## **University of Twente**

Bachelor thesis International Business Administration

# Causation and Effectuation: the Influence of Family Background on the Entrepreneurial Decision Making Process in Emerging Countries

First supervisor: M.R. Stienstra MSc

Second Supervisor: PD. Dr. R. Harms

Student: Vincent Meulenbroek

Student Number: S1007424

Email: v.m.meulenbroek@student.utwente.nl

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### Preface

The final stage of the bachelor International Business Administration is making a bachelor thesis. This opportunity has been given to me by M.R. Stienstra MSc. My gratitude goes out to him, for offering me this chance and for being my first supervisor during all the stages of this project. My gratitude also goes out to PD. Dr. R. Harms, for being my second supervisor. This project could not have been finished without both of your help. My research has been done as part of a greater project called EPICC – Entrepreneurial Processes in a Cultural Context. Data within this project has been collected by other students, because of that I want to thank them for collecting data that was necessary to finish this thesis.

Sincerely,

Vincent Meulenbroek

Enschede, May 2014

#### Abstract

Sarasvathy (2001) distinguishes two modes of entrepreneurial decision making; causation and effectuation. Causal processes choose between means to create a predetermined effect. Effectual processes have a given set of means and create multiple effects with that. Causation and effectuation are central to this project and account for the dependent variable.

Aldrich & Cliff (2003) found that family influence is present on entrepreneurial decision making. This offered a motive to use this independent variable. The family business background is investigated twice inside the EPICC project – Entrepreneurial Processes in a Cultural Context. Family business background is present if one of the two entrepreneurs' parents is self-employed. This research is part of the EPICC project; which tries to find out the influence of national culture on the entrepreneurial decision-making process.

## The research question is as following: *To what extent is the family business background correlated with causation and effectuation of student entrepreneurs in Vietnam, Indonesia and Malaysia?*

In total four hypotheses have been derived. These hypotheses are formed using the causal and effectual frame that Sarasvathy (2001) offered. Each of the hypotheses relate to one of the categories, according to Sarasvathy (2008). Even though the data is collected from Malaysia, Indonesia and Vietnam, a distinction was made between Malaysia and Indonesia on one hand and Vietnam on the other hand. Vietnam differentiates from Malaysia and Indonesia on religion, since their dominant religion is Buddhism unlike the other two Islamite countries. Another disadvantage of the Vietnamese sample is that the size is small compared to the others. The hypotheses are tested with and without data from Vietnam.

The focus in this research is on emerging countries. The data from the sample is coming from novice entrepreneurs. These novice entrepreneurs have been interviewed using the think-aloud protocol concerning a case about a fictive coffee-corner. Testing the hypotheses is done using the independent samples t-test or the Mann-Whitney U test. After testing all the hypotheses on both samples, influence is detected to a lesser extent. The family business background does have influence on the use of means, which is one of the categories Sarasvathy distinguished. This influence was noticeable on both samples, with and without Vietnam. On all of the other hypotheses no significant influence was found. At last the control variable religion is checked using the chi-square test. This test offered no significant influence from religion on family business background.

### Contents

Prefaceii
Abstractiii
List of Figures and Tablesvi
1. Introduction
1.1 Background1
1.2 Entrepreneurial decision making process
1.3 Formal and informal institutions 2
1.4 Family perspective
1.4.1 Definition family business background
1.5 Research gap 4
1.6 Research question
2. Literature
2.1 Effectuation
2.2 Family business background7
2.2.1 Introduction7
2.3 Family business background and effectuation7
3. Methodology 10
3.1 Introduction
3.1.1 Data collection method: Think aloud10
3.1.2 The case
3.1.3 Transcribing and coding11
3.1.4 Sample
3.1.5 Dependent and independent variable15
3.1.6 Analysis
4. Results
4.1. Malaysia and Indonesia on Expected Returns17
4.1.1 Malaysia, Indonesia and Vietnam on Expected Returns

4.2 Malaysia and Indonesia on Affordable Loss 19
4.2.1 Malaysia, Indonesia and Vietnam on Affordable Loss
4.3 Malaysia and Indonesia on Means 21
4.3.1 Malaysia, Indonesia and Vietnam on Means 22
4.4 Malaysia and Indonesia on Goals 23
4.4.1 Malaysia, Indonesia and Vietnam on Goals24
4.5 Chi-Square test Religion * Family Background; Malaysia and Indonesia
4.5.1 Chi-Square test Religion * Family background; Malaysia, Indonesia and Vietnam
5. Discussion
6. Conclusion and Limitation
References
Appendix A

## List of Figures and Tables

Table 1:	Causation versus effectuation	6
Table 2:	Ten problems and themes	11
Table 3:	Categories, causation and effectuation by Sarasvathy (2008)	12
Table 4:	Information available; Malaysia and Vietnam	13
Table 5:	Distribution of religion on Indonesia, Malaysia and Vietnam	14
Table 6:	Amount of entrepreneurial parents; Malaysia, Indonesia and Vietnam	14
Table 7:	Results independent samples t-test hypothesis 1a, Malaysia and Indonesia	17
Table 8:	Ranks of the Mann-Whitney	
	U test Hypothesis 1a, Malaysia, Indonesia and Vietnam	17
Table 9:	Results independent samples t-test; family business background and expected returns	18
Table 10:	Ranks of the Mann-Whitney U test Hypothesis 1b, Malaysia and Indonesia	19
Table 11:	Results of the Mann-Whitney U test Hypothesis 1b, Malaysia and Indonesia	19
Table 12:	Ranks of the Mann-Whitney U test Hypothesis 1b,	
	Malaysia, Indonesia and Vietnam	20
Table 13:	Results of the Mann-Whitney U test Hypothesis 1b,	20
	Malaysia, Indonesia and Vietnam	
Table 14:	Ranks of the Mann-Whitney U test hypothesis 2a, Malaysia and Indonesia	21
Table 15:	Results of the Mann-Whitney U test hypothesis 2a, Malaysia and Indonesia	21
Table 16:	Ranks of the Mann-Whitney U test hypothesis 2a,	22
	Malaysia, Indonesia and Vietnam	
Table 17:	Results of the Mann-Whitney U test hypothesis 2a,	22
	Malaysia, Indonesia and Vietnam	

Table 18:	Ranks of the Mann-Whitney U test hypothesis 2b, Malaysia and Indonesia	23
Table 19:	Results of the Mann-Whitney U test hypothesis 2b, Malaysia and Indonesia	23
Table 20:	Results independent samples t-test; Family business background and Goals	24
Table 21:	Cross tabulation Religion*Family Background; Malaysia and Indonesia	25
Table 22:	Results Chi-Square Tests; Malaysia and Indonesia	25
Table 23:	Cross tabulation Religion*Family Background;	26
	Malaysia, Indonesia and Vietnam	
Table 24:	Results Chi-Square Tests; Malaysia, Indonesia and Vietnam	26

#### **1. Introduction**

#### **1.1 Background**

In business context entrepreneurship is a pillar with an increasing amount of literature. When entering the word 'entrepreneurship' on Google Scholar it results in 696.000 hits, more than 70.000 only in 2013. These statistics indicate that entrepreneurship is interesting people at the moment. Although there have been multiple attempts to define entrepreneurship, there is still no universally agreed definition. Research on this topic often results in underlining the importance of multiple components of entrepreneurship. These are the entrepreneur, the entrepreneurial learning process, the entrepreneurial decision making process and the family perspective. Several relevant authors acknowledge this statement about entrepreneurship (Gartner, 1988; Politis, 2005; Dew, Read, Sarasvathy, & Wiltbank, 2009; Aldrich & Cliff, 2003).

The entrepreneur has different tools to control and direct a venture. These are leadership, power and motivation (Wickham, 2006). An entrepreneur tries to create and manage business in order to create value for the customer. The entrepreneur needs to be able to focus and direct the organization, to influence the course of actions within the organization and needs to have the ability to encourage an individual to take a particular course of action, which is known as the entrepreneurial process. In the literature, the entrepreneur is often subject for research (Gartner, 1988; Blanchflower & Oswald, 1998; Carland, Hoy, Boulton, & Carland, 1984).

Entrepreneurial learning is the learning that occurs when filling the entrepreneur's role. Experience is the key factor in entrepreneurial learning (Sarasvathy S. D., 2001). Entrepreneurs with experience are better able to discover and recognize entrepreneurial opportunities (Wickham, 2006). Personal and social emergence, contextual learning and negotiated enterprise are three important areas that play a factor in entrepreneurial learning (Rae, 2005). Personal and social emergence is the creation of the individual's self-perception as an entrepreneur. Contextual learning is the use of one's knowledge and experience within an industry to recognize opportunities that ventures can be formed around. The negotiated enterprise is about the process of engaging with other people to exchange, such as labor. Entrepreneurial learning is a thoroughly examined research subject (Politis, 2005; Deakins & Freel, 1998; Sullivan, 1995).

Throughout the entrepreneurial process entrepreneurs take decisions. The action or process of making important decisions is the decision-making process. The predominant decision making model

presented in business schools is the goal-driven model, which is a causal model (Sarasvathy S. D., 2001). She expanded the work of Mintzberg (1976) and distinguishes two modes of entrepreneurial decision making. In addition to causation as general decision making model, effectuation was added. Causal entrepreneurs try to reach a future goal with the resources available, effectual entrepreneurs focus on the resources they have and tend to find out what future goals can be reached. Effectuation is a model of entrepreneurship that needs to be tested by researchers (Perry, Chandler, & Markova, 2011, p. 857). There are several reasons why effectuation research has not grown very quickly, under which validating effectuation (and causation) measures is one. Because of the lack of research on effectuation, Perry et al. (2011) try to encourage researchers to do so. This is part of the reason the entrepreneurial decision making process (causation and effectuation) will be the main subject in this research and will be further discussed.

#### 1.2 Entrepreneurial decision making process

The choice between adopting an effectual or causal approach to decision making, depends on the situation. It can be better to choose for a causal approach instead of an effectual approach depending on the situation (Sarasvathy, 2001, p. 249). Even though these processes are different they can occur simultaneously and can overlap and intertwine over different contexts of decisions. Another fact to keep in account is that effectuation is no better or a more efficient theory than causation. This depends on the circumstances at that moment. Effectuation processes are more general and common than causation processes in human decisions. This can be illustrated with an example: *"on most nights most people cook dinner using an effectuation process – that is, they look around in their kitchen cupboards for what's available and fix themselves something. Only rarely do they decide to throw a dinner party and carefully develop a causation process for accomplishing it (i.e., choose a menu, shop for specific ingredients, and follow precise recipes)" (Sarasvathy S. D., 2001, p. 250). Different context variables can have influence on the adoption of entrepreneurial decision making processes. This can be clarified by the concept of informal and formal institutions, which will be discussed next.* 

#### **1.3 Formal and informal institutions**

Informal institutions are organizations in the sociological sense of having patterned and recurring interaction. Formal institutions have legal recognition, full-time officials, written rules, and their own funds (Dasgupta & Seregeldin, 2000). Informal institutions tend to be more social instead of bureaucratic formal institutions. An informal institution can be the family, and a formal institution can be the government. There are many links between formal and informal institutions, such as a

family booking a holiday from a travel agency. Informal institutions are not officially established and can apply to any type of activity and are often the most important institutions (Rodriguez, Uhlenbruck, & Eden, 2005).

The EPICC project (Entrepreneurial Processes in a Cultural Context) considers the informal institutions as crucial part of the circumstances on the entrepreneurial decision making process at the start-up phase of a company. The EPICC project covers research in developed countries but also in emerging countries. Research in emerging countries on entrepreneurial decision making in general is scarce. In Asia only China has been investigated (Shao, 2012). This is somewhat remarkable, since the economical and financial grow in some Asian countries. East Asia contains emerging countries like Indonesia, Malaysia, China and Vietnam. The GNI per capita in this area grew with almost 15 percent in 2012. From 2007 till 2012 the same statistics show a rise of 117 percent (The Worldbank Group, 2013). In a review of a World Bank report (Wennekers & Thurik, 1999), the eight so-called High-performing Asian Economies (HPAEs) experience a huge grow. These are the Republic of Korea, Taiwan, Singapore, Hong Kong, Japan, Vietnam, Indonesia, Malaysia and Thailand. It is uncertain whether these emerging economies show the same grow as in Thurik & Wennekers' article, with results from the USA. The next section will discuss the family perspective, as part of the informal institutions.

#### **1.4 Family perspective**

Family influence is present on the entrepreneurial decision making process (Aldrich & Cliff, 2003). This in fact means that family will influence entrepreneurs to make certain decisions. In brief, family can push entrepreneurs towards adopting a causal or effectual approach. In short, the family situation can play an important role on adopting a causal or effectual decision making mode. Family is often influential, especially when the person that starts up a new venture has parents or other family members that already have their own business, which is called family business background. Family members' experience can make it easier to start up a company, gain certain networks and having the availability of getting help and support (Greve & Salaff, 2003). Knowledge from the family members can be used increasing this experience. Empirical evidence shows that family plays an important role in the venture creation process and the venture creation decisions (Aldrich & Cliff, 2003). Such studies are mostly presented by American researchers observed in North-America, especially by Aldrich and Cliff. Studies in Asia on this topic are scarce.

#### 1.4.1 Definition family business background

In this case family business background means that at least one of the student entrepreneurs' parents is self-employed. This excludes that none of the parents are self-employed or that one of

them is an entrepreneur. Parents that are public servant or working in a self-employed company are not considered as family business background in the context of this research. In this thesis the student entrepreneur is a term that will be used often; this concept is used together with novices. In this case novice and student entrepreneurs will be used throughout each other, and are counted as equal.

#### 1.5 Research gap

The effect of family business background on the mode of decision making is studied in North-America and to a lesser extent in Asia. Except for China, almost no Asian country has been researched on this particular subject. It is interesting to find out what the effect of the family is, on the degree of using effectual decision making logic in emerging countries. In the EPPIC project, data has been collected by students in Asian countries as mentioned above. These data are available and accessible. In this research data will be used retrieved from Indonesia, Malaysia and Vietnam. Similar research was executed by Shao (2012), but that investigation focused particularly on China and a second variable has been added; gender. This research will focus on economic growth countries and will focus primarily on the influence of family business background on the entrepreneurial decision making logic. In this corner of the broad field of entrepreneurship, there is space for research.

#### **1.6 Research question**

This research aims to find differences between different countries on the usage of effectuation and causation, influenced by the family. This makes the following research question:

• To what extent is the family business background correlated with causation and effectuation of student entrepreneurs in Vietnam, Indonesia and Malaysia?

#### 2. Literature

#### **2.1 Effectuation**

The entrepreneurial process is a set of phases that one follows when starting a business venture. The entrepreneur must find, evaluate and develop an opportunity by overcoming the forces that resist the creation of something new. The four distinct phases are: (1) identification and evaluation of the opportunity, (2) development of the business plan, (3) determination of the required resources, and (4) the management of the resulting enterprise (Hisrich, Robert, Peters, & Shepherd, 2005). During all of these phases important decisions have to be made, these decisions are part of the entrepreneurial decision making process. Causation and effectuation are two modes of entrepreneurial decision making. The distinction between these two modes can easily be set up with a restaurant example. When a customer at a restaurant orders a menu, effective ways need to be selected to create that meal, which is an example of effectuation. On the other side, when the ingredients of the meal are given, the cooks focus on preparing one of the possible meals, which is an example of causation. The difference hides in the means and outcomes. A precise definition of causation and effectuation is as following: "Causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means" (Sarasvathy S. D., 2001, p. 245).

The effectual problem space consists of three elements: (1) Knightian uncertainty, (2) goal ambiguity and (3) environmental isotropy (Sarasvathy S. , 2008). Knightian uncertainty involves the absence of possibilities to calculate probabilities for future consequences, since the future is truly unpredictable. Goal ambiguity implies that the decision maker is unsure of his/her own preferences, which are neither given nor well ordered. Environmental isotropy means that it is unclear what elements of the environment to pay attention to and what to ignore. The solution to the effectual problem space is developing key elements of a logic that grapples directly with Knightian uncertainty, goal ambiguity and environmental isotropy. Even though there is not a concrete solution, there are guidelines about how this logic should be. This should be non-predictive (not taking the event space for probabilities as given and immutable), non-teleological (not taking preferences and goals as pre-existent unchangeable) and non-adaptive (not taking the environment as exogenous or as something to respond to and 'fit' with) (Sarasvathy S. , 2008).

Causal and effectual processes can be categorized by multiple principles, which are: (1) prediction of the future versus creation of the future, (2) goal-driven action versus means based action, (3) expected returns versus affordable loss, (4) competitive analysis versus use of alliances, (5) avoid

contingencies versus embracing contingencies and (6) no subcategory given (causation and effectuation) (Sarasvathy S. D., 2001). Table 1 shows the meaning of these principles.

	Causation	Effectuation
P vs C	Prediction of the future	Creation of the future
	Causal entrepreneurs frame the future	Effectual entrepreneurs focus on the
	as a continuation of the past. The future	extent to which people can control
	can be controlled by previously obtained	the future.
	knowledge.	
G vs M	Goal-driven action	Means based action
	Causal entrepreneurs are goal-oriented,	Effectual entrepreneurs start with the
	these goals determine the actions. The	means. Goals emerge by imagining
	focus is on limiting downside potential.	courses of action based on given
		means (Read, Dew et al. 2009, p. 3)
R vs L	Expected returns	Affordable loss
	Causal entrepreneurs purse new	Effectuation argues that investing
	opportunities based on expected value	what you are willing to or can lose is
	(Read, Dew et al. 2009, p. 3). The focus	the right mindset. Invest no more
	is on upside potential.	resources than stakeholders can
		afford to lose.
B vs A	Competitive analysis	Use of alliances
	There should be a competitive attitude	A network of relations and
	toward outsiders. Relationships are	partnerships should be discussed and
	driven by competitive analysis and	realized.
	possessions should be protected.	
K vs E	Avoid contingencies	Embrace contingencies
	Causal entrepreneurs do not prefer	Effectual entrepreneurs leverage
	surprises. Careful planning and focus	contingencies, and see them as
	can minimize the impact of the	challenges. Contingencies should not
	contingencies.	be avoided.
X vs N	Causal (no subcategory given)	Effectual (no subcategory given)

Table 1: Causation versus effectuation (Sarasvathy S. D., 2001)

#### 2.2 Family business background

#### **2.2.1 Introduction**

A fundamental difference between family-owned businesses and not family owned businesses is the way of decision making. The embeddedness perspective argues that people are not atomized decision-makers, but are implicated in networks of social relations. The family is one fundamental social institution in this context (Aldrich & Cliff, 2003, p. 577). Businesses that are family-controlled or managed frequently have a more centralized decision-making process. The decision making processes in family-controlled businesses can be affected by personal family issues which often blend with business issues (Morris, Williams, Allen, & Avila, 1997). This enlarges the chance to get in a quarrel. Especially the financial support is crucial in starting up a business for an entrepreneur. "In some instances, an entrepreneur's family or extended family not only provides needed capital, but provides other resources such as access to markets, sources of supply, technology, and even new ideas" (Dyer & Handler, 1994, p. 73). This indicates the importance of family support for an entrepreneur.

Recent research on this topic in EPICC has been executed by Shao (2012) and Pot (2014). Shao's research engendered some interesting results on the entrepreneurial decision making process. This research did not only consider the influence of family business background, as it is in this thesis, but also on the influence of gender. These two variables are tested to see what their influence on the use of effectual decision making logic is. Examination found that student entrepreneurs with self-employed parents are more likely to rely on mean-driven activities and exploit contingency than those without entrepreneurial parents in entrepreneurial decision making. The most important finding is that Chinese student entrepreneurs without family business background focus more on causal reasoning in the entrepreneurial decision making process. The research from Pot (2014) used a sample of student entrepreneurs from the United States. She found that parents do not influence the entrepreneurial decision making process, at least to affordable loss versus expected returns, avoiding contingencies versus embracing contingencies and employing competitive analysis versus using alliances. She also tested the remaining codes, prediction of the future versus creation of the future and goal-driven action versus means based action. Both of these codes did not show influence by having entrepreneurial parents.

#### 2.3 Family business background and effectuation

Recent research in North-America is presented by Dew et al. (2009). Experts and novices were compared on the use of effectual and predictive logics in entrepreneurial decision-making. This research offers results on the view of risk and resources. *"Novices demonstrated a higher propensity*"

to choose multiple market segments, an approach we link to chasing the largest expected return" (Dew, Read, Sarasvathy, & Wiltbank, 2009, p. 299). Novices in North-America tend to make more use of the expected returns approach than using the affordable loss principle. Shao (2012) concluded that student entrepreneurs (novices) without family business background focused more on causal reasoning than effectual reasoning. Dew et al. (2009) conclude that novices focus on chasing the largest expected return and Shao (2012) concludes that these novices focus more on causal reasoning if family business background is absent. This hints that novices without family business background focus more on chasing the largest expected returns. This leads to the following hypothesis:

## H1a: Novice entrepreneurs without family business background chase the largest expected return and raise required resources to maximize the opportunity.

Research by Shao (2012), states that entrepreneurs in China stay close to what they know from their entrepreneurial parents. Their parents are often handling the organization in a conservative way, which means they are not so much risk-adjusted but more likely risk-adverse. *"Earnings reflect bad news more quickly than good news. For instance, unrealized losses are typically recognized earlier than unrealized gains. This asymmetry in recognition leads to systematic differences between bad news and good news periods in the timeliness and persistence of earnings"* (Basu, 1997). This means that being conservative, is not about maximizing opportunities but more on investing what you are willing and are able to lose. This is a principle from effectual decision making logic. Conservatism focuses more on affordable loss instead of expected returns. This leads to hypothesis 2a, which is linked to hypothesis H1a.

There is another way this hypothesis can be established. Entrepreneurial parents do not only offer their children human capital in order to support resources needed to launch business, but also financial capital (Lentz & Laband, 1990). The financial capital is coming from their personal network. This indicates it started with means, since the capital accrues from who they know. This is a part of the category means, which Sarasvathy (2001) once distinguished and is opposite to the goal-driven intention. Since the financial capital comes from personal networks, it is assumable that entrepreneurs with entrepreneurial parents focus on affordable loss. The financial capital is not coming from the entrepreneur itself but from the entrepreneurial parents. This hints that the entrepreneur does not want to lose the capital since that is coming from persons that you care about. It has got an extra burden since the capital is coming from family and not from strangers or their selves. Therefore it is assumable that entrepreneurial parents focus on affordable loss than their counterparts. This leads to the following hypothesis:

## H1b: Novice entrepreneurs with family business background are focused on affordable loss and do not invest more resources than affordable.

The social and professional networks, such as the family, are very important at the start-up phase. Entrepreneurial parents are able to support resources that children need to launch business; they may give their children human capital (business experience, knowledge and competencies) and financial capital that is specific to running business (Lentz & Laband, 1990). Receiving business experience, knowledge and competencies signifies that these entrepreneurs start with the means. Starting with means relates to who I know (family), what I know (knowledge) and who I am (abilities or competencies) (Sarasvathy S. D., 2001). This indicates that entrepreneurs with family business background take action based on given means. In other words, these entrepreneurs have gained more experiences, received knowledge and perhaps were even trained (human capital) by their parents since they own a company. It is therefore assumable that entrepreneurs without a family business background do not have this experience and circumstances what their fellow entrepreneurs did go through. If entrepreneurs with family business background are means-based because of their entrepreneurial parents, it could be that entrepreneurs without family business background are goals-oriented (opposite to means-based) since they do not have these entrepreneurial parents. This leads to the following hypotheses:

#### H2a: Novice entrepreneurs with family business background take action on the use of means.

H2b: Novice entrepreneurs without family business background take action on the use of goals.

#### 3. Methodology

#### **3.1 Introduction**

This chapter will explain the research design. In order to examine the influence of family business background on use of decision making processes in emerging countries, both quantitative and qualitative research has been executed. In this study, data from three countries will be used; namely Malaysia, Indonesia and Vietnam. Firstly, the data collection method will be discussed, which is mostly about the think aloud procedure. The case itself will be discussed next together with the problems attached to it. After that the transcribing and coding part will be dealt with. The sample is the fourth part that will be discussed. After that, the dependent and independent variables will be explained.

#### 3.1.1 Data collection method: Think aloud

The think aloud method is used as data collection method in this part of the EPICC project. This method is used when more direct data is needed on the ongoing thinking processes during working (van Someren, Barnard, & Sandber, 1994). The think aloud method actually means that the subject can say anything that comes up in his mind. This method gives insight in the knowledge and methods of human problem-solving. In practice this means that the subject keeps talking and the interviewer keeps writing down everything the subject says. These writings are called protocols. The following quote summarizes the think aloud method: *"Protocols are collected by instructing people to solve one or more problems while saying 'what goes through their head'*, stating directly what they think" (van Someren, Barnard, & Sandber, 1994, p. 8). The think aloud protocols give a great insight in how the subject solves a problem step by step, which makes this method different from others. An advantage of the think aloud protocols is that it can provide data about sophisticated and less sophisticated cognitive processes; these processes are hard to catch by any other method. In general these protocols are easy to understand even though this is not always the case.

The key task of the interviewer is to make sure that the subject keeps talking, and preventing moments of silence. Since it is often very unnatural for the subject to be interviewed like this, it is important that the interviewer is well prepared for these silences. Before the interview exercises can be done to make the conversation as smooth as possible. The length of the interview is carefully established on two hours, which should be more than enough time.

#### 3.1.2 The case

This study is about student entrepreneurs that get interviewed by using the think aloud method. The purpose of the EPICC project is to identify whether patterns in entrepreneurial decision-making are

influenced by national culture. The case used in the EPICC project is about starting up a coffee corner and novice entrepreneurs were asked to answer. The entrepreneurs are questioned and asked to solve ten decision problems. These problems arise in the context of building a new company for an imaginary product. The questions asked to the subjects were based on the next ten themes:

Problem:	Themes
Problem 1:	Identifying the market
Problem 2:	Defining the market
Problem 3:	Meeting payroll
Problem 4:	Financing
Problem 5:	Leadership/Vision
Problem 6: Part 1	Product Re-development
Problem 6: Part 2	Product Re-development
Problem 7: Part 1	Growing the Company
Problem 7: Part 2	Growing the Company
Problem 8:	Hiring Professional Management
Problem 9:	Goodwill
Problem 10:	Exit

Table 2: Ten problems and themes

Multiple themes are divided into several problems, and each problem has their own questions in the case. The subject can choose between different directions and are supposed to think aloud. These problems are used in the EPICC project and are and will be implemented in multiple countries around the world. Although these decision problems are used in EPICC, they are not made up by participant of the project. These decision problems were already introduced by Sarasvathy (2008) and are little modified in favor of this project.

#### **3.1.3 Transcribing and coding**

After all the interviews have been recorded and transcribed, the transcriptions need to be coded. Coding happens by a scheme made by Sarasvathy (2008). The attributes and aspects of effectuation opposed to causation are outlined in this pattern. In the transcription each of the fragment or paragraph is coded. Sarasvathy created six categories of each of the two directions. If it is not possible to code certain parts it is still possible to divide them. The X and N are made for this situation. Every fragment or paragraph is coded and therefore attached to one of the six categories.

Causation	Effectuation
P = Prediction of the future	C = Creation of the future
G = Goal driven	M = Mean-based
R = Expected returns	L = Affordable loss
B = Competitive analysis	A = Use of alliances or partnerships
K = Avoid contingencies	E = Embrace Contingencies
X = Causal (no subcategory given)	N = Effectual (no subcategory given)

Table 3: Categories, causation and effectuation by Sarasvathy (2008)

Prediction of the future states that the future, on basis of past experiences, can be predicted. On the other hand, creation of the future means that the future comes from what people do and not from a certain trend that might be predicted. Being goal driven can be seen as oriented on growth and being ends based, while focusing on means is the opposite and do not start with the goal. Means-oriented literally implies starting with the means, so what do I know, who I know and who I am. Focusing on expected returns is all about the expected value and financials like investments and salaries. This involves chasing the largest expected returns by maximizing opportunities. Overleaf, when the focus lies at the maximally amount losable, affordable loss is mentioned. This is about the maximum investment that the stakeholders are willing to do. Competitive analysis involves an identification and analysis of the competitors. The attitude towards outsiders, such as rivaling companies, is very competitive. On the other hand, the use of alliances or partnerships is the opposite. This is about building a network of relationships and partnerships of stakeholders that are chosen by them.

The inter-rater reliability is in statistics the degree of agreement among raters (James, Demaree, & Wolf, 1984). The retrieved score shows how much consensus or homogeneity there is in the ratings given by judges. There are multiple ways of doing this statistically, of which Cohen's kappa probably is the most famous. In this case the transcriptions have been checked by a first and second rater. The first rater is the author of this thesis and the second rater is the first supervisor of the EPICC project. The score came out on above 75% and the lower limit was around 65%. This positive score reveals agreement among the raters.

#### **3.1.4 Sample**

The research data in this study is retrieved from Malaysia, Vietnam and Indonesia. The sample data is put available and gathered by students in the EPICC Project. As clarified in chapter one, the choice for Malaysia, Vietnam and Indonesia was due to their growing economy, their improving financial situation and the fact that these countries were not yet investigated in the EPICC project on the subject of family business background. The sample data have been attained without any problems. The interviews are focused on novice entrepreneurs. The EPICC project is about the decision making logic in starting-up a company and in maintaining a company. This explains why there has been chosen for novice entrepreneurs; it is in line with the project. The sample data are focused on student entrepreneurs. This has several advantages in contrast with other groups of non-student entrepreneurs. First of all student entrepreneurs in general have more time available than non-student entrepreneurs, since they are still at school. This makes them in general easier to contact than non-student entrepreneurs. Secondly, these initiatives and collaborations with universities abroad are almost by every other university highly stimulated and even recommended. This makes it much easier to create contacts with student entrepreneurs abroad.

In this research 22 Malaysian student entrepreneurs, 17 Vietnamese student entrepreneurs and 39 Indonesian student entrepreneurs have been interviewed, and this data has been collected. Not from all of these student entrepreneurs the information about the family business background is available and usable. The data from Malaysia was complete; from Vietnam only 11 out of 17 did have information on family business background and from Indonesia 37 out of 39 did have this information. A summary of these statistics are mentioned in the table below (table 4).

Country:	<u>Malaysia</u>	<u>Vietnam</u>	<u>Indonesia</u>	<u>Total:</u>
Family business				
background	22	11	37	<u>70</u>
information				
available				
Total:	<u>22</u>	<u>11</u>	<u>37</u>	<u>70</u>

Table 4: Information available; Malaysia and Vietnam

Religion is the control variable in this research. Religion can be of influence on the entrepreneur and his/her decisions. Religion plays a major role in influencing entrepreneurship and entrepreneurial activity (Audretsch, Boente, & Tamvada, 2007). Because of this influence religion will be used as control variable. In this research the emerging countries that will be investigated are Malaysia, Vietnam and Indonesia. Most of Malaysia's inhabitants are Islamite as well as those from Indonesia, while most Vietnams are Buddhist (Agency, 2014). Table 5 shows the distribution of religion in this sample.

#### **Country of research**

		Indonesia	Malaysia	Vietnam
Religion	Non / Atheist	12	2	10
	Christian Protestant	11	6	0
	Christian Catholic and other Christian	6	0	0
	Hindu	0	1	0
	Moslem	7	7	0
	Buddhist	0	0	0
	Other	1	1	1
	Jewish	0	5	0
Total		<u>37</u>	<u>22</u>	<u>11</u>

Table 5: Distribution of religion on Indonesia, Malaysia and Vietnam

Data from Malaysia and Indonesia will be tested together in first instance, without data from Vietnam. The sample from Vietnam is much smaller and there is a different dominant religion in Vietnam. The dominant religion in Malaysia and Indonesia matches (both Moslem) and their samples sizes are almost equal. Therefore each hypothesis will be tested on two samples; the first sample will include data from Malaysia and Indonesia and the second sample will include data from Malaysia, Indonesia and Vietnam. This way the influence of the small sample size and different religion of Vietnam can be measured. The table below expresses the distribution of the entrepreneurial parents. Malaysia, Indonesia and Vietnam in total represent 29 novice entrepreneurs with entrepreneurial parents and 41 without entrepreneurial parents. This means that the total sample size of Malaysia, Indonesia and Vietnam is 70, and the total sample size of Malaysia and Indonesia is 59.

Country:	Malaysia	Indonesia	Vietnam	Total:
Entrepreneurial	4	22	3	29
Parents				
Non-	18	15	8	41
Entrepreneurial				
Parents				
Total	22	37	11	70

Table 6: Amount of entrepreneurial parents; Malaysia, Indonesia and Vietnam

#### 3.1.5 Dependent and independent variable

The entrepreneurial decision making processes together form the dependent variable. This means that this variable is about the use of effectuation and causation. If affordable loss will be tested for example, the total affordable loss counts will be divided by the total amount of text blocks. The calculation will be the done in the same way for the other codes. The entrepreneurial decision making processes consist of multiple aspects which are shown in table 3. There is a line between effectuation and causation which are both decision making processes.

The independent variable is the existence of family business background. Family business background is defined as at least one of the parents is self-employment, in this way the entrepreneur can be influenced by that experience. In this research that variable can be divided in two categories; having entrepreneurial parents or not having entrepreneurial parents. Both the dependent and independent variable have been collected data about; these data are brought together in the literature part. The literature has formed the hypotheses.

#### 3.1.6 Analysis

The purpose of this research is to find the influence of family business background on the use of effectuation and causation in emerging countries. In this case the emerging countries are presented by Malaysia, Indonesia and Vietnam. The variables that are used in this research indicate that the independent samples t-test can be used but the independent sample t-test relies on a couple assumptions (Lund & Lund, 2013):

- The first assumption states that the dependent variable should be having a continuous scale. This is the case since the dependent variable will be a share.
- The independent variable needs to consist of two categorical independent groups. In this case each of the hypotheses that will be tested will use the existence of entrepreneurial parents and the lack of entrepreneurial parents.
- The independence of observations is important since there should not be a relationship between the different observations in one group or between all the groups.
- The fourth assumption is that there should not be significant outliers. These outliers are able to influence the test in a negative way, which makes the test unusable and worthless and harms the validity of the test. T are outliers in some of the tests, which will be shown in the results.
- Finally the dependent variable needs to be approximately normally distributed and there need to be homogeneity of variances. In this case there is sometimes enough reason to doubt the normal distribution.

Because of the fact that some of the tests show outliers and might therefore not be normal distributed, non-parametric will be used. The Kolmogorov-Smirnov test and the Shapiro-Wilk test can both point out whether the data is normal distributed or not. The Shapiro-Wilk test does the same work as the Kolmogorov-Smirnov test, but it has more power to detect differences from normality. Because of this reason the Shapiro-Wilk test will be used to test normality. If these tests result in a of distribution, Mann-Whitney U will lack normal the test be used.

### 4. Results

#### 4.1. Malaysia and Indonesia on Expected Returns

Hypothesis 1a states that novices without family business background chase the expected returns and raise required resources to maximize the opportunity. In order to test this hypothesis, a continuous variable is created (Expected\_Returns\_Share). This variable sums up the 'expected return counts' and will be divided by the total amount of text blocks coded. The categorical variable family business background consists of two options, which are having entrepreneurial parents or nonentrepreneurial parents (1 resp. 2). The normality of the sample is tested with the Shapiro-Wilk test and the data did significantly deviate from a normal distribution (results can be found in appendix A). Because of that, the Mann-Whitney U test is used. The results of the test can be found in table 7 and 8. There is no significant relation found, the p-value is greater than alpha=0.05. This means that hypothesis 1a is not supported.

Mann-Whitney U test: Family Business Background and Affordable Loss				
	Family Background	N	Mean Rank	Sum of Ranks
Affordable_Loss_	Entrepreneurial Parents	26	32.40	842.50
Total	Non-Entrepreneurial Parents	33	28.11	927.50
	Total	59		

Table 7: Ranks of the Mann-Whitney U test; Family business background and Affordable Loss

	Affordable_Loss_Total
Mann-Whitney U	366.500
Wilcoxon W	927.500
Z	954
Asymp. Sig. (2-tailed)	.340

Table 8: Results independent samples t-test; Family business background and Affordable Loss

#### 4.1.1 Malaysia, Indonesia and Vietnam on Expected Returns

Hypothesis 1a states that novices without family business background chase the expected returns and raise required resources to maximize the opportunity. In order to test this hypothesis, a continuous variable is created (Expected\_Returns\_Share). This variable sums up the 'expected return counts' and will be divided by the total amount of text blocks coded. The categorical variable family business background consists of having entrepreneurial parents or non-entrepreneurial parents (1 resp. 2). In this test the data from Vietnam is used together with the data from Malaysia and Indonesia. The normality of the sample is tested with the Shapiro-Wilk test and the data does not significantly deviate from a normal distribution (results can be found in appendix A). Because of that, the independent samples t-test will be used. The result of this test offers a p-value of 0.432. This means that there is no significant relation found. Hypothesis 1a with data from Malaysia, Indonesia and Vietnam is not supported. The results are shown in table 9.

Independent Samples T-test: Family Business Background and Expected Returns					
Group Statistics					
	Family Background	N	Mean	Std. Deviation	Std. Error Mean
Expected_Returns_Sh	Entrepreneurial	29	0.1354	0.07286	0.01353
are	Parents				
	Non-Entrepreneurial	41	0.1236	0.05229	0.00817
	Parents				
				Equal variances	Equal variances not
				assumed	assumed
Levene's Test for	F			1.021	
Equiality of Variances	Sig.		0.316		
t-test for Equality of	t		0.790	0.747	
Means	df			68	47.684
	Sig. (2-tailed)			0.432	0.459
	Mean Difference			.01181	.01181
	Std. Error Difference			.01495	.01580
	95% Confidence Interval of Lower			01801	01997
	the Difference	L	lpper	.04163	.04359

Table 9: Results independent samples t-test; family business background and expected returns

#### 4.2 Malaysia and Indonesia on Affordable Loss

Hypothesis 1b states that the novices with family business background focus more on affordable loss and do not invest more resources than available. In order to test this hypothesis a continuous variable is created (Affordable\_Loss\_Share). This variable sums up the 'affordable loss counts' and will be divided by the total amount of text blocks coded. The categorical variable Family business background consists of having entrepreneurial parents or non-entrepreneurial parents (1 resp. 2). In order to test the normality of the sample the data has been checked with the Shapiro-Wilk test. The data significantly deviates from a normal distribution (appendix A); on that account the Mann-Whitney U test is used. The p-value of this test is 0,125. Because of that, there is not a significant relation. Hypothesis 1b with data from Malaysia and Indonesia is not supported. The results are shown in table 10 and 11.

Mann-Whitney U test: Family Business Background and Affordable Loss				
	Family Background	N	Mean Rank	Sum of Ranks
Affordable_Loss_	Entrepreneurial Parents	26	33.87	880.50
Share	Non-Entrepreneurial Parents	33	26.95	889.50
	Total	59		

Table 10: Ranks of the Mann-Whitney U test; Family business background and Affordable Loss

	Affordable_Loss_Share
Mann-Whitney U	328.500
Wilcoxon W	889.500
Z	-1.535
Asymp. Sig. (2-tailed)	.125

Table 11: Results of the Mann-Whitney U test; Family business background and Affordable Loss

#### 4.2.1 Malaysia, Indonesia and Vietnam on Affordable Loss

Hypothesis 1b states that the novices with family business background focus more on affordable loss and do not invest more resources than available. In order to test this hypothesis a continuous variable is created (Affordable\_Loss\_Share). This variable sums up the 'affordable loss counts' and will be divided by the total amount of text blocks coded. The categorical variable family business background consists of having entrepreneurial parents or non-entrepreneurial parents (1 resp. 2). In this test, not only data from Malaysia and Indonesia is used. The data from Malaysia, Indonesia and Vietnam is used together. In order to test the normality of the sample the data has been checked with the Shapiro-Wilk test. The data significantly deviates from a normal distribution (appendix A). This is why the Mann-Whitney U test is conducted. There is no significant relation since the p-value is 0.616>0,05. This hypothesis will not be supported.

Mann-Whitney U test: Family Business Background and Affordable Loss				
	Family Background	N	Mean Rank	Sum of Ranks
Affordable_Loss_	Entrepreneurial Parents	29	36.95	1071.50
Share	Non-Entrepreneurial Parents	41	34.48	1413.50
	Total	70		

Table 12: Ranks of the Mann-Whitney U test Hypothesis 1b, Malaysia, Indonesia and Vietnam

	Affordable_Loss_Share
Mann-Whitney U	552.500
Wilcoxon W	1413.500
Z	501
Asymp. Sig. (2-tailed)	.616

Table 13: Results of the Mann-Whitney U test Hypothesis 1b, Malaysia, Indonesia and Vietnam

#### 4.3 Malaysia and Indonesia on Means

Hypothesis 2a states that novice entrepreneurs with family business background take much more action on the use of means than entrepreneurs without family business background. In order to test this hypothesis a continuous variable is made (Means\_Share). This variable counts and sums up the amount of times that a 'means-based problem' has occurred and divides this with the amount of text blocks coded. The categorical variable family business background is created and has two options; the absence or presence of entrepreneurial parents. These are numbered 1 and 2, in that sequence. This test used data from Malaysia and Indonesia. In order to check the normality of the sample the data has been checked using the Shapiro-Wilk test. The data significantly deviates from a normal distribution (appendix A). Because of that the Mann-Whitney U test is used. The p-value is less than 0,05. This means that there is a difference between the two conditions. The mean rank of novice entrepreneurs with entrepreneurial parents is less than the means rank of novice entrepreneurs without entrepreneurial parents. This means that hypothesis 2a is not supported.

Mann-Whitney U test: Family Business Background and Means					
	Family Background	N	Mean Rank	Sum of Ranks	
Means_Share	Entrepreneurial Parents	26	22.58	587.00	
	Non-Entrepreneurial Parents	33	35.85	1183.00	
	Total	59			

Table 14: Ranks of the Mann-Whitney U test; Family business background and Means

	Means_Share
Mann-Whitney U	236.000
Wilcoxon W	587.000
Z	-2.947
Asymp. Sig. (2-tailed)	.003

Table 15: Results of the Mann-Whitney U test; Family business background and Means

#### 4.3.1 Malaysia, Indonesia and Vietnam on Means

Hypothesis 2a states that novice entrepreneurs with family business background take more action on the use of means than entrepreneurs without family business background. In order to test this hypothesis a continuous variable is made (Means\_Share). This continuous variable counts and sums up the amount of times that a 'means-based problem' has occurred and divides that with the total amount of text blocks coded. The categorical variable family business background is created and has two options; the absence or presence of entrepreneurial parents. These are numbered 1 and 2, in that sequence. This test used data from Malaysia, Indonesia and Vietnam. In order to check the normality of the sample the data has been checked using the Shapiro-Wilk test. This test points out that the data of the sample is not normally distributed (appendix A). On that account the Mann-Whitney U test is used. The p-value is less than 0,05. This means that there is a difference between the two conditions. The mean rank of novice entrepreneurs with entrepreneurial parents. This means that hypothesis 2a is not supported.

Mann-Whitney U test: Family Business Background and Means				
	Family Background	N	Mean Rank	Sum of Ranks
Means_Share	Entrepreneurial Parents	29	27.53	798.50
	Non-Entrepreneurial Parents	41	41.13	1686.50
	Total	70		

Table 16: Ranks of the Mann-Whitney U test hypothesis 2a, Malaysia, Indonesia and Vietnam

	Means_Share
Mann-Whitney U	363.500
Wilcoxon W	798.500
Z	-2.755
Asymp. Sig. (2-tailed)	.006

Table 17: Results of the Mann-Whitney U test hypothesis 2a, Malaysia, Indonesia and Vietnam

#### 4.4 Malaysia and Indonesia on Goals

Hypothesis 2b states that novice entrepreneurs without family business background take much more action on the use of goals than entrepreneurs without family business background. In order to test this hypothesis a continuous variable is created (Goals\_Share). This variable sums up the 'goals counts' and will be divided by the total amount of text blocks coded. The categorical variable family business background consists of having entrepreneurial parents or non-entrepreneurial parents (1 resp. 2). In this test, only data from Malaysia and Indonesia is used. In order to test the normality of the sample the data has been checked with the Shapiro-Wilk test. The test points out that the data from the sample is not normally distributed (appendix A). Because of that, the Mann-Whitney U test is used. No significant relation was found. The p-value is higher than alpha 0.05. Hypothesis 2b with data from Malaysia and Indonesia is not supported.

Mann-Whitney U test: Family Business Background and Goals				
	Family Background	N	Mean Rank	Sum of Ranks
Goals_Share	Entrepreneurial Parents	26	28.73	747.00
	Non-Entrepreneurial Parents	33	31.00	1023.00
	Total	59		

Table 18: Ranks of the Mann-Whitney U test; Family business background and Affordable Loss

	Goals_Share
Mann-Whitney U	396.000
Wilcoxon W	747.000
Z	504
Asymp. Sig. (2-tailed)	.614

Table 19: Results of the Mann-Whitney U test; Family business background and Affordable Loss

#### 4.4.1 Malaysia, Indonesia and Vietnam on Goals

Hypothesis 2b states that novice entrepreneurs without family business background take much more action on the use of goals than entrepreneurs without family business background. In order to test this hypothesis a continuous variable is created (Goals\_Share). This variable sums up the 'goals counts' and will be divided by the total amount of text blocks coded. The categorical variable family business background consists of having entrepreneurial parents or non-entrepreneurial parents (1 resp. 2). In this test, data from Malaysia, Indonesia and Vietnam is used. In order to test the normality of the sample the data has been checked with the Shapiro-Wilk test. The test points out that the data from the sample is normally distributed (appendix A). This means that the independent samples t-test will be used to test the data. There is no significant relation found, the p-value 0.957 >0,05. Because of that, hypothesis 2b with data from Malaysia, Indonesia and Vietnam will not be supported.

Independent Samples T-test: Family Business Background and Goals					
Group Statistics					
Family Background	Ν	Mean	Std. Deviation	Std. Error Mean	
Entrepreneurial	29	.0895	.06385	.01186	
Parents					
Non-Entrepreneurial	41	.0888	.04481	.00700	
Parents					
				Equal variances not	
			assumed	assumed	
F			3.205		
Sig.		.078			
t			.054	.051	
df			68	46.915	
Sig. (2-tailed)			.957	.960	
Mean Difference			.00070	.00070	
Std. Error Difference			.01298	.01377	
95% Confidence Interval of Lower			02519	02700	
the Difference	L	Ipper	.02659	.02840	
	mples T-test: Family Bu Group Statist Family Background Entrepreneurial Parents Non-Entrepreneurial Parents F Sig. t df Sig. (2-tailed) Mean Difference Std. Error Difference 95% Confidence Interv the Difference	mples T-test: Family Business Group Statistics Family Background N Entrepreneurial 29 Parents 41 Parents 41 Parents 41 Parents 41 Sig. 29 Parents 41 Parents 41 Paren	mples T-test: Family Business Backgrou Group Statistics Family Background N Mean Entrepreneurial 29 .0895 Parents A1 .0888 Parents A1 .0888 Pa	mples T-test: Family Business Background and GoalsGroup StatisticsMeanStd. DeviationFamily BackgroundNMeanStd. DeviationEntrepreneurial29.0895.06385Parents41.0888.04481Non-Entrepreneurial41.0888.04481Parents41.0888.04481Parents41.0888.04481Parents5.00070.00070F5.00070.00070Sig. (2-tailed).957.00070Std. Error Difference.00070.0129895% Confidence Interval of Lower.02659the Difference.00070	

Table 20: Results independent samples t-test; Family business background and Goals

#### 4.5 Chi-Square test Religion \* Family Background; Malaysia and Indonesia

In order to test whether there is a relation between the religion of the sample and the family business background, the chi-square test can be used. This test shows whether the relationship is present. The test shows the real counts and the expected counts. If these two counts differ enough, the test will show a significant relationship between family business background and religion. The test only uses the categories that count higher than 5. The chi-square test demands a number of counts of at least 5. The alpha will be 0.05 again. If the Sig. turns out to be higher than the alpha it can be concluded that there is no relation present between religion and family business background. If the Sig. points out a number which is lower than 0.05, than there is significant proof that there is a relation present. In this test only the samples from Malaysia and Indonesia will be weighted.

			Family Background		
			Entrepreneurial	Non-	
			Parents	Entrepreneurial	
				Parents	Total
Religion	Non / Atheist	Count	6	8	14
		Expected Count	5,9	8,1	14,0
	Christian	Count	8	9	17
	Protestant	Expected Count	7,2	9,8	17,0
	Moslem	Count	5	9	14
		Expected Count	5,9	8,1	14,0
Total		Count	19	26	45
		Expected Count	19,0	26,0	45,0

Table 21: Cross tabulation Religion\*Family Background; Malaysia and Indonesia

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.408	2	.815
Likelihood Ratio	.411	2	.814
Linear-by-Linear Association	.260	1	.610
N of Valid Cases	45		

Table 22: Results Chi-Square Tests; Malaysia and Indonesia

The Chi-Square test offers a p-value of 0,610. This number is not lower than the alpha of 0.05. There is no significant relation between religion and family business background. This was tested on data from Malaysia and Indonesia.

#### 4.5.1 Chi-Square test Religion \* Family background; Malaysia, Indonesia and Vietnam

In order to test whether there is a relation between the religion of the sample and the family business background, the chi-square test can be used. This test shows whether the relationship is present. The alpha will be 0.05 again. If the Sig. turns out to be higher than the alpha it can be concluded that there is no relation present between religion and family business background. If the Sig. points out a number which is lower than 0.05, than there is significant proof that there is a relation present. In this test the samples from Malaysia, Indonesia and Vietnam will be used.

			Family Background		
			Entrepreneurial	Non-	
			Parents	Entrepreneurial	
				Parents	Total
Religion	Non / Atheist	Count	9	15	24
		Expected Count	9,6	14,4	24,0
	Christian	Count	8	9	17
	Protestant	Expected Count	6,8	10,2	17,0
	Moslem	Count	5	9	14
		Expected Count	5,6	8,4	14,0
Total		Count	22	33	55
		Expected Count	22,0	33,0	55,0

Table 23: Cross tabulation Religion\*Family Background; Malaysia, Indonesia and Vietnam

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.523	2	.770
Likelihood Ratio	.519	2	.771
Linear-by-Linear Association	.041	1	.840
N of Valid Cases	55		

Table 24: Results Chi-Square Tests; Malaysia, Indonesia and Vietnam

The Chi-Square test offers a p-value of 0.840, which means that this outnumbers alpha=0.05. There is no significant relation between religion and family background.

#### **5. Discussion**

The purpose of this research is to find out whether entrepreneurial parents do or do not have influence on the use of causation and effectuation in emerging countries. The data used for this goal was brought together by students from the Netherlands and was gathered on novice entrepreneurs in Malaysia, Indonesia and Vietnam. Each of these countries can be considered as an emerging country. In total five hypotheses have been created and tested. The data has been checked on normality using the Shapiro-Wilk test. Depending on the result of that test the independent samples t-test or the Mann-Whitney U test is used. Each of the hypotheses has been tested with and without data from Vietnam. This has been done because of the deviating religion in this country and the deviating sample size of the data from Vietnam in comparison to Malaysia and Indonesia.

This research questioned to what extend the family business background correlated with the entrepreneurial decision making process in emerging countries. The answer to this research question is that there is limited correlation, only one of the hypotheses does show significance. For all of the other hypotheses it is proven that there is approximately no difference between the absence and presence of entrepreneurial parents on this subject.

The first hypothesis (1a) states that entrepreneurs without family business background chase the largest expected returns and raise required resources to maximize the opportunity. This hypothesis is not supported. The hypothesis is based on research by Dew et al. (2009) and Shao (2012). These two investigations took place with data from North-America and China. Both countries are not emerging countries and have developed economies. That could be the reason why those research results do not count in emerging countries and religion might be influential. This hypothesis is also tested with Vietnam but this did not have much influence, since the p-value hardly changed. The hypothesis without Vietnam did not show a normal distribution but with Vietnam it was normally distributed.

The second hypothesis (1b) states that novice entrepreneurs with family business background are much more focused on affordable loss and do not invest more resources than affordable. This hypothesis is not supported as well. The hypothesis could be powered by conservatism on one hand and the extraction of cash by the entrepreneurial parents on the other hand. Both of these findings come from better developed countries such as North-America and China. This leads to differences in culture such as religion and other living circumstances. Vietnam was also added to the sample, the result went even more towards equality of the two conditions. The normality did not change when adding Vietnam but the result did.

The third hypothesis (2a) states that novice entrepreneurs with family business background take more action on the use of means than novice entrepreneurs without family business background. The results from the sample with data from Malaysia and Indonesia did show difference but not the way the hypothesis stated. Lentz & Laband (1990) conducted the literature for this statement. The data was not normally distributed; this did change when Vietnam was added to the sample. The p-value of the test changed, but the hypothesis is still not supported. Almost 15% more data was added to the sample but this hardly changed the p-value.

The fourth hypothesis (2b) states that novice entrepreneurs without family business background take much more action on the use of goals than novice entrepreneurs with family business background. This hypothesis was not supported. It was created as a consequence on hypothesis 2a. Hypothesis 2a offered low p-values and therefore the expectation was that this hypothesis should be doing the same. Being opposites does not directly mean that what counts for one does count for the other in an opposite way. Adding Vietnam to the sample did hardly change the normal distribution and this also counts for the results.

Religion was used as control variable. In order to check whether a relation exists between religion and family business background, a Chi-Square test has been executed. This test does not prove there is a relation present between religion and family business background. Therefore most probably the religion does not have any influence on the decision making process and the possible preference for the use of causation or effectuation.

#### 6. Conclusion and Limitation

In this moment of time the studies based on the variable family business background are rare. Shao (2012) already pointed out that according to his research he was one of the first who executed such investigation. This still counts at the moment this thesis was written. In this research in total seventy participants were asked to give their opinion about the start-up phase of a company in relation to effectuation and causation. This means there were 37 Indonesian participants, 22 Malaysian participants and 11 Vietnamese participants. A complete answer will be given to the research question which is as following: *"To what extent is the family business background correlated with causation and effectuation of student entrepreneurs in Vietnam, Indonesia and Malaysia?"* This influence is tested by specializing on four of the twelve categories of causation and effectuation according to Sarasvathy (2008). Limitations and future research options will be treated later.

This research found difference between student entrepreneurs with and without family business background. A difference is found between novices with and without family business background on the use of means, even though this is not enough to support the hypotheses in the way they are formulated. The other hypotheses show some interesting facts as well. It shows us that there are no differences based on expected returns, the focus on affordable loss and being goal-driven between student entrepreneurs with and without family business background in emerging countries. These hypotheses reveal what the influence of the variables above is on the entrepreneurial decision making process (effectuation versus causation) in emerging countries. Only on the use of means there is a difference between student entrepreneurs with and without family business background.

A fundamental comment on this research is the statement of emerging countries. First of all the situation in emerging countries can change and their economies can grow and their financial situation can improve. These countries do not have to stay emerging countries which means that this research is for a particular timeframe. In this research Indonesia, Malaysia and Vietnam have been investigated. Even though these countries are emerging, they do not cover all the emerging countries. While I make conclusions on emerging countries we have to keep in background that these do only cover three of them. The hypotheses are all set up on literature coming from North-America and China. This has been done because of a practical problem which is the absence of literature on other countries. This also illustrates why this research has been executed. The reason that Vietnam was not immediately put at the sample is because Vietnam did not have approximately the same sample size and the religion was deviating.

There are several ways how future research could be an addition to this research. First of all it is the research on family business background and entrepreneurial decision making should be done on

other emerging countries. Results can be compared and can give a better oversight on emerging countries on this subject. At the same time this also counts for developed countries. In order to make better conclusions there has to be produced more research on this subject in different countries; emerging and developed countries.

In this research only four out of the twelve categories were investigated on decision making processes. It is therefore understandable that the other categories should be investigated as well, since it will make the overall information available on this subject, much completer. Another point of attention is the fact that in this research one control variable has been used: religion. There has not been any influence of religion on family business background, but there might be other control variables that can have influence on the family business background

#### References

Agency, C. I. (2014). *The World Factbook*. Retrieved 2014, from Central Intelligence Agency: https://www.cia.gov/library/publications/the-world-factbook/geos/id.html

Aldrich, H. E., & Cliff, J. E. (2003). The persasive effects of family on entrepreneurship: toward a family embeddeness perspective. *Journal of Business Venturing*, 573-596.

Audretsch, D. B., Boente, W., & Tamvada, J. P. (2007). *Religion and entrepreneurship.* Jena: Friedrich-Schiller-University.

Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting & Economics*, 3-37.

Blanchflower, D. G., & Oswald, A. J. (1998). What Makes an Entrepreneur. *Journal of Labor Economics*, 26-60.

Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. A. (1984). Differentiating Entrepreneurs from Small Business Owners: A Conceptualization. *Acadamy of Management Review*, 354-359.

Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, 375-390.

Dasgupta, P., & Seregeldin, I. (2000). *Social Capital: A Multifaceted Perspective.* Washington D.C.: The World Bank.

Deakins, D., & Freel, M. (1998). Entrepreneneurial learning and the growth process in SMEs. *The Learning Organization*, 144-155.

Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 287-309.

Dyer, W. G., & Handler, J. W. (1994). Entrepreneurship and Family business: Exploring the connections. *Entrepreneurship: Theory & Practice*.

Gartner, W. B. (1988). "Who Is an Entrepreneur?" Is the Wrong Question. *Entrepreneurial Theory and Practice*.

Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, 15-28.

Greve, A., & Salaff, J. W. (2003). Social Networks and Entrepreneurship. *Entrepreneurship Theory and Practice*, 1-22.

Hisrich, Robert, D., Peters, M. P., & Shepherd, D. A. (2005). The Entrepreneurial Process. *Entrepreneurship* .

Hitt, M. A., Li, H., & Worthington IV, W. J. (2005). Emerging Markets as Learning Laboratories: Learning Behaviors of Local Firms and Foreign Entrants in Different Institutional Contexts. *Management and Organization Review*, 353-380.

*How do I interpret data in SPSS for an independent samples t-test?* (2008). Retrieved 2008, from Statistics Help For Students: http://statistics-help-for-students.com

Hundley, G. (2006). Family Background and the Propensity for Self-Employment. Industrial Relations .

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. *Journal of Applied Psychology*, 85-98.

Lentz, B. F., & Laband, D. N. (1990). Entrepreneurial success and occupational inheritance among proprietors. *Canadian Economics Association*.

Lund, M., & Lund, A. (2013). *Independent T-Test using SPSS*. Retrieved from Laerd Statistics: http://statistics.laerd.com

McVea, J. F. (2009). A field of study of entrepreneurial decision-making and moral imagination. *Journal of Business Venturing*, 491-504.

Minns, C., & Rizov, M. (2005). The spirit of capitalism? Ethnicity, religion, and self-employment in early 20th century Canada. *Exploration in Economic History*, 259-281.

Morris, M. H., Williams, R. O., Allen, J. A., & Avila, R. A. (1997). Correlates of success in family business transitions. *Journal of Business Venturing*, 385-401.

Perry, J. T., Chandler, G. N., & Markova, G. (2011). Entrepreneurial Effectuation: A Review and Suggestions for Future Research. *Entrepreneurship: Theory & Practice*, 26.

Politis, D. (2005). The Process of Entrepreneurial Learning: A Conceptual Framework. *Entrepreneurship: Theory & Practice*, 399-424.

Politis, D. (2005). The Process of Entrepreneurial Learning: A Conceptual Framework. Entrepreneurship: Theory & Practice. Pot, J. (2014). *Causation versus effectuation in entrepreneurial decision-making: the impact of family resources, family business background and education.* Enschede: University of Twente.

Rae, D. (2005). Entrepreneurial learning: a narrative-based conceptual model. *Journal of Small Business and Enterprise Development*, 323-335.

Read, S., Dew, N., Sarasvathy, S., Song, M., & Wiltbank, R. (2009). The logic of an effectual approach. *Journal of Marketing*, 1-18.

Rodriguez, P., Uhlenbruck, K., & Eden, L. (2005). Corrupt governments matter: How corruption affects the entry strategies of multinationals. *Academy of Management Review*, 383-396.

Sarasvathy, S. D. (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Acadamy of Management Review*, 243-263.

Sarasvathy, S. D., & Dew, N. (2005). Entrepreneurial logics for a technology of foolishness. *Scandinavian journal of Management*, 385-406.

Sarasvathy, S. (2008). *Effectuation: elements of entrepreneurial expertise*. Cheltenham, Glos, UK: Northampton, MA: Edward Elgar.

Shao, C. (2012). *Effectuation versus Causation in Entrepreneurial Decision-making in Chinese Context: Consideration of Impact of Family Business Background and Gender.* Enschede.

Sullivan, R. (1995). Entrepreneurial learning and mentoring. *Internation Journal of Entrepreneurial Behaviour & Research*, 160-175.

The Worldbank Group. (2013). Data. Retrieved 2012, from Worldbank: data.worldbank.org

van Someren, M. W., Barnard, Y. F., & Sandber, J. A. (1994). *THE THINK ALOUD METHOD; A practical guide to modelling cognitive processes.* London: Academic Press.

Wennekers, S., & Thurik, R. (1999). Linking Entrepreneurship and Economic Growth. *Small Business Economics*, 27-55.

Wickham, P. A. (2006). Strategic entrepreneurship. Edinburgh: Pearson Eduction Limited.

## Appendix A

#### **Tests of Normality**

			Shapiro-Wilk	
	Family Background	Statistic	df	Sig.
Expected_Returns_Share	Entrepreneurial Parents	.906	26	.021
	Non-Entrepreneurial Parents	.936	33	.051

Hypothesis 1a: Malaysia and Indonesia

#### Tests of Normality

			Shapiro-Wilk	
	Family Background	Statistic	df	Sig.
Expected_Returns_Share	Entrepreneurial Parents	.904	29	.012
	Non-Entrepreneurial Parents	.944	41	.042

Hypothesis 1a: Malaysia, Indonesia and Vietnam

#### **Tests of Normality**

			Shapiro-Wilk	ζ.
	Family Background	Statistic	df	Sig.
Affordable_Loss_Share	Entrepreneurial Parents	.971	26	.654
	Non-Entrepreneurial Parents	.883	33	.002

Hypothesis 1b: Malaysia and Indonesia

#### **Tests of Normality**

			Shapiro-Wilk	ζ.
	Family Background	Statistic	df	Sig.
Affordable_Loss_Share	Entrepreneurial Parents	.968	29	.497
	Non-Entrepreneurial Parents	.912	41	.004

Hypothesis 1b: Malaysia, Indonesia and Vietnam

Tests of Normality					
		Shapiro-Wilk			
	Family Background	Statistic	df	Sig.	
Means_Share	Entrepreneurial Parents	.973	26	.698	
	Non-Entrepreneurial Parents	.958	33	.229	

Hypothesis 2a: Malaysia and Indonesia

#### **Tests of Normality**

			Shapiro-Wilk	
	Family Background	Statistic	df	Sig.
Means_Share	Entrepreneurial Parents	.963	29	.380
	Non-Entrepreneurial Parents	.980	41	.665

Hypothesis 2a: Malaysia, Indonesia and Vietnam

#### Tests of Normality

			Shapiro-Wilk	
	Family Background	Statistic	df	Sig.
Goals_Share	Entrepreneurial Parents	.936	26	.107
	Non-Entrepreneurial Parents	.952	33	.155

Hypothesis 2b: Malaysia and Indonesia

#### Tests of Normality

			Shapiro-Wilk	ζ.
	Family Background	Statistic	df	Sig.
Goals_Share	Entrepreneurial Parents	.921	29	.033
	Non-Entrepreneurial Parents	.946	41	.049

Hypothesis 2b: Malaysia, Indonesia and Vietnam