop sound venture performance theory.” Delmar (2006) advises to consider three points while measuring the performance of small businesses: the choice of the performance indicator, the choice of the studied time period, and the choice of the calculation.

Employment and annual sales or turnover are the most commonly used performance indicators of small businesses in extant literature, as they are easily available and seen as non-controversial from the respondent’s point of view (Delmar 2006). Profits and assets are also objective measures of performance of small businesses, as compared to subjective measures, like market share and performance index, in which the respondent is asked to evaluate the business performance relative to the closest competitor in the industry or to his own goals (Delmar 2006). In their meta review of 82 empirical studies that considered "growth" as their dependent variable for measuring new venture's performance, Shepherd and Wiklund (2013)

also identified sales growth as a popular indicator, which was used in 60% of the studies, followed by employees growth (12.5%), profit (8.7%), equity/assets (5.8%) and other measures (14.4%). see Table 4.1 in Shepherd and Wiklund (2013: 118).

The performance of small firms is mainly measured as the difference between two points in time (e.g., one year, three years, five years), in absolute or relative terms (Delmar 2006). Absolute measures take the real figure of sales, for example. However, these data are not always readily available particularly in developing countries; see, for example, the empirical study conducted in three sub-Saharan African countries reported by Frese *et al* (2007). They observed that measuring the success of small businesses in developing countries is difficult, as bookkeeping is scarce and secrecy towards the tax office is high. Chandler and Lyon (2001) also noted that the mainstream entrepreneurship research has limited available data, since the focus is mostly on small and emergent businesses and their founders or managers. According to them, there is limited archival data for these kinds of individuals and firms. Moreover, they realized that "CEOs of small firms are usually reluctant to provide historical financial statements" (Chandler and Lyon, 2001: 111).

In the absence of objective data, scholars have suggested the use of self-reported performance measures and have provided guides to academics in measuring performance of small businesses (Venkataraman and Ramanjuam 1986, Brush and Vanderwerf 1992, Chandler and Hanks 1993, Wiklund and Shepherd 2005). See Zulkiffli and Perera (2011) for a literature review on objective and subjective measures of firm performance.

Shane (2003) listed four measures of performance: survival rate, sales, profit and initial public offering. Survival is defined as the continuation of the entrepreneurial effort. This longitudinal variable is not used in this chapter, since we collected cross-sectional data. The

term sales is used as a size change or an increase in the new firm's annual sales. Profit is defined as the surplus of revenues over costs after tax. Finally, initial public offering is defined as the sale of stock to the public. However, there is no stock market in the Ethiopian context. Therefore, we use four self-reported performance indicators (sales, employment, profit and assets size change) to measure the firm performance²² of Ethiopian tour operators.

4.3 Methodology

4.3.1 Subjects of the study

As discussed in Section 1.4, this PhD study was conducted amongst Ethiopian tour operators. Similar to the preceding chapters of this PhD thesis, the empirical analysis of Chapter 4 is based on data collected from 102 tour operators. In this chapter we considered the same data set as with Chapter 3. We only added dimensions for measuring firm performance, as discussed in Section 4.3.3 below.

4.3.2 Measurement scales

As aforementioned in this PhD thesis (Section 2.2), there is hardly any study that attempted to operationalize the entrepreneurial behaviour (i.e., discovery and creation) of small business

²² In entrepreneurship literature, the term "firm growth" is also used interchangeably to describe new venture's performance (see the meta review of Shepherd and Wiklund 2013). Nonetheless, in this chapter, we prefer to use the term "firm performance" to describe the entrepreneurial performance of small tourism firms for two reasons: First, "firm growth" is not an inclusive term to describe all the dimensions of entrepreneurial performance since growth is only one of the dimensions (Shane 2003). Second, as per to Shane's (2003) operationalization of measures of entrepreneurial performance, the term growth denotes only two of the measures we considered in this chapter (i.e., sales and employment). Hence, we treat growth as a sub set of the broader term performance in this PhD thesis.

owners in the extant literature, perhaps emanating from the unobservable nature of opportunity itself (Dimov 2011). There are few studies that attempted to operationalize opportunities and opportunity related processes (Welter 2012, Hechavarria and Welter 2015, Dencker and Bruger 2014, Upson *et al* 2017). These studies have provided some directions to empirically measure opportunities, once perceived as difficult in entrepreneurship literature (Dimov 2011), and extended its application to explain opportunity identification processes (Hayton *et al* 2011), entrepreneurial behaviour (Gupta *et al* 2015), eventual outcomes such as firm performance (Dencker and Bruger 2014), and innovativeness (Hechavarria and Welter 2015).

Welter (2012) attempted to empirically classify opportunity types by using descriptions of firms as rated by experts. He measured creation opportunity and discovery opportunity separately and used creation opportunity as independent variable to predict firm performance (Welter 2012). In another study, the opportunity type was operationalized using a single question: whether the idea for the business or the decision to start the business came first (Hechavarria and Welter 2015). The answers were coded as found opportunities and formed opportunities respectively. In this study, there were respondents (48.8%) who reported that the idea and the decision came simultaneously. Hence, three categories of respondents were used to define the variables used in the statistical analysis of this study (Hechavarria and Welter 2015).

Dencker and Bruger (2014) also measured opportunities by capturing risks that the founder faced while establishing the firm. They measured opportunity riskiness in three ways: high-risk industry, low-risk industry and a mix of high-risk and low-risk industry (Dencker and Gruber 2014). That is, they used three categories of founders in their statistical analysis. Recently, Upson *et al* (2017) employed a cluster analysis to categorize entrepreneurs into

discovery, creation and mid-way between discovery and creation, based on their mean scores on three entrepreneurial actions, namely decision-making/marketing, finance and source of competitive advantages.

In this chapter, we follow the assumption that creation and discovery are dichotomous constructs (Alvarez and Barney 2007, Hechavarria and Welter 2015, Welter and Alvarez 2015, Gonzalez *et al* 2017). This is because we use the conceptual description of Alvarez and Barney (2007) in this chapter. Despite this dichotomous assumption of creation and discovery, recent empirical research has found a three category approach convenient to define entrepreneurs (Dencker and Bruger 2014, Hechavarria and Welter 2015, Smolka *et al* 2016, Upson *et al* 2017).

Van Gelderen *et al* (2000) argued that using entrepreneurial actions as measures of firm performance vary according to the phase of the life cycle of the firm. In another study (Rosemary *et al* 2014), entrepreneurial actions were used as proxies to measure entrepreneurial success at the business start-up stage. It is recalled that we have operationalized a new scale with 47 items for seven entrepreneurial actions (leadership, decision-making, human resource practices, strategy, finance, marketing and sustaining competitive advantages) on creation and discovery behaviour in Chapter 2 of this PhD thesis (Section 2.3.3). In Chapter 3, we used the mean score differences of the six valid entrepreneurial actions to measure the extent to which small business owners apply creation behaviour or discovery behaviour. As a continuation of the empirical analysis of the proceeding chapters, the analysis in Chapter 4 is based on these previously operationalized items by using a similar data set with Chapter 3. We only added dimensions for measuring firm performance, as discussed previously.

4.3.3 Measures and variables

This section is divided into three sub-sections, presenting the dependent variables, the independent variables and the control variables respectively.

4.3.3.1. Dependent variables

In this chapter, the dependent variable is firm performance. Davidson *et al* (2006) asserted that performance of small firms can be measured with a range of different indicators, the most frequently suggested being “sales, employment, assets, physical output, market share and profits” (Davidson *et al* 2006: 365). In this chapter, we considered four of these firm performance measures, which are particularly relevant to the tourism sector. We found it difficult to measure the "market share" of Ethiopian tour operators. In addition, the sector under study (tour-operating) is a service sector, for which "physical output" measurement does not apply in the same way as in the manufacturing sector. Thus, these two measures were excluded. Further, in line with Davidson *et al* (2006), we analysed alternative measures of firm performance separately, instead of treating performance as a single latent construct. In this chapter, the size change of small tourism firms is measured by using four dimensions (sales, employment, profit and assets), as reported by the owner-manager themselves.

Despite our efforts, our respondents were reluctant to reveal objective performance data (i.e., absolute measures). They did not comply with our request to provide actual data (mainly sales and profit). In many developing countries, owner-managers do not want to disclose their financial statements, because of confidentiality. A similar incident was reported in another study, conducted in South Africa (Mthanti 2012). The lack of "trust" from the side of our respondents may also be related to the unfortunate coincidence of our data collection

period (September 2013 to February 2014). As discussed in Section 2.3.2 of this PhD thesis, the tour operators had a conflict with the Ethiopian government over the use of imported duty free cars for tour-operating purposes only.

Scholars suggested using subjective measures of firm performance when dealing with small businesses who do not want to disclose specific financial information (Droge *et al* 2004). Firm performance data in previously conducted studies in the context of sub-Saharan Africa were based on self-reported measures of firm performance (Krauss *et al* 2005, Frese *et al* 2007, Cruz *et al* 2012). We dropped the specific questions from our questionnaire and relied only on the self-reported measures of firm performance.

Accordingly, four self-reported measures of firm performance were defined, using a subjective approach to measure firm performance of Ethiopian tour operators over three years. The measures include items such as "How do you see the changes in your sales within the last three years (January 2010-January 2013)?" Similar questions were presented for the other three dependent variables (employment, profit and assets). We used a 5-point Likert scale, containing the categories: decreased dramatically (1), decreased somewhat (2), remained the same (3), increased somewhat (4) and increased dramatically (5). These four dependent variables are referred as sales, employment, profit and assets in the remaining part of the chapter.

4.3.3.2 Independent variables

In this chapter, we generated our independent variables from the operationalized scales in Chapter 2 (i.e., 47 valid and reliable items). We used two sets of independent variables since we employed two statistical analyses to examine the effects of entrepreneurs' behaviour on

firm performance (see Section 4.3.4 for these two statistical analyses). Our first set of independent variables comprise the 13 validated dimensions in Chapter 2 consisting of the seven entrepreneurial actions (leadership, decision-making, human resource practices, strategy, finance, marketing and sustaining competitive advantages) under discovery behaviour and creation behaviour. Hence, the mean scores of these 13 dimensions are used as independent variables in the first statistical analysis. We did not consider creation leadership as independent variable due to a low internal consistency ($\alpha=0.332$), see Table 3.1.

In our second statistical analysis, the independent variables are entrepreneurs who were defined based on their entrepreneurial behaviour at the start-up phase. Like our first statistical analysis, we used the 47 validated items in Chapter 2 to define our independent variables. Instead of computing mean scores for the 13 validated dimensions separately, we computed mean scores for each respondent on creation behaviour (17 items) and on discovery behaviour (30 items), since our interest is on the type of entrepreneurs in terms of their behaviour at the start-up phase. Based on their relative mean scores on creation and discovery, we categorized our respondents into three groups. We defined the first group "mainly creation" entrepreneurs as those respondents who scored 0.25 higher on creation than on discovery. We defined the second group "mainly discovery" entrepreneurs as those respondents who scored 0.25 higher on discovery than on creation. The "mainly creation" category represent 44.1% of our respondents, whereas the "mainly discovery" category represent 30.4% of our respondents. Accordingly, we created two dummy variables, one for "mainly creation" and one for "mainly discovery" entrepreneurs. We assigned the remaining respondents (25.5%) in the third category, which is defined as "balanced use" entrepreneurs. We coded these respondents as

zero in the two dummies we created as independent variables, to use them as a reference category in our second statistical analysis.

Given the dichotomous assumption of creation and discovery approaches (Alvarez and Barney 2007), our categorization of small business owners in three groups may not be perfect. It would have been more appropriate to categorize small business owners as creation entrepreneurs and discovery entrepreneurs. For instance, Welter (2012) categorized respondents in two groups, based on opportunity types, as creation entrepreneurs and discovery entrepreneurs.

We followed the three-category approach for two reasons. First, in contrary to our expectations, the mean score difference between creation entrepreneurs and discovery entrepreneurs became very low (less than 0.25 at a 5 point Likert scale) for more than one-fourth of our respondents. We therefore found it less logical to strictly categorize them in groups of creation entrepreneurs or discovery entrepreneurs. Second, as discussed in Section 4.3.2 above, we followed the methodological approach of prominent scholars in the field of entrepreneurship who have recently found the categorization of entrepreneurs into three groups convenient in the empirical analysis of opportunity and opportunity related concepts such as creation and discovery. For instance, one of the authors of Alvarez and Barney (2007), the article we have extensively referred in this PhD thesis, J.B Barney, is among the authors of Upson *et al* (2017). Interested readers can also refer to Smolka *et al* (2016) on the recommendation they received to follow this approach from the reviewers of one of the top entrepreneurship journals (i.e., *Entrepreneurship: Theory and Practice*).

Notwithstanding this strong theoretical support for our categorization of respondents into three groups, our use of 0.25 values as a cut-off point is an arbitrary one, which may not

be a perfect approach, even though arbitrary calculation is not uncommon in extant literature. For instance, Smolka *et al* (2016) used one and a half point on the 7-point Likert scales, as an arbitrary cut-off point, to categorize their respondents into three groups. Even though Smolka *et al* (2016) failed to discuss about their arbitrary calculation, their selection of a relatively large cut-off point could be related with their non-dichotomous assumption about the two variables they considered (i.e., causation and effectuation). Besides, their interest was also to evaluate the synergetic effects of the two variables on firm performance. Whereas our selection of a relatively smaller cut-off value (i.e., only 0.25) is to minimize the number of respondents to be assigned in the reference category, since our interest is to determine the effects of entrepreneurs' behaviour types on firm performance (i.e., creation behaviour and discovery behaviour), not the synergetic effects of the two behaviour types, unlike Smolka *et al* (2016). For instance, the use of one and a half arbitrary point in the study of Smolka *et al* (2016) put more than two-third of their respondents (i.e., 73.5%) in a category of "balanced use" (i.e., the reference category), whereas the number of respondents captured in the two categories they used as predictors were a little above one fourth of their samples. Only 6.8% of the entrepreneurs were captured in the "mainly casual" category and 19.7% of them in the "mainly effectual" category in their study. In contrast, only 25.5% of the respondents are captured in the reference category in our study. Nearly three-fourth of our respondents (i.e., 74.5%) are assigned in the two dummy categories, which are used as predictors of firm performance in our second regression analysis.

4.3.3.3 Control variables

In order to provide unbiased estimates of the effect of creation and discovery behaviour on firm performance, we used control variables commonly included when researching

determinants of small firm performance. We used two sets of control variables: personal characteristics and firm characteristics. We used personal characteristics that were discussed under recent meta analytic work (Marvel and Davis 2014). These include age (measured in years), highest level of education (measured as having a university level degree), prior work experience in the industry (i.e., tour-operating business), and entrepreneurial experiences (with previous start-ups). Shane (2000) asserts that prior knowledge and experience play a major role in the ability of the entrepreneur to identify and exploit entrepreneurial opportunities. For example, the founder's level of education and the founder's industry experience have a positive impact on firm performance (Segal *et al* 2010). We did not control for gender variation, owing to the low number of women in the tour-operating sector of Ethiopia.

Following previous research measuring firm performance (e.g., Hmieleski and Baron 2008, Hmieleski and Corbet 2008), firm age and firm size were also used as control variables, in order to account for the fact that the performance achieved by a firm may be influenced by the firm characteristics (Delmar *et al* 2003). Firm age was measured as the number of years since the firm had been established. Firm size was measured by using the full time equivalent of employees at the beginning of the year in which the survey was conducted (i.e., January 2013).

4.3.4 Statistical procedures

The core premise of this chapter is that firm performance is affected by entrepreneurs' behaviour in the start-up phase (main predictors) and by personal and firm characteristics (control variables). As discussed in Section 4.3.3.2, we used two sets of independent variables. As a result, we employed two separate statistical analyses. Hierarchical regression is utilized as the main statistical procedure in this chapter, because it adds terms to the regression model

in stages and enables us to see the additional terms that are added to the model and the change in R^2 (Pallant 2010). First, four personal characteristics, namely age, education level, prior work experience and entrepreneurial experience, were entered into the model. Second, two firm characteristics, namely firm age and firm size, were entered into the model. Third, the 13 validated dimensions were entered in the model. In our second hierarchical regression analysis, two dimensions (mainly discovery entrepreneurs and mainly creation entrepreneurs) were entered in the model instead of the 13 dimensions. *SPSS* version 23 was used to conduct the statistical analyses.

Preliminary analyses were conducted to ensure that the assumptions of normality, linearity, multi collinearity and homoscedasticity were not violated. Our data set ($n=102$) violates none of the above assumptions to conduct a hierarchical regression analysis. For instance, there was no deviation from normality as proved from the normal probability plot of the standardized residuals and the variance inflation factors (VIF) were all below the recommended cut-off value of 10 (Hair *et al* 2010). Neither was multi collinearity a problem with the highest VIF being 3.562 and 1.694 in the first and in the second hierarchical regression analyses, respectively.

Table 4.1 and Table 4.2 present the descriptive statistics and bi-variate correlation matrix of all the dimensions we used in the first and second regression analyses, respectively. Similar with the presentations in the preceding chapter, in Table 4.1 and Table 4.3 below, the entrepreneurial actions under creation and discovery behaviour are distinguished with the prefix of creation and discovery. In both regression analyses, there is no significant correlation among the predicting dimensions and the control variables to affect regression results. As is evident from Table 4.1, the largest correlation we find among the independent variables are

between the dimensions of discovery human resource practices and discovery strategy ($r=0.650$). Among the control variables, the largest correlation we find are between age and firm age ($r=0.456$). Besides, within the independent variables and the control variables, the largest correlation we find is between work experience and discovery leadership ($r=0.580$). Nonetheless, these low to medium correlations are not strong enough or very high (e.g., $r > 0.9$) to introduce multi collinearity as a problem (Pallant 2010). On the other hand, there is a high degree of correlation among the dependent variables, confirming their measurement of the same concept, viz., firm performance. However, this high degree of correlations among these four dependent variables is not problematic, since they are used to measure firm performance independent of each other in our regression models.

Table 4.1 Descriptive statistics and correlation of the control variables, entrepreneurial actions and firm performance measures among Ethiopian tour operators

No	Dimensions	Mean ²³	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	Age	40.91	9.02	1											
2	Education level	0.76	0.43	-0.087	1										
3	Work experience	0.34	0.48	.037	.220*	1									
4	Entrepreneurial experience	0.37	0.49	.154	-.127	-.087	1								
5	Firm age	9.27	4.18	.456**	.049	-.041	.067	1							
6	Firm size	10.73	8.84	-.043	.178	.112	.137	.180	1						
7	Creation_Strategy	4.23	0.07	-.069	.226	.089	-.143	.092	.210*	1					
8	Discovery_Strategy	3.78	0.08	.003	.154	.248*	-.080	-.061	.283**	.325**	1				
9	Discovery_Sustaining competitive advantages	3.75	0.79	.123	.194	.152	-.037	.116	.067	.438**	.407**	1			
10	Discovery_Human resource practices	3.68	0.91	.087	.225*	.116	.029	.116	.242*	.394**	.650**	.625**	1		
11	Creation_Sustaining competitive advantages	3.63	0.84	-.149	.141	.053	-.042	-.103	.126	.283**	.435**	.255**	.371**	1	
12	Creation_Decision-making	3.53	0.90	-.017	.035	.007	.106	-.089	.331**	.102	.218*	.165	.175	.260**	1
13	Marketing	3.29	1.06	.066	.116	.082	-.032	.102	.220*	.388**	.399**	.584**	.599**	.249*	.218*
14	Discovery_Marketing	3.28	1.26	.177	.339**	.166	.109	.139	.354**	.441**	.475**	.548**	.643**	.313**	.189
15	Discovery_Leadership	3.01	0.90	-.032	.413**	.580**	-.121	-.043	.080	.249**	.429**	.268**	.233**	.268**	.005
16	Discovery_Decision-making	2.84	1.04	.203*	.190	.039	.099	.014	.168	.360**	.500**	.403**	.508**	.203*	.117
17	Creation_Human resource practices	2.61	1.01	-.219*	-.248*	-.130	.041	-.187	-.130	-.211*	-.391**	-.313**	-.489**	-.142	-.048
18	Creation_Finance	2.60	1.07	-.147	.058	-.065	-.162	-.126	-.128	.119	.084	-.036	-.068	.086	-.073
19	Discovery_Finance	1.82	0.84	.249*	-.154	-.148	-.044	-.096	-.211*	-.029	-.002	.039	.153	-.075	-.094
20	Sales	3.80	1.11	-.360**	.002	.072	-.320**	-.272**	.110	-.037	.019	-.112	-.110	.161	.036
21	Employment	3.50	0.85	-.188	.094	.158	-.191	-.091	.346**	.128	.041	.051	.029	.115	.126
22	Profit	3.70	1.06	-.304**	-.035	.091	-.220*	-.204*	.068	-.091	.032	-.147	-.116	.166	.042
23	Assets	3.69	0.80	-.204*	.033	.078	-.079	-.258**	.159	-.134	-.015	-.132	-.152	.039	.084

The Tables continues on the next page

²³ The mean values for three dimensions (i.e., education level, work experience and entrepreneurial experience) are between 0 and 1, since they were coded as dummy variables. The mean of 0.76 for education level implies that 76% of our respondents have attended a tertiary level education after completing high school. Similarly, 34% of our respondents have worked in tour-operating firms before, whereas 37% of them had established another business individually or with others before.

No	Dimensions	13	14	15	16	17	18	19	20	21	22	23
13	Creation_Marketing	1										
14	Discovery_Marketing	.638**	1									
15	Discovery_Leadership	.233*	.332**	1								
16	Discovery_Decision-making	.371**	.582**	.269**	1							
17	Creation_Human resource practices	-.319**	-.582**	-.219*	-.527**	1						
18	Creation_Finance	-.144	-.061	.139	.036	.126	1					
19	Discovery_Finance	.148	.039	-.027	.208*	-.138	.123	1				
20	Sales	-.055	-.157	.049	-.177	.194	.124	-.272**	1			
21	Employment	.121	.106	.108	.053	-.050	.022	-.172	.551**	1		
22	Profit	-.012	-.154	.090	-.181	.174	.156	-.176	.835**	.618**	1	
23	Assets	-.083	-.103	.003	-.094	.243*	.146	-.183	.721**	.598**	.778**	1

Pearson's Correlation Coefficients. ** p < 0.01 and * p < 0.05 level (2-tailed).

Table 4.1 Continued: Pearson's correlation matrix

Table 4.2 Descriptive statistics and correlation of the control variables, entrepreneurs' behaviour and firm performance measures among Ethiopian tour operators

No	Dimensions	Mean ²⁴	St.dev	1	2	3	4	5	6	7	8	9	10	11	12
1	Age	40.91	9.02	1											
2	Education level	0.76	0.43	-0.087	1										
3	Work experience	0.34	0.48	0.037	0.220*	1									
4	Entrepreneurial Experience	0.37	0.49	0.154	-0.127	-0.087	1								
5	Firm age	9.27	4.18	0.456**	0.049	-0.041	0.067	1							
6	Firm size	10.73	8.84	-0.043	0.178	0.112	0.137	0.180	1						
7	Mainly discovery entrepreneurs	0.30	0.46	0.211*	0.129	0.151	0.064	-0.002	0.059	1					
8	Mainly creation entrepreneurs	0.44	0.50	-0.163	-0.274**	-0.226*	-0.031	-0.087	-0.014	-0.587**	1				
9	Sales	3.80	1.11	-0.360**	0.002	0.072	-0.320**	-0.272**	0.110	-0.209*	0.317**	1			
10	Employment	3.50	0.85	-0.188	0.094	0.158	-0.191	-0.091	0.346**	-0.013	0.105	0.551**	1		
11	Profit	3.70	1.06	-0.304**	-0.035	0.091	-0.220*	-0.204*	0.068	-0.234*	0.312**	0.835**	0.618**	1	
12	Assets	3.69	0.80	-0.204*	0.033	0.078	-0.079	-0.258**	0.159	-0.169	0.277**	0.721**	0.598**	0.778**	1

Pearson Correlation Coefficients. ** $p < 0.01$ and * $p < 0.05$ level (2-tailed).

²⁴ See footnote 22 on the meanings of mean values between 0 and 1. The mean values of the two predictors, which are also coded as dummy variables, is between 0 and 1. That is, 30% of our respondents were "mainly discovery" entrepreneurs, whereas 44% of them were "mainly creation" entrepreneurs.

4.4 Results

We employed hierarchical multiple regression analyses to assess the ability of entrepreneurs' behaviour to predict firm performance over three years (January 2010 - January 2013), after controlling for the effects of personal and firm characteristics. We used 13 dimensions as predictors of firm performance in our first statistical analysis. The analysis was conducted four times for each of the dependent variables. The results of these hierarchical regression models are displayed in Table 4.3 and discussed below. In Table 4.3, the regular fonts represent the seven validated entrepreneurial actions under discovery behaviour, whereas the italic fonts represent the six validated entrepreneurial actions under creation behaviour.

The addition of the control variables in the regression model explained firm performance measures. As is evident from Table 4.3, the four personal characteristics in Model I explained the changes in sales (21.1%), employment (8.6%), income (14.1%) and assets (5.1%). The addition of the two firm characteristics in Model II also explained the changes in sales (4.2%), employment (12.9%), income (1.4%) and assets (7.2%). The addition of the 13 dimensions in the regression model explained the changes in sales (10.4%), employment (5.9%), profit (11.0%) and assets (12.0%). Nonetheless, the full models for all of the four firm performance measures (sales, employment, profit and assets) are statistically insignificant at 0.05 significance level, as can be seen from the p -values in Model III in Table 4.3. It is only three of the dimensions on discovery and creations were indicative of firm performance. Discovery finance (β (std) = - 0.277, t (-2.548), $p=0.013$) negatively predicted the change in sales at a significant level of 0.05.

Table 4.3 Effects of entrepreneurial actions under discovery and creation behaviour on firm performance of Ethiopian tour operators

Model	Dimensions	Firm performance measures							
		Sales		Employment		Profit		Assets	
		β (Unstd)	β (Std)	β (Unstd)	β (Std)	β (Unstd)	β (Std)	β (Unstd)	β (Std)
	(Constant)	5.788		4.117		5.348		4.401	
	Age	-0.041	-0.328**	-0.016	-0.168*	-0.034	-0.290**	-0.018	-0.201**
	Education level	-0.202	-0.078	0.056	0.029	-0.261	-0.106	-0.014	-0.008
	Work Experience	0.181	0.077	0.259	0.145	0.243	0.109	0.139	0.083
I	Entrepreneurial Experience	-0.627	-0.273**	-0.261	-0.149	-0.391	-0.179*	-0.068	-0.041
	R^2	0.211		0.086		0.141		0.051	
	F-value (R^2)	6.475		2.276		3.983		1.290	
	p-value (R^2)	0.000		0.067		0.005		0.279	
	(Constant)	5.582		3.799		5.229		4.230	
	Age	-0.029	-0.238**	-0.010	-0.103	-0.028	-0.240**	-0.006	-0.069
	Education level	-0.237	-0.092	-0.056	-0.028	-0.285	-0.116	-0.031	-0.017
	Work Experience	0.109	0.047	0.184	0.103	0.204	0.092	0.072	0.043
	Entrepreneurial Experience	-0.701	-0.305**	-0.379	-0.216**	-0.434	-0.199**	-0.128	-0.078
	Firm age	-0.045	-0.170	-0.019	-0.092	-0.023	-0.091	-0.049	-0.257**
	Firm size	0.023	0.184*	0.037	0.381***	0.013	0.112	0.019	0.211**
	R^2	0.253		0.215		0.155		0.123	
	R^2 change	0.042		0.129		0.014		0.072	
	F-value (R^2)	5.357		4.326		2.913		2.218	
	p-value (R^2)	0.000		0.001		0.012		0.048	

The Table continues on the next page.

Model	Dimensions	Firm performance measures							
		Sales		Employment		Profit		Assets	
		β (Unstd)	β (Std)	β (Unstd)	β (Std)	β (Unstd)	β (Std)	β (Unstd)	β (Std)
	(Constant)	4.976		4.306		4.976		4.343	
	Age	-0.013	-0.079	-0.006	-0.060	-0.013	-0.112	0.001	0.014
	Education level	-0.226	-0.087	-0.148	-0.075	-0.226	-0.092	0.076	0.041
	Work Experience	0.143	0.024	0.223	0.125	0.143	0.064	0.168	0.101
	Entrepreneurial Experience	-0.418	-0.328***	-0.414	-0.236**	-0.418	-0.191*	-0.197	-0.121
	Firm age	-0.027	-0.233**	-0.031	-0.150	-0.027	-0.107	-0.046	-0.240*
	Firm size	0.017	0.222**	0.041	0.426***	0.017	0.144	0.022	0.244**
	Creation_Strategy	-0.179	-0.116	-0.022	-0.019	-0.235	-0.160	-0.225	-0.204*
	Discovery_Strategy	-0.160	-0.123	-0.296	-0.297*	-0.058	-0.046	-0.041	-0.044
	Discovery_Sustaining competitive advantages	-0.069	-0.049	0.045	0.042	-0.169	-0.126	-0.022	-0.022
	Discovery_Human resource practices	0.098	0.079	-0.012	-0.013	0.000	0.000	-0.050	-0.056
III	Creation_Sustaining competitive advantages	0.201	0.152	0.093	0.092	0.218	0.174	0.046	0.049
	Creation_Decision-making	-0.058	-0.046	-0.004	-0.004	-0.016	-0.014	-0.002	-0.002
	Creation_Marketing	0.113	0.107	0.102	0.127	0.226	0.225	0.064	0.085
	Discovery_Marketing	-0.108	-0.122	-0.057	-0.084	-0.119	-0.141	0.007	0.011
	Discovery_Leadership	0.062	0.038	0.029	0.023	0.118	0.077	-0.087	-0.075
	Discovery_Decision-making	0.014	0.013	0.105	0.129	-0.032	-0.032	0.081	0.106
	Creation_Human resource practices	0.060	0.054	-0.079	-0.094	0.023	0.022	0.158	0.202
	Creation_Finance	0.110	0.106	0.062	0.077	0.156	0.158	0.124	0.167
	Discovery_Finance	-0.371	-0.277**	-0.146	-0.143	-0.208	-0.164	-0.157	-0.165
	R^2	0.357		0.274		0.265		0.243	
	R^2 change	0.104		0.059		0.110		0.120	
	F-value (R^2)	2.392		1.629		1.559		1.385	
	p-value (R^2)	0.004		0.068		0.088		0.157	

Unstandardized (β -Unstd) and standardized (β -std) coefficients are presented. *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.1$ level.

Table 4.3 Continued: Regression results

Two dimensions, namely discovery strategy (β (std) = - 0.297, t (-1.917), $p=0.059$) and creation strategy (β (std) = - 0.204, t (-1.702), $p=0.093$) were also indicative of the changes in employment size and assets (though negatively) at a significance level of 0.1, respectively. As can be seen from Model III in Table 4.3, neither the entrepreneurial actions under discovery behaviour nor the entrepreneurial actions under creation behaviour predicted the changes in profit.

In a nutshell, in our first regression analysis, except the above three dimensions, the entrepreneurial actions under both discovery and creation behaviour were unable to predict firm performance. We, therefore, did not find support to Hypothesis 1 and Hypothesis 2. In other words, neither the entrepreneurial actions under creation behaviour nor the entrepreneurial actions under discovery behaviour are significantly associated with firm performance measures in this developing country context.

We also assessed the effects of two types of entrepreneurs who are defined based on their behaviour to predict firm performance. We used two predictors (mainly discovery entrepreneurs and mainly creation entrepreneurs) in our second hierarchical regression. As the foregoing discussion under Section 4.3.3.2, we developed these predictors following the approach of other scholars in the entrepreneurship field (Upson *et al* 2017, Smolka *et al* 2016, Hechavarria and Welter 2015). Again, the analysis was conducted four times for each of the dependent variables. The results of these analyses are displayed in Table 4.4. The additional terms explained by personal characteristics (Model I) and firm characteristics (Model II) remained the same in both regression analyses, since we used similar control variables. Hence, further discussions are provided below on the results only from Model III of Table 4.4.

Table 4.4 Effects of entrepreneurs' behaviour on the performance of Ethiopian tour operators

Model	Dimensions	Firm performance measures			
		Sales	Employment	Profit	Assets
I	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.328***	-0.168*	-0.290***	-0.201**
	Education level	-0.078	0.029	-0.106	-0.008
	Work Experience	0.077	0.145	0.109	0.083
	Entrepreneurial Experience	-0.273***	-0.149	-0.179*	-0.041
	R^2	0.211	0.086	0.141	0.051
	F -value (R^2)	6.475	2.276	3.983	1.290
	p -value (R^2)	0.000	0.067	0.005	0.279
II	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.238**	-0.103	-0.240**	-0.069
	Education level	-0.092	-0.028	-0.116	-0.017
	Work Experience	0.047	0.103	0.092	0.043
	Entrepreneurial Experience	-0.305***	-0.216**	-0.199**	-0.078
	Firm size	-0.170	-0.092	-0.091	-0.257**
	Firm age	0.184*	0.381***	0.112	0.211**
	R^2	0.253	0.215	0.155	0.123
	R^2 change	0.042	0.129	0.014	0.072
	F -value (R^2)	5.357	4.326	2.913	2.218
p -value (R^2)	0.000	0.001	0.012	0.048	
III	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.190*	-0.098	-0.183*	-0.014
	Education level	-0.017	0.002	-0.040	0.060
	Work Experience	0.096	0.122	0.142	0.094
	Entrepreneurial Experience	-0.287***	-0.210**	-0.180*	-0.060
	Firm size	-0.168*	-0.081	-0.096	-0.259**
	Firm age	0.169*	0.369***	0.100	0.198**
	Mainly discovery entrepreneurs	-0.013	0.068	-0.054	-0.039
	Mainly creation entrepreneurs	0.274**	0.148	0.259**	0.268**
	R^2	0.321	0.228	0.229	0.196
	R^2 change	0.068	0.013	0.074	0.073
	F -value (R^2)	5.490	3.427	3.462	2.836
p -value (R^2)	0.000	0.002	0.002	0.007	

Standardized coefficients presented. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Sales: After controlling for personal and firm characteristics, with the addition of the main predictors (mainly discovery entrepreneurs and mainly creation entrepreneurs) in the regression model, the total variance explained by the model as a whole was 32.1% ($F_{8, 93} = 5.490, p < 0.001$). These predictors explained an additional 6.8% of the variance in sales change (see the R^2 change in Model III), after controlling for personal and firm characteristics. The full model is statistically significant at a significance level of 0.05 ($p = 0.012$), R squared change = 0.068, F change (2, 93) = 4.655. In the final model, being mainly discovery entrepreneurs ($\beta = -0.013, t (-0.120), p = 0.905$) was statistically insignificant, whereas being mainly creation entrepreneurs ($\beta = 0.274, t (2.461), p = 0.016$) was statistically significant at a level of 0.05. Hence, this finding supports our third Hypothesis (H3). Among the control variables, entrepreneurial experience ($\beta = -0.287, t (-3.227), p = 0.002$) was also statistically significant (though negative). Moreover, firm age ($\beta = 0.169, t (1.844), p = 0.068$) was a positive indicator of the change in sales among Ethiopian tour operators, whereas two control variables were negative indicators of the change in sales; personal age ($\beta = -0.190, t (-1.853), p = 0.067$) and firm size ($\beta = -0.168, t (-1.668), p = 0.099$).

Employment: After controlling for personal and firm characteristics, with the addition of the main predictors (mainly discovery entrepreneurs and mainly creation entrepreneurs) in the regression model, the total variance explained by the model as a whole was 22.8% ($F_{8, 93} = 3.427, p < 0.01$). However, the full model is not statistically significant ($p = 0.457$), R squared change = 0.013, F change (2, 93) = 0.790, $p > 0.05$. In the final model, neither being mainly discovery entrepreneurs ($\beta = 0.068, t (0.585), p = 0.560$) nor mainly creation entrepreneurs ($\beta = 0.148, t (1.249), p = 0.215$) were statistically significant. Hence, this finding does not support our third hypothesis (H3). Two control variables were statistically

significant, with entrepreneurial experience recording lower (though negative) beta value ($\beta = -0.210$, $t (-2.214)$, $p = 0.029$) than firm age ($\beta = 0.369$, $t (3.784)$, $p = 0.000$).

Profit: After controlling for personal and firm characteristics, with the addition of the main predictors (mainly discovery entrepreneurs and mainly creation entrepreneurs), the total variance explained by the model as a whole was 22.9% ($F(8, 93) = 3.462$, $p < 0.001$). These predictors explained an additional 7.4% of the variance in profit over three years, after controlling for personal and firm characteristics. The full model is statistically significant at a level of 0.05 ($p = 0.014$), R squared change = 0.074, F change (2, 93) = 4.472, $p < 0.05$. In the final model, being mainly discovery entrepreneurs ($\beta = -0.054$, $t (-0.468)$, $p = 0.641$) was insignificant, whereas being mainly creation entrepreneurs ($\beta = 0.259$, $t (2.187)$, $p = 0.031$) was statistically significant at 0.05 level. Hence, this finding supports our third Hypothesis (H3). Among the control variables, age ($\beta = -0.183$, $t (-1.681)$, $p = 0.096$) and entrepreneurial experience ($\beta = -0.180$, $t (-1.901)$, $p = 0.060$) were negative indicators of change in profit among Ethiopian tour operators.

Assets: After controlling for personal and firm characteristics, with the addition of the main predictors (mainly discovery entrepreneurs and mainly creation entrepreneurs), the total variance explained by the model as a whole was 19.6% ($F(8, 93) = 2.836$, $p < 0.01$). These predictors explained an additional 7.3% of the variance in assets change, after controlling for personal and firm characteristics. The full model is statistically significant at a significance level of 0.05 ($p = 0.017$), R squared change = 0.073, F change (2, 93) = 4.236, $p < 0.01$. In the final model, being mainly discovery entrepreneurs ($\beta = -0.039$, $t (-0.330)$, $p = 0.742$) was insignificant, whereas being mainly creation entrepreneurs ($\beta = 0.268$, $t (2.213)$, $p = 0.029$) was statistically significant at a level of 0.05. Hence, this finding supports our third

Hypothesis (H3). Additionally, two control variables were statistically significant at a level of 0.05; firm age ($\beta = 0.198$, $t (1.988)$, $p = 0.05$) as a positive predictor and firm size ($\beta = -0.259$, $t (-2.364)$, $p = 0.020$) as a negative predictor of the changes in assets owned by Ethiopian tour operators.

In general, our third hypothesis, which reads, "*In a developing country context, being mainly creation entrepreneur rather than discovery entrepreneur at a start-up phase will be positively related with a higher level of firm performance*" is greatly supported, since three out of the four firm performance measures are positively and significantly associated with the predictor mainly creation entrepreneurs.

4.5 Discussion

Chapter 4 investigates the relationship between entrepreneurs' behaviour and firm performance. The findings of our first regression analysis indicate that hardly any of the seven entrepreneurial actions under discovery behaviour and six of them under creation behaviour are associated with firm performance measures. Hypothesis 1 and 2 suggest that the entrepreneurial actions of small business owners in discovery ways are negatively associated with firm performance, whereas the entrepreneurial actions of small business owners in creation ways are positively associated with firm performance. Nonetheless, we find no support to hypothesis 1 and hypothesis 2. That is, the entrepreneurial actions under creation behaviour are not different from those under discovery behaviour in predicting firm performance among Ethiopian tour operators. For instance, uncertain decision-making (creation) is not different from risky decision-making (discovery) in effect on firm performance.

The insignificant associations between the 13 predictors and the four firm performance measures for most regression results in our first analysis (i.e., 49 out of the 52 expected regression results) can be attributed to our estimation of a large number of parameters (13 predictors) in the regression model over a small sample size (n=102) in our data set.

Despite this limitation in our sample size, we believe these are encouraging findings. The insignificant relationship between the entrepreneurial actions under both discovery and creation behaviour, on the one hand, and firm performance measures, on the other, implies that each of the entrepreneurial actions of small business owners with creation behaviour at the start-up phase are not superior to those with discovery behaviour, in terms of outcomes such as firm performance. We can therefore claim that these findings narrow the ongoing debate in entrepreneurship literature about the effects of early stage entrepreneurial actions under creation and discovery behaviour.

In our second regression analysis, consistent with prior literature, we used three categories for defining entrepreneurs in terms of their behaviour at the start-up phase. Hypothesis 3 suggests that being mainly creation entrepreneurs rather than being mainly discovery entrepreneurs results in a higher firm performance. The findings of Chapter 4 suggest that small business owners who employed mainly creation behaviour in the start-up phase show a higher firm performance in terms of sales, profit and assets. There is not any association between the eventual performance of mainly discovery entrepreneurs and their behaviour at the start-up phase in a context of this developing country. Hence, we find evidence to greatly support Hypothesis 3.

This finding is consistent with previous research outcomes in other developing countries. Hausmann and Rodrik (2003) remarked that success is difficult and costly for discovery entrepreneurs in developing countries because their businesses are easily copied and

imitated, as Mambula (2002) noted among Nigerian small businesses. Conversely, the fact that creation entrepreneurs become more successful in such a context is perhaps related to the way in which they sustain their competitive advantages because their opportunities were identified through tacit learning in a path dependent process (Alvarez and Barney 2007) and, thus, cannot be easily copied and imitated by others. In sum, in this chapter, we have further strengthened the longstanding notion in entrepreneurship literature that for small business owners in developing countries success through discovery is difficult. In other words, creation entrepreneurs will eventually become more successful than discovery entrepreneurs in a context of developing countries, as we witnessed among Ethiopian tour operators. This finding is important because it will also have practical implications for the provision of entrepreneurship education and training in developing countries.

Higher sales give the possibility of higher profits. Higher sales also represent increased business activities and, therefore, demand for new work positions (Agiomirgianakis *et al* 2006). However, contrary to our expectation, employment has not shown an increase among the firms of mainly creation entrepreneurs in the studied period. Even though this finding does not support our third hypothesis, it seems to be consistent with empirical research from four decades ago that showed that firm size of small businesses is set at the start. Over six years of longitudinal study, Birley (1987) did not see any change in aggregate employment size in either full-time or part-time jobs, despite an increase in sales.

4.6 Conclusion

This chapter attempted to examine the effects of entrepreneurs' behaviour on firm performance. For this purpose, we formulated and tested three hypotheses. It was

hypothesized that entrepreneurial actions under creation behaviour and those under discovery behaviour will have positive and negative effects on firm performance, respectively. In contrary to these two hypotheses, the findings indicated that most entrepreneurial actions under both discovery and creation behaviour are not associated with firm performance measures. Hypothesis 3 suggested that small firms of mainly creation entrepreneurs rather than mainly discovery entrepreneurs show a higher level of firm performance. Our findings showed that being mainly creation entrepreneurs leads to a higher firm performance (though not fully) than being mainly discovery entrepreneurs in this developing country context. Therefore, in this chapter, we found evidence to greatly support Hypothesis 3, but no evidence to support Hypothesis 1 and Hypothesis 2. In other words, the overall effects of entrepreneurial actions rather than their separate effects, particularly under creation behaviour, are significant in predicting firm performance positively.

The findings of this chapter revealed that the firms of mainly creation entrepreneurs showed a higher level of performance in terms of sales, profit and assets. We can conclude that young small tour-operating firms in Ethiopia founded by mainly creation entrepreneurs are performing higher than their counterparts. Nonetheless, we cannot fully claim that being mainly creation entrepreneurs always leads to a higher firm performance because we did not find a statistical support to show that they also showed a higher performance than mainly discovery entrepreneurs in terms of employment size change.

The findings of Chapter 4 also revealed that even though the dimension of mainly discovery entrepreneurs is not significantly associated with firm performance measures, the negative coefficients on sales, profit and assets imply that success for discovery entrepreneurs is difficult in developing countries. Conversely, we can also conclude that neither the firms of

mainly discovery entrepreneurs perform higher than the firms of mainly creation entrepreneurs. This finding is consistent with previous research outcomes in other developing countries (e, g. Hausmann and Rodrik 2003). Thus, entrepreneurs who mainly apply discovery behaviour in the start-up phase might be able to improve the performance of their firms by increasing the degree in which they also apply creation behaviour at an early stage of new firm formation. The findings in this chapter have also practical implications for the provision of entrepreneurship education and training in Ethiopia and other countries with similar situations and business environments.

Chapter 5

*Causation and effectuation behaviour of Ethiopian entrepreneurs: Implications on the performance of small tourism firms*²⁵

²⁵ This chapter was accepted on 28 August 2017 for publication in the *Journal of Small Business and Enterprise Development* (JSBED). Chapter 5 and the JSBED paper are greatly identical.

Abstract

There is an ongoing discussion in the entrepreneurship literature about decision-making behaviour among entrepreneurs. Effectuation is presented as an alternative to the traditional view of decision-making in entrepreneurship referred to as causation. There is a wealth of literature describing the distinctive features of causation and effectuation. However, few empirical studies on the effects of these decision-making behaviour have been conducted on firm performance. This chapter addresses this research gap in drawing on empirical evidence (n=118) from small tourism firms (tour operators) in Ethiopia. The hierarchical regression model reveals that causation is positively related to an increase in employment size. Among the effectuation dimensions tested, pre-commitment positively explains the financial performance of the small tourism firms. We contribute to the advancement of theory on causation and effectuation by testing their operationalized measures in an African context and provide empirical evidence about their effects on firm performance.

5.1 Introduction

The entrepreneurial actions employed in a pursuit of profitable opportunities have attracted the attention of entrepreneurship scholars, particularly after the seminal work of Shane and Venkataraman (2000). For example, Alvarez and Barney (2007) introduced "creation theory" as an alternative to the dominant "discovery theory" of entrepreneurial actions. In a similar manner, Sarasvathy (2001) introduced "effectuation theory" as an alternative to "causation theory", which has been an established approach in literature on entrepreneurial decision-makings (Sarasvathy 2001, Perry *et al* 2012). Sarasvathy (2001) used a recipe analogy - "what ingredients do I need?" and "what ingredients do I have?" - to respectively describe the two entrepreneurial decision-making behaviour: causation and effectuation. Causation serves novice entrepreneurs (Brettel *et al* 2012), who have a given goal and search for means to reach that goal, whereas effectuation serves expert (Read *et al* 2009a) or habitual (Chandler *et al* 2011) entrepreneurs, who start with the means at hand and look for potential goals. The distinction between causation and effectuation is presented in detail in the next section.

In their meta-review of effectuation research, Read *et al* (2009a) revealed that conceptual research outweighs empirical studies. The majority of the empirical studies are experimental and conducted by analyzing "think aloud verbal protocols" (Read *et al* 2009a, Perry *et al* 2012). There are few effectuation studies based on primary data from the field. In these studies, qualitative data have been used widely (e.g., Harting 2004, Sarasvathy and Dew 2005) and few scholars have used quantitative data to develop and validate measurement scales (Chandler *et al* 2007, 2011; Brettel *et al* 2012). There is still a lack of empirical research on effectuation and its principles (Chandler *et al* 2011), particularly on its effects on

firm performance (Read *et al* 2009a, McKelvie *et al* 2013). This study addresses this research gap in the literature.

Prior studies revealed that early- stage strategies and decisions have an impact on later-stage firm performance (Baron *et al* 1999). Similarly, the decisions entrepreneurs make in their pursuit of profitable opportunities (e.g., causation or effectuation) may have a considerable effect on eventual firm performance. Although there is no definitive claim in the literature whether causation or effectuation leads to better firm performance, McKelvie *et al* (2013: 1) argue that, there is a "tacit undertone in the literature that the use of effectuation is superior." Similarly, Read *et al* (2009a) provide evidence through a meta-analysis that effectuation may lead to a "superior outcome" in eventual firm performance. However, this claim has hardly been verified in a non-Western context. Which decision-making behaviour of small business owners leads to a higher firm performance in a developing country context: causation or effectuation? This chapter attempts to provide an answer to this basic research question by drawing empirical evidence from formal small businesses in an African context. Recently, the empirical study of Eijdenberg *et al* (2017) among small business owners in Burundi indicated that there is no significant difference between the effects of effectuation and causation on small business growth. Chapter 5 of the PhD thesis adds a new data set from another African country (Ethiopia) to stimulate empirical studies on causation and effectuation in non-Western settings.

Chapter 5 of the PhD thesis is prompted by scholarly calls for a thorough investigation about the relationship between effectuation principles and new firm performance (Chandler *et al* 2011, McKelvie *et al* 2013), based on primary data from field studies (Perry *et al* 2012, Chandler *et al* 2011). It has also been argued that the extant literature of entrepreneurship has

paid little or no attention to the service sector, particularly to the tourism industry (Lerner and Haber 2000, Li 2008), as compared to the manufacturing sector. This chapter attempts to contribute to fill in this gap in the literature as well by focusing on the performance of small tourism firms.

The main aim of this chapter is, therefore, to investigate the effects of causation and effectuation on the performance of formally established small tourism firms (tour operators) in an African context. We chose to conduct our study among Ethiopian tour operators, since they have flourished recently (see the methodology section below). We anticipated that in these newly established small tourism firms both causation and effectuation have been employed in the new business development process. We contribute to the field of entrepreneurship literature by providing empirical evidence drawn from primary data collected in an African context. In so doing, we not only remedy the gap in empirical field studies, but we also add much needed research on the tourism sector development in Africa.

5.2 Literature review and hypotheses

Sarasvathy (2001) broke new ground with her "effectuation' theory" in the field of entrepreneurship. Since then, effectuation theory has attracted the attention of entrepreneurship scholars. In this section, we provide a brief description of causation and effectuation and make a distinction between them. We then review the relationship between causation and effectuation, on the one hand, and firm performance, on the other, in entrepreneurship literature. Finally, we develop working hypotheses for our study.

5.2.1 Causation and effectuation: A conceptual review

Both causation and effectuation are behaviour (Sarasvathy 2001) or cognitive processes (Perry *et al* 2012) that entrepreneurs employ in their decision-makings while pursuing profitable opportunities. Sarasvathy (2001 and 2008) presented effectuation as distinct from causation, the traditional view of decision-making taught in management sciences and business schools (Sarasvathy and Dew 2010). Chandler *et al* (2011) described Sarasvathy's effectuation theory as a "ground-breaking research" in the field of entrepreneurship. Effectuation theory has also attracted the attention of scholars in other fields such as strategy (Wiltbank *et al* 2006) and marketing (Read *et al* 2009b). To move effectuation research from its intermediary stage (Perry *et al* 2012), validated scales were developed for measurement of causation and effectuation (Wiltbank *et al* 2009, Chandler *et al* 2011, Nelson and Goldsby 2011, Brettel *et al* 2012).

Sarasvathy defined causation as “processes that take a particular effect as given and focus on selecting between means to create that effect” (Sarasvathy 2001: 245). The underlying logic of causation is that “to the extent we can predict the future, we can control it” (Sarasvathy 2001: 251). Novice entrepreneurs who employ causation in their pursuit of profitable opportunities and new business development (Brettel *et al* 2012) begin with a very clear and pre-determined vision from the onset (i.e., with given goals). To determine their goals, they evaluate opportunities based on expected returns. They use their pre-determined goals as a way to make competitive analysis and to exploit pre-existing knowledge and capabilities (e.g., determining which stakeholders or resource-owners to approach for financing). Finally, they try to predict an uncertain future (Sarasvathy 2001, Sarasvathy and

Dew 2005, 2010, Read *et al* 2009a, Chandler *et al* 2011, Perry *et al* 2012, McKelvie *et al* 2013).

In contrast, effectuation "takes a set of means as given and focus on selecting between possible effects that can be created with that set of means" (Sarasvathy 2001: 245). The underlying logic of effectuation is that "to the extent we can control the future, we do not need to predict it" (Sarasvathy 2001: 251). Five behavioural principles effectual entrepreneurs employ in their new business development process are proposed in literature (e.g., Sarasvathy and Dew 2005, Nelson and Goldsby 2011). From the extant literature we have studied, effectual entrepreneurs employ these five principles²⁶ by pursuing five consecutive stages.

In the first stage, effectual entrepreneurs employ the *bird-in-hand* principle by focusing on their values, beliefs and role in the society ("who they are, what they know and whom they know"). At this early stage of firm formation, effectual entrepreneurs do not have a well-defined vision or action to pursue, unlike their counter parts, causal entrepreneurs. They only make general aspirations about their future at this stage and remain flexible to follow a series of workable and valuable courses of action in the new business development process. In the second stage, effectual entrepreneurs employ the principle of *affordable loss* to minimize unseen losses if their efforts of forming a new business fail. In the third stage, effectual entrepreneurs employ a principle of *patchwork quilt*. In this stage, they emphasize on forming partnerships and strategic alliances to build a team for the future of the firm they are forming (e.g., through pre-commitment with future clients or suppliers). In the fourth stage, effectual entrepreneurs focus on learning from their own experiences by employing the *lemonade* principle. At this stage, they adapt to unexpected and unforeseen opportunities. In the fifth

²⁶ We also referred to the descriptions of these five principles in: <http://www.effectuation.org>.

stage, effectual entrepreneurs become a pilot in the airplane of their life and business, after which their fifth behavioural principle (*pilot-in-the-plane*) is named. In this final stage of the new firm formation, effectual entrepreneurs have already gained and developed the necessary skills to control an unpredictable future.

Several scholars have attempted to describe the difference between the two entrepreneurial decision-making behaviour. What makes effectuation different from causation is still an ongoing discussion in the field of entrepreneurship (Perry *et al* 2012). As yet, there is no consensus among scholars about the form and occurrence of causation and effectuation (i.e., are they two distinct concepts or do they occur along a continuum in decision-making processes?). For instance, there are studies that show that entrepreneurs use more effectuation in the initial stage of new venture development and more causation in later phases (Harting 2004, Harmeling *et al* 2004, Read and Sarasvathy 2005). On the other hand, scholars such as Chandler *et al* (2011) contended that causation and effectuation are dichotomous constructs. Chandler *et al* (2011) developed and validated a survey instrument to measure causation and effectuation as two distinct concepts and analyzed the empirical distinction between them. This scale has now been used or at least cited in 399 studies as observed per 30 September 2017. We use the scale from Chandler *et al* (2011) in this study and treat causation and effectuation as two distinct behaviour that small business owners exhibit in their pursuit of profitable opportunities.

Some authors attempted to compare different points of view using entrepreneurial actions and other issues. For example, Alvarez and Barney (2007) compared discovery and creation concepts in table form by using seven entrepreneurial actions. In a similar manner, Sarasvathy *et al* (2010) compared three views in opportunity identification (recognition,

creation and discovery). Following such traditions in entrepreneurship literature, we here distinguish causation and effectuation from each other by using entrepreneurial actions and other issues. The main comparisons are presented in Table 5.1 below.

5.2.2 Causation, effectuation and firm performance

Do entrepreneurial decision-making behaviour that small business owners employ in their pursuit of profitable opportunities have an impact on eventual firm performance? Although there are a few studies conducted in this regard, there is no definitive answer about the influence of causation and effectuation on eventual firm performance.

In her pioneer work, Sarasvathy (2001) stated that neither causation nor effectuation is superior in predicting performance. However, in a later joint publication she offered five testable propositions about the relationship between entrepreneurial expertise, the use of effectuation and new firm performance (Read and Sarasvathy 2005). Read *et al* (2009a) provided a meta-review of 35 publications on the relationship between effectuation and firm performance. They argue that effectuation may eventually lead to a "superior outcome" in performance.

Few empirical studies have been conducted on the relationship between effectuation and firm performance. For example, Wiltbank *et al* (2009) compared *control* (effectuation) and *prediction* (causation) processes employed by 121 business angels and found out that the angel investors who emphasized control strategies encountered fewer investment failures. McKelvie *et al* (2013) measured the effects of causation and effectuation on firm-level performance. They found out that the different dimensions of effectuation have varying effects

Table 5.1 A comparison between causation and effectuation behaviour

Issues	Causation	Effectuation	Literature Source
Type of entrepreneur	Novice	Habitual or Expert	Dewet <i>et al</i> (2009), Chandler <i>et al</i> (2011), Read <i>et al</i> (2009a), Brettel <i>et al</i> (2012)
Opportunity drivers	Exogenous forces	Endogenous forces	Chandler <i>et al</i> (2011)
Theoretical foundation	Neo-classical micro economics	Cognitive science	Chandler <i>et al</i> (2011)
Logic	Identify the end, predict the future	Identify the means, control the future	Chandler <i>et al</i> (2011), Sarasvathy (2001), Read and Sarasvathy (2005), Dew <i>et al</i> (2009a)
Decision-making	Risky	Uncertain	Sarasvathy (2001, 2008), Chandler <i>et al</i> (2007, 2011), McKelvie <i>et al</i> (2013), Dew <i>et al</i> (2009a)
Strategy	Rational, goal-driven, planned strategy	Flexible, emergent and non-prediction strategy	Perry <i>et al</i> (2012), Chandler <i>et al</i> (2011), Sarasvathy (2001), Read and Sarasvathy (2005), Dew <i>et al</i> (2009)
Finance and resource acquisition	Pre-existing capabilities and resources	Environmental contingencies, flexibility, partnerships	Chandler <i>et al</i> (2011), Sarasvathy (2001), Read and Sarasvathy (2005), Dew <i>et al</i> (2009a)
Marketing research	Based on analysis and planning	General aspirations (who I am, what I know, whom I know), experimentation, pre-commitments	Chandler <i>et al</i> (2011), Read and Sarasvathy (2005), McKelvie <i>et al</i> (2013), Read <i>et al</i> (2009a)
Sustaining competitive advantages	Competitive analysis	Strategic alliances and partnerships	Chandler <i>et al</i> (2006, 2011), Read and Sarasvathy (2005), Dew <i>et al</i> (2009a)
Business environment	Well developed	Dynamic, uncertain	Chandler <i>et al</i> (2011), Dew <i>et al</i> (2009a)
Measurement nature	Reflective, uni-dimensional construct	Formative, multi-dimensional construct	Chandler <i>et al</i> (2011)
R&D project management and approach	Driven by given project targets, maximize expected returns	Driven by given means end, minimize affordable loss	Brettel <i>et al</i> (2012)

on performance. For example, pre-commitment was a positive predictor of profitability and financial performance. Flexibility also positively predicted financial performance and the use of affordable loss was found to be a positive predictor of achieving first sale and profitability. They also found that the use of causation has a positive relationship with change in the number of employees.

Several scholars have suggested further studies on the relationship between causation and effectuation, on the one hand, and eventual firm performance, on the other (Read *et al* 2009a, Chandler *et al* 2011, Perry *et al* 2012, and McKelvie *et al* 2013). This is important to move effectuation research to a more mature stage. Chapter 5 of this PhD thesis is partly prompted by such a call.

Chandler *et al* (2011) outlined four principles of effectuation and developed a validated scale to measure effectuation as a formative construct through its four dimensions, viz., experimentation, affordable loss, flexibility and pre-commitment. In recent empirical studies, measuring effectuation through its four dimensions has become popular in entrepreneurship literature (e.g., McKelvie *et al* 2013, Smolka *et al* 2016, Cai *et al* 2016). In the remainder of this section, the definition of the four dimensions of effectuation and their implications on firm performance are provided.

Experimentation refers to "a series of trial and error changes pursued along various dimensions of strategy, over a relatively short period of time, in an effort to identify and establish a viable basis for competing" (Cai *et al* 2016: 4). According to Sarasvathy (2001: 252), the effectuation process focuses on "experimenting with as many strategies as possible with the given limited means". Hence, even though a series of trial and errors incur additional costs and time for entrepreneurs (Sarasvathy 2001), the use of experimentation helps to

formulate strategic goals and crystallize a viable business model in unpredictable future (Chandler *et al* 2011, Fisher 2012). Nonetheless, unlike in the developed economies, the formulated business models may not always work well in non-Western contexts (Cai *et al* 2016). Hence, experimentation is of great importance to identify and pursue profitable opportunities, particularly in underdeveloped market environments, such as an African context.

Affordable loss refers to "the tendency of expert entrepreneurs to evaluate an investment according to whether they could survive the total failure of an initiative" (Read *et al* 2009b: 15). Hence, unlike a causal entrepreneur who calculates expected returns, an effectual entrepreneur is willing to put at risk his assets he can afford to lose in the worst-case scenario. Affordable loss may enable him to contain losses or lessen the impact of possible failure by quitting of the new business and try pursuing another opportunity (Dew *et al* 2009b). Similarly, Fisher (2012) asserted that the use of affordable loss helps to invest limited amounts of resources to new projects at a time. Hence, the use of affordable loss is of great importance for the survival and growth of new firms in resource-constrained environments, such as an African context.

Flexibility refers to "the exploitation of contingencies rather than the exploitation of pre-existing knowledge that arose unexpectedly over time" (Sarasvathy 2001: 252). Given their "predisposition toward contingencies", expert entrepreneurs respond quickly to environmental contingencies and positive surprises that arose unexpectedly and "leverage them into new opportunities" (Read *et al* 2009a: 576). In other words, flexibility allows effectual entrepreneurs to creatively combine the resources and capabilities they have and what they could mobilize in a short time to sustain the new firm by adapting to the unexpected

changes in the environment (Chandler *et al* 2011). Hence, flexibility is of great importance for the growth and survival of small firms, particularly in resource constrained and underdeveloped market environments, such as an African context.

Pre-commitment refers to "an emphasis on pre-commitments and strategic alliances to control an unpredictable future" (Chandler *et al* 2011: 377). The use of pre-commitment allows effectual entrepreneurs to build partnerships and strategic alliances with stakeholders (e.g., venture capitalists) in the new venture (Sarasvathy and Dew 2008). Nonetheless, they establish partnerships with "only those in which both parties share the risk of the venture and benefit from the success of the venture" (Read *et al* 2009a: 574). Sarasvathy and Dew (2008) argued that "neither indiscriminate over-trust nor naïve altruism" constitute effectual partnerships. The only way any one can take a stake in the new firm is by willing to commit enough resources and talents to sustain the new firm. Hence, their emphasis on pre-commitments and strategic alliances helps effectuators to "build networks of self-selected stakeholders, each of whom commits only what he or she can afford to lose, to help shape new ventures and new markets that may or may not eventually turn out to be blockbuster financial successes" (Sarasvathy and Dew 2008: 731). Hence, building effectual partnerships with those stakeholders who make real commitments is of great importance for the survival and success of new firms, particularly in resource-constrained environments, such as an African context. In sum, in resource constrained contexts such as sub-Saharan Africa (Vermeire and Bruton 2016), the four dimensions of effectuation are anticipated to have effects on the eventual performance of small tourism firms, such as tour operating firms in Ethiopia.

5.2.3 Hypotheses

Causation focuses on exploitation of pre-existing capabilities and resources to maximize expected returns (Perry *et al* 2012, Chandler *et al* 2011, McKelvie *et al* 2013). As a result, causal entrepreneurs follow a well-defined business plan and employ competitive analysis to predict their future. Their human resource practices (HRP) are, therefore, characterized by planned actions from business commencement. In fact, entrepreneurs, particularly in developing countries, invest in HRP when they enter international markets and build partnerships with more economically developed countries (Khavul *et al* 2009). This applies for both causation and effectuation entrepreneurs. Nonetheless, causal entrepreneurs tend to play an active role by undertaking many of the business activities at the start up stage since they have prior knowledge and experience about the founded business (Sarasvathy 2001).

Prior studies also revealed that planning for the future significantly increases employment size. For instance, Shane (2003: 223) provided empirical evidence that "the entrepreneur's tendency to plan for the future significantly increased the employment growth of their ventures." Hence, given their tendency towards planning for the future, in this study, a higher change in employment size is expected among entrepreneurs with causation behaviour rather than those with effectuation behaviour. This premise is in line with the principles of effectuation, which focus on controlling the unpredictable future rather than on predicting the uncertain future (causation), as described by Sarasvathy (2001).

Moreover, according to the organization life cycles model, which assumes that new firms go through a sequence of growth and change, the decisions about additional employees and new facilities will vary depending on available resource over the different stages of the firm (Brush *et al* 1997). Aldrich and Langton (1997) asserted that almost all small and

medium-sized firms began small at the founding stage and expand at the survival stage. Start-ups will only slowly translate their understanding of human resource management into organizational change as the firm ages (Brush *et al* 1997).

Even though the above explanation of the life cycle model applies for both causation and effectuation, unlike effectual entrepreneurs who mobilize resources from stakeholders at the early stages, causal entrepreneurs seek additional resources at the survival stage for additional investments, for instance, for additional facilities and employees.

In other words, causal entrepreneurs start with hiring few employees and increase the number of employees eventually depending on the available resources (Brush *et al* 1997). Empirical studies also show that causation results in changes in the number of employees in the long run (McKelvie *et al* 2013). In this study, it is therefore anticipated that causation will eventually lead to a larger positive change in employment size among new firms than effectuation. Hence, the first hypothesis in this study is stated as follows:

Hypothesis 1 (H1): *In an uncertain and dynamic context, entrepreneurs who employ causation rather than effectuation at the start of their new firm exhibit a higher change in their employment size.*

In their meta review of 35 articles comprising 9897 new firms, Read *et al* (2009a) revealed that three of the effectuation principles (except affordable loss) "are positively and significantly related to new venture performance" (Read *et al* 2009a: 574). These meta analytic findings support the premises in this study that there is a positive and significant relationship between effectuation (at least for three of its dimensions) and firm performance.

Recent empirical evidences from non-Western contexts, such as in transitional economies, also reveal that effectuation is a positive predictor of new venture's performance (Cai *et al* 2016). This finding among Chinese entrepreneurs is consistent with the theoretical explanations outlined in the preceding section that the principles of effectuation are relevant for new firm's performance in higher uncertainty market environments. In their meta review of effectuation research, Perry *et al* (2012: 838) also affirmed that entrepreneurs with effectuation behaviour, as compared to those with causation behaviour, are "likely to be more effective in settings characterized by greater level of uncertainty."

In developing countries, and particularly in Africa, the business environment is dynamic and uncertain. In such conditions, there are few angel investors or venture capitalists to provide finance for start-ups. In addition, access to formal creditors such as commercial banks is very limited. In other words, the resources required for implementing causation may not be available. In such predominantly resource-poor situations, effectuation is more likely to prevail (Read and Sarasvathy 2005). Thus, entrepreneurs in a developing country should rely on environmental contingencies for resource acquisition while starting up their new firm by implementing effectuation principles. Read and Sarasvathy (2005: 23) proposed that "successful firms are more likely to have begun through effectuation actions." Empirical studies also show that effectual entrepreneurs perform better financially than causal entrepreneurs (McKelvie *et al* 2013). Therefore, in this study, a higher financial performance is expected among newly established small firms in an African context through effectuation rather than causation. Hence, the second hypothesis in this study reads as follows:

Hypothesis 2 (H2): *In an uncertain and dynamic context, entrepreneurs who employ effectuation rather than causation at the start of their new firm exhibit a higher change in their financial performance.*

Following from the literature on measures of financial performances (see McKelvie *et al* 2013 and Read *et al* 2009a for the appropriate dependent variable(s) in effectuation researches), we formulate three sub-hypotheses:

Hypothesis 2a (H2a): *In an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their sales.*

Hypothesis 2b (H2b): *In an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their profits.*

Hypothesis 2c (H2c): *In an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their assets.*

5.3 Methodology

5.3.1 Sampling

We chose Ethiopian tour operators who were owner-managers as subjects of the study. The use of individuals as units of analysis has been a long tradition in entrepreneurship research (Davidson and Wiklund 2001, Chandler and Lyon 2001). The owner-managers were selected for two reasons. First, they have formally established businesses in Ethiopia with a relatively

large capital need, characteristics that are ideal for an empirical study. Second, many of these businesses have flourished comparatively recently, following the downfall of the former socialist regime in 1991. We anticipated finding owner-managers who had employed both causation and effectuation in starting-up their tour-operating business.

In Ethiopia, the Ministry of Culture and Tourism (MoCT) registers and issues licenses to tour-operating firms. However, the list we obtained from the MoCT does not differentiate active tour operators from those who ceased operations. Instead, we used lists from two associations, namely the Ethiopian Tour Operators Association (ETOA) and the Society of Tour Operators in Addis Ababa (STOA). The tour operators who were active during the data collection process are members of either ETOA (180 members) or STOA (33 members). Both lists serve as a sample framework for our study in this chapter. The owner-managers were contacted via telephone and asked to participate in the study. Those who replied positively were considered for the study.

The PhD researcher collected data between March 2015 and August 2015 from 118 tour operators whose firms existed for three or more years. This has resulted in a response rate of 55.4%, which meets the threshold recommended to conduct an empirical study like the one at hand. Hair *et al* (2010) recommend a sample-to-variable ratio of 20: 1 for robust factor analysis. In our study with five variables (see below), this ratio is 23.6: 1, which exceeds the recommendation.

5.3.2 *Questionnaire*

A survey questionnaire, our main data-gathering tool, was first prepared in English, before translation into Amharic, a widely spoken language in urban areas including the capital city,

Addis Ababa, where all Ethiopian tour operators are based. To verify the correctness of the translation, the questionnaire was translated back into English by a professional translator from the Department of English Language and Literature at Addis Ababa University (AAU) who speaks both Amharic and English fluently. Only minor refinements to items were required.

We based our scales on Chandler *et al* (2011) who developed and validated a scale for measuring causation and effectuation. Causation is captured with 7 items as a uni-dimensional construct and effectuation through four distinct dimensions, viz., experimentation (4 items), affordable loss (3 items), flexibility (4 items) and pre- commitments (2 items). Hence, five independent variables were drawn from their statements.

The statements of Chandler *et al* (2011) focus on the decision-making processes entrepreneurs employ at a business start-up. Hence, we added a phrase “*while starting-up my current business*” at the beginning of each statement (except for two experimentation items referring to current situations), to specifically direct each respondent to his decision-making processes at business start-up. This helped minimize retrospective biases often occurring in a survey questionnaire. Moreover, the statements of Chandler *et al* (2011) were adapted to fit the situation of a service sector in Ethiopia (i.e., tour-operating). For instance, one of the causation items which reads as “we designed and planned production and marketing efforts” is adapted to reflect the tour-operating service in Ethiopia as “while starting-up my current business, I designed and planned tour-operating services and marketing efforts”. Likewise, we adapted one pre-commitment item to reflect the service sector by substituting the phrase “customers and suppliers” with the word “clients”. Except for such minor adaptations, the other statements were used as they appear in Chandler *et al* (2011). Since the owner-managers

were all interviewed, we used a first person singular (i.e., "I") rather than the plural "we" in all sentences. The measurement utilized a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=moderately agree/disagree, 4=agree and 5=strongly agree) to rate each of the twenty items.

The questionnaire was piloted with 12 tour operators including the presidents of the Ethiopian Tour Operators Association (ETOA) and the Society of Tour Operators in Addis Ababa²⁷ (STOA), who were asked to indicate any vagueness in the questionnaire. This has led to the addition of sector specific examples to some terminologies included in the statements of Chandler *et al* (2011), to make the questionnaire better understandable to all respondents. These terminologies include control processes, experimentation, business model, being flexible and using pre-commitments. In the second pilot study conducted with these 12 tour operators, only minor concerns were raised as they understood and were able to complete the questionnaire.

5.3.3 Measures and Variables

This section is divided into three sub-sections, presenting the dependent variables, the independent variables and the control variables.

5.3.3.1 Dependent variables

The dependent variable in this chapter is "firm performance", which is operationalized in financial and non-financial performance measures. Financial performance is treated as a second-order construct (Jarvis *et al* 2003), which is composed of three distinct dimensions (change in sales, profit and assets), as recommended in entrepreneurship literature (Brush and

²⁷The Ethiopian tour operators are organized under two associations (ETOA and STOA). The ETOA was established in 2003, whereas the STOA was established in October 2011.

Vanderwerf 1992, Chandler and Hanks 1993, Gartner and Shane 1995, Murphy *et al* 1996, Chenhall and Smith 2007). We use the change in employment size to measure non-financial performance as a first-order construct.

As discussed in Section 4.2.2, firm performance is mainly measured as the difference between two points in time, in absolute or relative terms (Delmar 2006). However, real figures of, e.g., sales and profit are not easily available in contexts such as sub-Saharan Africa (Frese *et al* 2007). Droge *et al* (2004) recommended the use of subjective measures of firm performance, such as self-reported performance measures, in the absence of absolute measures. Previously conducted studies in the context of sub-Saharan Africa were based on self-reported measures of firm performance, such as changes in annual sales, number of employees, profit and total assets in a given time span (Krauss *et al* 2005, Frese *et al* 2007, Cruz *et al* 2012).

Accordingly, four self-reported measures of firm performance were created, using a more subjective approach to measure the performance of the Ethiopian tour operators over three years. The measures included items such as “How do you see the change in your employment size, within the last three years (January 2012-January 2015)?” Similar questions were asked for changes in sales, profit and assets. The measurement utilized a 5-point Likert scale including decreased dramatically (1), decreased somewhat (2), remained the same (3), increased somewhat (4) and increased dramatically (5).

5.3.3.2 *Independent variables*

In this chapter, the independent variables are causation and effectuation. To measure causation, we adapted the seven items validated by Chandler *et al* (2011) as a uni-dimensional

construct. Similar with Chandler *et al* (2011), we define effectuation as a second-order construct composed of four dimensions, which are conceptually distinct, but measure the same concept, viz., effectuation. Accordingly, we treat effectuation as a formative construct, measured by its four dimensions (experimentation, affordable loss, flexibility and pre-commitment). Even though Chandler *et al* (2011) considered pre-commitment a dimension shared between causation and effectuation, we prefer to treat pre-commitment under effectuation, since the discriminant validity yielded five components, each of the five components (causation, experimentation, affordable loss, flexibility and pre-commitment) loaded separately (See Table 5.2). The four dimensions of effectuation are independent of each other, as evident from the discriminant validity test, and should be treated separately to define the concept of effectuation.

5.3.3.3 Control variables

Scholars recommend the inclusion of personal and firm characteristics as control variables (Hmieleski and Baron 2008, Hmieleski and Corbet 2008), to effectively measure the impact of the independent variable(s) over the dependent variable(s). Accordingly, we used respondent's age (measured in number of years), education level (having a university degree or not), prior work experience and entrepreneurial experience as control variables. With regard to firm characteristics, we included firm age and firm size as control variables.

5.3.4. Statistical procedures

We validated the items developed by Chandler *et al* (2011) by using a two stage Exploratory Factor Analysis (EFA) with *SPSS* version 23, since we collected data on causation and effectuation for the first time in an African context. First, we conducted a convergent validity test for causation and for each of the four dimensions of effectuation (experimentation,

affordable loss, flexibility and pre-commitment), to test whether the items measure the same concept. We extracted the items using principal component analysis based on Eigen values greater than one and the Varimax rotation method. The Kaiser-Meyer-Olkin (KMO) results, which are above the recommended 0.6 value (Hair *et al* 2010) and the Bartlett's Test of Sphericity ($p < 0.001$ in all cases), prove the factorability of our items under each dimensions. Except for one item of flexibility (i.e., "while starting up my current business, I adapted what I was doing to the resources I had"), all the items for each of the five dimensions fall under a single factor confirming convergent validity. This item failing convergent validity criteria is dropped.

Second, we conducted a discriminant validity test. The remaining 19 items of causation and effectuation were subjected to principal components analyses (PCA). Prior to performing PCA, the suitability of the data for factor analysis was assessed. Inspection of the correlation matrix revealed the presence of significant correlations among the four dimensions of effectuation at the level of 0.01, even though they are not significantly correlated with causation (see Table 5.3 below). The KMO value was 0.794, exceeding the recommended value of 0.6 (Hair *et al* 2010) and Bartlett's test of Sphericity reached statistical significance ($X^2 = 997.198$, $df = 171$, $p < 0.001$), supporting the factorability of the 19 items. The final PCA revealed the presence of five components with Eigen values exceeding 1. This five-component solution explained a total of 66.6%, with each component showing a number of strong loadings with dimensions of causation, experimentation, affordable loss, flexibility and pre-commitments respectively. There was no cross loading to affect discriminant validity as can be seen from Table 5.2.

Table 5.2 Discriminant validity test results for causation and the four dimensions of effectuation among Ethiopian tour operators

Dimensions	Items	Factors				
		1	2	3	4	5
Causation	While starting up my current business, I analyzed long run opportunities and selected what I thought would provide the best returns.	0.783	-0.008	-0.057	0.001	-0.277
	While starting up my current business, I developed a strategy to best take advantage of resources and capabilities.	0.734	0.202	-0.067	0.199	-0.246
	While starting up my current business, I designed and planned business strategies.	0.807	0.103	0.092	0.120	0.074
	While starting up my current business, I organized and implemented control processes to make sure I met objectives.					
	E.g., establishing an internal reporting structure in a fixed time like monthly or biannual report.	0.743	0.065	0.132	-0.004	0.308
	While starting up my current business, I researched and selected target markets and did meaningful competitive analysis.	0.812	0.057	0.105	0.016	0.230
	While starting up my current business, I had a clear and consistent vision for where I wanted to end up.	0.716	0.201	0.170	0.067	0.147
	While starting up my current business, I designed and planned tour-operating services and marketing efforts.	0.406	0.261	0.314	-0.420	0.104
	The Table continues on the next page					

Experimentation	While starting up my current business, I experimented with different tourism routes or itineraries. E.g., I selected my tourist destinations after trial and error.	0.198	0.213	0.746	-0.019	0.005
	The service that I now provide is essentially the same as originally conceptualized. ²⁸	-0.087	-0.039	0.821	0.100	0.100
	The service that I now provide is substantially different than I first imagined.	0.101	-0.003	0.799	0.343	0.169
Affordable loss	While starting up my current business, I tried a number of different approaches until I found a business model that worked. E.g., the tour packages I use now are developed after many trial and error efforts.	0.146	0.363	0.461	0.326	-0.098
	While starting up my current business, I was careful not to commit more resources than I could afford to lose.	0.146	0.829	-0.004	0.133	0.172
	While starting up my current business, I was careful not to risk more money than I was willing to lose with my initial idea.	0.022	0.865	0.154	0.111	0.059
Flexibility	While starting up my current business, I was careful not to risk so much money that my firm would be in real trouble financially if things did not work out.	0.185	0.812	0.075	0.036	-0.012
	While starting up my current business, I allowed the business to evolve as opportunities emerged.	0.242	0.133	0.347	0.513	0.153
	While starting up my current business, I was flexible and took advantage of opportunities as they arose. E.g., instead of following a rigid business plan, having a business plan that changes situationally.	0.211	0.151	0.240	0.745	0.163
Pre-commitment	While starting up my current business, I avoided courses of action that restricted my flexibility and adaptability.	-0.033	0.140	0.088	0.723	0.166
	While starting up my current business, I used a substantial number of agreements with clients and other organizations and people to reduce the amount of uncertainty.	0.190	0.465	0.062	0.220	0.601
	While starting up my current business, I used pre-commitments from clients as often as possible. E.g., asking for a down payment.	0.047	0.033	0.132	0.235	0.832

Table 5.2 Continued: Discriminant validity test results

²⁸This item was reverse coded.

Moreover, we tested for the reliability of the items under each dimension by using Cronbach's Alpha (Hair *et al* 2010). The seven items of causation are reliable with a rather high Cronbach's value ($\alpha=0.862$). Experimentation is a four item scale, with a sufficient value of Cronbach's Alpha ($\alpha=0.768$), affordable loss is a three item scale, with a sufficient value of Cronbach's Alpha ($\alpha=0.844$), flexibility is also a three item scale, with a sufficient value of Cronbach's Alpha ($\alpha=0.689$) and pre-commitment is a two item scale, with a sufficient value of Cronbach's Alpha ($\alpha=0.616$).

This chapter aimed at investigating the effect of causation and effectuation as main predictors of firm performance, and personal and firm characteristics as control variables. Hierarchical regression analysis was utilized as the main statistical procedure in this study since it adds terms to the regression model in stages and enables us to see the additional term or terms that are added to the model and the change in R^2 (Pallant 2010). The mean scores of each dimension were calculated to use in the hierarchical regression model.

Accordingly, four personal characteristics, namely age, education level, prior work experience and entrepreneurial experience were entered into step 1. Two firm characteristics (i.e., firm age and firm size) were entered in step 2. Causation and the four dimensions of effectuation, viz., experimentation, flexibility, affordable loss and pre-commitment, were entered in step 3 as the main predictors of the change in employment, sales, profit and assets. SPSS version 23 was used to conduct the statistical analyses. Table 5.3 presents the descriptive statistics and bivariate correlation matrix of all the dimensions used in the analysis.

Table 5.3 Descriptive statistics and correlation matrix of the control variables, causation and effectuation dimensions and firm performance measures among Ethiopian tour operators

No	Dimensions	Mean ²⁹	SD	1	2	3	4	5	6	7
1	Age	42.96	6.63	1						
2	Education level	0.67	0.47	-.256**	1					
3	Work experience	0.53	0.50	.030	-.199*	1				
4	Entrepreneurial experience	0.64	0.48	-.037	-.108	.782**	1			
5	Firm size	10.29	3.42	.206*	-.112	.043	.076	1		
6	Firm age	9.24	3.44	.473**	-.294**	.060	-.030	.292**	1	
7	Causation	3.32	1.01	.104	-.144	.090	.127	.133	.074	1
8	Experimentation	3.31	1.20	-.135	-.171	.017	-.072	.056	-.008	.257**
9	Affordable loss	3.30	1.22	.212*	-.124	-.180	-.074	.177	.095	.311**
10	Flexibility	3.77	0.99	.055	.158	-.132	-.103	.100	.078	.251**
11	Pre commitment	3.77	1.16	.094	-.022	.003	-.048	.139	.087	.252**
12	Employment	3.44	0.97	-.125	-.053	-.094	.009	.084	.014	.395**
13	Sales	3.76	1.31	-.127	-.114	-.056	.000	.045	-.028	.215*
14	Profit	3.45	1.20	-.166	-.144	-.041	-.017	-.012	-.045	.216*
15	Assets	3.33	0.99	-.160	-.130	-.129	-.092	.020	.008	.259**

The Table continues on the next page.

²⁹ The mean values of three control variables (education level, work experience and entrepreneurial experience) are between 0 and 1, since they are coded as dummy variables. That is, 67% of our respondents have attended a tertiary level of education after completing high school. 53% of our respondents have worked in tour-operating or related business before, whereas 64% of them have established another business individually or with others before.

No	Dimensions	8	9	10	11	12	13	14	15
8	Experimentation	1							
9	Affordable loss	.271**	1						
10	Flexibility	.467**	.320**	1					
11	Pre commitment	.319**	.369**	.460**	1				
12	Employment	.387**	.296**	.368**	.282**	1			
13	Sales	.320**	.249**	.264**	.370**	.714**	1		
14	Profit	.290**	.333**	.205*	.417**	.863**	.605**	1	
15	Assets	.349**	.246**	.275**	.320**	.777**	.724**	.771**	1

Pearson Correlation Coefficients. ** $p < 0.01$ and * $p < 0.05$ level (2-tailed).

Table 5.3 Continued: Pearson's correlation matrix

As can be seen from Table 5.3, there is no significant correlation within the independent variables and within the control variables as well as among the independent and the control variables to affect regression results, as can be seen from Table 5.3. The largest correlation we found within the independent variables is between experimentation and flexibility ($r=0.467$), within the control variables is between age and firm age ($r=0.473$) and among the independent and control variables is between age and affordable loss ($r=0.212$). As mentioned before, in this study, effectuation is measured as a formative construct in which the measured variables cause the outcomes on the latent variable and the causality is in the opposite direction. Besides, in a formative construct, there are no assumptions imposed on the correlations between the measured variables, they can be positive, negative or non-significant (Jarvis *et al* 2003). Hence, the positive correlations between the four dimensions of effectuation in our study are in line with these theoretical explanations about formative constructs. In contrary, in a reflective construct, the correlations between the measured variables are positive and need to be zero when the values of respondents on the latent variable are taken into account. Interested readers about a detailed discussion on the distinction between reflective and formative constructs are referred to Jarvis *et al* (2003).

Not only did we find a positive correlation among the dimensions of effectuation but also we found a positive correlation between the four dimensions of effectuation on the one hand and causation on the other. Among the four dimensions of effectuation, we found a higher correlation between causation and affordable loss ($r=0.311$), which was even higher than the correlation between experimentation and affordable loss ($r=0.271$). Such a low correlation between experimentation and affordable loss was also reported in another study. For instance, in the study of Smolka *et al* (2016), experimentation showed a low correlation

with affordable loss ($r=0.204$), as compared with its correlation with flexibility ($r=0.383$) and pre-commitment ($r=0.228$). In a nut shell, these correlation coefficients are not strong enough or high (e.g., $r > 0.9$) to introduce multi collinearity as a problem (Pallant 2010).

On the other hand, there is a high degree of correlation among the dependent variables, confirming their measure of the same concept, viz., firm performance. For instance, the relatively lowest correlation is between employment and profit ($r=0.605$), whereas the highest correlation is between sales and profit ($r=0.863$).

The aggregate mean score of effectuation, as a reflective construct, was also computed from its four dimensions ($\alpha=0.69$). In this study, it was found that both causation and effectuation behaviour exist among Ethiopian tour operators, although effectuation seems a more often exhibited behaviour. The respondents scored higher on effectuation ($m=3.54$) than on causation ($m=3.32$). This claim is also statistically supported. The two tailed paired sampled t-tests revealed that effectuation is more applied than causation ($t(117) = 2.214$, $p < 0.05$). In this study, it was also tested whether Ethiopian entrepreneurs are more causation-driven or more-effectuation driven or driven by both behaviour while starting-up their tour operating firms. Recent empirical research has found a three category approach convenient to define entrepreneurs on the basis of their entrepreneurial actions (Hechavarria and Welter 2015, Smolka *et al* 2016, Upson *et al* 2017).

Accordingly, based on their relative mean scores on effectuation and causation, the respondents were categorized into three groups: those who scored 0.25 higher on effectuation than on causation; those who scored 0.25 higher on causation than on effectuation and those who scored between a 0.25 difference at a 5-point Likert scale on causation and effectuation. In a similar fashion with Smolka *et al* (2016), in this study, the first group was defined as

"mainly effectual" entrepreneurs (40.7% our samples), the second group as "mainly causal" entrepreneurs (26.3%) and the third group as "balanced use" entrepreneurs (33.0%). In a nutshell, Ethiopian entrepreneurs in the tourism sector are driven more by effectuation, as compared with causation, to establish tour operating firms, even though both entrepreneurial behaviour exist in this developing country situation.

However, unlike Smolka *et al* (2016), we have not investigated the synergistic effect of causation and effectuation on firm performance. This is because this study differs from their study in its assumption about the form and occurrence of causation and effectuation, which is an ongoing debate in the field of entrepreneurship (i.e., are the two logics two sides of a continuum or not?). Smolka *et al* (2016) followed the approach in which causation and effectuation seen as "orthogonal in nature", rather than as two sides of a continuum (Smolka *et al* 2016: 7), whereas in this study, similar with Chandler *et al* (2011), causation and effectuation are seen as dichotomous constructs.

Despite such debates on the nature and form of occurrence of causation and effectuation, a recent study has called for an examination of the hybrid effects of causation and effectuation "to advance theory on decision-making processes in new venture creation processes under uncertainty" (Reymen *et al* 2015: 376). As shown before, there are also studies that show the simultaneous occurrence of causation and effectuation (Dutta *et al* 2015, Reymen *et al* 2015, Laine and Galkina 2017). Hence, examining the synergistic effect of causation and effectuation on firm performance will be an avenue for future research in an African context for those scholars similar with Smolka *et al* (2016) in their approach.

5.4 Results

Hierarchical regression analysis was used to assess the ability of causation and effectuation to predict firm performance (self-reported changes in employment, sales, profit and assets) over three years, after controlling for the effects of personal characteristics and firm characteristics. Preliminary analyses were conducted to ensure there was no violation of the assumptions of normality, linearity, multi collinearity and homoscedasticity. Our data set (n=118) violates none of the above assumptions. For instance, there was no deviation from normality as proved from the normal probability plot of the standardized residuals and the variance inflation factors (VIF) were all below the recommended cut-off value of 10 (Hair *et al* 2010). Neither was multi collinearity a problem with the highest VIF being 1.739. The analysis was conducted four times for each of the dependent variables. The results of these hierarchical regression models are displayed in Table 5.4 and discussed below.

Employment change: Age, education level, previous work experience and entrepreneurial experience were entered at step1, explaining 5.2% of the variance in perceived changes in employment. An additional 1.3% only was explained by entering firm age and firm size at step 2. After entry of the main predictors (causation, experimentation, affordable loss, flexibility and pre-commitment), the total variance explained by the model was 33.3% ($F(11, 108) = 4.811, p < 0.001$). These predictors therefore explain an additional 26.8% of the variance in the change of employment size over the three years after controlling for personal characteristics and firm characteristics. The full model is statistically significant ($p < 0.001$), R^2 change = 0.268, F change (5, 106) = 8.529, $p < 0.001$. In the final model, causation ($\beta = 0.269, t(3.062), p = 0.003$) was statistically significant. Hence, H1, which reads that "*in an African context, small business owners who employ causation rather than effectuation at the*

Table 5.4 Effects of causation and effectuation on firm performance of Ethiopian tour operators

Model	Dimensions	Firm performance measures			
		Employment	Sales	Profit	Assets
I	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.140	-0.163*	-0.217**	-0.209**
	Education level	-0.121	-0.178*	-0.216**	-0.218**
	Work Experience	-0.275*	-0.173	-0.101	-0.180
	Entrepreneurial Experience	0.206	0.110	0.031	0.017
	R^2	0.052	0.051	0.070	0.083
	F -value (R^2)	1.541	1.512	2.143	2.572
	p -value (R^2)	0.195	0.204	0.080	0.042
II	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.186*	-0.174	-0.219**	-0.243**
	Education level	-0.103	-0.175*	-0.215**	-0.204**
	Work Experience	-0.274*	-0.167	-0.100	-0.183
	Entrepreneurial Experience	0.201	0.101	0.029	0.019
	Firm size	0.088	0.061	0.011	0.034
	Firm age	0.068	-0.002	-0.001	0.065
	R^2	0.065	0.054	0.071	0.088
	R^2 change	0.013	0.003	0.001	0.005
	F -value (R^2)	1.280	1.063	1.406	1.796
p -value (R^2)	0.272	0.389	0.219	0.106	
III	(Constant)	0.000	0.000	0.000	0.000
	Age	-0.191*	-0.183*	-0.270***	-0.250**
	Education level	-0.053	-0.147	-0.170*	-0.167*
	Work Experience	-0.250*	-0.181	-0.064	-0.186
	Entrepreneurial Experience	0.198	0.145	0.036	0.044
	Firm size	0.009	-0.009	-0.073	-0.035
	Firm age	0.062	-0.007	0.006	0.060
	Causation	0.269***	0.072	0.067	0.145
	Experimentation	0.184*	0.129	0.057	0.140
	Affordable loss	0.082	0.070	0.216**	0.067
	Flexibility	0.155	0.060	-0.023	0.078
	Pre-commitment	0.074	0.281***	0.346***	0.201**
	R^2	0.333	0.244	0.314	0.270
	R^2 change	0.268	0.190	0.244	0.182
F -value (R^2)	4.811	3.109	4.420	3.565	
p -value (R^2)	0.000	0.001	0.000	0.000	

Standardized coefficients presented. *** $p < 0.01$, ** $p < 0.05$ and * $p < 0.1$ level

start of their business exhibit a higher change in employment size", is supported. Among the dimensions of effectuation, experimentation ($\beta = 0.184$, $t(1.807)$, $p = 0.074$) is indicative for a change in employment size. Two control variables were indicative of change in employment size with prior work experience recording larger, although negative, beta value ($\beta = -0.250$, $t(-1.808)$, $p = 0.073$) than age of the respondents ($\beta = -0.191$, $t(-1.978)$, $p = 0.051$).

Sales change: Age, education level, previous work experience and entrepreneurial experience were entered at step1, explaining 5.1% of the variance in changes in sales. Only 0.3% was additionally explained by entering firm age and firm size at step 2. After entry of the main predictors (causation, experimentation, affordable loss, flexibility and pre-commitment), the total variance explained by the model as a whole was 24.4 % ($F(11, 108) = 3.109$, $p < 0.001$). These five predictors explained an additional 19.0% of the variance in sales after controlling for personal characteristics and firm characteristics. The full model is statistically significant at 0.01 level ($p = 0.000$), R squared change = 0.193, $F(5, 106) = 5.316$, $p < 0.001$). In the final model, only the use of pre-commitment ($\beta = 0.281$, $t(2.785)$, $p = 0.006$) at business start-up was statistically significant. Hence, H2a, which reads that "in an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their sales", is rejected, since only one of the four dimensions of effectuation, is significant. Respondent's age ($\beta = -0.183$, $t(-1.778)$, $p = 0.078$) was statistically indicative (negatively though) of a change in sales.

Profit change: As previously, age, education level, previous work experience and entrepreneurial experiences were entered at step 1, explaining 7.0% of the variance in perceived changes in profit. There was only 0.1% additional explanation to the model by entering firm age and firm size at step 2. After entry of the main predictors (causation, experimentation, affordable loss, flexibility and pre-commitment), the total variance explained

by the model as a whole was 31.4% ($F(11, 108) = 4.420, p < 0.001$). These predictors explained an additional 24.3% of the variance in profit over three years, after controlling for personal characteristics and firm characteristics. The full model is statistically significant at 0.01 level ($p = 0.000$), R squared change = 0.239, $F(5, 106) = 7.539, p < 0.01$. In the final model, pre-commitment ($\beta = 0.346, t(3.603), p = 0.000$) and affordable loss ($\beta = 0.216, t(2.228), p = 0.028$) at business start-up were statistically significant. Hence, H2b that reads, "in an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their profit" is partially supported, since two dimensions of effectuation are significant. Among the control variables, age of respondents ($\beta = -0.270, t(-2.757), p = 0.007$) was statistically significant and education level ($\beta = -0.170, t(-1.807), p = 0.074$) was indicative for the change in profit among Ethiopian tour operators in the final model (both negative).

Assets change: Age, education level, previous work experience and entrepreneurial experiences were entered at step 1, explaining 8.3% of the variance in perceived changes in assets. Only 0.5% was additionally explained by entering firm age and firm size at step 2. After entry of the main predictors (causation, experimentation, affordable loss, flexibility and pre-commitment), the total variance explained by the model as a whole was 27.0% ($F(11, 108) = 3.565, p < 0.001$). These predictors explained an additional 18.2% of the variance in assets, after controlling for personal characteristics and firm characteristics. The full model is statistically significant at 0.01 level ($p = 0.000$), R squared change = 0.182, $F(5, 106) = 5.272, p < 0.01$. In the final model, only pre-commitment ($\beta = 0.201, t(2.024), p = 0.045$) at business start-up was statistically significant. Hence, H2c, which reads that "in an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their assets", is rejected, since only one of the four

dimensions of effectuation is significant. Among the control variables, age of respondents ($\beta = -0.250$, $t (-2.472)$, $p=0.015$) was statistically significant and education level ($\beta = -0.167$, $t (-1.720)$, $p=0.088$) was indicative for the changes in assets among Ethiopian tour operators in the final model (both negative).

In general, we find some support for the second hypothesis, which reads, "*In an African context, small business owners who employ effectuation rather than causation at the start of their business exhibit a higher change in their financial performance*". Among the four dimensions of effectuation, pre-commitment fully explained the financial performance of Ethiopian tour operators and affordable loss results in a higher profit. However, being flexible or experimenting on the new business at business start-up has no effect on eventual financial performance. Nevertheless, almost all effects, also the insignificant effects are positive, which is consistent with Hypothesis 2.

To further investigate the aggregate effects of effectuation, it was regressed as a first order construct on the three financial performance indicators. As discussed before, a mean score of effectuation was also computed from its four dimensions ($\alpha=0.691$) as a reflective construct in a similar way as in previous empirical studies (e.g., McKelvie *et al* 2013, Smolka *et al* 2016 and Cai *et al* 2016). The findings from the three regressed models reveal that effectuation is significantly associated with financial performance. The use of effectuation positively predicts the changes in sales ($\beta=0.422$, $t (4.911)$, $p=0.001$), profit ($\beta=0.451$, $t (5.383)$, $p=0.000$) and assets ($\beta=0.409$, $t (4.836)$, $p=0.000$). Hence, these findings strongly support hypothesis 2 (H2), even though the four dimensions of effectuation showed varying effects on financial performance indicators.

5.5 Discussion

Scholars such as Fisher (2012) remark that effectuation has become the most compelling emerging theory in entrepreneurship. Having a theoretically and empirically sound scale would encourage scholars to conduct more empirical research (Nelson and Goldsby 2011), which will eventually enable effectuation research to move to a mature stage (McKelvie *et al* 2013). There have been attempts to develop and validate scales to measure causation and effectuation in literature (Wiltbank *et al* 2009, Chandler *et al* 2011, Brettel *et al* 2012, Nelson and Goldsby 2011). Nonetheless, there has not been consensus on a comprehensive scale that is universally accepted. Moreover, the subsequent application of these scales has been lacking, particularly in an African context. For example, the scale of Chandler *et al* (2011), used in this chapter for measuring causation and effectuation behaviour of Ethiopian tour operators, has not been validated among small businesses in an African context. Hence, we applied Exploratory Factor Analysis (EFA) to validate this scale with a new data set drawn from small tour-operating firms in Ethiopia.

In developing the instrument, we dropped one item of flexibility, which reads “*while starting up my current business, I adapted what I was doing to the resources I had*” since it failed to meet convergent validity criteria. We argue that this item is not consistent with the practice of resource acquisition by effectual entrepreneurs who rarely rely on their own resources to start-up a new firm, particularly in uncertain and dynamic business environments such as an African context. Instead, they form partnerships with people and organizations to partly or fully invest in their new firm (Dew *et al* 2009a). According to McKelvie *et al* (2013), in uncertain and dynamic entrepreneurial environments, entrepreneurs build their firms by applying effectuation principles in their resource acquisition. Hence, finance and other

resource acquisition of small businesses, particularly in an uncertain business environment like Ethiopia, involves loans from family, relatives or acquaintances, described as the three Fs (family, friends and fools) by Alvarez and Barney (2007).

This mode of resource acquisition is in particular true in the sector under study (i.e., tour operators), which demands a relatively large investment to establish a new firm. For example, small business founders may not be able to fund the purchase of new cars from their own resources to establish a tour-operating firm. Post-hoc analyses revealed that many of the Ethiopian tour-operating firms have been established with financial assistance from clients and friends (mostly from former international clients) and/or families and relatives. Even though these post-hoc explanations are obviously topics to be addressed in further research, we recommend the future inclusion of items measuring "partners and alliances" in the current scale used to measure causation and effectuation, adapted from Chandler *et al* (2007).

With regard to the effects of causation and effectuation on eventual firm performance, our study reveals mixed effects on financial and non-financial measures. For instance, none of the four dimensions of effectuation significantly explained the change in employment size among the Ethiopian tour-operating firms (although experimentation is indicative of change in employment size). In other words, effectuation behaviour does not lead entrepreneurs to hire more employees over a short time (McKelvie *et al* 2013). Read *et al* (2009b: 14) also found that expert entrepreneurs (i.e., effectuators) apply "distinct mechanisms for keeping costs down and pushing revenues up." One mechanism of reducing costs seems to be through keeping the number of employees stable. Conversely, and consistent with our first hypothesis (H1), causation results in a higher change in employment size.

The chapter reveals that effectuation only partly explains the financial performance of small businesses. Since effectuation is more often employed in a dynamic and uncertain environment such as the Ethiopian context, we expected each of the four dimensions of effectuation to dominate practices among Ethiopian tour operators to bring positive change to their financial performance. However, our research does not entirely support this: the four dimensions of effectuation vary in their effect on financial performance, a similar finding to that of McKelvie *et al* (2013). The dimensions of experimentation and flexibility did not explain any of the three financial performance indicators at all, whereas pre-commitment positively predicts all of the three financial performance indicators, while affordable loss only positively predicts one of the indicators (profit).

Effectual entrepreneurs focus on short term remedies to control their unpredictable future in pursuit of profit opportunities (Sarasvathy 2001). Such short-term experimentation by effectual entrepreneurs may result in a better financial performance than causal entrepreneurs who expect returns in the long run. Nonetheless, experimentation did not predict any of the financial performance indicators. During the field study, we learned that most tour packages, which tour operators sell to their clients, are almost identical. They focus on established historic routes to the North and to safaris and national parks in the South and Southeast of the country. It seems that Ethiopian tour operators rarely research and develop new touristic destinations (i.e., experimentation) but rather follow established and successful itineraries. As we defined them in terms of their entrepreneurial behaviour in Section 4.3.2.2, the majority of Ethiopian tour operators (44.1%) are mainly creation entrepreneurs who rarely make marketing research (Alvarez and Barney 2007, Sarasvathy 2001).

According to Sarasvathy (2001), effectual entrepreneurs remain flexible, rather than strictly pursue existing goals. Such flexible behaviour enables them to embrace surprises arising from uncertain situations in their entrepreneurial activities. In our study, even though Ethiopian tour operators seem quite flexible, with a mean value of 3.77, as compared to a mean value of 3.32 for causation, this behaviour has not resulted in an increase in sales, profit or assets. Ethiopian tour operators may be unable to take advantage of opportunities as they arise (noted also by Chandler *et al* 2011). For instance, they are not actively engaged in their tour-operating business throughout the year. They expect to operate fully for five months in the two peak seasons, viz., winter (January-February) and summer (June, July and August). At other times, none of them has attempted to extend their services to transit travelers who stay in Addis Ababa between 7 to 24 hours, yet a more flexible entrepreneur could have accessed this untapped market.

Our study reveals that affordable loss predicts the profitability of new firms. This can be explained through the concept of "control-based strategies", one of the two theories that focus on how entrepreneurs deal with uncertainty (Kuechle *et al* 2016). Expert entrepreneurs have a preference for control-based strategies, such as affordable loss, as opposed to predictive strategies (Dew *et al* 2009a). Such preferences for non- predictive strategies may be "significantly related to new venture positive performance." (Dew *et al* 2009b: 109). For instance, Wiltbank *et al* (2009) showed a lower number of investment failures for angel investors who employ control-based strategies, such as affordable loss.

According to Sarasvathy (2001), effectual entrepreneurs decide what they can afford to lose and accept risks when they take the plunge into new business. For instance, they make investments in stages by applying control-based strategies, such as affordable loss (Dew *et al*

2009a). They would add additional resources in the new firm "only as justified by results" (Chandler *et al* 2011: 380). If their investments fail, they look for ways to contain losses to an acceptable level. In such a worst-case scenario, unlike causation entrepreneurs who anticipate expected returns, effectual entrepreneurs immediately shift to identify and pursue new opportunities (Sarasvathy and Dew 2005). This can be explained through the concept of the use of "patient capital" for starting a new business. That is, their start-up capital from "whom they know" (Sarasvathy 2001) allows effectual entrepreneurs to try several projects, instead of one, since they "have flexible or unspecified payback terms" (Dew *et al* 2009b: 116). In other words, incentives such as peer lending or loans from family members enable effectual entrepreneurs to think through more than one project instead of one at a time, so that they can try the next project in case the first project fails (Dew *et al* 2009b).

In a similar manner, Ethiopian tour operators who rely on financial sources from acquaintances for establishing their tour-operating firms (i.e., effectuation behaviour), evaluate the performance of their firms (e.g., profit) within a short period. In our study, we chose to survey tour-operating firms, which have been active in the business over the last three years. As entrepreneurs with effectuation behaviour regularly evaluate the success of their business, these tour operators must have remained in the business for making a profit. Otherwise, they would have withdrawn from the tour-operating business. Hence, our results are consistent with the theory that the principle of affordable loss positively predicts the profitability of small tour-operating firms in Ethiopia. Once the new business is deemed sustainable and irreversible, the profits may be reinvested in the business itself (Dew *et al* 2009b).

Consistent with a previous study (McKelvie *et al* 2013), our study shows that pre-commitment leads to an increase in sales, profit and assets. A high level of commitment to

strategic alliances, with their clients, the Ethiopian government and among tour operators themselves, could explain the strong positive relationship between pre-commitment and all the three financial performance indicators.

5.6 Conclusion

The literature often indicates that the firm performance of effectual entrepreneurs is higher than that of causal entrepreneurs. However, this claim has hardly been verified in a non-Western context. Recently, Eijdenberg *et al* (2017) found neither effectuation nor causation have effects on small business growth in Burundi. This chapter is one of the few in a developing country context to compare the firm performance of entrepreneurs who used causation and effectuation behaviour while pursuing profitable opportunities. From a data set of 118 entrepreneurs, who have founded small tour-operating firms in Ethiopia, the chapter attempted to determine whether or not there is an increase or change in employment size among entrepreneurs with causation behaviour. The chapter also attempted to determine whether the financial performance of entrepreneurs was determined by their effectuation behaviour.

In line with our hypothesis, we can demonstrate that the firms of entrepreneurs with causation behaviour show a higher change in their employment size than the firms of entrepreneurs with effectuation behaviour. However, those exhibiting effectuation behaviour at the start-up phase showed (at least partly) better financial performance. Not all the four dimensions of effectuation explained the financial performance of Ethiopian small tour-operating firms. Among the various effectuation dimensions examined, pre-commitment provided the strongest association with all the three financial performance indicators (sales,

profit and assets). Affordable loss also predicted profit. Nonetheless, the financial performance of Ethiopian tour operators seems unrelated to a tendency to experiment with new packages or to be flexible. There appears to be little financial incentive to explore new routes. We conclude that both causation and effectuation have effects on firm performance. In other words, unlike other scholars (e.g., Read *et al* 2009a), we did not find a strong evidence to claim that effectuation is superior to causation in outcomes in a developing country context.

This chapter further validates the operationalized scale by Chandler *et al* (2011) in showing that it is applicable in an African context. Consistent with their findings, our factor analysis revealed five constructs (causation and the four principles of effectuation). We conclude that researchers on African small businesses can confidently use their validated scale, adapted in places to suit a particular situation.

Chapter 6
Conclusions

6.1 Conclusion

This PhD thesis describes and analyzes the entrepreneurial behaviour and firm performance of Ethiopian tour operators. The general aim of this PhD study was, therefore, to investigate the entrepreneurial behaviour of small business owners in a developing country context in their pursuit of profitable opportunities and the effects of such behaviour on the eventual firm performance. In Chapter 1, the following two basic research questions were posed:

- 1) *What does the entrepreneurial behaviour of small business owners look like when starting-up new businesses in a developing country context?*
- 2) *What effect does the entrepreneurial behaviour of small business owners have on the subsequent performance of their new businesses in a developing country context?*

To provide answers to these questions, data were collected from owners of small tourism firms (tour operators) firms in Ethiopia. In total, 220 respondents³⁰ were interviewed with structured questionnaires.

This concluding chapter first answers the four specific research questions raised in each of the four empirical chapters (Section 6.1.1) and provides answers to the two basic research questions mentioned above (Section 6.1.2). The other sections of the chapter subsequently discuss the theoretical contributions (Section 6.2) and the limitations of the research (Section 6.3). The chapter then provides four recommendations for future research to further understanding of the entrepreneurial behaviour of small business owners in their pursuit of opportunities, as well as the determinants of the performance of small businesses

³⁰As aforementioned in Section 1.5, there was an overlap between the groups of respondents interviewed during the first survey and during the second survey. As a result, the actual number of the interviewed Ethiopian tour operators is less than 220, even though we collected data from 220 respondents during the two field surveys.

(Section 6.4). Lastly, in Section 6.5 the chapter presents the practical implications of this PhD thesis for policy makers.

6.1.1 Answers to the research questions of the four empirical chapters

In Chapter 2, the following research question was raised: *Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context?* Our research concluded that discovery and creation are two distinct constructs in explaining the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities in a developing country.³¹

After showing that discovery and creation behaviour are distinct constructs, the next research question raised was: *Which entrepreneurial behaviour is more applied by small business owners in a developing country context: creation or discovery?* Chapter 3 confirmed the dominant application of creation behaviour by small business owners in their entrepreneurial actions, such as decision-making, strategy and finance. However, their human resource practices are more through discovery behaviour. In summary, although the two entrepreneurial behaviour types are evident in this developing country context, the chapter confirmed (though not fully) that creation behaviour is more often employed than discovery behaviour by small business owners in their pursuit of profitable opportunities.³²

Once it was confirmed that creation is the most common behaviour among small business owners, the subsequent question raised was: *Do the small firms of creation*

³¹ In the Introduction (Section 1.4), it was already mentioned that although Chapter 2,3 and 4 are interrelated, they deal with clearly distinct research questions. Had the answer to the research question in Chapter 2 been negative (i.e., discovery and creation behaviour are not two distinct constructs), then Chapter 3 and 4 would have been unnecessary.

³² Had the answer to the research question in Chapter 3 been negative (i.e., there is no any significant difference in the application of discovery and creation behaviour), then Chapter 4 would have been unnecessary.

entrepreneurs show a higher level of firm performance than the small firms of discovery entrepreneurs in a developing country context? Chapter 4 confirmed that small firms founded by small business owners with mainly creation behaviour had higher performance in terms of change in sales, profit and assets than those founded with mainly discovery behaviour. Due to the small sample size, we could not tease out which dimensions of the entrepreneurial actions under discovery behaviour and creation behaviour were most relevant herein.

There is still an ongoing debate in the literature on whether causation or effectuation leads to higher firm performance (Sarasvathy 2001, Perry *et al* 2012, McKelvie *et al* 2013). There are few empirical studies conducted in the Western context (developed economies) on this theme (Read *et al* 2009a). Similarly, empirical studies in a non-Western context, particularly in Africa, are lacking. From the literature we have studied, Eijdenberg *et al* (2017) conducted a study on the effects of effectuation and causation on the growth of small businesses in another African country (Burundi). Chapter 5 attempted to shed light on this issue by conducting an empirical study on this theme in another African country (Ethiopia). The main research question was: *Which decision-making behaviour of small business owners lead to a higher firm performance in a developing country context: causation or effectuation?* The findings are mixed: causation and effectuation have varied effects on firm performance. For instance, the use of causation behaviour positively predicted an increase in employment size, whereas the use of effectuation behaviour partly predicted the financial performance of small businesses. Not all of the four dimensions of effectuation predicted financial performance. There was a positive relationship between pre-commitment, on one hand, and all the three financial performance indicators (sales, profit and assets change), on the other. There was also a positive relationship between affordable loss and profit change. Nonetheless, the financial performance of small business owners is not related to their tendency to experiment

or to be flexible. In sum, the overall effect of effectuation is positively related to financial performance measures, even though its dimensions vary in their separate effects on sales, profit and assets increase. The chapter concludes that both causation and effectuation have varied implications on firm performance. In other words, unlike the findings of other research in Western contexts, a strong empirical support is not found to claim that effectuation is superior to causation in outcomes such as firm performance in an African context.

Nonetheless, the findings of mixed effects of causation and effectuation on firm performance in this study differs from the "no effect" findings of the study of Eijdenberg *et al* (2017), even though both studies were conducted among small businesses in an uncertain environment in an African context (i.e., Ethiopia and Burundi). The study of Eijdenberg *et al* (2017) was conducted in the retail sector (i.e., mini-markets, alimentation shops and boutiques), based on the scales of Brettel *et al* (2012), whereas the current study was conducted in the tourism sector (i.e., tour-operating firms), based on the scale of Chandler *et al* (2011). Hence, the variation in findings between the two studies may be ascribed to the differences in the sectors studied and the scales used.

6.1.2 Answers to the main research questions

This PhD thesis has provided new insights in the entrepreneurial behaviour of small business owners in their pursuit of profitable opportunities. In answer to the first research question, 44.1% of the Ethiopian tour operators, as defined by their behaviour type when starting-up their tour-operating firms, were found to be "mainly creation" entrepreneurs, whereas 30.4% of them were found to be "mainly discovery" entrepreneurs. More than one-fourth of them applied a more "balanced mix" of both discovery and creation behaviour at the start-up phase.

Hence, we can conclude that both discovery and creation behaviour were evident among small business owners in this developing country context (Chapter 4). The entrepreneurs were also found to employ both causation and effectuation behaviour in making early stages decisions to establish their tour-operating firms.

Turning to the second research question on subsequence performance, while the study provided evidence about how creation behaviour impacts on firm performance, the results about the effects of causation and effectuation behaviour on firm performance were mixed. The use of effectuation in making early stages decisions partly explained eventual financial performance, although the four dimensions of effectuation had varied effects. On the other hand, there was a positive relationship between causation and change in employment size. We therefore conclude that causation and effectuation behaviour have varied effects on firm performance. In other words, unlike other scholars (e.g., Read *et al* 2009a), we do not claim that effectuation is superior to causation in determining firm performance in this developing country context.

6.2 Theoretical contributions

The field of entrepreneurship has evolved over several decades, shifting away from a focus on the cognitive characteristics that make entrepreneurs different from non-entrepreneurs. In the new millennium, opportunity and opportunity related processes, such as discovery and creation, have become a dominant theme in literature. This section presents the three main theoretical contributions of this PhD thesis to the field of entrepreneurship.

6.2.1 Addition to the literature about entrepreneurship research in developing countries

Entrepreneurship, as a field of research, has often been criticized for the lack of its own theories and its prime focus on developed economies, such as in North American and Europe. In particular, the field lacks conceptual and empirical evidence from non-Western contexts in explaining the entrepreneurial behaviour that small business owners exhibit in the early stages of their pursuit of profitable opportunities and new firm development. To fill this gap, scholars like Bruton *et al* (2008) have recommended country-specific studies in non-Western contexts. This PhD thesis, conducted in a developing country context, contributes to the entrepreneurship literature in three ways.

First, it is one of the few studies that provide data on formal businesses in an African context. Previous research in a similar context concentrated mainly on informal businesses, which are more common and easier to approach. Our choice of small tour operators in the formal business sector is because of their contribution to the economy, especially to employment and wealth creation. Thus, the research contributes to the increasing volume of literature on entrepreneurship, entrepreneurial behaviour of small business owners, determinants of firm performance and regional economic development by providing empirical evidence from a developing country.

Secondly, it also investigates the applicability of Western theories on small-scale entrepreneurs in a developing country context. It has shown that the creation behaviour of entrepreneurs is relevant and prevalent in at least one developing country, contrary to many previous studies, which highlighted discovery behaviour for opportunity and opportunity related processes (Kizner 1997, Shane 2000, 2003). Besides, the study has shown that effectuation theory, which is also less studied as compared to the dominant causation theory in

the field of entrepreneurship in the Western context, is relevant in a non-Western context, such as sub-Saharan Africa.

Thirdly, the various scales developed and validated to measure causation and effectuation based on data from a Western context have rarely been refined for a non-Western context, such as African societies, yet further refinement of these scales is crucial for their application more globally. To date, hardly any empirical study has attempted to refine these scales, particularly the ones developed by Chandler *et al* (2011), in an African context with empirical evidence drawn from a service sector. One of the novel aspects of this thesis is that the scale of Chandler *et al* (2011) has been refined for small businesses in an African context. Hence, another theoretical contribution of this research is that it confirms the wider application of the scale of Chandler *et al* (2011) for measuring causation and effectuation globally.

6.2.2 Fine-tuning theoretical debates in the entrepreneurship field

The pursuit of opportunities has become an important theme in the field of entrepreneurship in the new millennium (Short *et al* 2009, Busenitz *et al* 2014). Discovery and creation have emerged as two prominent approaches in researching the behaviour of entrepreneurs (Vaghely and Julien 2010, Edelman and Yli-Renko 2010). Nonetheless, there is still an ongoing debate in literature about what constitutes entrepreneurial opportunity or opportunity related processes such as discovery, creation and recognition (Hansen *et al* 2011). For instance, for scholars such as Alvarez and Barney (2007), discovery and creation are dichotomous concepts, whereas for Hmieleski *et al* (2015), entrepreneurial behaviour such as decision-making ranges along a continuum. Delineating a boundary between discovery and creation

behaviour is important to advance our understanding about the form and types of early stages entrepreneurial behaviour of small business owners.

Nonetheless, an empirical distinction between the two entrepreneurial behaviour types has hardly been carried out. Even in the Western context, there is little empirical evidence to narrow the debate on the form and nature of the two behaviour types (e.g., Welter 2012, Hechavarria and Welter 2015). Despite a scholarly call to extend research to a non-Western context for fine-tuning existing Western theories with new data sets drawn from developing countries (Bruton *et al* 2006), there is hardly any evidence from a non-Western context to settle this debate (i.e., are discovery behaviour and creation behaviour dichotomous, or do they exist along a continuum line?). Our study is one of the first to research the distinction between discovery behaviour and creation behaviour in a developing country context, at least in an African context. Having proved a distinction between discovery and creation behaviour, our contribution is to narrow the ongoing debate on entrepreneurial behaviour in a pursuit of profitable opportunities.

Current debates also focus on the effects of entrepreneurial behaviour for the eventual performance of new businesses (Read *et al* 2009a, Perry *et al* 2012). This PhD thesis also contributes in showing that creation behaviour stimulates sales and leads to increase in profit and assets, whereas discovery behaviour showed no significant association with firm performance measures. Likewise, effectuation behaviour partly contributes to a higher financial performance, whereas causation behaviour results in an increase in employment size.

6.2.3 Contribution to developing and validating scales

After examining the conceptual and operational definition of opportunity and opportunity related processes in extant literature for over 19 years, Hansen *et al* (2009) concluded that there was a lack of consensus among scholars on the definition of opportunities. This lack of a common definition of opportunities and its operationalization has slowed down empirical research in entrepreneurship (Dimov 2011).

Having a rigorous scale to measure opportunity and opportunity related concepts such as discovery and creation behaviour is essential for empirical research on the theme of opportunity. Hitherto, there was hardly any standard operationalized scale in entrepreneurship literature to measure the discovery and creation behaviour of small business owners in their pursuit of profitable opportunities, although there are few attempts to operationalize opportunity in various ways. Another theoretical contribution of this thesis is by operationalizing the concepts of opportunity related processes such as discovery and creation behaviour. The developed and validated items in Chapter 2 serve as a stepping-stone to better develop and validate scales for the measurement of the early stages of entrepreneurial endeavours. It is hoped that in future, this operationalized scale can be employed more widely.

6.3 Research limitations

Being one of the limited number of studies on entrepreneurial behaviour in a developing country, there are inevitably some gaps and limitations related to issues such as scale development, research context and methodological procedures.

i) Limitations with scales used

Two kinds of scales were used: an operationalized scale to measure causation and effectuation behaviour and a novel scale to measure discovery and creation behaviour. Chapter 5 was based on an operationalized scale, which was developed and validated by Chandler *et al* (2011). Over the last five years, this scale has been widely used to measure causation and effectuation decision-makings. However, the analyses in other chapters were based on a newly developed scale, which has not been operationalized before. The scales used in Chapter 2, 3 and 4 were derived from the statements of Alvarez and Barney (2007), following recommendations in extant literature on new scale development. For instance, we took utmost care to follow the six procedures recommended by Netemeyer *et al* (2003) in developing valid and reliable scales. However, the newly developed scales have not been cross-validated with new samples. Our reliance on scales based on conceptual descriptions from a single source and adjusted to fit the sector studied (i.e., tour-operating firms) without cross-validating with new datasets may raise validity and reliability questions on the findings of this thesis.

ii) Lack of external validity

In their book entitled *Entrepreneurship in Context*, Van Gelderen and Masurel (2012) emphasized the importance of context in entrepreneurship research. Empirical results drawn from context-specific new data sets add new knowledge and insights to the field. Nonetheless, the results from contextualized research lack external validity. Because the research focused on a specific context, the results might not be generalizable to other contexts, because countries' characteristics differ. We therefore acknowledge that the results of this study on a single service sector may be limited in terms of its generalizability for other small businesses.

iii) Methodological limitations

We acknowledge three methodological limitations. First, this PhD study relied on the self-description by respondents of their entrepreneurial behaviour and firm performance, which may be subjective and not free from respondents' bias; this raises issues about the internal validity of the outcomes of the research. Second, data were collected in two single time periods by employing a cross-sectional research design. However, as Davidson *et al* (2006) pointed out, studies assessing firm performance from an earlier point in time up to the time of the investigation are subject to selection and retrospection biases. Third, we were not able to predict the effects of the seven entrepreneurial actions under discovery and creation behaviour on firm performance, due to the small sample size in our first data set, as compared to the number of parameters used in the regression model. Notwithstanding its methodological contribution for entrepreneurship literature by providing directions to measure the behaviour of entrepreneurs at the start-up phase and its eventual effect on firm performance, this limitation related with small sample size has, therefore, resulted in low test power and instability of regression results. Nonetheless, it should be noted that it has been difficult to obtain large samples in this developing country context, as discussed in Section 2.3.2. Unlike data collection from owner-managers of SMEs in developed countries, in many developing countries, owner-managers do not want to disclose their financial statements, because of confidentiality.

6.4 Recommendations for future research

Having discussed the research limitations, we make four recommendations for future research in entrepreneurship.

i) The need for further explanation of the concept of creation

The creation approach has only recently received attention compared to the discovery approach, which is well defined and studied. There is limited work carried out so far on creation behaviour and as a result, this study relied heavily on the conceptual descriptions of Alvarez and Barney (2007), regarding the seven entrepreneurial actions for the two types of entrepreneurial behaviour. Nonetheless, this research has revealed that their description of the creation approach lacks uni-dimensionality, particularly concerning the dimension of creation leadership. Creation behaviour, which is relatively new in literature, therefore needs to be further explained with other entrepreneurial actions, apart from the ones used in this thesis. For instance, Hansen *et al* (2011) provided lists of elements to define and operationalize entrepreneurial opportunities and opportunity-related processes. Future research can utilize these elements in order to fully explain creation behaviour and to develop and validate measurement scales for discovery and creation behaviour.

ii) The need for operationalized scales in measuring discovery and creation behaviour

Despite their popularity in literature, there is hardly any operationalized scale to measure discovery and creation behaviour of small business founders and owners. This study has shown conclusively that there is a measureable distinction when businesses start between discovery behaviour and creation behaviour. A contribution was therefore made to develop a scale to measure the entrepreneurial behaviour of start-ups. Nonetheless, this attempt can only

serve as a stepping-stone to identify the discovery and creation behaviour of start-ups. As we did not cross-validate our items with data from other sectors, this research gap is an avenue for further research. It would be interesting to see our scales further refined and cross-validated with new data from another sector, such as manufacturing.

iii) The need for using objective data to measure firm performance

Firm performance has always been one of the themes in entrepreneurship literature and has been widely studied. Our research has also examined the determinants of firm performance but has relied on the self-description by respondents of their firm performance, which may be subjective. Hence, future research should rely on objective data (e.g., actual figures on sales, profit, assets and employment size) to determine the effects of the entrepreneurial behaviour on the eventual performance of their newly established businesses.

iv) The need for research on women's entrepreneurship in developing countries

Women's entrepreneurship is emerging as an important research theme. This is evident from recent volumes in the series of "Research in Entrepreneurship and Management", such as *New Perspectives on Women Entrepreneurs: An Introduction*. The launch of two journals since 2009, which focus on women's entrepreneurship (i.e., *Journal of Women's Entrepreneurship and Education* and *International Journal of Gender and Entrepreneurship*), confirms that women's entrepreneurship has become an important theme in entrepreneurship research. However, studies in a Western context predominate and there is lack of research on women's entrepreneurship in developing countries. Although it varies from country to country, the participation of women in businesses is often very limited due to social, cultural and economic

factors. This study is a good example: tour-operating in Ethiopia is a male dominated business and of the 220 respondents we interviewed, only eight of them were women. As a result, we could not examine the entrepreneurial behaviour and firm performance disaggregated by gender. Therefore, we call for future research on the theme of women's entrepreneurship in developing countries and on the role of females in firms run by males (such as their spouses).

6.5 Practical implications to policy makers

The PhD thesis has practical implications for policy-makers in Ethiopia and other African countries in designing their entrepreneurship-based development strategies. By concentrating on start-up processes, this study highlights the need for future assistance programmes to small businesses (e.g., provision of training and education). Hence, it may prove to be an important document for institutions striving to train and support start-ups in new structures, such as "Entrepreneurship Development Centers" in Ethiopia. Several of our findings have relevance for training and support. For instance, we have shown that small business owners, such as tour operators, widely employ creation behaviour in entrepreneurial activities, such as decision-making, strategy and finance, and that the application of creation behaviour results in a higher firm performance, in terms of change in sales, profit and assets. Therefore, we are confident that the provision of entrepreneurial trainings in decision-making, strategy and finance activities, through enhancing the creation behaviour in start-ups, will eventually result in a higher firm performance.

An additional practical contribution of this PhD thesis is providing inputs for training manuals for small business owners to enhance their managerial and entrepreneurial skills in Ethiopia and other African countries. For instance, entrepreneurship courses are already

included in higher education institutions in Ethiopia, in fields such as engineering. Hence, the PhD thesis may be an important document for these courses in higher education of Ethiopia and other African countries. For instance, the provision of entrepreneurship education and training, aimed at enhancing the decision-making, strategy and finance skills of small business owners and founders, will be more effective through the creation approach rather than the common way of teaching through the discovery approach.

The entrepreneurial behaviour of Ethiopian tour operators and the determinants of the performance of their newly established business described in this thesis may also apply to other hospitality and tourism sectors, such as hotels and souvenir shops. This claim is due to the fact that the tour-operating sector includes a broad range of service activities, such as sightseeing, accommodation, transportation, recreational activities and shopping. Therefore, government officials, non-governmental organizations (NGOs) and other practitioners in the tourism sector in Ethiopia (e.g., the Ministry of Culture and Tourism) can use this PhD thesis to enhance the innovative behaviour of the tour operators and other small business owners in the tourism sector (e.g., hotels, restaurants, lodges etc.). In addition, the findings of this PhD thesis can be extensively used to promote the market potential of the tourism sector of Ethiopia and in the design and issue of protective measures such as rules and regulations to sustain the competitiveness of small businesses.

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English Summary

In developing countries, entrepreneurship is often seen as one of the solutions for economic development through job creation in the private sector. However, the studies on the impact of entrepreneurship in developing countries have not shown any comprehensive analyses of the effect different types of entrepreneurial opportunities have on poverty alleviation (Alvarez and Barney 2014). Vermeire and Bruton (2016: 1) argue that our theoretical understandings of entrepreneurial opportunities in resource constrained contexts such as sub-Saharan Africa "remains largely limited to those opportunities that can be created or discovered in developed market economies".

Despite the fact that firm performance is a highly relevant topic for poverty alleviation in developing countries, few studies have investigated the nature and types of entrepreneurial behaviour and their eventual impact on firm performance. Researchers emphasize that entrepreneurship research in developing countries needs to better understand the "job creation and economic growth potential of different types of entrepreneurial opportunities" (Alvarez and Barney 2014: 160). This also adds new insights and knowledge to entrepreneurship literature by fine-tuning existing opportunity theories from developed economies (Bruton *et al* 2008). Hence, the general aim of this PhD study is to investigate the entrepreneurial behaviour of small business owners in a developing country context in their opportunity identification and exploitation process and the implications of such behaviour on the eventual firm performance.

This PhD thesis draws on empirical evidence from small tourism firms in an African context and aims to narrow the existing research gaps in entrepreneurship literature by providing answers to two main research questions: 1) *What does the entrepreneurial*

behaviour of small business owners look like when starting-up new businesses in a developing country context? and 2) *What effect does the entrepreneurial behaviour of small business owners have on the subsequent performance of their new businesses in a developing country context?* Thus, the PhD study extends the scope of opportunity research into the domains of entrepreneurial behaviour and firm performance.

This empirical research has been conducted in the context of a developing country (Ethiopia) where entrepreneurial culture is limited due to social, cultural, economic and political factors. Entrepreneurial activities are a recent phenomenon in Ethiopia. Only since 1991 has Ethiopia begun moving towards a market economy. As the main focus of this study is concerned (i.e. tour operating firms), there was only a single state owned firm (i.e. the National Tour Operation) before 1991. The findings are, therefore, based on primary data collected from 220 respondents who own and manage tour operating firms in an uncertain and dynamic entrepreneurial context. The main findings are interconnected and arranged sequentially: those in Chapter 2, 3 and 4 are based on data collected from 102 respondents during the first round field visit. The findings in Chapter 5 are based on data collected from 118 respondents during the second round field study. Nonetheless, the actual number of the interviewed tour operators is less than 220 due to an overlap between the groups of respondents interviewed during the first survey (n=102) and the second survey (n=118) even though data were collected from 220 respondents,

Chapter 2 covers the ongoing debate on the dichotomous nature of discovery and creation concepts by providing an answer to the question: *Is it possible to distinguish discovery behaviour and creation behaviour among small business owners in a developing country context?"* The research reveals that there is a measureable distinction between

discovery behaviour and creation behaviour in this developing country context. In order to collect the data, a new scale was developed by using the conceptual descriptions of Alvarez and Barney (2007) regarding the seven entrepreneurial actions for discovery and creation concepts as proxies. We modified and used their statements to provide 47 valid and reliable items.

Chapter 3 determines which particular entrepreneurial behaviour is applied by small business owners to identify new opportunities: *Which entrepreneurial behaviour is more applied by small business owners in a developing country: creation or discovery?* Decision-making, strategy and finance are shown to be largely driven by creation behaviour rather than discovery behaviour. However, they apply more discovery behaviour than creation behaviour in their human resource practices. In a nutshell, small business owners in this developing country apply both types of entrepreneurial behaviour even though creation behaviour is more common.

Chapter 4 determines whether one type of entrepreneurial behaviour leads to a higher firm performance than the other by providing an answer to the research question: *Which entrepreneurial behaviour of small business owners leads to a higher firm performance in a developing country context: creation or discovery?* To answer this question, we compared creation behaviour against discovery behaviour to test the eventual impact of creation behaviour on four firm performance measures (i.e. sales, employment, profit and assets). This PhD study shows that creation behaviour results in a higher increase in sales, profit and assets, but not in employment. The answer is, therefore, that creation behaviour eventually leads to a higher firm performance (though not fully) than discovery behaviour in this developing country context. Notwithstanding the overall higher effect on eventual

performances of small firms founded and owned by entrepreneurs with mainly creation behaviour, there is no significant difference between the separate effects of each of the entrepreneurial actions under creation behaviour and discovery behaviour on eventual firm performance.

Chapter 5 examines the eventual difference in firm performance due to the different behaviour entrepreneurs employ in their decision-making logic: *Which decision-making logics of small business owners leads to a higher firm performance in a developing country: causation or effectuation?* The results are mixed: the causation behaviour in early-stage decision-making results in a higher change in employment size, whereas effectual behaviour results in higher financial performance (i.e. sales, profit and assets). Nonetheless, not all of the four principles of effectuation predicted financial performance. For instance, the principle of pre-commitment results in an increase in all the three financial performance indicators (sales, profit and assets) and the principle of affordable loss results in an increase in profit, whereas the principles of experimentation and flexibility have no effect on financial performance. This PhD study shows that causation is positively related to a non-financial performance measure, whereas effectuation is positively related to financial performance measures even though the overall effect of its dimensions vary in their separate effects on sales, profit and assets increase.

Based on the findings of the first two empirical chapters, the answer to the first question: *What does the entrepreneurial behaviour of small business owners look like when starting-up new businesses in a developing country context?* is that both discovery and creation behaviour can be distinguished. Creation is the predominantly applied behaviour in at least three of small business owners' entrepreneurial actions (i.e. decision making, strategy and finance) while discovery is predominantly applied in only one action (human resource

practices). The results of the next two empirical chapters in answering the second research question: *What effect does the entrepreneurial behaviour of small business owners have on the subsequent performance of their new businesses?* show that the impact of different entrepreneurial behaviour varies using financial and non-financial performance measures. Creation and effectual behaviour have a positive impact on financial performance measures (sales, profit and assets), contributing to personal wealth creation among small business owners in developing countries, but have no significant impact on employment size change. On the other hand, causation behaviour is positively related to non-financial performance measure (i.e., an increase in employment size), but not with financial performance measures. This PhD study concludes that both causation and effectuation have varied implications on firm performance. In other words, unlike the findings of other research in Western contexts, a strong empirical support is not found to claim that effectuation is superior to causation in outcomes such as firm performance in an African context.

In general, this PhD study makes more contributions, from both practical and theoretical perspectives, to the field of entrepreneurship. In its theoretical implications, the PhD thesis contributes to the field of entrepreneurship in three ways: addition to the literature about entrepreneurship research in developing countries, fine-tuning ongoing theoretical debates in the entrepreneurship field and developing and validating new scales to measure early-stages entrepreneurial behaviour.

The first theoretical contribution of the PhD thesis is the addition of a new data set from a developing country to the increasing volume of literature on entrepreneurship, entrepreneurial behaviour of small business owners, determinants of firm performance and regional economic development. It also confirms the applicability of Western theories about small-scale entrepreneurs in a developing country context. For instance, it has shown that the

creation behaviour of entrepreneurs is relevant and prevalent in at least one developing country, contrary to many previous studies which highlighted discovery behaviour for entrepreneurial opportunities. Further, it confirms the wider application of the scale of Chandler *et al* (2011) for measuring causation and effectuation globally.

The second theoretical contribution of this PhD thesis is by fine-tuning ongoing theoretical debates in the entrepreneurship field about entrepreneurial opportunity identification behaviour (e.g. are discovery and creation behaviour dichotomous, or do they exist along a continuum line?). Having proved a distinction between discovery and creation behaviour, the contribution of this PhD study is to narrow the ongoing debate on the nature and form of opportunity identification behaviour of entrepreneurs. Current debates also focus on the implications of entrepreneurial behaviour for the eventual performance of new businesses. This PhD thesis shows that creation behaviour stimulates sales, leading to increase in profit and assets even though it has no effect on employment. Likewise, effectuation aggregately contributes to a better financial performance. The findings about creation and effectuation on financial performance add to the current discussion about the link among dominant opportunity theories such as effectuation, bricolage and creation (Welter *et al* 2016). The results of this PhD study are therefore timely, given the recent attention this subject has received in the literature.

The third theoretical contribution of this PhD thesis is by operationalizing the concepts of opportunity related processes such as discovery and creation behaviour. The developed and validated items in this PhD thesis serve as a stepping stone to better develop and validate scales for measurement of the early stages of entrepreneurial endeavours. It is hoped that in

the future, with further validation, this operationalized scale can be employed more widely to measure opportunity identification behaviour of entrepreneurs.

In its practical implications, the PhD study is relevant for policy-makers in Ethiopia and other African countries in designing their entrepreneurship-based development strategies aimed at achieving economic development through job and wealth creation. This is because several of the findings of this PhD thesis have relevance for the management of entrepreneurial training and support. For instance, this PhD thesis has shown that small business owners employ creation behaviour widely in decision-making, strategy and finance and that creation behaviour results in a higher firm performance in terms of sales, profit and assets. Therefore, the provision of entrepreneurial trainings in decision-making, strategy and finance activities, through enhancing the creation behaviour in start-ups, will eventually result in higher firm performance. The entrepreneurial behaviour of Ethiopian tour operators and determinants of the performance of their newly established business described here may also apply to other hospitality and tourism sectors such as hotels and souvenir shops. In addition, the findings of the PhD thesis can be extensively used to promote the market potential of the tourism sector of Ethiopia and in the design and issue of protective measures such as rules and regulations to sustain the competitiveness of small businesses.

Nederlandse samenvatting

In ontwikkelingslanden wordt ondernemerschap vaak gezien als een van de mogelijkheden om economische ontwikkeling te bevorderen, met name door het creëren van werkgelegenheid in de private sector. Eerder onderzoek naar de impact van ondernemerschap in ontwikkelingslanden heeft echter nog geen uitgebreide analyses opgeleverd van het effect van verschillende soorten activiteiten van ondernemers (Alvarez en Barney 2014). Vermeire en Bruton (2016) stellen dat theoretische inzichten in de activiteiten van ondernemers in een omgeving met schaarse middelen, zoals in Afrikaanse landen ten zuiden van de Sahara, grotendeels beperkt blijven tot kansen die gecreëerd of ontdekt kunnen worden in ontwikkelde markteconomieën.

Ondanks het feit dat de prestaties van ondernemingen een belangrijk gegeven vormen met het oog op armoedebestrijding in ontwikkelingslanden zijn er tot nu toe weinig studies verricht naar de aard en de verschillende types van gedragingen van ondernemers en de eventuele impact daarvan op het functioneren van hun ondernemingen. Verschillende onderzoekers benadrukken daarom het belang van het beter begrijpen van de kansen die ondernemers kunnen benutten op het gebied van het creëren van werkgelegenheid en economische groei (Alvarez en Barney 2014). Dit betere begrip kan ook leiden tot nieuwe inzichten en nieuwe kennis ten behoeve van de literatuur over ondernemerschap, door de verfijning van bestaande theorieën vanuit het perspectief van ontwikkelde economieën (Bruton et al. 2008). Het algemene doel van dit promotie-onderzoek is dan ook om het gedrag van ondernemers van kleine bedrijven in een ontwikkelingsland te onderzoeken, in het bijzonder het identificeren en het benutten van kansen, en de gevolgen daarvan voor hun bedrijfsresultaten.

Dit promotie-onderzoek gebruikt empirische gegevens van kleine ondernemingen in de toerismesector (touroperators) in een Afrikaanse context en geeft antwoord op twee hoofdvragen: 1) Hoe ziet het gedrag van ondernemers er uit bij het starten van bedrijven in de context van een ontwikkelingsland? 2) Welk effect heeft het gedrag van ondernemers van kleine bedrijven op hun bedrijfsresultaten in de context van een ontwikkelingsland?

Het empirisch onderzoek behorend bij dit proefschrift is uitgevoerd in een ontwikkelingsland (Ethiopië), waar sprake is van een bescheiden ondernemingsklimaat, vanwege sociale, culturele, economische en politieke omstandigheden. Ondernemingsgerichte activiteiten vormen een nieuw verschijnsel in Ethiopië. Pas sinds 1991 is Ethiopië zich in de richting van een markteconomie gaan ontwikkelen; zo bestond er tot 1991 slechts één reisorganisatie, en dat was een staatsbedrijf (National Tour Operation). De bevindingen van dit proefschrift zijn gebaseerd op primaire data verzameld onder 220 respondenten die een reisorganisatie bezitten en beheren in Ethiopië. Hoofdstuk 2, 3 en 4 zijn gebaseerd op data van 102 respondenten die zijn verzameld tijdens de eerste veldwerkperiode. Hoofdstuk 5 is gebaseerd op data afkomstig van 118 respondenten die zijn verzameld tijdens de tweede veldwerkperiode. Alhoewel alles bij elkaar primaire data zijn verzameld onder 220 respondenten, gedurende twee verschillende veldwerkperiodes, is het feitelijke aantal geïnterviewde ondernemers kleiner dan 220 vanwege een overlap tussen de groep respondenten die in de eerste ronde van veldonderzoek is bestudeerd en de groep die in de tweede ronde is bestudeerd.

Hoofdstuk 2 sluit aan bij het huidige debat over de dichotome aard van de concepten 'ontdekking' (ofwel *discovery*) en 'creatie' (ofwel *creation*), door een antwoord te formuleren op de volgende vraag: "Is het mogelijk om een onderscheid te maken tussen

ontdekkingsgedrag en creatiegedrag van ondernemers van kleine bedrijven in de context van een ontwikkelingsland?” Het onderzoek toont aan dat er een meetbaar verschil bestaat tussen ontdekkingsgedrag en creatiegedrag van deze ondernemers. Om zinvolle data te kunnen verzamelen is een nieuwe schaal ontworpen, waarbij gebruik is gemaakt van het werk Alvarez en Barney (2007), met name van hun zeven ondernemingsgerichte acties.

De onderzoeksvraag van Hoofdstuk 3 luidt als volgt: “Welk gedrag van ondernemers van kleine bedrijven in de context van een ontwikkelingsland komt vaker voor: creatie of ontdekking?”. Besluitvorming, strategievorming en financiering blijken met name te worden gedreven door ontdekkingsgedrag, terwijl personeelsbeleid en concurrentiebeleid meer gedreven worden door creatiegedrag. Samengevat luidt de conclusie dat ondernemers van kleine bedrijven in dit ontwikkelingsland beide soorten gedragingen vertonen, alhoewel creatie vaker voorkomt dan ontdekking.

Hoofdstuk 4 richt zich op de volgende vraag: “Welk gedrag van ondernemers van kleine bedrijven leidt tot betere bedrijfsresultaten in de context van een ontwikkelingsland: creatie of ontdekking?” Voor het beantwoorden van deze vraag zijn twee benaderingen gehanteerd. Allereerst is een onderscheid gemaakt tussen ondernemers die voornamelijk ontdekkingsgedrag vertonen versus ondernemers die voornamelijk creatiegedrag vertonen. De studie toont aan dat voornamelijk creatiegedrag leidt tot meer groei van omzet, winst en activa, maar niet tot meer groei van de werkgelegenheid. Daarnaast komt uit het onderzoek naar voren dat er geen significant verschil optreedt tussen de afzonderlijke ondernemersacties die vallen onder ontdekkingsgedrag respectievelijk creatiegedrag.

Hoofdstuk 5 gaat in op de effecten van een andere benadering van gedrag: *causation* (kortweg doelgericht handelen) versus *effectuation* (kortweg middelengericht handelen). De onderzoeksvraag van dit hoofdstuk luidt als volgt: “Welk gedrag van ondernemers van kleine bedrijven leidt tot betere bedrijfsresultaten in de context van een ontwikkelingsland: *causation* of *effectuation*?” De bevindingen lopen uiteen: *causation* leidt tot toename van werkgelegenheid terwijl *effectuation* leidt tot betere financiële resultaten (toename van omzet, winst en activa), zij het dat dit niet geldt voor alle dimensies van *effectuation*.

Op basis van de bevindingen van de eerste twee empirische hoofdstukken van dit proefschrift, en als antwoord op de eerste hoofdvraag, kan worden gesteld dat zowel gedrag gericht op het ontdekken van kansen als gedrag gericht op het creëren van kansen kan worden onderscheiden. Ook kan worden gesteld dat gedrag gericht op het creëren van kansen dominant is met betrekking tot vier specifieke handelingen (besluitvorming, strategievorming, financiering en marketing), terwijl met betrekking tot twee andere specifieke handelingen (personeelsbeleid en concurrentiebeleid) gedrag gericht op het ontdekken van kansen dominant is.

De bevindingen van de twee volgende empirische hoofdstukken, en in antwoord op de tweede hoofdvraag, tonen aan dat de impact van de verschillende typen ondernemersgedrag varieert voor financiële en niet-financiële resultaten. Gedrag gericht op creatie en *effectuation* hebben een positieve impact op financiële prestaties (groei van omzet, winst en activa); er is echter geen impact op de groei van de werkgelegenheid. Anderzijds heeft *causation* een positief verband met toename van de werkgelegenheid. Dit promotie-onderzoek heeft dan ook als algemene conclusie dat *causation* en *effectuation* uiteenlopende effecten hebben op

prestaties van bedrijven. In tegenstelling tot onderzoeksbevindingen in een westerse context is er geen empirisch bewijs gevonden dat *effectuation* superieur is aan *causation*.

Dit proefschrift levert in drie opzichten een bijdrage aan de theorie: verrijking van de wetenschappelijke literatuur over onderzoek naar ondernemerschap in ontwikkelingslanden; nuancering van het huidige debat over ondernemerschap; ontwerp en validatie van nieuwe schalen om ondernemersgedrag in de startfase van een onderneming te meten.

De eerste theoretische bijdrage van dit proefschrift is gebaseerd op de nieuwe dataset, afkomstig uit een ontwikkelingsland. Deze bijdrage bevestigt de toepasbaarheid van westerse theorieën over kleinschalige ondernemers in de context van een ontwikkelingsland. Bijvoorbeeld, er is aangetoond dat ondernemersgedrag gericht op de creatie van kansen relevant is en het meest voorkomt in dit ontwikkelingsland, in tegenstelling tot veel eerdere studies die gedrag gericht op ontdekking van kansen juist sterk benadrukten. Hieraan wordt toegevoegd dat de benadering van Chandler et al. (2011) om *causation* en *effectuation* te meten breed toepasbaar is.

De tweede theoretische bijdrage van dit proefschrift betreft nuancering van het huidige debat over ondernemerschap. Dit promotie-onderzoek toont aan dat creatiegedrag van ondernemers leidt tot groei van omzet, winst en activa. Op een vergelijkbare manier draagt *effectuation* bij aan betere financiële prestaties. Deze laatste bevindingen dragen ook bij aan het debat over het verband tussen de dominante theorieën *effectuation*, *bricolage* en *creatie* (Welter et al. 2016).

De derde theoretische bijdrage van dit proefschrift betreft de operationalisering van processen die te maken hebben met de identificatie van kansen, zoals ontdekkingsgedrag en

creatiegedrag. De onderwerpen die in dit onderzoek beschreven en getest zijn dienen als een opstap naar beter ontwikkelde en gevalideerde schalen voor de bestudering van ondernemers in de startfase van hun ondernemingen.

Op het praktische vlak is dit proefschrift relevant voor beleidsmakers in Ethiopië en andere Afrikaanse landen bij het ontwikkelen van beleid dat ondernemerschap als uitgangspunt hanteert bij het nastreven van economische vooruitgang. Een aantal bevindingen is namelijk relevant voor het opzetten van trainingen voor ondernemers en voor de ondersteuning van ondernemers.

Het ondernemersgedrag van eigenaren van Ethiopische reisorganisaties en de relatie met bedrijfsprestaties zoals beschreven in dit proefschrift kunnen ook van toepassing zijn op andere sectoren binnen het toerisme, zoals hotels en souvenirwinkels. Tenslotte kunnen de bevindingen van dit proefschrift gebruikt worden om het marktpotentieel van de toerismesector in Ethiopië tot verdere ontplooiing te brengen en om beschermende maatregelen te nemen, zoals wettelijke bepalingen en voorschriften, om het concurrentievermogen van kleine bedrijven te waarborgen.

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While applying to the scholarship offered to the unit I have been serving as a lecturer at Addis Ababa University (i.e., Unit of Tourism and Development), I thought that I would be enrolled in one of the tourism faculties because the concept note I developed was on ecotourism. Then, after meeting Henk van den Heuvel, who was the coordinator of the STRONGBOW project by then, at the science faculty of Addis Ababa University, I realized that I would join the then Amsterdam Center for Entrepreneurship at the Vrije Universiteit Amsterdam (ACE@VU). Given my background in Geography, I was not certain that I would fit in the programme of ACE@VU. Had it not be for the support of many individuals, I would not have made this long journey of a PhD study in Entrepreneurship. The time has come now to extend my gratitude to many people. First, my gratitude is for my PhD supervising team (Enno Masurel, Leo Paas and Henk van den Heuvel).

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