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The effect of entrepreneurial behaviour on multinational performance in sub-Saharan Africa moderated for corporate culture: Business potential for multinationals

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ABSTRACT

This thesis focus on the business potential of sub-Saharan Africa by examining the effect of entrepreneurial behaviour on firm performance. The entrepreneurial intentions of the population in three sub-Saharan African countries were assessed on its effect on the performance of seventy-two foreign subsidiaries in the same region. This work contributes to the existing knowledge on the effect of entrepreneurial behaviour on firm performance and helps to better identify business opportunities in sub-Saharan Africa. Additionally, by reviewing the current literature on the role of corporate culture and entrepreneurial behaviour, this study adds corporate culture as a moderating effect in the analysis. The results reveal that entrepreneurial behaviour does not statistically significantly affect the firm performance of foreign subsidiaries in sub-Saharan Africa. However, as aspects of corporate culture, individualism, power distance and indulgence versus restraint were found to be significant moderating effects on the relationship between entrepreneurial behaviour and firm performance.

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1. INTRODUCTION

Considering the high global competitiveness and the role of entrepreneurial behaviour in enhancing firm performance, this thesis sheds light on the business potential in sub-Saharan Africa for multinationals.

The modern global business economy includes an increased interaction between global markets which leads to greater expectations of customers in terms of product choice, supply and ordering methods (Walters, 2004). These expectations force firms to focus on innovative ideas and products and moreover remaining competitive (Wakkee, Elfring & Monaghan, 2008; Kuratko & Audretsch, 2013; Tribbit, 2017). Entrepreneurial behaviour among employees plays a crucial role in achieving such innovations (Blanka, 2019; Kärnä, Nikina-Ruohonen, & Humala, 2021; Edwin, Ali, & Noor, 2021). Worldwide, the highest percentage of entrepreneurial behaviour among the population can be found in sub-Saharan Africa [Global Entrepreneurship Monitor, 2021]. With the foresight that the global economy will double in 2032 (PriceWaterhouseCoopers, 2015) the pressure on firms increases and entering new markets to generate sufficient growth is inevitable (Emerging Risk Global, 2021). Therefore, this thesis tries to identify the business potential for multinationals in sub-Saharan Africa based on hiring from the local labour force to embrace entrepreneurial behaviour.

For years, SSA was falling behind on investments of multinationals due to the difficulties within the region (Ajayi, 2006; Achour et al., 2015). However, in the past years, the business environment has been improved (Ajayi, 2006) and slowly the number of investments is increasing (Ideue, 2018). Due to these increasing foreign investments, the region was ranked in the top ten fastest-growing economies worldwide (Leke & Signé, 2019). Additionally, the World Bank recorded the most improvements in SSA compared to the rest of the world and states that these improvements give many opportunities for foreign investors (Worldbank, 2019). These opportunities are not only for multinationals to gain access to the wide range of natural resources, as most investments were originally (Morris & Fessenhaie, 2014), but there is an increase in other sectors such as manufacturing, business services, ICT, sales and marketing as well (Sita, Wolfenden & Hlophe, 2021). Combined with the rapidly improving business environment and the growing opportunities for more sectors, it is therefore important to examine these growing opportunities in the region as it can give important insights for multinationals. Existing literature on business potential in SSA, is largely focussed on the technological development in the country, the large growing population and the rapid urbanization (Abdel-Latif et al., 2018; Leke, Chironga & Desvaux, 2018; Leke & Signé, 2019). Surprisingly, little to no research focuses on the high entrepreneurial behaviour among the population (Herrington & Coduras, 2019). This is a great loss in the literature since it may give multinationals great opportunities to compete in the current global environment.

After an extensive examination of the existing literature on entrepreneurial behaviour and firm performance, it shows that entrepreneurial behaviour within firms may increase firm performance in terms of financial performance. This effect occurs due to the innovative behaviour of individuals who exhibit entrepreneurial behaviour. Entrepreneurial employees seek for new opportunities, create new products and self-renewal which can lead to better performance of the firm and an increased competitive advantages (Grant & Ashford, 2008; Wakkee et al., 2008; Moriano, Gorgievski & Laguna, 2009; Hernandez, 2019). Mostly, a statistically significant positive effect has been found in the literature (Blanka, 2019). One of these studies is of Oyong (2019).

She analyses entrepreneurial behaviour among individuals and the effect on the firm performance of Small and Medium Enterprises. Atsu (2021) and Eyana (2017) focus on entrepreneurial behaviour of firm owners in developing countries. These three studies are of significant use as they are most in line with the current thesis. Both are focussed on entrepreneurial behaviour of individuals in developing countries. Based on the literature, the expectations towards the results of this thesis are, to find a significant positive effect. Additionally, the literature review showed that corporate culture plays a significant role in entrepreneurial behaviour within firms (Müge, 2014; Mustafa, Gavin, & Hughes, 2018). When firms want to embrace entrepreneurial behaviour within the firm, an appropriate corporate culture is required to benefit the most from this behaviour as it can either strengthen or diminish it (Nafula, 2018). Corporate culture is therefore an important concept to encounter for when analysing entrepreneurial behaviour on firm performance. Furthermore, the literature also shows that national culture is reflected in the corporate culture of an organization (Soeters & Scheuder, 1998; van Oudenhoven, 2001; Menzel, Krauss & Ulijn, 2006) and since the current thesis examines the business potential for multinationals in SSA, that is an important finding. The question raised by this theory is whether every multinational can benefit from the entrepreneurial behaviour in SSA considering their corporate culture. Corporate culture is therefore regarded as a moderating effect on the relationship between entrepreneurial behaviour and firm performance. The hypotheses are also built on this question.

The contribution of this thesis to the literature is more-fold. First of all, by focussing on entrepreneurial behaviour in SSA as an opportunity for multinationals, a novel way is presented to examine business potential in SSA. The increase in business improvements in the region and the multiplying opportunities for multinationals make this research highly relevant. By examining a novel way of business potential, it can broaden the perspective of multinationals on business opportunities in SSA and thus, more multinationals can access SSA to seek for competitive advantages. As Rowley (2021) states, it is time to invest and unlock the capital in this region.

Secondly, this thesis contributes to the literature on entrepreneurial behaviour and firm performance. By focussing on a whole region rather than on one specific country the results are of broader use. Also, this thesis will use a rather uncommon way of indicating entrepreneurial behaviour in the analysis. It is common to use three indicators of entrepreneurial behaviour, innovativeness, risk-taking and proactiveness, however, this thesis will use entrepreneurial intentions as an indicator for entrepreneurial behaviour. This is based on the theory of planned behaviour (Ajzen, 1991).

Thirdly, as the literature indicates, corporate culture plays a crucial role in fostering entrepreneurial behaviour within firms. It therefore seems crucial to include such concepts into the research since the focus in this thesis is on multinationals seeking for entrepreneurial behaviour in SSA. However, to my best knowledge, there is no research which includes corporate culture into the analysis. By not including such a moderating effect, the results can be positively biased. Thus, to have a more realistic and more precise image of the effect of entrepreneurial behaviour within firms on firm performance, this thesis includes corporate culture. Lastly, by focussing on the effect of entrepreneurial behaviour on firm performance and on the business potential of sub-Saharan Africa, this thesis builds a bridge between both literatures. It makes the results and conclusion of wider use for other researchers as well as for policy makers and managers. The thesis has thus also managerial implications.

In conclusion, the aim of this thesis is to relate the effect of entrepreneurial behaviour on firm performance of multinationals as a business opportunity for multinationals in sub-Saharan Africa. The research question which belongs to it is: *To what extent in sub-Saharan Africa a business opportunity for multinationals when seeking for entrepreneurial behaviour?*

This paper is structured as follows: the literature review section provides an overview of existing empirical research, to broaden the perspective on entrepreneurial behaviour and the role of corporate culture. It also describes the business environment of sub-Saharan Africa. The theoretical framework can be found next; it provides explanation for the reasoning behind the effect of entrepreneurial behaviour on firm performance. It also includes the hypotheses. The methodology section is organized into four parts: (1) data collection, (2) sample, (3) variables and (4) data analysis. In chapter 5 the results are analysed and interpreted, and chapter 6 provides a discussion on the results of this study. Limitations are also included in the discussion section. Lastly, this thesis ends with a conclusion and implications for further research.

2. LITERATURE REVIEW

2.1 BUSINESS POTENTIAL FOR MULTINATIONALS IN SUB-SAHARAN AFRICA

For years, sub-Saharan Africa (SSA) was falling behind in attracting multinationals (Ajayi, 2006). Investments were difficult to make due to failure of governance, political instability, policy problems, terrorism, and corruption (Ajayi, 2006; Achour et al., 2015). However, in the past years, the business environment has improved (Ajayi, 2006; Worldbank, 2019) and slowly the number of investing multinationals is increasing (Ideue, 2018).

By improving the business environment in the region, many opportunities for multinationals occur (Worldbank, 2019). The biggest example of an improvement in the region is the implementation of the African Continental Free Trade Area (AfCFTA), signed by fifty-four countries of the region. It removes trade barriers and reduces tariffs which makes open trade possible (Maliszewska et al., 2020). It also enables economic growth due to scale productions, diversity of manufacturing products and greater efficiency (Maliszewska et al., 2020). The AfCFTA is the first step in creating a single trade market (Appiakoring, 2019). In addition, the African Virtual Trade- Diplomacy Platform makes the business environment safer and more secure to operate (Mckenzie, 2021). The platform allows firms to meet in an online secured environment across different timelines and legal frameworks (McKenzie, 2021). As a result of judicious monetary and fiscal policies, the fiscal deficit is expected to decrease making the region in general less risky to invest in (Worldbank, 2021). One of the biggest challenges for firms in SSA was the poor infrastructure, however, investments to enhance infrastructure have doubled creating opportunities for significant improvements (Leke & Signé, 2019).

Because of the improved business environment, business opportunities have expanded (Leke & Signé, 2019). From the onset onwards, the business potential of SSA for multinational companies was greatly determined by the wide range of abundant natural resources (Ajayi, 2006; Ideue, 2018; Akhtaruzzaman, Muhammad, Yang, & Omar, 2018). However, gradually, other business opportunities are becoming more prominent, such as telecommunications, retailing and services (Ernst & Young Goba, 2020; Sita et al., 2021). Research on opportunities in SSA shows that the rapidly growing, young population in the region may offer many possibilities for multinationals, since fifty per cent of the new job market entrants worldwide, comes from SSA (Abdel-Latif, et al., 2021). This rapidly growing labour force makes the region the most dynamic economy in the world and one of the most important markets (Abdychev, et al., 2018). The growing population also results in increased local demand which, in turn, proliferates an industrial revolution; this can make Africa the next great manufacturing centre (Leke & Signé, 2019). Additionally, Leke et al., (2018) also states that the business potential of SSA results especially from the growth opportunities in the region. These growth opportunities come from the eager digital adaptation which made the region the fastest broadband connection worldwide and is also likely to increase firms' productivity. (Leke & Signé, 2019). Other growth opportunities are the fast urbanization (Leke et al., 2018). McKinsey examined the revenue growth of existing firms within the region and the results show that these firms are growing faster compared to their equals in other parts of the world (Leke et al., 2018). Studies show that the growing labour force and the growing productivity was the root of the annual real GDP growth of 5.4 (Leke & Signé, 2019). Research of McKinsey shows that besides the above-named digital adaptation and fast urbanization, the agriculture production is also an increasing potential for business (Chironga, Desvaux & Leke,

2018). The well-known abundant natural resources will contribute to the economic growth; however, this is seen as a low-growth business opportunity (Chironga et al., 2018). Other opportunities are seen as fast growth opportunities. These opportunities taken together, results in a more diversified African economy in the coming years (Chironga et al., 2018). As stated before, the region already was significantly improving their business environment but the Covid- crisis pushed the region towards even more structural and economic changes which is an attractive outlook for firms (Khan, 2022).

2.2 ENTREPRENEURIAL BEHAVIOUR

Entrepreneurial behaviour (EB) refers to a person's ability to explore and exploit new business opportunities with the aim of profit and growth (Palm, Lopes & Cunha, 2009). According to Igi Global dictionary (n.d.), EB is the capacity of individuals to discover opportunities and turn them into profitable business, where risk-taking behaviour is required. McAdam and Cunningham (2019) cite EB as: "Entrepreneurial behaviour is a subset of entrepreneurial activities concerned with understanding, predicting, and influencing individual behaviour in entrepreneurial settings. Accordingly, entrepreneurial behaviour is directly concerned with the understanding, prediction, and control of human behaviour in enterprises." (p.1, 2019).

To define entrepreneurial individuals, researchers relied on the exploitation of specific personality traits. This is referred to as the personality stream; researchers distinguish entrepreneurs from non-entrepreneurs based on specific traits and demographics (Gartner, 1989). The personality approach in research begins with McClelland's theory on 'need for achievement' (McClelland, 1961). According to him, individuals with a certain EB have a high need for achievement. In continuation, researchers used the prominent psychological Big-5 model, which describes an individual's personality in a taxonomy of five dimensions of personality traits, to define an entrepreneur. However, this was challenging and the model received a lot of criticism since the framework consists of macro-personality traits which could not accurately describe situation-specific behaviours of entrepreneurial individuals (Kerr, Kerr & Xu, 2018). Some researchers even state that there are no specific personality traits for an entrepreneur at all (Carsrud & Brännback, 2009; Kerr et al., 2018). Nevertheless, research continued and a broad range of entrepreneurial traits were determined (Palma et al., 2009). The most commonly described entrepreneurial traits are: risk-taking; self-efficacy; innovativeness; locus of control and need for achievement (Begley & Boyd, 1987; Littunen, 2000; Chen & Lai, 2010; Westhead, McElwee, Wright, 2011; Zhang & Bruning, 2011; Kerr et al., 2018).

Subsequently, due to the limitations of the personality approach, the behavioural approach emerged. This approach tends to focus on the behaviours of entrepreneurs with the help of intention-based models which describe the decision-making process of behaving entrepreneurial (Kerr et al., 2018). The Entrepreneurial Event Model of Shapero (1982), the Theory of Planned Behaviour of Ajzen (1991) and Maximization of the Expected Utility of Douglas and Shepherd (2000) are intention-based models and belong to the behavioural stream in the literature. Probably, the most well-known intention-based model is the theory of planned behaviour (TPB). The theory originates from the social psychology research and is widely used among prior researchers as it defines the relationship between intentions and behaviour (Krueger & Carsrud, 1993; Souitaris, Zerbinati & Al-Laham, 2007). The model exists of three components which influence one's intentions: personal attitudes; subjective norms and perceived behavioural control (Ajzen, 1991). Personal attitudes is one's perception of the desirability to perform the behaviour (Riverola & Giones, 2012; Badoiu, Escrig-Tena & Segarra-Cipré 2020). Subjective norms is the perception of the individual's social environment about performing the behaviour, and perceived behavioural control is the perception on the difficulty to perform such behaviour (Riverola & Giones, 2012; Badoiu, et al., 2020). These three components are influenced by one's personality traits and exogenous factors such as demographics, cultural support and financial support (Ajzen & Fishbein, 1980; Ajzen, 1991; Shapero & Sokol, 1982; Krueger, Reilly & Carsrud, 2000). The behavioural approach better represents the advantages of EB

to both individuals as organizations compared to the trait approach (Palma et al., 2009). Contrary to personality traits, behaviours are by definition observable, thus, by approaching EB as a behaviour it can be measured and managed (Palma et al., 2009).

In the late 1980s, the value of entrepreneurial actions within firms was recognized. Its contribution to the performance of the firm caused firms to reorganize and evaluate the use of their human resources (Kuratko, Ireland and Hornsby, 2001). Since the 21st century, entrepreneurial actions are seen as the success factor for competitive advantages and a growing firm performance (Kuratko et al., 2001). Much research has been done to indicate the effect of EB on firm performance and it resulted in two principal streams in the literature: firm level EB and individual level EB. On firm-level, the focus is on the organization as a whole. An entrepreneurial firm is defined as one who engages in innovations, undertakes risky ventures and is the first to produce proactive innovations (Blanka, 2019). Firm level EB can be defined as corporate entrepreneurship, entrepreneurial orientation and intrapreneurship (Neessen, Caniëls, Vos and de Jong, 2018; Blanka, 2019). The most common conceptualization of firm level EB consists of three dimensions: innovativeness, risk-taking and proactiveness (Neessen et al., 2018). Most of the empirical research on the effect of firm level EB on firm performance indicates a statistically significant positive effect (Elumah, Shobayo, & Akinleye, 2018; Kallmuenzer & Peters, 2017; Covin, Green, & Slevin, 2006; Lyon, Lumpkin, & Dess, 2000; Galbreath, Lucianetti, Thomas, & Tisch, 2020). These studies used sales growth, return on sales, gross profit and net profit as the indicator for firm performance. The sample of firms consisted of manufacturing companies, family firms and domestic firms. Rauch, Wiklund, Lumpkin, & Frese (2009) indicate in their meta analysis that 49 of 51 studies on the effect of firm level EB on firm performance show a significant positive effect.

The other stream in literature focusses on individual level EB, which is still under-studied in the literature (Hernandez, 2019). Individual level EB within firms is seen as a bottom-up approach where employees act entrepreneurially and consequently affect firm performance (Hernandez, 2019). When firms support entrepreneurial employees, employees can contribute to the organization by creating new products, processes and self-renewal which can increase the firm's competitiveness and performance (Grant & Ashford, 2008; Wakkee et al., 2008; Moriano et al., 2009; Hernandez, 2019). Entrepreneurial employees are therefore seen as the foundation for innovation (Blanka, 2019). Some researchers define individual level EB as intrapreneurship, corporate entrepreneurial behaviour or employee entrepreneurial behaviour (Wakkee et al., 2008; Hernandez, 2019; Neessen et al., 2018; Badoiu et al., 2020; Akinbinu, 2021). Unlike the great amount of studies on firm level EB and firm performance, there are only a few empirical studies on individual EB and firm performance (Neessen et al., 2018; Blanka, 2019). One study by Oyong (2019) examines EB on an individual level through the use of different indicators such as confidence, task and results orientation and risk taking. In terms of organizational performance, she distinguishes marketing performance and financial performance. Data is collected among 40 different entrepreneurs in the region of Lumajang Regency and she finds a significant positive effect of individual EB on organizational performance on aggregated firm level.

In this vein, Eyana (2017) examines the effect of firm owners' EB and on firm performance. He approaches EB through discovery and creation behaviour indicators and finds that creative entrepreneurs positively affect firm performance. Firm performance is defined as: sales; employment; profit and assets. His

data is collected among respondents who own and manage four operating firms in Ethiopia. Another researcher who devoted his research to developing countries and firm owners' EB is Atsu (2021). He examines EB amongst Kenyan farmers and the effect on firm performance and competitiveness. He analyses the degree of EB of smallholder potato farmers and uses proactiveness, risk-taking and innovativeness as indicators for EB, which are also indicators for firm level EB. He finds that farmers who exhibit a medium level of EB are constrained to increase their competitiveness and firm performance. This result gives notice that there is a difference in the level of EB which one can exhibit and that it can differ in effect on firm performance.

Aside from the direct effect of EB on firm performance, there are also researchers who state that EB can have an indirect effect on firm performance. According to them, the initiatives of entrepreneurial employees can impact the performance of teams and in turn affect firm performance which would be the indirect effect of EB on firm performance (Tribbitt, 2017; Neessen et al., 2018).

In conclusion, the concept of EB can be explained through the personality approach or behavioural approach. The personality approach defines entrepreneurs based on specific personality traits and the behavioural approach defines entrepreneurs based on the decision-making process to perform such behaviour. The effect of EB on firm performance can occur on firm level and on individual level. On both levels, a significant positive effect is found in large part of previous studies.

2.3 CORPORATE CULTURE

To define corporate culture, it is preferable to first define and explain culture. Margaret Mead, the famous anthropologist was the first who defined culture differently than an association with civilization. In 1928, she defined it as the whole complex of traditional behaviour developed by humans and learned by each generation (Brumann, 1999). Many other researchers built on her definition and in 1980, Hofstede describes culture as “the collective programming of the mind which distinguishes the members of one group from another” (pp. 21-23). Furthermore, Hofstede was the first who quantified culture among different countries into several cultural dimensions. Other researchers followed him, for instance, Trompenaars (1993) and Schwartz (1994) who both conducted a seven-dimensional model of culture. Despite the development of several cultural models, the cultural dimensions of Hofstede are prominent in the literature on culture (Mockaitis, 2002; Beugelsdijk & Welzel, 2018; Zhou & Kwon, 2020). His model started with four dimensions: power distance; individualism vs. collectivism; masculinity vs. femininity and uncertainty avoidance (Hofstede, 1980). Later, two dimensions were added based on the World Values Survey: long term orientation vs. short term and indulgence vs. restraint orientation (Beugelsdijk & Welzel, 2018).

The dimensions of Hofstede are not only prominent in the cultural literature, but also in international literature. Researchers use Hofstede’s dimensions to examine the relationship between national culture and corporate culture. For instance, Soeters and Scheuder (1998) who examine subsidiaries of a US multinational in the Netherlands and the relationship of the US culture and corporate culture. They find that the national US culture influences the corporate culture of the mother firm as well as the corporate culture of the subsidiaries in the Netherlands. Van Oudenhoven (2001) also devotes his research on this relationship, and he uses Hofstede’s dimensions to measure corporate culture. He finds a reflection of national culture in corporate culture. Menzel et al. (2006) find equivalent results. These findings imply that when multinationals are moving to other countries, they “bring” their national culture with them reflected in their corporate culture.

Besides the assumption that multinationals reflect their home- country culture, it is also well-known that corporate culture is one of the determinants of a firm success (Paunovic & Dima, 2014). Paunovic and Dima state that corporate culture also influences the behaviour of employees and that firms with a culture that encourage changes and flexibility are assumed to be more successful. To foster EB within firms it is therefore important to examine the organizational context of the firm (Hornsby, Kuratko, & Zahra, 2002; Kuratko, Hornsby, & Covin, 2014). To foster this behaviour, corporate culture is the first step. (Müge, 2014; Mustafa et al., 2018). Surprisingly, despite the importance of corporate culture when fostering EB, little to no studies include corporate culture into the analysis on the effect of EB on firm performance. However, Nafula’s study is in line with this hypothesis. Nafula (2018) examines the effect of EB on the service quality of governments and she takes work culture as a moderating variable. Her results indicate that work culture has a statistically significant moderating influence on the relationship between EB and perceived service quality in governments. Her research is conducted in Kenya. The direct effect of corporate culture on EB is examined by Müge (2014). She uses Hofstede’s dimensions to measure corporate culture and finds a significant effect for two dimensions on corporate entrepreneurship. Furthermore, other research is focused on innovative behaviour rather than EB. For instance, Szczepanska- Woszczyna (2015) claims that corporate cu

lture plays a role in the innovation proces of firms since it can support or render creativity and innovative behaviour.

To conclude, culture can be quantified by several dimensional models of which Hofstede's dimensions are the most well-known among researchers. From research, it assumes that corporate culture reflects national culture of the home-country of the firm. To enhance EB within firms, firms should have a supportive corporate culture.

3. THEORETICAL FRAMEWORK

3.1 ENTREPRENEURIAL BEHAVIOUR AND MULTINATIONAL PERFORMANCE

To enable firm growth in terms of an increased financial performance, firms can embrace employees who exhibit entrepreneurial behaviour (EB). This can be achieved by coaching and training existing employees in acting more entrepreneurially, however, this is a long and difficult process to fulfil (Wakkee, et al., 2008). It is therefore suggested by this thesis to hire entrepreneurial employees. More specifically, it is suggested for multinationals to establish foreign subsidiaries in sub-Saharan Africa where a large part of the population exhibits EB. Hiring from the local labour force would help firms to embrace such employees and it may increase their firm performance. As the focus is on entrepreneurial employees, this thesis is in line with previous studies who examine individual level EB. Studies on firm level EB are, thus, not in line with this thesis since the aim is not to examine the effect of an entrepreneurial firm on its performance. In addition, there is no mediator role of corporate entrepreneurship in the relationship of individual EB and firm performance. This thesis tries to analyse the direct effect of entrepreneurial individuals on firm performance.

By hiring from the local labour force, the entrepreneurial employees would have certain personality traits that contribute to innovative behaviour, e.g., entrepreneurial behaviour (Blanka, 2019). It also influences the likelihood that individuals will exploit new venture opportunities (Shane, Locke, & Collins, 2003) and are the factor to entrepreneurial success (Carland, Hoy, & Carland, 1988; Blanchflower & Oswald, 1998; Burns, 2013). However, explaining the effect on firm performance just by these traits would be incorrect due to the static characteristic of a trait (Krueger & Carsrud, 1993; Blanka, 2019). Although some researchers claim that personality traits can also directly impact firm performance (Barazandeh, Parvizian, Alizadeh, Khosrabi, & Saber, 2015; Koryak et al, 2015; Theriou & Aggelidis, 2014), there are many mediating and moderating effects (Rauch, 2014). To completely understand the concept of individual level EB it is necessary to approach it through both the trait and behavioural approach (Carland et al., 1988). The behavioural approach would also give a more dynamic perspective of the concept (Blanka, 2019).

The theory of planned behaviour (TPB) is an intention-based model which describes the decision-making process to behave entrepreneurially. The best link for a specific behaviour is one's intention, in this case entrepreneurial intention (EI) (Sheeran, 2002; Armitage & Conner, 2010; Kautonen, van Gelderen & Tornikoski, 2013). Since the aim of this study is to identify the effect of EB of individuals on firm performance, this theory is valuable in assisting to predict this effect as it explains the link between intentions and behaviour and the antecedents of this behaviour. In addition, this theory is chosen since this thesis proposes to multinationals to hire from the local labour force in SSA. This means that those individuals are not already acting entrepreneurial but intent to. The three common used indicators for EB (innovativeness, proactiveness and risk taking) are mostly used to measure it among firm owners and thus acting entrepreneurs or to measure firm level EB (Covin and Slevin, 1989; Atsu, 2021). Researchers confirm that the TPB is also applicable in entrepreneurial context (Krueger and Carsrud, 1993; Kautonen et al., 2013; Martínez-González, Álvarez-Albelo & Mendoza-Jiménez, 2022) and is one of the most commonly applied theories in the literature on EB and firm performance (Blanka, 2019).

As previously discussed, individuals who exhibit EB have specific personality traits. Following the TPB, these traits influence one's attitudes, subjective norms and perceived behavioural control towards one's intention to act upon a specific behaviour. Specific to EB, these personality traits include amongst others: innovativeness; need for achievement; self-efficacy; locus of control; risk-taking and proactiveness (Schumpeter, 1935; McClelland, 1961; Begley & Boyd, 1987; Littunen, 2000; Chen & Lai, 2010; Westhead et al., 2011; Zhang & Bruning, 2011; Burns, 2013; Kerr et al., 2018; Sastre, del Mar Benavides-Espinosa, & Ribeiro-Soriano, 2021). Thus, individuals who exhibit EB had first the intent towards the behaviour. This intent is influenced by the three antecedents and these are influenced among others by specific personality traits. The effect of EB on firm performance can be explained by these specific personality traits. The most common personality traits of an entrepreneurial individual and their contribution to firm performance are explained below.

Innovativeness refers to an individual's willingness to search for new ways of action (Patchen, 1965). It is therefore more than invention; it also involves the commercialization of ideas, implementation, and the modification of existing products, systems and resources (Bird, 1989, p.39). Innovation is one of the core concepts of entrepreneurship (Schumpeter, 1935) and being innovative as an entrepreneurial employee implies the adopting and implementation of competitive strategies (Bird, 1989). De Jong and den Hartog (2010) summarize innovative behaviour at work as: problem recognition; idea generation; idea promotion and idea realization. Employees who are innovative are willing to extend their contribution to the firm beyond their job requirements (Parker, Williams & Turner, 2006). When firms accept the idea generation and implementation of the employees, it becomes a source of competitive advantages (Anderson, de Dreu, & Nijstad, 2004). Innovativeness affects a firm's success and long term survival (Rosenbusch & Bausch, 2005; Kerr et al., 2018; Nafula, 2018).

The trait 'need for achievement' is related to "a strong desire to accomplish goals and attain a high standard of performance and personal fulfillment" (Dictionary Need for Achievement, n.d.). Individuals with such a trait will strive for responsibility and the understanding of existing systems (McClelland, 1961). Entrepreneurial employees have a high need for achievement which is instrumental to setting challenging goals and motivation to accomplish these goals. This should in turn affect firm performance (Rauch & Frese, 2007; Rauch, 2014; Kerr et al., 2018). It will also help entrepreneurial employees to overcome business challenges which they may face in the business environment (Emerging Risks Global, 2021).

Self-efficacy of an individual is defined as the belief in one's own capacity to perform such behaviours that achieve specific performance (Bandura, 1977). Self-efficacy is related to taking initiative, actively looking for information which leads to better knowledge and a long-term perspective which would therefore contribute to firm performance (Bandura, 1982; Baum & Locke, 2004; Rauch, 2014; Kerr et al., 2018; Edwin et al., 2021).

Individuals who exhibit locus of control believe they can control outcomes and would therefore put more effort and persistence towards achieving those outcomes. This is an important element in firm's success (Rotter, 1966; Rauch & Frese, 2007; Edwin et al., 2021).

Entrepreneurial individuals have a lower perception of risks in different situations which means that they can effectively make decisions such as venturing in unknown markets which can contribute to the success of a firm (Baron, 2004; Nafula, 2018). Risk taking is seen as fundamental element of EB since innovation and

strategic renewal requires time, effort and resources to be invested before the results is known (Nafula, 2018). Although there are some mixed results on the risk propensity of entrepreneurs, it has been assumed that entrepreneurial individuals are greater risk takers than non-entrepreneurs (Shaver & Scott, 1991).

The last specific personality trait of an entrepreneur is proactiveness. This refers to opportunity-seeking and looking forward (Lumpkin & Dess, 2001). Employees who are proactive strive to improve the internal organizational environment, for instance by improving work efficiencies (Parker & Collins, 2010). They also aim to improve the fit between the firm and its environment by scanning opportunities and threats (Parker & Collins, 2010). Those employees also like to take charge on strategy changes and make elaborated long term planning (Frese, 2009; Parker & Collins, 2010).

To conclude, when foreign subsidiaries were to hire employees with a certain entrepreneurial intention, it is likely that these intentions came into existence based on specific personality traits and as well as attitudes, subjective norms and perceived behavioural control. Consequently, entrepreneurial intentions are a valid predictor of EB which results from among others peronsonality traits that might increase multinational performance.

Hypothesis 1: Entrepreneurial behaviour has a significant positive effect on multinational performance

3.2 THE MODERATING ROLE OF CORPORATE CULTURE

Entrepreneurial behaviour (EB) amongst employees is not a stable feature of the employee but depends on situational components (Badoiu et al., 2020). There should be an appropriate physical environment to stimulate various aspects of an employee's cooperation, for instance a reduction of hierarchy and bureaucracy enables knowledge sharing and joint generation (Menzel, Aaltio, & Ulijn, 2007). In addition, research has shown that realizing EB within firms requires management support and in particular an entrepreneurial- friendly environment (Kirby, 2006). When this is not appropriate, for example when there is resistance against change, entrepreneurial employees may get irritated and impatient (Henry & Stevens, 1999). They can become inactive during the implementation process which can lead to conflicts, and this can have negative consequences for the employee's chances to behave entrepreneurially (Henry & Stevens, 1999). Thus, to gain the most benefits from the entrepreneurial employees in SSA, the subsidiary of the multinational should exhibit an appropriate corporate culture. Hypothesis 2 is therefore proposed. The Hofstede's dimensions will be used to explain the possible moderating effect of corporate culture since the literature shows that multinationals reflect their home country culture in the corporate culture of their subsidiaries. It seems therefore appropriate to use national cultural dimensions for corporate culture, which is also done by other researchers (Soeters & Scheuder, 1998; Van Oudenhoven, 2001; Menzel et al., 2006).

Hypothesis 2. Corporate culture has a significant moderating effect on EB and multinational performance

From the personality approach in research on EB, it seems that individuals who exhibit EB are highly individualistic (Morris, Davis, & Allen, 1994). Firms where production processes, inventory management and matrix structure are interdependent are not appropriate for entrepreneurial employees since they have a strong individualistic orientation (Reich 1987; Stewart 1989; Sundbo 1991). Such firms presumably do not provide an appropriate corporate culture as it might limit flexibility for new ideas. Entrepreneurial employees also prefer to work independently rather than in a group or team. They rather have individual breakthroughs than incremental breakthroughs which would be the case with a collectivistically orientated culture (Reich 1987; Stewart 1989; Sundbo 1991). Even though an individualistic culture has the appropriate characteristics to stimulate employees to be creative, take initiative and being responsible, a too high individualistic orientation may halt innovative ideas (Menzel et al., 2006). If there is a very high individualistic culture, employees may also strongly focus on their own goals and keep their ideas for themselves since a competitive sphere is created (Menzel et al., 2006). Even though some studies suggest that there should be a combination of individualistic behaviour and collectivistic behaviour within firms (Morris, Avila & Allen, 1993; Ulijn & Weggeman, 2001), based on empirical research on the direct effect of individualism on EB (Müge, 2014) it is expected that collectivism is a less appropriate corporate culture to foster EB. In other words:

Hypothesis 2a. Collectivism negatively moderates the effect of EB on multinational performance

To act entrepreneurially within firms, a culture of open communication, shared ideas, and mutual trust is required, and the allocation of power therefore plays a significant role (Menzel et al., 2006). In other words, firms need to foster openness to interactions and communications to develop ideas (Menzel et al., 2006). The decision-making structure should be decentralized, and authority must be equally distributed to encourage and support innovative behaviour (Menzel et al., 2006; Neessen et al, 2018). Additionally, in a high power distance

culture, there is low acceptance of initiative and less acceptance of failure (Zhao, Li, & Rauch, 2012; Menzel et al., 2006). To foster EB within firms it is essential to accept failure since not every innovative idea becomes a success (Menzel et al., 2006). Employees should not have to fear to lose their jobs when an idea failed. Empirical research on power distance and entrepreneurship is scarce and results are mixed (Arrak, Kaasa, Varblane, 2012). Nevertheless, the expectation is that lower power distance is an appropriate culture for EB followings Hofstede's (1980) and Müge's (2014) findings.

Hypothesis 2b. High power distance negatively moderates the effect of EB on multinational performance

Low uncertainty avoidance refers to the willingness to take risks; in a low uncertainty avoidance culture, there is flexibility and taking risks is accepted (Hofstede, 1980; Menzel et al., 2006). In a high uncertainty avoidance culture, there are more rules and regulations to follow (Arrak et al., 2012). EB is about seeking new opportunities and finding new ways, which is a risk-intensive process (Menzel et al., 2006). This implies that to act entrepreneurially and seek for new opportunities within firms, there should be tolerance to take risks and openness to change within the firm. Therefore, hypothesis 2c is developed:

Hypothesis 2c. High uncertainty avoidance negatively moderates the effect of EB on multinational performance.

The fourth dimension of corporate culture is masculinity vs. femininity. In a masculine culture, people live to work, are goal oriented, have ambitions, and they need to be excellent (Menzel et al., 2006). The majority of studies show that the ideal entrepreneurial culture should be predominantly masculine since this type of culture supports individuals to be independent and ambitious (Çelikkol, Kitapıcı, & Döven, 2019). In a masculine culture there is purposefulness and this is critical to successful idea development (Nakata & Sivakumar, 1996). Nevertheless, some empirical research shows that a feminine culture fosters creativity, idea development and opportunity recognition (Thwaites, 1992). Thwaites (1992) finds that superior performance comes from team spirit, trust and low conflicts which would be more present in a feminine culture. A feminine culture would also be optimal for the initiation part of the idea development process since it would indicate on a supportive environment (Nakata & Sivakumar, 1996). However, the idea process also exists of pursuing towards implementation of the new idea and this would be more characterized as a masculine culture (Nakata & Sivakumar, 1996; Menzel et al., 2006). Following the personality traits of entrepreneurial individuals, a masculine culture would be a more appropriate culture since it is goal, results, and task orientated (Menzel et al., 2006). In addition, Hofstede (1980) also finds that high masculinity encourages EB. Hypothesis 2d is developed:

Hypothesis 2d. Femininity negatively moderates the effect of EB on multinational performance.

The fifth dimension of Hofstede's model is long term orientation versus short term orientation. Long-term oriented corporate culture emphasizes future-oriented attitudes including openness to the new which is basically the essence of EB (Menzel et al., 2006; Çelikkol et al., 2019). On the contrary, short term orientated cultures focus on the past and present and are keen on traditions (Hofstede & Bond, 1988). Long term orientated cultures would be a better fit when developing innovative ideas, since most of these take time to develop, being implemented in markets and yield results (Rosenberg, 1998). The development of innovative ideas is an iterative process which can take a very long time with many setbacks (Menzel et al., 2006). An organization with a short-term orientated culture would not accept these long paths towards an idea, which may moderate EB. Hypothesis 2e is therefore proposed:

Hypothesis 2e. Short-term orientation negatively moderates the effect of EB on multinational performance.

The last dimension is indulgence vs. restraint. An indulgent culture allows humans to control their own behaviour and to fulfil their human desires with room for enjoyment (Hofstede, Hofstede, & Minkov, 2010). Contrary to indulgence, restraint creates a high degree of inappropriateness to fulfill human desires and limits personal control (Hofstede et al. 2010). As previously described, individuals who exhibit EB tend to have a high locus of control which means that they are likely to prefer an indulgent culture (Swierczek & Quang, 2004; Amiri & Marimaei, 2012) . Literature also shows that individualism is related to the idea of happiness and happiness is associated with locus of control (Minkov, 2009). It is therefore assumed that a corporate culture with restraining dimensions, has a negatively moderating effect on EB and firm performance:

Hypothesis 2f. Restraint negatively moderates the effect of EB on multinational performance.

In conclusion, to act entrepreneurially as an employee within a firm and to reap the benefits of EB an appropriate corporate culture in terms of individualism, low power distance, low uncertainty avoidance, masculinity, long-term orientation and indulgence is required.

4. METHODOLOGY

4.1 DATA COLLECTION

The data used in this thesis comes from various sources and are cross-sectional data. The model estimation is mainly based on country-level data covering the year 2010. The first source for data is Global Entrepreneurship Monitor (GEM). The GEM data is collected via the Adult Population Survey (APS) which is a tool to measure the level and nature of entrepreneurship around the world (GEM consortium, Adult Population Survey, n.d.). It consists of several variables such as attitudes, perceptions, and intentions towards entrepreneurship. The process of data collection is executed by the usage of landline telephone networks as 85% of all household possess landline telephone (GEM Consortium, Data collection, n.d.). For countries where this approach is less appropriate, face-to-face interview techniques and mobile phones are used (GEM Consortium, Data collection, n.d.). The data chosen for this thesis is from 2010. As GEM consortium states on their website, the data is reliable as it is conducted by an independent survey vendor and reviewed by the GEM data team. This has been confirmed by Martínez- González et al. (2022) and Herrington and Conduras (2019). The meta-analysis of Blanka (2019) recognizes that most research on EB is based on data of GEM (Calza, Cannavale, & Zohoorian Nadali, 2020; Dézsi-Benyovszki, Szabó & Tünde, 2017; Ali & Jabeen, 2020). The data of GEM can be used for this research as it defines entrepreneurship in a broad perspective. The data does not only exist of newly started businesses or officially registered self-employed individuals, but it also sheds light on the behavioural perspective of entrepreneurship, for instance entrepreneurial intentions (GEM Consortium, Entrepreneurship, n.d.). Since the theory shows that intentions are the best predictor for behaviour, the GEM data is very valuable of use.

The second data source used, is Hofstede's cultural dimensions dataset. As mentioned before, Hofstede measures culture in a quantitative way. He defines national culture into six dimensions; thus, the dataset consists of six variables on country-level. Hofstede's data is collected by a Value Survey Module among IBM employees between 1967 and 1973 (Hofstede, 1980). More than 100,000 employees and managers in sixty-four subsidiaries of the IBM corporation were asked for the survey (Hofstede, 1980). In addition to this IBM data, subsequent studies were executed with results including respondents who are airline pilots, students, managers and consumers (Hofstede, National Culture, n.d.). As the literature indicates, corporate culture reflects national culture, which makes Hofstede's data suitable for this thesis (Menzel, 2006; Burns, 2013; Müge, 2014). The questionnaire can be found in appendix A (Hofstede, 2013). The survey consist four question per dimensions, which comes at a total of 24 questions. Each question is scored on five-point scales: 1= of utmost importance; 2= very important; 3= of moderate importance; 4= of little importance and 5= of very little or no importance (Hofstede & Minkov, 2013).

Lastly, data on multinational performance is needed for the explained variable. Data from United Nations Industrial Development Organization (UNIDO) has been chosen since it is the most appropriate dataset with the most current available data (2010) on susidiaries. With the Africa Investor Survey data has been collected from randomly selected investors in sub-Saharan Africa¹ (personal communications, May, 26th 2022).

¹ The dataset and questionnaires of UNIDO is not freely accessible, but also not exclusive. A confidentiality agreement must be signed with UNIDO.

The survey is being conducted by enumerators employed by UNIDO at subsidiary-level in twenty-two SSA countries. The purpose of this survey is to gather information directly from firm owners and managers about the performance of their firm and the assessment of their business environment (personal communications, May, 26th 2022). The data consists of several variables to identify constraints in the business environment of the specific countries and to analyse performance of the foreign firms in those countries. The latter makes this dataset useful for this thesis as it requires performance indicators.

4.2 SAMPLE

The sample population for this thesis is chosen based on several requirements. First, the subsidiary-level dataset of UNIDO consisted of 6,497 observations of which 2,311 are foreign owned. The stand-alone investments and part of family or group firms were excluded from the dataset which left only subsidiaries in the dataset. The dataset counts 838 subsidiaries and of these 821 are foreign owned.

The GEM dataset from 2010 contains four countries in sub-Saharan Africa. These countries are Angola; Ghana; Uganda and Zambia. The combine this data with the data of UNIDO, some countries from the UNIDO dataset have been removed and only the corresponding countries are included in the sample. These are: Ghana; Uganda and Zambia.

The dataset of Hofstede's cultural dimensions is included as well. The cultural dimensions must apply on the home country of the foreign subsidiaries since this is the culture which the subsidiary "brings" to the host country. Therefore, the choice is based on the available data on origin countries of the subsidiaries. After removing non-matching countries, 133 subsidiaries remained. The countries removed from the dataset can be found in table 4.1 and the countries left in the dataset can be found in table 4.2. Descriptive of the sample can be found in table 4.3.

Table 4.1.

Origin countries of foreign owned subsidiaries removed from dataset

Location of parent company's headquarters	Freq.	Percent	Cum.
BAHAMAS	1	1,85	1,85
BAHRAIN	1	1,85	3,70
BOTSWANA	1	1,85	5,56
BRITISH VIRGIN ISLANDS	1	1,85	7,41
CHINA (HONGKONG, SAR)	1	1,85	9,26
COTE D'IVORE	1	1,85	11,11
EUROPE	1	1,85	12,96
KENYA	32	59,26	72,22
LEBANON	1	1,85	74,07
LIBYAN	3	5,56	79,63
LIECHTENSTEIN	1	1,85	81,48
MALAWI	1	1,85	83,33
MAURITIUS	4	7,41	90,74
SUDAN	1	1,85	92,59
UNITED ARAB EMIRATES	4	7,41	100,00
Total	54	100.00	

Table 4.2.*Origin countries of foreign owned subsidiaries in Ghana, Uganda, and Zambia*

Location of parent company's headquarters	Freq.	Percent	Cum.
AUSTRALIA	1	0.75	0.75
BELGIUM	1	0.75	1.50
CANADA	3	2.26	3.76
CHINA	7	5.26	9.02
CZECH REPUBLIC	1	0.75	9.77
DENMARK	1	0.75	10.53
EGYPT	2	1.50	12.03
FRANCE	8	6.02	18.05
GERMANY	4	3.01	21.05
INDIA	12	9.02	30.08
INDONESIA	2	1.50	31.58
JAPAN	2	1.50	33.08
LUXEMBOURG	1	0.75	33.83
MALAYSIA	1	0.75	34.59
MALI	1	0.75	35.34
NETHERLANDS	6	4.51	39.85
NIGERIA	3	2.26	42.11
NORWAY	2	1.50	43.61
SINGAPORE	1	0.75	44.36
SOUTH AFRICA	26	19.55	63.91
SWEDEN	2	1.50	65.41
SWITZERLAND	7	5.26	70.68
UGANDA	1	0.75	71.43
UNITED KINGDOM	24	18.05	89.47
UNITED REPUBLIC OF TANZANIA	3	2.26	91.73
UNITED STATES OF AMERICA	9	6.77	98.50
ZIMBABWE	2	1.50	100.00
Total	133	100.00	

Table 4.3.*Descriptive Statistics sample*

Variable	Obs	Mean	Std. Dev.	Min	Max
Foreignsubsidiaries	133	29.211	11.302	1	43

Note. The sample consists of 43 different origin countries

4.3 VARIABLES

4.3.1 EXPLAINED VARIABLE

The literature shows that return on assets (ROA) and return on equity (ROE) are widely used measures for multinational performance (Mehran , 1995; Ang, Cole & Lin, 2007; Nguyen, Nguyen, Nguyen, & Do, 2021). However, due to the lack of data on foreign subsidiaries in sub-Saharan Africa and these measures, the explained variable in this thesis is value of annual sales (LNvalSales). The data is provided by UNIDO. Even though, ROA and ROE were preferable, since it indicates the competitiveness of the firm and how much the investment gave in return (Zinn, 2021), sales indicators are the most common financial performance indicators for subsidiaries according to the literature review of Ramsey & Bahia (2013).

4.3.2 EXPLANATORY VARIABLE

For entrepreneurial behaviour, this thesis uses entrepreneurial intentions as a proxy. As the literature shows, entrepreneurial intentions are the best predictor of EB (Ajzen, 1991). The entrepreneurial intentions rate of GEM data is defined as a percentage of 18-64 population who are latent entrepreneurs and who intend to start a business within three years (GEM Consortium, Entrepreneurial Behaviour and Attitudes, n.d.). The variable 'FUTSUP' of the GEM dataset indicates individuals' entrepreneurial intentions but it also includes individuals who are currently starting a business (GEM Consortium, Entrepreneurial attitudes, perceptions, intentions, n.d.). To have a so called cleaner proxy for EI, nascent entrepreneurship should be excluded from the analysis. Therefore, this is excluded from the customized dataset and variable 'entrepreneurialintentions' was left (GEM Consortium, Data, 2010). Question asked, "are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years."

4.3.3 MODERATING VARIABLES

The moderated variable in this thesis is corporate culture. As the literature shows, national culture reflects corporate culture, therefore the cultural dimensions of Hofstede have been used as a proxy for corporate culture. Many other researchers also used Hofstede's national culture dimensions as a proxy for corporate culture (Morris et al., 1994; Hayton, George & Zahra, 2002; Zahra, Hayton & Salvato, 2004; Müge, 2014). The dataset of Hofstede contains six variables: pdi; idv; mas; uai; ltwvs and ivr. These variables are defined in: power distance; individualism versus collectivism; masculinity versus femininity; uncertainty avoidance; long term vs. short term and indulgence vs. restraint. Each variable has an index value in the range of 0 to 100. The scores on each dimension are explained in figure 4.1 (de Bruin, 2017).

Figure 4.1.

Hofstede's cultural dimensions index scores



The index is calculated by subtracting mean values from each corresponding survey question (Hofstede & Minkov, 2013).

4.3.4 CONTROL VARIABLES

Following previous research, several variables that are known to affect firm performance are controlled in the empirical model. Firm size is the most well-known variable which impacts firm performance, since larger firms tend to perform better than smaller firms (Zahra et al., 2000). For firm size, the number of full-time employees is taken (LNfirmsize). Besides firm size, firm age may also affect firm performance as it is a proxy for experience (Zahra et al., 2000). The variable 'origForeignInvestYear' is used as a control variable since it indicates the year of investment of the subsidiary. To use this variable as a controller for age, 'origForeignInvestyear' has been transformed into 'LNage'². All data for the control variables are taken from the UNIDO dataset.

² Age = 2010 – origforeigninvestmentyear

4.4 DATA ANALYSIS

4.4.1 DESCRIPTIVE STATISTICS

The data analysis has been done with software program Stata 16.1. The missing values have not been excluded from the sample since Stata deals with these missing values in an appropriate way, however, outliers of the residuals are removed within a range of minus three and plus three. This caused the decrease of 133 observations to 72 observations. The descriptive statistics of the variables can be found in table 4.4.

Table 4.4.

Descriptive Statistics variables

Variable	Obs	Mean	Std. Dev.	Min	Max
LNvalSales	72	15.227	1.953	11.041	19.973
entrepreneurialint~s	74	73.009	4.493	67.07	77.09
pdi	74	50.041	20.035	18	100
idv	74	68.365	22.741	14	91
mas	74	53.757	18.985	5	95
uai	74	46.203	17.152	8	94
ltowvs	74	55.689	16.229	26	88
ivr	74	54.514	18.029	24	78
LNFTTtotal	74	4.325	1.209	1.386	6.733
LNage	73	2.684	.871	.693	4.419

4.4.2 EMPIRICAL STRATEGY AND TESTS

The empirical strategy consists of an ordinary least square regression and a T-test.

To answer the research question, an ordinary least square (OLS) regression has been used since it can estimate coefficients of a linear regression and it describes the relationship between explanatory variable and the explained variable (Wooldridge, 2014). The OLS regression analysis will therefore indicate whether EB is potentially interesting for foreign direct investments in sub-Saharan Africa as it shows the effect on annual sales of foreign subsidiaries. To perform a regression analysis with OLS, six classical linear model assumptions must be met to have unbiased and consistent estimators (Wooldridge, 2014). Before assessing these assumptions, the outliers in the variables and residuals are analysed with scatter plots and histograms (appendix B and C). Some outliers in the variables are indicated, but not removed as inequality will be reduced which led to a less representative sample for the population (no population is perfect) (Ferguson, 2018). The variables with many outliers are, however, transformed into log variable. Even though some moderating variables showed outliers, these are not transformed into log variables since the distribution of these variables are natural for these kinds of data. The outliers in the residuals are removed outside the range of minus three and plus three since these would influence the outcome of the data analysis (Koether, 2012).

After removing these outliers, the assumptions were reviewed and if needed solved. The first assumption requires linearity in the parameters. Since the model in the current thesis can be written in unknown parameters and an intercept, the assumption has been met. Assumption 2 requires random sampling. The data should be a random sample of n observations (Wooldridge, 2014). This assumption is also met since the

observations in the data are randomly collected. The third assumption requires to have the independent variables not constant and there is no exact linear relationship between the independent variable (Wooldridge, 2014). This assumption can be assessed with VIF factors and a correlation matrix, both to be found in appendix D. The VIF factors are below ten, which is a tolerant number (Regression with Stata Chapter 2 - Regression Diagnostics, n.d.). The last assumption, the zero conditional mean requirement, has been evaluated with a correlation matrix of the residuals (appendix E). There is no correlation found which means that also the last assumption for an OLS regression has been met (Wooldridge, 2014). To conclude, all four assumptions have been met which means that the estimated coefficients in the regression analysis are unbiased.

To continue, the hypotheses must be tested to find an answer on the research questions. A two-sided T-test has been used to test the hypotheses. This test was chosen as it can indicate whether there is a statistically significant mean difference between two groups in the sample (Wooldridge, 2014). It can thus indicate whether there is an effect of entrepreneurial intentions on annual sales and whether there is a moderating effect of corporate culture. To be able to perform a T-test, two more assumptions must be met (Wooldridge, 2014). Assumption 5., Homoskedasticity. This means that the error term should have the same value given any explanatory variables (Wooldridge, 2014). This assumption has been evaluated with the Breusch-Pagan test and it indicates heteroskedasticity³ (see appendix F). To solve the heteroskedasticity problem, robust standard errors are used (Wooldridge, 2014). Lastly, assumption 6 requires normality of the residuals. This has been evaluated with the Shapiro-Wilk W test. The test shows that the residuals are not normally distributed⁴. The Kernel density graph can be found in appendix G which also shows a non-normally distribution. Some of the variables are therefore transformed into log variables.

³ $H_0: \delta_1 = \delta_2 = \delta_3 = \delta_4 = 0$ $H_a: H_0$ not true. If p-value < $\alpha = 0.05$ reject H_0 . P-value = 0.0000, thus reject H_0

⁴ H_0 : normally distributed H_a : not normally distributed. If p-value < $\alpha = 0.05$ reject H_0 . P-value = 0.00000, thus reject H_0

5. RESULTS

5.1 THE MAIN EFFECT OF ENTREPRENEURIAL BEHAVIOUR ON MULTINATIONAL PERFORMANCE

To assess whether the control variables should be included in the analysis, the significance has been tested. Model 1 indicates the effect of the control variables on annual sales. It shows that all control variables are statistically significant⁵. It implies that for this sample, firm size and firm age influence the annual sales of foreign subsidiaries and should therefore be included in the model. Without controlling for these variables, demonstration of the effect of entrepreneurial intentions on firm performance would be difficult (Bhandari, 2022). If firm size increases with 1 per cent, annual sales increase with .68 per cent, *ceteris paribus*. If firm age increases with 1 per cent, annual sales increase with .70 per cent, *ceteris paribus*.

To test hypothesis 1, the impact of the explanatory variable on the explained variable was assessed. Table 5.1 shows the results of the regression analysis of the variables. Model 2 shows the direct effect of entrepreneurial intentions on annual sales, including the control variables. Table 5.1 shows that the explanatory variable is insignificant in this model⁶. This means that entrepreneurial intentions are not a statistically significant determinant for annual sales of foreign subsidiaries. In other words, no support was found for the hypothesis that entrepreneurial behaviour would increase the firm performance of foreign subsidiaries in sub-Saharan Africa. Hypothesis 1 is therefore not accepted. In model 2, the adjusted R-squared is .31 which means that the estimated model explains for 31 per cent the variability in annual sales. The adjusted R-squared has increased from model 1 to model 2 with .01, thus, 1 per cent. The explainability of the variability in the depended variable is thus increased when adding entrepreneurial intentions in the model.

⁵ LN Firm size: $H_0: \beta_1 = 0$ $H_a: \beta_1 \neq 0$. $\alpha = 0.05$. $t = 4.64$. $t_c = 4.303$ $|t| > t_c$ reject H_0 .

LN Age: $H_0: \beta_1 = 0$ $H_a: \beta_1 \neq 0$. $\alpha = 0.05$. $t = 2.89$. $t_c = 4.303$ $|t| > t_c$ reject H_0 .

⁶ $H_0: \beta_1 = 0$ $H_a: \beta_1 \neq 0$. $\alpha = 0.1$. $t = -1.18$. $t_c = 2.353$ $|t| > t_c$ reject H_0 .

5.2 THE MODERATED EFFECT OF CORPORATE CULTURE

To test whether corporate culture has a moderating effect on entrepreneurial intentions in relationship with annual sales, several regressions are conducted. Table 5.1 shows the results of these analyses. Model 3 shows that the moderating variable power distance is statistically significant⁷. The negative coefficient indicates that the strength of the effect of entrepreneurial intentions on annual sales diminishes. To indicate the exact effect of the moderating variable, margin plots are executed. In appendix H the margin plot of power distance shows that for cases with relative low value of power distance, there is a moderate, positive relationship between entrepreneurial intention and firm performance, whereas in the cases with relatively high values of power distance there is a strongly negative relationship between entrepreneurial intentions and firm performance. Hypothesis 2a is accepted, a high power distance negatively moderates the effect of EB on firm performance. Besides the moderating effect showed in model 3, the direct effect of entrepreneurial intention on firm performance can also be indicated which is insignificant. The adjusted R-squared of the model increases with 4 per cent. Model 3 explains for 35 per cent the variability in annual sales.

Model 4 is estimated with inclusion of the moderated variable individualism on entrepreneurial intentions. The regression shows that the moderating effect of individualism is statistically significant⁸. The total effect of the moderating variable is positive. Thus, the individualism dimension increases the strength of the impact of entrepreneurial intentions on annual sales. The margin plot of individualism shows that a relatively high score on the individualism index provides a moderate positive relationship between entrepreneurial intentions and firm performance. A relatively low score on this index indicates that there is collectivism, and the margin plots shows that there is a moderating negative relationship. Thus, hypothesis 2b is accepted, collectivism has a moderating negative relationship between entrepreneurial intentions and firm performance. Model 4 also shows a significant direct effect of entrepreneurial intentions on annual sales⁹. The negative coefficient means that when entrepreneurial intentions increase with 1 per cent, annual sales decrease with .39 per cent, *ceteris paribus*. Including the cultural dimension Individualism in the model, increased the adjusted R-squared to 35 per cent.

Model 5, model 6 and model 7 are found to be statistically insignificant on their interaction terms¹⁰. This means that no support was found for the cultural dimension masculinity and its moderating effect on the relationship between entrepreneurial intentions and annual sales. This indicates that a masculine or feminine corporate culture does not affect the relationship between EB and firm performance. A high or low uncertainty avoidance would also not affect the relationship of EB and firm performance. A corporate culture where long term orientation or short-term orientation occurs does also not affect the relationship in this thesis. However, model 5 does show a statistically significant direct effect of entrepreneurial intentions on annual sales¹¹. In this model, entrepreneurial intentions negatively affect annual sales. When entrepreneurial intentions increase with 1 per cent, annual sales decreases with .19 per cent.

⁷ P = .031. $\alpha = 0.05$. $p < 0.05$.

⁸ P = .016. $\alpha = 0.05$. $p < 0.05$.

⁹ P = .009. $\alpha = 0.01$. $p < 0.01$.

¹⁰ P = .164. $\alpha = 0.1$. $p > 0.1$. P = .339. $\alpha = 0.1$. $p > 0.1$. P = .683. $\alpha = 0.1$. $p < 0.1$.

¹¹ P = .048. $\alpha = 0.05$. $p < 0.05$.

The last cultural dimension and its moderated effect has been tested in model 8. Model 8 shows the results of the effect of Indulgence vs. Restraint. The results shows that Indulgence index is statistically significant¹². The total effect of the indulgence dimension is positive. In other words, indulgence versus restraint increases the strength of the impact of entrepreneurial intentions on annual sales. The margin plot of indulgence implies that for cases with relatively high scores on the indulgence index, a moderate positive relationship between entrepreneurial intentions and annual sales exists. This means an indulgent corporate culture moderates positively the effect of EB on firm performance. For the relatively low scores, there is a moderated negative relationship. In other words, a more restraint corporate culture causes a moderating negative effect of EB on firm performance. Hypothesis 2d is therefore accepted.

Model 9 represents the complete model including all cultural dimensions. Surprisingly, it shows that only masculinity is statistically significant on its direct effect and moderating effect. Masculinity was found to be insignificant in the other models. Since there were some outliers in this dataset, the robustness of this model has been assessed with a robust regression analysis. The table can be found in appendix I. The findings indicate that the explanatory variable and the moderating variables are statistically insignificant. In other words, without the exclusion of the outliers in the data, the variables of model 9 are statistically insignificant in the robust model. The adjusted R-squared of the robust model is .38. This implies that the complete model explains for 35 per cent of the variability of annual sales.

¹² P = .072. $\alpha = 0.1$. $p < 0.1$.

Table 5.1

Regression analysis explanatory variables, moderating variables, and control variables

Variables	Model 1	Model 2 H1	Model 3 H2a	Model 4 H2b	Model 5 H2c	Model 6 H2d	Model 7 H2e	Model 8 H2f	Model 9
Entrepreneurial Intentions		-.0556294 (.0471218)	.2186976 (.1348839)	-.3938264 *** (.146222)	-.1926233 ** (.0958083)	-.1610116 (.1518034)	.0139965 (.1855229)	-.3425606 ** (.1669551)	-.4133636 (.9795331)
Power distance			.4076342 ** (.1913929)						.3470619 (.5216454)
Individualism				-.3631068 ** (.1508753)					-.1383698 (.41024)
Masc. vs. femini.					-.1989855 (.138331)				-.3805638 ** (.1760525)
Uncert. avoidance						-.1770197 (.2191731)			.0127355 (.2652025)
Long term vs. short term							.0901153 (.2287841)		-.2104417 (.3013745)
Indulgence vs. restraint								-.3822121 * (.2132426)	-.1273994 (.5908624)
EI_PDI			-.0055701 ** (.0025319)						-.0053299 (.0070779)
EI_IDV				.0049318 ** (.0020019)					.0016977 (.0056431)
EI_MAS					.0026356 (.0018747)				.0051446 ** (.0023847)
EI_UAI						.0026328 (.0030982)			-.0000571 (.0037326)
EI_LTOWVS							-.0012574 (.0030651)		.0025932 (.0040076)
EI_IVR								.0051674 * (.0028227)	.0011208 (.0079579)
Controls									
LN Firm Size	.6762679 *** (.1456895)	.6372323 *** (.1418268)	.6549118 *** (.1307902)	.5634945 *** (.1390674)	.6620755 *** (.1431749)	.6434708 *** (.1407638)	.6305003 *** (.1381608)	.618303 *** (.1356166)	.6597187 *** (.1668132)
LN Firm Age	.6990802 *** (.9753963)	.7167202 *** (.2411368)	.7570993 *** (.2244214)	.7708278 *** (.219855)	.7348163 *** (.2402144)	.7430508 *** (.2530454)	.7161228 *** (.2412967)	.7711588 *** (.2253154)	.8809802 *** (.248759)
Constant	10.39239 *** (.9753963)	14.57788 *** (3.796645)	-5.71541 (10.24915)	39.61444 *** (11.25069)	24.75194 *** (7.188323)	21.533 * (10.84421)	9.593205 (14.10481)	35.74718 *** (12.77282)	46.74997 (73.0537)
Study characteristics									
No. firms	72	72	72	72	72	72	72	72	72
Adj. R-square	.30406332	.31020678	.35471784	.35643222	.31227616	.30104374	.29185355	.33440965	.33585332

*** $p < .01$, ** $p < .05$, * $p < .1$

6. DISCUSSION

This study examined the effect of EB in sub-Saharan Africa on firm performance of foreign subsidiaries. For 72 foreign subsidiaries the effect of entrepreneurial intentions in the general population of three African countries (Ghana, Uganda, Zambia) was assessed. OLS-regression analysis shows a statistically insignificant effect of EB on firm performance. The main effect has also been analysed with moderating variables. The moderating variables represented six dimensions of corporate culture. The analyses show three statistically significant moderating variables and three statistically insignificant variables.

The majority of literature on entrepreneurial behaviour (EB) and firm performance reports a significant positive effect on firm performance, for as well as on firm level EB as on individual level EB. On an individual level, this effect occurs due to the EB of employees. These behaviours are examined through different dimensions such as innovativeness, proactiveness and risk-taking (Neessen et al., 2018; Blanka, 2019). The personality traits of entrepreneurial employees play an important role in the explanation why EB increases firm performance (Blanka, 2019). However, literature also shows that personality traits have static characteristics (Blanka, 2019) and explaining the effect by just the personality trait would not be enough. Therefore, this thesis used the theory of planned behaviour to further explain the effect. Personality traits affect the three antecedents of entrepreneurial intentions and it seems from the literature that entrepreneurial individuals exhibit specific personality traits such as innovativeness, proactiveness, risk taking, need for achievement and self-efficacy (McClelland, 1961; Begley & Boyd, 1987; Littunen, 2000; Chen & Lai, 2010; Westhead et al., 2011; Zhang & Bruning, 2011; Burns, 2013; Kerr et al., 2018; Sastre et al., 2021). It was therefore expected to find a significant positive effect of EB on firm performance but nevertheless, an insignificant effect was found.

The insignificant effect can be explained by the fact that this thesis uses a different indicator for EB than other studies have used (Oyong, 2019; Eyana, 2017; Atsu, 2021). Studies most in line with this research, such as Oyong, Eyana and Atsu, have used EB rather than solely intentions as an indicator; additionally, they collected data among actual entrepreneurs rather than aspiring ones. An implication of using entrepreneurial intention as an indicator, might be that people with a certain intention might not act upon this intention when they get a job. When studying EB amongst actual entrepreneurs, it is a fact that they have already acted upon these entrepreneurial intentions. However, the link between EI and EB has been thoroughly studied and has been proven to be a very valid predictor (Sheeran, 2002; Armitage & Conner, 2010; Kautonen et al., 2013). Possibly, the reason why this study still shows a statistically insignificant effect, is because it seems that in developing people show EI out of necessity due to the limited job opportunities rather than out of internal motivation (McCarthy, 2013). Thus, the respondents from the dataset might not have the required personality traits to increase firm performance. In addition, a single question asked in the data collection might have been answered affirmatively by people who felt obliged to start a business out of sheer necessity rather than out of the antecedents of EB, e.g. personality traits. Also, collecting data on non-cognitive characteristics such as personality traits, attitudes and perceptions is often vulnerable to response biases (Furnham, 1986; Wetzel, Böhnke & Brown, 2016; Kreitchmann, Abad, Ponsoda, Nieto & Morillo, 2019). Respondents may give socially desirable answers rather than a true answer (Furnham, 1986). It might be the case that the respondents in this dataset

provided a socially desirable answer to please the researcher. A last explanation would be, that some authors in the literature suggest that individual EB cannot have a direct effect on firm performance. It is more likely that individual EB may have an indirect effect on firm performance, thus, entrepreneurial employees affect corporate entrepreneurship which in turn may affect firm performance (Badoui, 2020; Neessen et al., 2018).

In addition to the insignificant results, the regression analysis also revealed a statistically significant negative effect of entrepreneurial intentions on annual sales when testing the effect of corporate culture. A possible explanation for this negative effect is the risks associated with these entrepreneurial behaviours. Entrepreneurial individuals have a strong desire to maintain control which can result in high levels of stress (Kets de Vries, 1985). It also results in a reluctance to delegate responsibilities and delegation and collaboration are crucial factors to firm growth (Greiner, 1998). The negative effect can also be explained by the personality trait self-efficacy. Self-efficacy means the belief in one's own capacity to perform such behaviours (Bandura, 1977), however, extremely high optimism about one's own capacity can indirectly negatively affect firm performance. for instance by making wrong investment decisions (Hmieleski & Baron, 2008). The necessity driven entrepreneurial intentions might also be of effect here. In addition, since this thesis proposes to hire local employees, firms would also have to deal with cultural differences. The cultural differences between home-country employees and host-country employees may cause cultural clashes with would negatively affect firm performance (Orlando, Barnet, Dwyer, & Chadwick, 2004). However, it is also argued in the literature that cultural differences may increase creativity and innovation within firms (Lambert, 2016), which would affect firm performance positively. Nevertheless, the negative coefficient may be explained by a too large cultural difference between the employees.

The existing literature does not take the moderated effect of corporate culture into account, however, it does state the significant role of corporate culture in fostering EB. When firms want to foster EB of their employees, an appropriate corporate culture is required to act upon the behaviour. This thesis therefore takes corporate culture as a moderating variable into the analyses. The results show that three cultural dimensions out of the six are statistically significant. After the first regression model, a second model were introduced to test hypothesis 2. This model contains the moderating variables of corporate culture. The expectation was that corporate culture would have moderating effect on entrepreneurial intentions and annual sales based. This expectation was based on the literature and research that individuals who want to act entrepreneurially, need an environment, a culture, which accepts that kind of behaviour. Low power distance, individualism, masculinity, low uncertainty avoidance, long term orientation and indulgence would be a appropriate based on the theory. Nevertheless, the estimated model shows different results. Only three out of six dimensions are statistically significant. Hypotheses 2a, 2b and 2f were accepted. This means that only the dimensions individualism, power distance and indulgence versus restraint have a moderating effect on the relationship between entrepreneurial intentions and annual sales. More specifically, an individualistic culture strengthens the effect of EB on firm performance. This is in line with the theory that in entrepreneurial employees rather work alone than in a team and that they rather have individual breakthroughs than a shared breakthrough (Reich, 1987; Stewart, 1989; Sundbo, 1991). Hypothesis 2b was also accepted, meaning that a high power distance would moderate negatively the relationship between EB and firm performance. This is in line with the findings of Hofstede (1980);

entrepreneurial individuals have a high need for achievement and independence which is negatively correlated with power distance. Menzel et al. (2006) also confirms low power distance as an ideal corporate culture for entrepreneurial employees. Lastly, hypotheses 2f states that a restraint corporate culture negatively moderates the relationship between EB and firm performance. The literature shows that a restraint corporate culture would restrict control on fulfilling human desires (Hofstede et al., 2010). This would limit the freedom of entrepreneurial employees and therefore negatively affect their behaviour.

The insignificance effect of masculinity versus femininity may be explained by mixed results in the existing literature. Masculinity as well as femininity are indicated as an appropriate entrepreneurial culture; in a masculine culture people are highly ambitious and in feminine culture fosters creativity (Thwaites, 1992; Çelikkol et al., 2019). There is no empirical evidence on whether a masculine or feminine culture would support or render EB (Menzel et al., 2006), which may explain why this thesis did also not find a statistically significant effect of this dimension on EB and firm performance.

Uncertainty avoidance was also found to be insignificant. A possible explanation could be that firms find ways to minimize risk for example with risk-assessment tools (Çelikkol et al., 2018). However, the literature also shows that low uncertainty cultures are open for changes and flexible. Wennekers, Thurik and Van Stel (2007) states that the role of uncertainty avoidance in the context of EB is complex and may not be labelled as a simple linear relationship.

Long term orientation is also found to be statistically insignificant which was unexpected. Literature shows that long term orientation is required to foster EB within firms, since idea development is a long process with expected setbacks (Menzel et al., 2006). However, Urban (2006) also did not find a significant effect of long term orientation on EB.

In general, the insignificant results of the three dimensions may also be explained by the complexity of culture and corporate culture. Corporate culture does not only exist of six dimensions. The complexity to conceptualize culture is high and there are many other indicators to define corporate culture (Hofstede Insights, n.d.). In addition, the integrative model of Menzel et al (2006), shows that an appropriate corporate culture for EB often refers to a combination of the dimensions. For instance, there should be a combination of both medium masculine and feminine culture and a medium level of long-term and short-term orientation. Lastly, an appropriate culture also depends on the phase of the new idea development process (Nakata & Sivakumar, 1996). The first phase in this process is commonly defined as the fuzzy front end which requires higher creativity and higher degrees of freedom (Menzel et al., 2006). The other phases focus on the exploitation, process planning and implementation which may require lesser degrees of freedom and creativity. These phases are related to specific measurements of firm performance (Nakata & Sivakumar, 1996). Since there are different phases in the process it may also require a different measurement to assure the moderating effect of corporate culture. This thesis takes only one measurement, annual sales, into account, which may only be appropriate to measure the last phase of the entrepreneurial process. It may also explain why some of the cultural dimensions are insignificant, since in the last phase it would require a different form of corporate culture.

The results of corporate culture as a moderating effect indicate that the reasoning and theories behind cultures and EB may be confirmed by empirical testing. Since half of the dimensional model of Hofstede is found to be statistically significant, it gives notice to the importance of corporate culture and EB.

The results of this thesis are based on data of Global Entrepreneurship Monitor (GEM) and Hofstede's dimensions. For both databases one could argue the reliability. Additionally, the specific data on entrepreneurial intentions is conducted on a single question. One could argue whether one single question is representative construct to collect data. There are three concerns rising when using a single item construct: low content variability; sensitivity and reliability (Sauro, 2018). A multiple item construct would be more representative since it would average out measurement error (Nunnally & Bernstein, 1978). Nevertheless, single item constructs are often used in large samples since a lower respondent burden is of high importance (Cheung & Lucas, 2014). The GEM data consists of two thousand respondents which is categorized as large sample (Cheung & Lucas, 2014). Furthermore, when collecting data on perceptions and attitudes cultural differences could play a key role (GEM consortium, Data collection, n.d.). These differences can influence the answers and it is therefore preferable to use a panel data (GEM consortium, n.d.). Unfortunately, the construct of this thesis did not allow to use a panel data, mostly due to the lack of data on firm performance of foreign subsidiaries. Besides the concerns on the GEM data, it was still the best option for this thesis as there is no such database containing data on EB. Secondly, the data of Hofstede received a lot of criticism over the years as many researchers state the data collection among IBM employees would not be representative for a nation and that its data is quite old (indicators origin from originally work in 1980) (Arrak et al., 2020). The economic development of countries over the years is also expected to shift cultural values, which ignites doubts about Hofstede's data (Beugelsdijk, Maseland, & van Hoorn, 2015). Nevertheless, some researchers state that there is no better alternative yet and therefore the Hofstede's data is still dominant in research (Beugelsdijk et al., 2015).

There are also some additional limitations in this thesis. Firstly, the financial years of the foreign subsidiaries are not equal to each other. Some annual sales are based on year 2008 and some on year 2010. This means that the difference in sales can be explained by other factors such as the economic crisis in year 2008. To limit the difference in external factors of the multinationals, it would be better to use similar financial years. Secondly, the units of the annual sales are not known. This means that while it was assumed to be dollars, there is no certainty for it. If in some cases the annual sales is written in local currency and some in dollars, it would give a bias in the effect of EB since the comparison of the dependent variable is not equal in values. Lastly, due to lack of data only three out of forty-six countries of sub-Saharan Africa were included in this research. This is a relatively small number of countries to generate the results over sub-Saharan Africa.

Based on the empirical results in this thesis and the knowledge of the improvements of the business environment in sub-Saharan Africa, the answer on the research question would be that sub-Saharan Africa is not a great opportunity for multinationals with the aim to embrace entrepreneurial employees. However, the results of this thesis should be seen in the light of the discussion and limitations of this research. Thus, to conclude it is recommended to further examine the research question. Implications for further research are (1) usage of panel data of time series data to have more precise results and specific to this research this is highly recommended since the effect of hiring entrepreneurial employees is not instant and takes some time. It is also implied to (2)

conduct a dataset based on a multi-dimensional construct to identify one's entrepreneurial intentions. Responses biases would decrease, and (3) usage of different firm performance indicators to identify an appropriate corporate culture in the different phases of idea development.

In the light of the above discussion and limitations, some managerial implications can be given. Firstly, to identify whether individuals exhibit entrepreneurial intentions, firms should focus on personality profiling of entrepreneurial individuals during recruitment processes. This profiling should indicate whether an individual has the required personality traits to contribute to firm performance and the competitiveness of the firm. Secondly, when finding such employees, it is important to be aware of a lower chance on retention. Entrepreneurial employees are ambitious and may take their resignation quicker than other employees (Dészi-Benyovszki et al., 2017; Mizar & Vollmer, 2019). Often, entrepreneurial employees collect experience by taking a job and based on this experience they start their own business (Blanka, 2019).

7. CONCLUSION

In the introduction the importance of entrepreneurial behaviour (EB) in today's corporate landscape has been discussed. It was shown that the population of sub-Saharan Africa contains the largest part of EB worldwide. Therefore, in this thesis the effect of EB on firm performance was related to sub-Saharan Africa. More specifically, the aim was to relate the effect to business potential for multinationals in sub-Saharan Africa. The theory of planned behaviour shows that individuals who exhibit a particular intention, are influenced by specific personality traits. In the case of EB, researchers have indicated some specific traits which influences the entrepreneurial intentions. The empirical results presented in chapter 5 showed that there is unexpected no significant effect of entrepreneurial intentions on annual sales when embracing entrepreneurial intentions. Moreover, it showed that three out of six cultural dimensions plays a moderated effect in the model. Power distance, individualism and indulgence versus restraints would moderate the relationship of EB on firm performance. Based on the results of this study and the existing literature on sub-Saharan Africa, it may be concluded that for this sample sub-Saharan Africa seems not interesting for multinationals when they want to embrace EB. However, due to the limitations of this research, further research should indicate whether this is a true answer.

REFERENCES

- Abdel-Latif, H., Choi, S. M., Fuje, H., Haines, C., Ouattara, F., & Rawling, H. (2021, October). *Sub-Saharan Africa Regional Economic Outlook. One Planet, Two Worlds, Three Stories, October 2021*. Retrieved June 23, 2022, from International Monetary Fund: [file:///C:/Users/lisel/Downloads/text%20\(1\).pdf](file:///C:/Users/lisel/Downloads/text%20(1).pdf)
- Abdychev, A., Alonso, C., Alper, E., Desruelle, D., Kothari, S., Liu, Y., Sharma, P. (2018, December 17). *The Future of Work in Sub-Saharan Africa*. Retrieved June 27, 2022, from International Monetary Fund: <https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2018/12/14/The-Future-of-Work-in-Sub-Saharan-Africa-46333>
- Achour, I., Bader, B., Shelleman, R., Thomas, L., Unnikrishan, S., & Wilburn, K. (2015, June). *Africa is now: The Opportunity for Mid-Sized US Companies*. Retrieved March 12, 2022, from The Chicago Council on Global Affairs: <https://www.lw.com/mediacoverage/africa-is-now-the-opportunity-for-mid-sized-us-companies>
- Adjusted R-squared*. (2022, May 5). Retrieved on June 20, 2022, from Corporate Finance Institute: <https://corporatefinanceinstitute.com/resources/knowledge/other/adjusted-r-squared/>
- Ajayi, I. (2006). Foreign Direct Investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential . Retrieved March 13, 2022, from African Economic Research Consortium: https://media.africaportal.org/documents/FDI_papers_booklength_volume.pdf
- Akhtaruzzaman, Muhammad, Yang, S., & Omar, A. (2018). Are Resource-Rich Countries More Attractive than Countries with Good Institutions to Foreign Direct Investors in Sub-Saharan Africa? *International Journal of Economics and Finance*, 65-74. Retrieved May 23, 2022, from <https://www.ccsenet.org/journal/index.php/ijef/article/view/75165>
- Akinbinu, B. M. (2021, August 20). *Entrepreneurship: the Phenomenological Study of the lived experiences of Intrapreneurs 'Now Turned' Entrepreneurs in South Africa*. Retrieved on April 28, 2022, from University of South Africa: https://uir.unisa.ac.za/bitstream/handle/10500/28065/thesis_akinbinu%20bolarinde%20mathew%20%281%29.pdf?sequence=1&isAllowed=y
- Ali, J., & Jabeen, Z. (2020, September). Understanding entrepreneurial behavior for predicting start-up intention in India: Evidence from global entrepreneurship monitor (GEM) data. *Journal of Public Affairs*. Retrieved May 15, 2022, from https://onlinelibrary.wiley.com/doi/full/10.1002/pa.2399?casa_token=Fdws_rgOIY4AAAAA%3AwDrwou7rAih-yWTF1bS_Nn2nwkl3xa_DibXv944kevYOhRKJairDzJsto3w8LC7QvcrB8ljdA3zfk
- Amiri, N. S., & Marimaei, M. R. (2012, November). Concept of Entrepreneurship and Entrepreneurs Traits and Characteristics. *Journal of Business Administration*, 150-155. Retrieved June 28, 2022, from <http://www.scholarly-journals.com/sjba/archive/2012/November/pdf/Amiri%20and%20Marimaei.pdf>
- Anderson, N., de Dreu, C. K., & Nijstad, B. A. (2004). The routinization of innovation research: a constructively critical review of the state-of-the-science. *Journal of Organizational Behavior*, 147-173. Retrieved June 26, 2022, from <https://dare.uva.nl/search?identifier=2ebbb72b-78e4-4c8a-bb45-36371f00a403>
- Ang, J., Cole, R., & Lin, J. W. (2007, March). Agency Costs and Ownership Structure. *The Journal of Finance*, 81-106. Retrieved May 97, 2002, from <https://onlinelibrary.wiley.com/doi/abs/10.1111/0022-1082.00201>
- Appiakoring, C. (2019, June 3). Doing Business in Sub-Saharan Africa. (T. Murrietta, Interviewer) Retrieved June 24, 2022, from <https://mz.usembassy.gov/doing-business-in-sub-saharan-africa/>

- APS Data Collection . (n.d.). Retrieved May 15, 2022, from GEM Consortium: <http://gem-consortium.nsclient.xyz/wiki/1162>
- Armitage, C., & Conner, M. (2010, December). Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review. *British Journal of Social Psychology* , 471-499. Retrieved May 4, 2022, from https://www.researchgate.net/publication/227533335_Efficacy_of_the_Theory_of_Planned_Behaviour_A_Meta-Analytic_Review
- Arrak, K., Kaasa, A., & Varblance, U. (2020, March). REgional Cultural Context as a Determinant of entrepreneurial behaviour: The case of Germany. *The Journal of Entrepreneurship* , 88-118. Retrieved May 20, 2022, from <https://journals.sagepub.com/doi/full/10.1177/0971355719893501>
- Atsu, A. (2021, May). *Effect of entrepreneurial behaviour on competitive advantage and performance of small scale potato enterprises in Molo Sub County, Kenya*. Retrieved on March 30, 2022, from African Journal of Agricultural Research: <http://41.89.96.81:8080/xmlui/bitstream/handle/123456789/2749/Effect%20of%20Entrepreneurial%20Behaviour%20on%20Competitive%20%28%29.pdf?sequence=1&isAllowed=y>
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs: Prentice- Hall.
- Ajzen, I. (1991, December). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 179-211. Retrieved February 1, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/074959789190020T>
- Badoiu, G.-A., Escrig-Tena, A., & Segarra-Ciprés, M. (2020). *Corporate entrepreneurship and entrepreneurial behaviour of employees: a theoretical model of bottom-up relationships*. Retrieved on April 6, 2022, from <http://repositori.uji.es/xmlui/bitstream/handle/10234/192609/71645.pdf?sequence=1>
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 191-215. Retrieved May 9, 2022, from <https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf>
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 122-147. Retrieved May 8, 2022, from <https://www.semanticscholar.org/paper/Self-efficacy-mechanism-in-human-agency.bandura/8beec556fe7a650120544a99e9e063eb8fcd987b>
- Barazandeh, M., Parvizian, K., Alizadeh, M., Khosrabi, & Saber. (2015, August). Investigating the effect of entrepreneurial competencies on business performance among early stage entrepreneurs Global Entrepreneurship Monitor (GEM 2010 survey data). *Journal of Global Entrepreneurship Research*, 5-18. Retrieved May 8, 2022, from https://www.researchgate.net/publication/281281329_Investigating_the_effect_of_entrepreneurial_competencies_on_business_performance_among_early_stage_entrepreneurs_Global_Entrepreneurs_ip_Monitor_GEM_2010_survey_data
- Baron, R. (2004, March). The cognitive perspective: a valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing*, 221-239. Retrieved May 8, 2022, from <https://www.sciencedirect.com/science/article/pii/S0883902603000089>
- Baum, J. R., & Locke, E. A. (2004, September). The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth. *Journal of Applied Psychology* , 587-598. Retrieved May 8, 2022, from https://www.researchgate.net/publication/270820314_The_Relationship_of_Entrepreneurial_Traits_Skill_and_Motivation_to_Subsequent_Venture_Growth

- Begley, T., & Boyd, D. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller business. *Journal of Business Venturing*, 79-93. Retrieved March 26, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/0883902687900206>
- Beugelsdijk, S., Maseland, R., & van Hoorn, A. (2015). Are scores on Hofstede's dimensions of national culture stable over time? . *Global Strategy Journal* , 223-240. Retrieved June 19, 2022, from https://pure.rug.nl/ws/portalfiles/portal/98242804/Are_scores_on_Hofstede_s_dimensions_of_national_culture_stable.pdf
- Beugelsdijk, S., & Welzel, C. (2018, October). Dimensions and Dynamics of National Culture: Synthesizing Hofstede with Inglehart. *Journal of Cross-Cultural Psychology*, 1469-1505. Retrieved April 8, 2022, from <https://journals.sagepub.com/doi/full/10.1177/0022022118798505>
- Bhandari, P. (2022, may 4). *Control Variables | Waht are they & Why do they matter?* Retrieved June 6, 2022, from Scribbr: <https://www.scribbr.com/methodology/control-variable/#:~:text=lf%20you%20don't%20control%20relevant%20extraneous%20variables%2C%20%20may,effect%20of%20your%20independent%20variable.>
- Bird, B. (1988, July). Implementing Entrepreneurial Ideas: The Case for Intention. *The Academy of Management Review*, 442-453. Retrieved May 8, 2022, from <https://www.jstor.org/stable/258091?seq=1>
- Bird, B. (1989). *Entrepreneurial behaviour*. Glenview: Scott Foresman. Retrieved May 9, 2022
- Blanchflower, D., & Oswald, A. (1998). What Makes an Entrepreneur? *Journal of Labor Economics*, 26-60. Retrieved June 25, 2022, from <https://www.andrewoswald.com/docs/entrepre.pdf>
- Blanka, C. (2019). An individual-level perspective on intrapreneurship: a review and ways forward. *Review of Managerial Science*, 919-961. Retrieved April 29, 2022, from <https://link.springer.com/article/10.1007/s11846-018-0277-0>
- Bruin de, L. (2017, June 17). *Hofstede's Cultural Dimensions*. Retrieved June 24, 2022, from Business to You: <https://www.business-to-you.com/hofstedes-cultural-dimensions/>
- Brumann, C. (1999, February). Writing for Culture. *Current Antropology*, 1-27. Retrieved January 11, 2022, from www.journals.uchicago.edu: <https://www.journals.uchicago.edu/doi/pdf/10.1086/200058>
- Brush, C. G., & Vanderwerf, P. A. (1992). A comparison of methods and sources for obtaining estimates of new venture performance . *Journal of Business Venturing*, 157-170. Retrieved May 18, 2022, from <https://www.sciencedirect.com/science/article/pii/0883902692900100>
- Burns, P. (2013). *Corporate Entrepreneurship: Innovation and Strategy in Large Organizations*. New York: Palgrave Macmillan. Retrieved May 18, 2022
- Calza, F., Cannavale, C., & Zohoorian Nadali, I. (2020, October). How do cultural values influence entrepreneurial behavior of nations? A behavioral reasoning approach. *International Business Review*. Retrieved May 15, 2022, from <https://www.sciencedirect.com/science/article/pii/S0969593120300688>
- Carland, J. W., Hoy, F., & Carland, J. A. (1988). "Who is an Entrepreneur?" Is a Question Worth Asking. *American Journal of Small Business*, 33-39. Retrieved June 25, 2022, from <http://thierry-verstraete.com/wp-content/uploads/2020/10/Carland-Who-is-an-entrepreneur.pdf>
- Carsrud, A., & Brännback, M. (2009). *Understanding the Entrepreneurial Mind*. New York: Springer. Retrieved May 5, 2022, from <https://link.springer.com/content/pdf/bfm%3A978-1-4419-0443-0%2F1.pdf>

- Çelikkol, M., Kitapıcı, H., & Döven, G. (2019, December). Culture's impact on entrepreneurship & interaction effect of economic development level: an 81 country study. *Journal of Business Economics and Management*, 777-797. Retrieved May 18, 2022, from <https://journals.vilniustech.lt/index.php/JBEM/article/view/10180>
- Chell, E. (2008). *The Entrepreneurial Personality: A Social Construction*. London: Routledge. Retrieved March 26, 2022
- Chen, Y.-F., & Lai, M.-C. (2010). *Factors Influencing the Entrepreneurial Attitude of Taiwanese Tertiary-Level Business Students*. Retrieved February 1, 2022, from [www.media.web.britannica.com: http://media.web.britannica.com/ebSCO/pdf/581/48096581.pdf](http://media.web.britannica.com/ebSCO/pdf/581/48096581.pdf)
- Cheung, F., & Lucas, R. (2014). Assessing the validity of single-item life satisfaction measures: results from three large samples. *Quality of Life Research*, 2809-2818. Retrieved June 19, 2022, from <https://link.springer.com/article/10.1007/s11136-014-0726-4>
- Chironga, M., Desvaux, G., & Leke, A. (2018, November 29). *Rethinking the African business opportunity*. Retrieved June 10, 2022, from McKinsey: <https://www.mckinsey.com/featured-insights/middle-east-and-africa/rethinking-the-african-business-opportunity>
- Covin, J., Green, K., & Slevin, D. (2006, January). Strategic Process Effects on the Entrepreneurial Orientation-Sales Growth Rate Relationship. *Entrepreneurship: Theory and Practice*, 57-81. Retrieved April 21, 2022, from https://www.researchgate.net/publication/229806996_Strategic_Process_Effects_on_the_Entrepreneurial_Orientation-Sales_Growth_Rate_Relationship
- Global Entrepreneurship Monitor. (2010). *Data*. [database] Retrieved June 1, 2022, from GEM consortium: <https://www.gemconsortium.org/data/key-aps>
- Date, S. (n.d.). *Testing For Normality of Residual Errors Using Skewness And Kurtosis Measures*. Retrieved June 4, 2022, from Time Series Analysis, Regression and Forecasting: <https://timeseriesreasoning.com/contents/skewness-and-kurtosis-measures/>
- Dézsi-Benyovszki, A., Szabó, & Tünde, P. (2017). Intrapreneurs and Entrepreneurs - Do they differ in Romania? *Acta Oeconomica*, 43-61. Retrieved May 15, 2022, from <https://akjournals.com/view/journals/032/67/1/article-p43.xml>
- Dictionary Need for Achievement*. (n.d.). Retrieved May 9, 2022, from American Psychological Association: <https://dictionary.apa.org/need-for-achievement>
- Doing Business 2019*. (2019). Retrieved March 30, 2022, from World Bank: https://www.worldbank.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf
- Douglas, E., & Shepherd, D. (2000, February). Entrepreneurship as a Utility Maximizing Response. *Journal of Business Venturing*, 231-251. Retrieved May 8, 2022, from https://www.researchgate.net/publication/4967851_Entrepreneurship_as_a_Utility_Maximizing_Response
- Driessen, M., & Zwart, P. (2006, July). De E-Scan Ondernemerstest ter beoordeling van ondernemerschap. *Maandblad voor Accountancy en Bedrijfseconomie*, 382-391. Retrieved April 7, 2022, from https://www.researchgate.net/publication/336635412_De_E-Scan_Ondernemerstest_ter_beachoordeling_van_ondernemerschap

- Dunning, J. (1998, March). Location an the Multinational Enterprise: A Neglected factor? *Journal of International Business Studies*, 45-66. Retrieved April 3, 2022, from <https://link.springer.com/article/10.1057/palgrave.jibs.8490024>
- Dunning, J., & Narula, R. (1995). The R&D Activities of Foreign Firm in the United States. *International Studies of Management & Organization*, 39-74. Retrieved May 3, 2022, from <https://www.jstor.org/stable/40397299?seq=1>
- Economic reform is making Africa an attractive market for FDI* . (2019, September 23). Retrieved May 23, 2022, from Consultancy Africa: <https://www.consultancy.africa/news/1839/economic-reform-is-making-africa-an-attractive-market-for-fdi#:~:text=The%20continent%20also%20has%20a,been%20political%20instability%20and%20corrupti on.>
- Edwin, S., Ali, J., & Noor, N. (2021, October 15). Entrepreneurs Personality Traits and Business Performance: A Conceptual Framework . *Advances in Business Research International Journal*, 56-64. Retrieved March 26, 2022, from https://www.researchgate.net/publication/356162219_Entrepreneurs_Personality_Traits_and_Busines s_Performance_A_Conceptual_Framework
- Ekvall, G. (2008, January). Organizational climate for creativity and innovation. *European Journal of Work and Organizational Psychology*, 105-123. Retrieved May 8, 2022, from <https://www.tandfonline.com/doi/abs/10.1080/13594329608414845>
- Elumah, L., Shobayo, P., & Akinleye, D. (2018). Impact of Entrepreneurship Orientation and Entrepreneurial Management On Firm Growth: Evidence from Nigeria Manufacturing Industry. *Proceedings of the iSTEAMS Multidisciplinary Cross-Border Conference University of Professional Studies* (pp. 163-168). Accra: Research Gate. Retrieved April 4, 2022, from https://www.researchgate.net/publication/322618620_Impact_of_Entrepreneurship_Orientation_and_Entrepreneurial_Management_On_Firm_Growth_Evidence_From_Nigeria_Manufacturing_Industry
- Entrepreneurial attitudes, perceptions, intentions*. (n.d.). Retrieved May 15, 2022, from GEM Consortium: <http://gem-consortium.ns-client.xyz/wiki/1182>
- Entrepreneurial Behaviors and Practices Within the Modern Business Economy*. (2021, January 26). Retrieved February 21, 2022, from Emerging Risks Global: <https://www.emergingrisksglobal.com/post/entrepreneurial-behaviours-and-practices-within-the-modern-business-economy>
- Entrepreneurial behaviour and Attitudes*. (n.d.). Retrieved May 15, 2022, from GEM Consortium: <http://gem-consortium.ns-client.xyz/wiki/1375>
- Eyana, S. (2017, November 17). *Entrepreneurial behaviour and firm performance of ethiopian tour operators*. Retrieved March 27, 2022, from Vrije Universiteit: <https://www.semanticscholar.org/paper/Entrepreneurial-behaviour-and-firm-performance-of-Eyana/dbd128c6caf9d51263ab7c21f440edb12e7034f9>
- FDI in Figure*. (2021, April). Retrieved May 12, 2022, from OECD: <https://www.oecd.org/investment/FDI-in-Figures-April-2021.pdf>
- Ferguson, K. (2018, March 7). *When Should You Delete Outliers from a Data set?* . Retrieved June 16, 2022, from Humans of Data.

- Franco, C., Rentocchini, F., & Marzetti, G. (2010, April). *Why do firms invest abroad? An analysis of the motives underlying Foreign Direct Investment*. Retrieved May 3, 2022, from ResearchGate: https://www.researchgate.net/publication/231608606_Why_do_firms_invest_abroad_An_analysis_of_the_motives_underlying_Foreign_Direct_Investment
- Frese, M. (2009). Towards a psychology of entrepreneurship - An action theory perspective. . *Foundation and Trends in Entrepreneurship*, 437-496. Retrieved May 8, 2022, from https://www.researchgate.net/publication/261636907_Towards_a_psychology_of_entrepreneurship_-_An_action_theory_perspective_Foundation_and_Trends_in_Entrepreneurship_56_437-496
- Furnham, A. (1986). Response bias, social desirability and dissimulation. *Personality and Individual Differences*, 385-400. Retrieved June 19, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/0191886986900140>
- Galbreath, J., Lucianetti, L., Thomas, B., & Tisch, D. (2020, May). Entrepreneurial orientation and firm performance in Italian firms: The moderating role of competitive strategy. *International Journal of Entrepreneurial Behavior & Research*, 629-647. Retrieved April 21, 2022, from https://www.emerald.com/insight/content/doi/10.1108/IJEER-07-2019-0457/full/html?casa_token=BBUyU5_skJYAAAAA:jTIDoD4dRiBXCiS4TLEo3YNyH-5sbAwNNwo5BhGt1Q-RSR1L17WwH2CBi1FeoLxPSjg2EaDTj3dJkzditiQkKVRKtwF85GYHwu4AI0697adBT-tm1A3fw
- Gartner, W. (1989, July 1). "Who is an Entrepreneur?" Is the Wrong Question. Retrieved January 2022, 2022, from www.journals.sagepub.com: <https://journals.sagepub.com/doi/10.1177/104225878901300406>
- Grant, A., & Ashford, S. (2008). The dynamics of Proactivity at Work. *Research in Organizational Behavior*, 3-24. Retrieved June 15, 2022, from Research: <https://www.semanticscholar.org/paper/The-dynamics-of-proactivity-at-work-Grant-Ashford/98214540cfe4a2eae2ea06884df1f1e66d187303>
- Greiner, L. E. (1998, May). *Evolution and Revolution as Organizations Grow*. Retrieved June 25, 2022, from <https://hbr.org/1998/05/evolution-and-revolution-as-organizations-grow>
- Hayton, J., George, G., & Zahra, S. (2002, July). National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship: Theory and Practice*, 33-52. Retrieved May 18, 2022, from https://www.researchgate.net/publication/284757665_National_Culture_and_Entrepreneurship_A_Review_of_Behavioral_Research
- Henry, S., & Stevens, K. T. (1999, January). Using Belbin's leadership role to improve team effectiveness: An empirical investigation. *Journal of Systems and Software*, 241-250. Retrieved June 25, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S0164121298100602?via%3Dihub>
- Hernandez, M. (2019, June 14). *Uveiling International New Ventures' Success: Employee's Entrepreneurial Behavior*. Retrieved February 21, 2022, from Administrative Sciences: <file:///C:/Users/lisel/Downloads/admsci-09-00056-v3.pdf>
- Herrington, M., & Coduras, A. (2019). The national entrepreneurship framework conditions in sub-Saharan Africa: a comparative study of GEM data/National Expert Surveys for South Africa, Angola, Mozambique and Madagascar. *Journal of Global Entrepreneurship Research*. Retrieved May 15, 2022, from <https://link.springer.com/article/10.1186/s40497-019-0183-1#citeas>
- Hmieleski, K., & Baron, R. (2008, March). When Does Entrepreneurial Self-Efficacy Enhance versus Reduce Firm Performance? . *Strategic Entrepreneurship Journal* , 57-72. Retrieved April 7, 2022, from http://www.hmieleski.com/Publications/Hmieleski_Baron_SEJ_2008_ESE.pdf

- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Newbury Park: Sage Publication Inc. Retrieved May 8, 2022, from [https://books.google.nl/books?hl=nl&lr=&id=Cayp_Um4O9gC&oi=fnd&pg=PA13&dq=Hofstede,+G.+\(1980\).+Culture%27s+consequences:+International+differences+in+work+related+values&ots=V5GABwNPI8&sig=WyJXs-YVbznIXqLwPI8fAgEhaxs#v=onepage&q=Hofstede%2C%20G.%20\(1980\)](https://books.google.nl/books?hl=nl&lr=&id=Cayp_Um4O9gC&oi=fnd&pg=PA13&dq=Hofstede,+G.+(1980).+Culture%27s+consequences:+International+differences+in+work+related+values&ots=V5GABwNPI8&sig=WyJXs-YVbznIXqLwPI8fAgEhaxs#v=onepage&q=Hofstede%2C%20G.%20(1980)).
- Hofstede, G. (2013, May). *Values Survey Module 2013. Questionnaire English Language version* . Retrieved May 20, 2022, from <https://geerthofstede.com/research-and-vsm/vsm-2013/>
- Hofstede, G. (n.d.). *National Culture*. Retrieved April 8, 2022, from Hofstede Insights: <https://hi.hofstede-insights.com/national-culture>
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth . *Organizational Dynamics*, 5-21. Retrieved June 28, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/0090261688900095>
- Hofstede, G., & Minkov, M. (2013). *Values Survey Module 2013 Manual*. Retrieved May 30, 2022, from <https://geerthofstede.com/wp-content/uploads/2016/07/Manual-VSM-2013.pdf>
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Intercultural Cooperation and Its Importance for Survival* . New York: McGraw Hill. Retrieved May 18, 2022, from <https://books.google.nl/books?id=o4OqTgV3V00C&printsec=frontcover&hl=nl#v=onepage&q&f=false>
- Hofstede, G., Jan, H. G., & Minkov, M. (1991). *Cultures and Organizations*. New York: McGraw Hill. Retrieved June 20, 2022
- Hornsby, J., Kuratko, D., & Zahra, S. (2002, May). Middle Managers' Perception of the Internal Environment for Corporate Entrepreneurship: Assessing a Measurement Scale. *Journal of Business Venturing*, 253-273. Retrieved June 25, 2022, from https://www.researchgate.net/publication/4779176_Middle_Managers'_Perception_of_the_Internal_Environment_for_Corporate_Entrepreneurship_Assessing_a_Measurement_Scale
- Hosny, A. (2018). Firm Performance and their Perception of Political Instability in Egypt: Evidence from an Endogenous Treatment Regression Model. *Journal of African Development*, 61-68. Retrieved June 19, 2022, from <https://scholarlypublishingcollective.org/psup/african-development/article-abstract/20/2/61/200130/Firm-Performance-and-their-Perception-of-Political?redirectedFrom=fulltext>
- How GEM defines entrepreneurship*. (n.d.). Retrieved May 15, 2022, from GEM Consortium: <http://gem-consortium.ns-client.xyz/wiki/1149>
- Ideue, K. (2018, January 10). *Recent Trends in Foreign Direct Investment in Sub-Saharan Africa*. Retrieved March 13, 2022, from https://www.ide.go.jp/library/Japanese/Publish/Reports/Seisaku/pdf/2018_1_10_001_ch03.pdf
- Introduction* . (n.d.). (n.d.) Retrieved June 1, 2022, from Hofstede Insights: <https://hi.hofstede-insights.com/faq#FAQ5>
- Jong de, J., & Den Hartog, D. (2010, February 19). Measuring Innovative Work Behaviour. *Creativity and Innovation Management* , 23-36. Retrieved June 26, 2022, from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8691.2010.00547.x>

- Jonnada, V. (2014, November 9). *Why do firm become International Businessess*. Retrieved June 23, 2022, from Academia.edu:
https://www.academia.edu/34358382/Why_do_firms_become_International_Businesses
- Kallmuenzer, A., & Peters, M. (2017, August). Entrepreneurial behaviour, firm size and financial performance: the case of rural tourism family firms . *Tourism Recreation Research*, 1-13. Retrieved May 18, 2022, from
https://www.researchgate.net/publication/318911191_Entrepreneurial_behaviour_firm_size_and_financial_performance_the_case_of_rural_tourism_family_firms
- Kärnä, E., Nikina- Ruohonen, A., & Humala, I. (2021, February 15). *Entrepreneurial spirit of knowledge workers as a key asset in strategic change*. Retrieved March 31, 2022, from eSingals Research:
<https://esignals.fi/research/en/2021/02/15/entrepreneurial-spirit-of-knowledge-workers-as-a-key-asset-in-strategic-change/#b357f147>
- Kautonen, T., van Gelderen, M., & Tornikoski, E. (2013). Predicting entrepreneurial behaviour: a test of the theory of planned behaviour. *Applied Economics*, 697-707. Retrieved May 4, 2022, from
<https://www.tandfonline.com/doi/full/10.1080/00036846.2011.610750>
- Kerr, S. P., Kerr, W. R., & Xu, T. (2018, July). Personality Traits of Entrepreneurs: A Review of Recent Literature. *Foundation and Trends in Entrepreneurship*, 279-356. Retrieved May 5, 2022, from
<https://www.hbs.edu/faculty/Pages/item.aspx?num=53682>
- Kets de Vries, M. F. (1985, November). The Dark Side of Entrepreneurship. *Harvard Business Review*, 160-167. Retrieved June 25, 2022, from <https://hbr.org/1985/11/the-dark-side-of-entrepreneurship>
- Khan, M., & Panarina, E. (2017, April). The Role of National Cultures in Shaping the Corporate Management Cultures: A Four Countries Theoretical Analysis. *Journal of Eastern European and Central Asian Research*. Retrieved April 7, 2022, from
https://www.researchgate.net/publication/316752724_The_Role_of_National_Cultures_in_Shaping_the_Corporate_Management_Cultures_A_Four_Countries_Theoretical_Analysis
- Kirby, D. (2006). Creating Entrepreneurial Universities in the UK: Applying Entrepreneurship Theory of Practice. *Journal of Technology Transfer*, 599-603. Retrieved June 27, 2022, from
<https://link.springer.com/content/pdf/10.1007/s10961-006-9061-4.pdf>
- Koether, R. (2012, April 11). *Residual analysis and Outliers*. Retrieved June 16, 2022, from
<http://people.hsc.edu/faculty-staff/robbk/math121/lectures/Spring%202012/Lecture%2043%20-%20Residual%20Analysis.pdf>
- Koi-Akrofi, G., Matey, H., Banaseka, F., & Quist, S. (202, December). Impact of personality, human capital, and environmental influences on student's entrepreneurial potential: The case of I.T. Management and Business Administration final year students of UPSA, Ghana. *International Journal of Innovation and Applied Studies*, 351-369. Retrieved February 1, 2022, from <http://www.ijias.issr-journals.org/abstract.php?article=IJIAS-20-322-04>
- Koryak, O., Mole, K., Lockett, A., Hayton, J. C., Ucbasaran, D., & Hodgkinson, G. (2015, January). Entrepreneurial leadership, capabilities and firm growth. *International Small Business Journal: Researching Entrepreneurship*, 89-105. Retrieved May 8, 2022, from
<https://journals.sagepub.com/doi/abs/10.1177/0266242614558315>
- Kreitchmann, R. S., Abad, F. J., Ponsoda, V., Dolores, N. M., & Morillo, D. (2019, October). Controlling for Response Biases in Self-Report Scales: Forced-Choice vs. Psychometric Modeling of Likert Items.

- Frontiers of Psychology*, 1-12. Retrieved June 19, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02309/full>
- Krueger, N., & Carsrud, A. (1993, October). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship and Regional Development*, 315-330. Retrieved March 31, 2022, from https://www.researchgate.net/publication/232926814_Entrepreneurial_intentions_Applying_the_theory_of_planned_behaviour
- Krueger, N., Reilly, M., & Carsrud, A. (2000, November). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 411-432. Retrieved February 1, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S0883902698000330>
- Kuratko, D., & Audretsch, D. (2013, September). Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 323-335. Retrieved June 25, 2022, from <https://link.springer.com/article/10.1007/s11365-013-0257-4>
- Kuratko, D., Hornsby, J., & Covin, J. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 37-47. Retrieved June 25, 2022, from <https://www.firstmonday.org/wp-content/uploads/2014/05/03Diagnosing-a-firm%E2%80%99s-internal-environment.pdf>
- Kuratko, D., Ireland, R., & Hornsby, J. (2001, November). Improving Firm Performance through Entrepreneurial Actions: Acordia's Corporate Entrepreneurship Strategy. *The Academy of Management Executive*, 60-71. Retrieved April 29, 2022, from https://www.jstor.org/stable/pdf/4165786.pdf?refreqid=excelsior%3Afb4ea4f3c789e31d4e8650d714b477b1&ab_segments=&origin=
- Lambert, J. (2016). Cultural Diversity as a Mechanism for Innovation: Workplace diversity and the absorptive capacity framework. *Journal of Organizational Culture*, 68-78. Retrieved March 30, 2022, from <https://twu-ir.tdl.org/bitstream/handle/11274/12976/Lambert-CulturalDiversityAs.pdf?sequence=1&isAllowed=y>
- Leke, A., & Signé, L. (2019, January 11). *Spotlighting opportunities for business in Africa and strategies to succeed in the world's next big growth market*. Retrieved March 9, 2022, from www.brookings.edu: <https://www.brookings.edu/research/spotlighting-opportunities-for-business-in-africa-and-strategies-to-succeed-in-the-worlds-next-big-growth-market/>
- Leke, A., Chironga, M., & Desvaux, G. (2018, November 15). *Africa's overlooked business revolution*. Retrieved June 23, 2022, from McKinsey: <https://www.mckinsey.com/featured-insights/middle-east-and-africa/africas-overlooked-business-revolution>
- Littunen, H. (2000, December). The Entrepreneurship and the Characteristics of the Entrepreneurial Personality. *International Journal of Entrepreneurial Behaviour & Research*, 295-310. Retrieved March 26, 2022, from https://www.researchgate.net/publication/235295567_The_Entrepreneurship_and_the_Characteristics_of_the_Entrepreneurial_Personality
- Louw, L., van Eeden, S., & Bosch, J. (2003, February). Entrepreneurial traits of undergraduate students at selected South African tertiary institutions. *International Journal of Entrepreneurial Behaviour & Research*, 5-26. Retrieved February 1, 2022, from https://www.researchgate.net/publication/317077416_Entrepreneurial_traits_of_undergraduate_students_at_selected_South_African_tertiary_institutions

- Lumpkin, G. T., & Dess, G. G. (2001, September). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing* , 429-451. Retrieved June 26, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S0883902600000483>
- Lyon, D., Lumpkin, G., & Dess, G. (2000, September). Enhancing Entrepreneurial Orientation Research: Operationalizing and Measuring a Key Strategic Decision Making Process. *Journal of Management* , 1055-1085. Retrieved April 21, 2022, from https://www.researchgate.net/publication/247570002_Enhancing_Entrepreneurial_Orientation_Research_Operationalizing_and_Measuring_a_Key_Strategic_Decision_Making_Process
- Maliszewska, M., Ruta, M., Arenas, G., Brenton, P., Calderon, C., Echandi, R., van der Mensbrugghe, D. (2020, July 27). *The African Continental Free Trade Area*. Retrieved March 29, 2022, from Worldbank: <https://www.worldbank.org/en/topic/trade/publication/the-african-continental-free-trade-area>
- Martínez- González, J. A., Álvarez -Albelo, C. D., Mendoza - Jiménez, J., & Kobylinska, U. (2022). Predicting the entrepreneurial behaviour of Starting Up a New Company: A Regional Study Using PLS-SEM and Data from the Global Entrepreneurship Monitor. *Mathematics*. Retrieved May 15, 2022, from <https://www.mdpi.com/2227-7390/10/5/704#cite>
- McAdam, M., & Cunningham, J. (2019). *Entrepreneurial behaviour: Individual, Contextual and Microfoundational Perspectives*. Cham: Palgrave Macmillan. Retrieved May 4, 2022, from https://link.springer.com/chapter/10.1007/978-3-030-04402-2_1#copyright-information
- McCarthy, J. (2013). *Entrepreneurial PLans Highest in sub-Saharan Africa*. Retrieved on June 19, 2022, from Gallup: <https://news.gallup.com/poll/177644/entrepreneurial-plans-highest-sub-saharan-africa.aspx>
- McClelland, D. (1961). *The Achieving Society*. New York: The Free Press. Retrieved February 1, 2022, from <https://books.google.nl/books?hl=nl&lr=&id=RI2wZw9AFE4C&oi=fnd&pg=PA1&dq=McClella#v=onepage&q&f=false>
- McKenzie, B. (2021, November 16). *10 reasons to consider Africa trade and investment opportunities in 2022*. Retrieved March 29, 2022, from African Markets: <https://www.african-markets.com/en/news/africa/10-reasons-to-consider-african-trade-and-investment-opportunities-in-2022>
- Mehran, H. (1995, June). Executive compensation structure, ownership, and firm performance . *Journal of Financial Economics*, 163-184. Retrieved May 7, 2022, from <https://www.sciencedirect.com/science/article/pii/0304405X9400809F?via%3Dihub>
- Menipaz, E., & Menipaz, A. (2011). *International Business*. London : SAGE Publications. Retrieved Januari 29, 2022, from <https://uk.sagepub.com/en-gb/eur/international-business/book227083#preview>
- Menzel, H. C., Krauss, R., Ulijn, J. M., & Weggeman, M. C. (2006, June). *Developing characteristics of an intrapreneurship-supportive culture* . Retrieved May 7, 2022, from <https://research.tue.nl/en/publications/developing-characteristics-of-an-intrapreneurship-supportive-cult-3>
- Menzel, H., Aaltio, I., & Ulijn, J. (2007, December). On the Way to Creativity: Engineers as Intrapreneurs in Organizations. *Technovation* , 732-743. Retrieved June 26, 2022, from https://www.researchgate.net/publication/223184108_On_the_Way_to_Creativity_Engineers_as_Intrapreneurs_in_Organizations

- Minkov, M. (2009, February 10). Predictors of Differences in Subjective Well-Being Across 97 Nations. *Cross-Cultural Research*, 152-179. Retrieved June 28, 2022, from <https://journals.sagepub.com/doi/10.1177/1069397109332239>
- Mockaitis, A. (2002, December). The National Cultural Dimensions of Lithuania. *Ekonomia*, 67-77. Retrieved May 28, 2022, from https://www.researchgate.net/publication/288964749_The_National_Cultural_Dimensions_of_Lithuania
- Moriano, J., Gorgievski, & Laguna, M. (2012, January). A Cross-Cultural Approach to Understanding Entrepreneurial Intention. *Journal of Career Development*, 162-185. Retrieved June 15, 2022, from https://www.researchgate.net/publication/233951487_A_Cross-Cultural_Approach_to_Understanding_Entrepreneurial_Intention
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering Corporate Entrepreneurship: Cross-cultural Comparisons of the Importance of Individualism versus Collectivism. *Journal of International Business Studies*, 65-89. Retrieved May 8, 2022, from https://www.jstor.org/stable/pdf/154852.pdf?refreqid=excelsior%3A40dad36a72a5dc8d6d17b6e03ed9f9ea&ab_segments=&origin=&acceptTC=1
- Morris, M., Avila, R. A., & Allen, J. (1993). Individualism and the modern corporation: Implications for innovation and entrepreneurship. *Journal of Management*, 595-612. Retrieved June 28, 2022, from <https://psycnet.apa.org/record/1994-15692-001>
- Morris, M., & Fessenhaie, J. (2014, December). The industrialisation challenge for Africa: Towards a commodities based industrialisation path. *Journal of African Trade*, 25-36. Retrieved May 23, 2022, from <https://www.sciencedirect.com/science/article/pii/S221485151400005X>
- Müge, L. (2014, April). The Effects of Organizational Culture on Corporate Entrepreneurship. *International Journal of Business and Social Science*. Retrieved May 18, 2022, from https://ijbssnet.com/journals/Vol_5_No_5_1_April_2014/4.pdf
- Mustafa, M., Gavin, F., & Hughes, M. (2018, October). Contextual Determinants of Employee Entrepreneurial Behavior in Support of Corporate Entrepreneurship: A Systematic Review and Research Agenda. *Journal of Enterprising Culture*, 285-326. Retrieved May 8, 2022, from https://www.researchgate.net/publication/328215639_Contextual_Determinants_of_Employee_Entrepreneurial_Behavior_in_Support_of_Corporate_Entrepreneurship_A_Systematic_Review_and_Research_Agenda
- Nafula, F. J. (2018). *Influence of entrepreneurial behaviour on Perceived Service Quality by Government Ministries in Kenya*. Retrieved May 9, 2022, from <http://ir.jkuat.ac.ke/bitstream/handle/123456789/4828/Fanice%20Nafula-%20PRINTING%20and%20BINDING.pdf?sequence=1&isAllowed=y>
- Nakata, C., & Sivakumar, K. (1996, January). National Culture and New Product Development: An Integrative Review. *Journal of Marketing*, 61-72. Retrieved June 28, 2022, from <https://www.jstor.org/stable/1251888?seq=1>
- Neessen, P., Caniëls, M., Vos, B., & Jong de, J. (2018, November 29). The intrapreneurial employee: toward an integrated model of intrapreneurship and research agenda. *International Entrepreneurship and Management Journal*, 545-571. Retrieved March 27, 2022, from <https://link.springer.com/article/10.1007/s11365-018-0552-1>

- Nguyen, V. H., Nguyen, T. T., Nguyen, V. T., & Do, D. T. (2021, January). Internal Factors Affecting Firm Performance: A case Study in Vietnam. *Journal of Asian Finance, Economics and Business*, 303-314. Retrieved May 6, 2022, from <https://www.koreascience.or.kr/article/JAKO202112748674972.page>
- Noorbakhsh, F., Paloni, A., & Youssef, A. (1999, August). *Low wages or skilled labour? Prospects for foreign direct investment in developing countries*. Retrieved May 3, 2022, from https://www.gla.ac.uk/media/Media_219080_smxx.pdf
- Nunnally, J., & Bernstein, I. H. (1978). *Psychometric Theory*. New York: McGraw- Hill. Retrieved June 19, 2022
- O'Connel, B. (2018, September 5). *What is Leverage in Finance and What is the Formula*. Retrieved June 2, 2022, from The Street: <https://www.thestreet.com/personal-finance/education/what-is-leverage-finance-14700895>
- Oluwole, V. (2022, February 20). *China ranks ahead of America as the largest investor in Africa since 2010*. Retrieved May 12, 2022, from Business Insider Africa: <https://africa.businessinsider.com/local/markets/china-ranks-ahead-of-america-as-the-largest-investor-in-africa-since-2010/62532rh>
- Organisational Culture*. (n.d.). Retrieved June 17, 2022, from Hofstede Insights: <https://hi.hofstede-insights.com/organisational-culture>
- Orlando, R., Barnet, T., Dwyer, S., & Chadwick, K. (2004, April). Cultural Diversity in Management, Firm Performance, and the Moderating Role of Entrepreneurial Orientation Dimensions. *The Academy of Management Journal*, 255-266. Retrieved April 3, 2022, from https://www.jstor.org/stable/pdf/20159576.pdf?refreqid=excelsior%3A4814d66b7937a7caf07bb435e972ec10&ab_segments=&origin=
- Ouédraogo, E., Ouédraogo, I., & Lompo, E. (2020). Political Instability and Firm Performance: A Microeconomic Evidence from Ivory Coast. *American Journal of Economics and Business Administration*, 49-55. Retrieved June 19, 2022, from <https://thescpub.com/abstract/ajebasp.2020.49.55>
- van Oudenhoven, J. P. (2001). Do organizations reflect national cultures? A 10-nation study. *International Journal of Intercultural Relations*, 89-107. Retrieved May 7, 2022, from <https://www.sciencedirect.com/science/article/pii/S0147176700000444>
- Oyong, L. (2019, May). The Effect of entrepreneurial behaviour and Organizational Innovation on MSMEs Performance. *JEMA Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, 2597-4071. Retrieved February 21, 2022, from https://www.researchgate.net/publication/333498835_The_Effect_of_Entrepreneurial_Behavior_and_Organizational_Innovation_on_MSMEs_Performance
- Pai, M. S., & Vollmer, S. (2019, June 14). *How to recruit and retain entrepreneurial talent*. Retrieved June 19, 2022, from Financial Management: <https://www.fm-magazine.com/news/2019/jun/how-to-hire-entrepreneurial-talent-201920519.html>
- Palm, P., Lopes, M., & Cunha, M. (2009, Januar). *Entrepreneurial Behavior*. Retrieved on March 26, 2022, from ResearchGate: https://www.researchgate.net/publication/215694453_Entrepreneurial_Behavior
- Parker, S., & Collins, C. (2010). Taking Stock: Integrating and Differentiating Multiple Proactive Behaviors. *Journal of Management*, 633-662. Retrieved June 26, 2022, from <https://journals.sagepub.com/doi/10.1177/0149206308321554>

- Parker, S., Williams, H. S., & Turner, N. (2006, May). Modeling the antecedents of proactive behavior at work. *The Journal of Applied psychology*, 636-652. Retrieved June 25, 2022, from <https://www.semanticscholar.org/paper/Modeling-the-antecedents-of-proactive-behavior-at-Parker-Williams/8c979b1df71c34cfb81e8a43ee75fe09f68ac622>
- Patchen, M. (1965). *Some questionnaire measures of employee motivation and morale; a report on their reliability and validity*. Michigan: Ann Arbor. Retrieved May 8, 2022
- Paunovic, S., & Dima, I. C. (2014). Organizational culture and corporate entrepreneurship. *Annals of the University of Petrosani*, 269-276. Retrieved May 7, 2022, from <https://www.upet.ro/annals/economics/pdf/2014/part1/Paunovic-Dima.pdf>
- Political Stability in sub-Saharan Africa*. (2020). Retrieved June 19, 2022, from the Global Economy : https://www.theglobaleconomy.com/rankings/wb_political_stability/Sub-Sahara-Africa/#Uganda
- Porter, M. (1998). *Competitive Strategy: Techniques for Analyzing Industries and CompetitorsL with an New Introduction*. New York: Free Press. Retrieved May 3, 2022
- PriceWaterhouseCoopers. (2015, February). *The World in 2050. Will the shift in global economic power continue*. Retrieved June 25, 2022, from <https://www.pwc.com/gx/en/issues/the-economy/assets/world-in-2050-february-2015.pdf>
- Qi, D., Wu, w., & Zhang, H. (2000, October). Shareholding Structure and Corporate Performance of Partially Privatized Firms: Evidence from Listed Chinese Companies. *Pacific-Basin Finance Journal*, 587-610. Retrieved May 18, 2022, from https://www.researchgate.net/publication/222689720_Shareholding_Structure_and_Corporate_Performance_of_Partially_Privatized_Firms_Evidence_from_Listed_Chinese_Companies
- Radipere, S., & Ladzani, W. (2014). The effects of entrepreneurial intention on business performance. *Journal of Governance and Regulation*, 210-223. Retrieved April 29, 2022, from https://pdfs.semanticscholar.org/3da9/7004d507849dcbccde90608674121c7ccb85.pdf?_ga=2.217566614.1488780600.1650787106-551858815.1645448168
- Ramsey, J. R., & Bahia, B. R. (2013). How to Determine Subsidiary Performance Based on the Internationalization Strategy. *Journal of Management Policy and Practice*, 11-18. Retrieved June 5, 2022, from http://t.www.na-businesspress.com/JMPP/RamseyJR_Web14_1_.pdf
- Rauch, A. (2014). Predictions of entrepreneurial behavior: A personality approach. In E. Chell, & M. Karatas-Özkan, *Handbook of Research in Small Business and Entrepreneurship* (pp. 165-187). Cheltenham: Edward Elgar. Retrieved February 21, 2022, from https://books.google.nl/books?redir_esc=y&hl=nl&id=B-wyAwAAQBAJ&q=Rauch#v=onepage&q&f=false
- Rauch, A., & Frese, M. (2007, December). Let's Put the Person Back into Entrepreneurship Research: A Meta-Analysis on the Relationship Between Business Owners' Personality Traits, Business Creation, and Success. *Journal of Work and Organizational Psychology*, 352-385. Retrieved May 8, 2022, from https://www.researchgate.net/publication/242366340_Let%27s_Put_the_Person_Back_into_Entrepreneurship_Research_A_Meta-Analysis_on_the_Relationship_Between_Business_Owners%27_Personality_Traits_Business_Creation_and_Success
- Rauch, A., Wiklund, J., Lumpkin, G., & Frese, M. (2009, May 1). Entrepreneurial Orientation and Business Performance: An Assessment of past Research and Suggestions for the Future. *Entrepreneurship*

- Theory and Practice*, 761-787. Retrieved on April 29, 2022, from <https://journals.sagepub.com/doi/10.1111/j.1540-6520.2009.00308.x>
- Regression with Stata Chapter 2 - Regression Diagnostics*. (n.d.). Retrieved June 4, 2022, from Statistical Methods and Data Analysis: <https://stats.oarc.ucla.edu/stata/webbooks/reg/chapter2/stata-webbooksregressionwith-statachapter-2-regression-diagnostics/#:~:text=We%20can%20use%20the%20vif,on%20the%20degree%20of%20collinearity.>
- Reich, R. B. (1987, May). Entrepreneurship Reconsidered: The Team as Hero. *Harvard Business Review*, 77-83. Retrieved May 8, 2022, from <https://hbr.org/1987/05/entrepreneurship-reconsidered-the-team-as-hero>
- Reset for growth: fast forward (2021)*. EY. Retrieved May 23, 2022, from https://assets.ey.com/content/dam/ey-sites/ey-com/en_za/topics/attractiveness/reports/ey-aar-reset-for-growth-final.pdf
- Riverola, C., & Giones, F. (2012). Analysing Nascent Entrepreneurs' Behaviour through Intention-Based Models. *7th European Conference on Innovation and Entrepreneurship*. Santarem: ResearchGate. Retrieved May 4, 2022, from https://www.researchgate.net/publication/259369472_Analysing_Nascent_Entrepreneurs'_Behaviour_through_Intention-Based_Models
- Riviezzo, A., & Garofano, A. (2017). Linking SMEs' strategic orientation and international performance: insights from an empirical investigation in Italy. In S. Santos, A. Caetano, C. Mitchell, H. Landström, & A. Fayolle, *The Emergence of entrepreneurial behaviour* (pp. 223-240). Cheltenham: Edward Elgar Publishing . Retrieved March 30, 2022
- Rosenberg, N. (1998). Uncertainty and Technological Chance. *The Economic Impact of Knowledge*, 17-34. Retrieved June 26, 2022, from <https://www.sciencedirect.com/science/article/pii/B9780750670098500045?via%3Dihub>
- Rosenbusch, N., & Bausch, A. (2005). Does innovation really matter? a meta-analysis on the relationship between innovation and business performance. *Babson Kauffman Entrepreneurship Research Conference*. Wellesley. Retrieved May 8, 2022, from <https://pureportal.strath.ac.uk/en/publications/does-innovation-really-matter-a-meta-analysis-on-the-relationship>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied* , 1-28. Retrieved May 24, 2022, from <https://psycnet.apa.org/record/2011-19211-001>
- Rowley, M. (2021, February 17). *Why Now Is The Ideal Time To Invest In Africa, The Fastest Growing Continent In The World*. Retrieved April 8, 2022, from Forbes: <https://www.forbes.com/sites/melissarowley/2021/02/17/why-now-is-the-ideal-time-to-invest-in-africa-the-fastest-growing-continent-in-the-world/?sh=27b6f0762477>
- Sastre, C. G., del Mar Benavides-Espinosa, M., & Ribeiro-Soriano, D. (2021, November). When intention turn into action: pathways to succesful firm performance. *International Entrepreneurship and Management Journal*. Retrieved May 8, 2022, from https://link.springer.com/article/10.1007/s11365-021-00782-2?utm_source=researcher_app&utm_medium=referral&utm_campaign=RESR_MRKT_Researcher_inbound#citeas

- Sauro, J. (2018, March 14). *Is a Single Item Enough to Measure a Construct?* . Retrieved June 19, 2022, from Measuring U: <https://measuringu.com/single-multi-items/>
- Schiffer, M. (2001). Firm Size and the Business Environment: Worldwide Survey Results. *International Finance Corporation*. Retrieved May 27, 2022, from International : <https://openknowledge.worldbank.org/handle/10986/13988>
- Schumpeter, J. (1935, May). The Analysis of Economic Change. *The Review of Economics and Statistics*, 2-10. Retrieved May 8, 2022, from <https://www.jstor.org/stable/1927845?origin=crossref&seq=1>
- Schwartz, S. (1994). Beyond Individualism-Collectivism: New Cultural Dimensions of Values . In U. Kim, H. Triandis, C. Kagitcibasi, S.-C. Choi, & G. Yoon, *Individualism and collectivism: Theory, method, and application* (pp. 85-119). London: Sage. Retrieved April 3, 2022
- Shane, S., Locke, E., & Collins, C. (2003). Entrepreneurial motivation. *Human Resource Management Review* , 257-279. Retrieved June 26, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S1053482203000172>
- Shapiro, A., & Sokol, L. (1982). The Social dimensions of entrepreneurship. In C. Kent, D. Sexton, & K. Vesper, *Encyclopedia of Entrepreneurship* (pp. 72-90). Englewood Cliffs: Prentice Hall. Retrieved March 31, 2022
- Shaver, K. G., & Scott, L. R. (1992, January 2). Person, Process, Choice: The Psychology of New Venture Creation. *Entrepreneurship Theory and Practice*, 23-46. Retrieved June 25, 2022, from <https://journals.sagepub.com/doi/10.1177/104225879201600204>
- Sheeran, P. (2002). Intention-Behaviour Relations: A Conceptual and Empirical Review. *European Review of Social Psychology*, 1-36. Retrieved May 4, 2022, from https://www.researchgate.net/publication/279613604_Intention-Behavior_Relations_A_Conceptual_and_Empirical_Review
- Sita, A., Wolfenden, R., & Hlophe, S. (2021, November). *Reset from growth: fast forward* . Retrieved March 10, 2022, from https://assets.ey.com/content/dam/ey-sites/ey-com/en_za/topics/attractiveness/reports/ey-aar-reset-for-growth-final.pdf
- Soeters, J., & Schreuder, H. (1988). The interaction between national and organizational cultures in accounting firms . *Accounting Organizations and Society* , 75-85. Retrieved April 8, 2022, from https://www.academia.edu/29360775/The_interaction_between_national_and_organizational_cultures_in_accounting_firms
- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007, July). Do entrepreneurship programmes raise entrepreneurial intentions of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, 566-591. Retrieved February 1, 2022, from <https://www.sciencedirect.com/science/article/abs/pii/S0883902606000486>
- Stewart, A. (1989). *Team Entrepreneurship*. Newbury Park: Sage Publication. Retrieved May 8, 2022
- Sub-Saharan Africa Exits Recession in 2021 but Recovery Still Vulnerable*. (2021, October 6). Retrieved March 10, 2022, from The World Bank: <https://www.worldbank.org/en/news/press-release/2021/10/06/sub-saharan-africa-exits-recession-in-2021-but-recovery-still-vulnerable>

- Sundbo, J. (1991). Strategic paradigms as a frame of explanation of innovations: a theoretical synthesis. *Entrepreneurship and Regional Development*, 159-173. Retrieved May 8, 2022, from <https://www.tandfonline.com/doi/abs/10.1080/0898562910000011?journalCode=tepn20>
- Swierczek, F. W., & Quang, T. (2004). Entrepreneurial cultures in Asia: Business Policy or Cultural Imperative. *Journal of Enterprising Culture*, 127-145. Retrieved June 28, 2022, from <https://www.worldscientific.com/doi/abs/10.1142/S0218495804000075>
- Szczepanska-Woszczyna, K. (2015). Leadership and Organizational Culture as the Normative Influence on Top Management on Employee's Behaviour in the Innovation Process. *Procedia Economics and Finance*, 396-402. Retrieved May 7, 2022, from <https://www.sciencedirect.com/science/article/pii/S2212567115016469>
- Theriou, N., & Aggelidis, V. (2014). The Mediating Effect of the Knowledge Management Process to the firms Performance: A resource-based view . *International Journal of Economics & Business Administration* , 87-114. Retrieved May 8, 2022, from <https://ideas.repec.org/a/ers/ijebaa/viiy2014i1p87-114.html>
- Thwaites, D. (1992). Organizational influences on the new product development process in financial services. *Journal of Product Innovation Management*, 303-313. Retrieved May 8, 2022, from <https://www.sciencedirect.com/science/article/pii/S0737678205800566>
- Tribbitt, M. (2017). Developing Entrepreneurial Behavior in Established Firms. *Graziadio Business Review* . Retrieved March 30, 2022, from <https://gbr.pepperdine.edu/2017/08/developing-entrepreneurial-behavior-in-established-firms/>
- Trompenaars, F., & Hampden-Turner, C. (1993). *Riding the Waves of Culture: Understanding Cultural Diversity in Business*. London: Nicholas Brealey Publishing . Retrieved May 24, 2022
- Ulijn, J. M., & Weggeman, M. C. (2001). Towards an innovation culture : what are it's national, corporate, marketing and engineering aspects, some experimental evidence. In C. L. Cooper, S. Cartwright, & P. C. Earley, *Handbook of organizational culture and climate* (pp. 487-517). London: Wiley. Retrieved June 28, 2022
- Urban, B. (2006, February). Entrepreneurship in the Rainbow Nation: Effect of Cultural Values and ESE on Intentions. *Journal of Developmental Entrepreneurship*, 171-186. Retrieved June 28, 2022, from https://www.researchgate.net/publication/23551958_Entrepreneurship_in_the_Rainbow_Nation_Effect_of_Cultural_Values_and_ESE_on_Intentions
- Verboncu, I., & Zalman, M. (2005). *Management si Performante*. Editura Universitara. Retrieved April 3, 2022
- Wakkee, I., Elfring, T., & Monaghan, S. (2008, February). Creating entrepreneurial employees in traditional seervice sectors . *International Entrepreneurship and Management Journal* , 1-21. Retrieved February 1, 2022, from <https://link.springer.com/article/10.1007/s11365-008-0078-z>
- Walters, D. (2004). New economy – new business models – new approaches. *International Journal of Physical Distribution & Logistics Management*, 219-229. Retrieved June 25, 2022, from https://www.researchgate.net/publication/235300219_New_economy_-_new_business_models_-_new_approaches
- Wei, S. (2021, May 28). *Testing the Assumption of Linear Regression* . Retrieved May 19, 2022, from Towards Data Science: <https://towardsdatascience.com/testing-the-assumptions-of-linear-regression-f38857abc08a>

- Wennekers, S., Thurik, R., Stel van, A., & Noorderhaven, N. (2007). Uncertainty avoidance and the rate of business ownership across 21 OECD countries, 1976–2004. *Journal of Evolutionary Economics*, 133-160. Retrieved June 30, 2022, from <https://link.springer.com/article/10.1007/s00191-006-0045-1>
- Westhead, P., McElwee, G., & Wright, M. (2011). *Entrepreneurship: Perspectives and Cases*. Essex: Pearson. Retrieved March 26, 2022
- Wetzel, E., Böhnke, J. R., & Brown, A. (2016). Response Biases. In F. Long, D. Bartram, F. Cheung, K. Geisinger, & D. Iliescu, *The ITC International Handbook of Testing and Assessment* (pp. 2-37). Oxford: Oxford University Press. Retrieved June 19, 2022, from https://www.researchgate.net/publication/282667681_Response_biases/citations
- What is Entrepreneurial Behavior*. (n.d.). Retrieved May 4, 2022, from IGI Global: Publisher of Timely Knowledge: <https://www.igi-global.com/dictionary/entrepreneurial-behavior/67278>
- What is the Adult Population Survey (APS)?* (n.d.). Retrieved May 15, 2022, from GEM Consortium: <http://gem-consortium.ns-client.xyz/wiki/1141>
- Why Africa is becoming a bigger player in the global economy*. (2020, September 11). Retrieved June 23, 2022, from EY: https://www.ey.com/en_gl/tax/why-africa-is-becoming-a-bigger-player-in-the-global-economy
- Wooldridge, J. (2014). *Introduction to Econometrics*. China: RR Donnelley. Retrieved May 19, 2022
- Zach. (2019, February 23). *Understanding Heteroscedasticity in Regression Analysis*. Retrieved June 6, 2022, from Statology: <https://www.statology.org/heteroscedasticity-regression/#:~:text=Use%20weighted%20regression,which%20shrinks%20their%20squared%20residuals.>
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000, October). International Expansion by New Venture Firms: International Diversity, Mode of Market Entry, Technological Learning, and Performance. *The Academy of Management Journal*, 925-950. Retrieved May 18, 2022, from <https://www.jstor.org/stable/1556420?seq=1>
- Zahra, S., Hayton, J., & Salvato, C. (2004, July). Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture. *Entrepreneurship: Theory and Practice*, 363-381. Retrieved May 18, 2022, from <https://journals.sagepub.com/doi/10.1111/j.1540-6520.2004.00051.x>
- Zahra, S., Kuratko, D., & Jennings, D. (1999, April 1). Guest Editorial: Entrepreneurship and the Acquisition of Dynamic Organizational Capabilities. *Entrepreneurship Theory and Practice*, 5-10. Retrieved April 7, 2022, from <https://journals.sagepub.com/doi/10.1177/104225879902300301>
- Zhang, D., & Bruning, E. (2011, February). Personal characteristics and strategic orientation: Entrepreneurs in Canadian manufacturing companies. *International Journal of Entrepreneurial Behaviour & Research*, 82-103. Retrieved March 26, 2022, from https://www.researchgate.net/publication/239781463_Personal_characteristics_and_strategic_orientation_Entrepreneurs_in_Canadian_manufacturing_companies
- Zhao, H., & Seibert, S. (2006, April). The Big five Personality Dimensions and Entrepreneurial Status: A Meta-Analytical Review. *Journal of Applied Psychology*, 259-271. Retrieved May 5, 2022, from https://www.researchgate.net/publication/7228183_The_Big_Five_Personality_Dimensions_and_Entrepreneurial_Status_A_Meta-Analytical_Review

- Zhao, X., Li, H., & Rauch, A. (2012). Cross-Country Differences in Entrepreneurial Activity: The Role of Cultural Practice and National Wealth. *Frontiers of Business Research in China*, 447-474. Retrieved May 20, 2022, from <https://fbr.rmbs.ruc.edu.cn/userfiles/download/1394183314831.pdf>
- Zinn, D. (2021, November 4). *Return on Assets: How ROA can help you assess how much bang a company is getting for its buck*. Retrieved on June 5, 2022, from Business Insider Nederland: <https://www.businessinsider.nl/return-on-assets-how-roa-can-help-you-assess-how-much-bang-a-company-is-getting-for-its-buck/>
- Zhou, Y., & Kwon, J.-W. (2020). Overview of Hofstede-Inspired Research Over the Past 40 Years: The Network Diversity Perspective. *SAGE Open*, 1-17. Retrieved June 14, 2022, from <https://journals.sagepub.com/doi/10.1177/2158244020947425>

APPENDICES

APPENDIX A – VSM QUESTIONNAIRE

INTERNATIONAL QUESTIONNAIRE (VSM 2013)- page 1

Please think of an ideal job, disregarding your present job, if you have one. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

- 01. have sufficient time for your personal or home life 1 2 3 4 5
- 02. have a boss (direct superior) you can respect 1 2 3 4 5
- 03. get recognition for good performance 1 2 3 4 5
- 04. have security of employment 1 2 3 4 5
- 05. have pleasant people to work with 1 2 3 4 5
- 06. do work that is interesting 1 2 3 4 5
- 07. be consulted by your boss in decisions involving your work 1 2 3 4 5
- 08. live in a desirable area 1 2 3 4 5
- 09. have a job respected by your family and friends 1 2 3 4 5
- 10. have chances for promotion 1 2 3 4 5

In your private life, how important is each of the following to you: (please circle one answer in each line across):

- 11. keeping time free for fun 1 2 3 4 5
- 12. moderation: having few desires 1 2 3 4 5
- 13. doing a service to a friend 1 2 3 4 5
- 14. thrift (not spending more than needed) 1 2 3 4 5

INTERNATIONAL QUESTIONNAIRE (VSM 2013) – page 2

15. How often do you feel nervous or tense?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

16. Are you a happy person ?

- 1. always
- 2. usually
- 3. sometimes
- 4. seldom
- 5. never

17. Do other people or circumstances ever prevent you from doing what you really want to?

- 1. yes, always
- 2. yes, usually
- 3. sometimes
- 4. no, seldom
- 5. no, never

18. All in all, how would you describe your state of health these days?

- 1. very good
- 2. good

3. fair
4. poor
5. very poor

19. How proud are you to be a citizen of your country?

1. very proud
2. fairly proud
3. somewhat proud
4. not very proud
5. not proud at all

20. How often, in your experience, are subordinates afraid to contradict their boss (or students their teacher?)

1. never
2. seldom
3. sometimes
4. usually
5. always

INTERNATIONAL QUESTIONNAIRE (VSM 2013) – page 3

To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):

- 1 = strongly agree
- 2 = agree
- 3 = undecided
- 4 = disagree
- 5 = strongly disagree

21. One can be a good manager without having a precise answer to every question that a subordinate may raise about his or her work 1 2 3 4 5

22. Persistent efforts are the surest way to results 1 2 3 4 5

23. An organization structure in which certain subordinates have two bosses should be avoided at all cost 1 2 3 4 5

24. A company's or organization's rules should not be broken - not even when the employee thinks breaking the rule would be in the organization's best interest 1 2 3 4 5

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Some information about yourself (for statistical purposes):

25. Are you:

1. male
2. female

26. How old are you?

1. Under 20
2. 20-24
3. 25-29
4. 30-34
5. 35-39
6. 40-49
7. 50-59
8. 60 or over

27. How many years of formal school education (or their equivalent) did you complete (starting with primary school)?

1. 10 years or less
2. 11 years
3. 12 years

4. 13 years
5. 14 years
6. 15 years
7. 16 years
8. 17 years
9. 18 years or over

28. If you have or have had a paid job, what kind of job is it / was it?

1. No paid job (includes full-time students)
2. Unskilled or semi-skilled manual worker
3. Generally trained office worker or secretary
4. Vocationally trained craftsperson, technician, IT-specialist, nurse, artist or equivalent
5. Academically trained professional or equivalent (but not a manager of people)
6. Manager of one or more subordinates (non-managers)
7. Manager of one or more managers

29. What is your nationality?

30. What was your nationality at birth (if different)?

Thank you very much for your cooperation!

APPENDIX B – SCATTER PLOT ANALYSIS

Figure 4.2.

Graph matrix explained variable, explanatory variables, and control variables

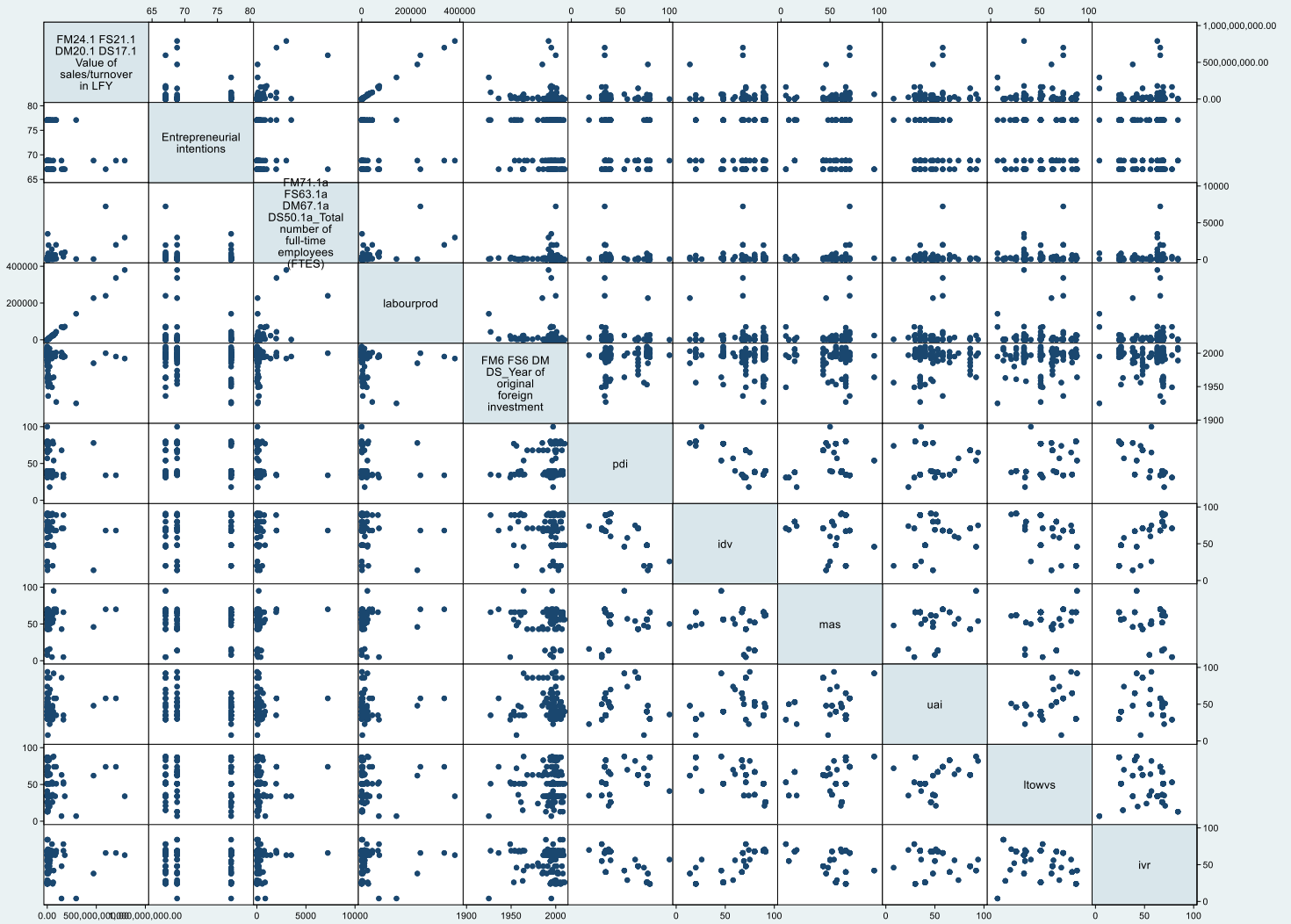


Figure 4.3.

Scatter plot value of sales and entrepreneurial intentions (explanatory variable)

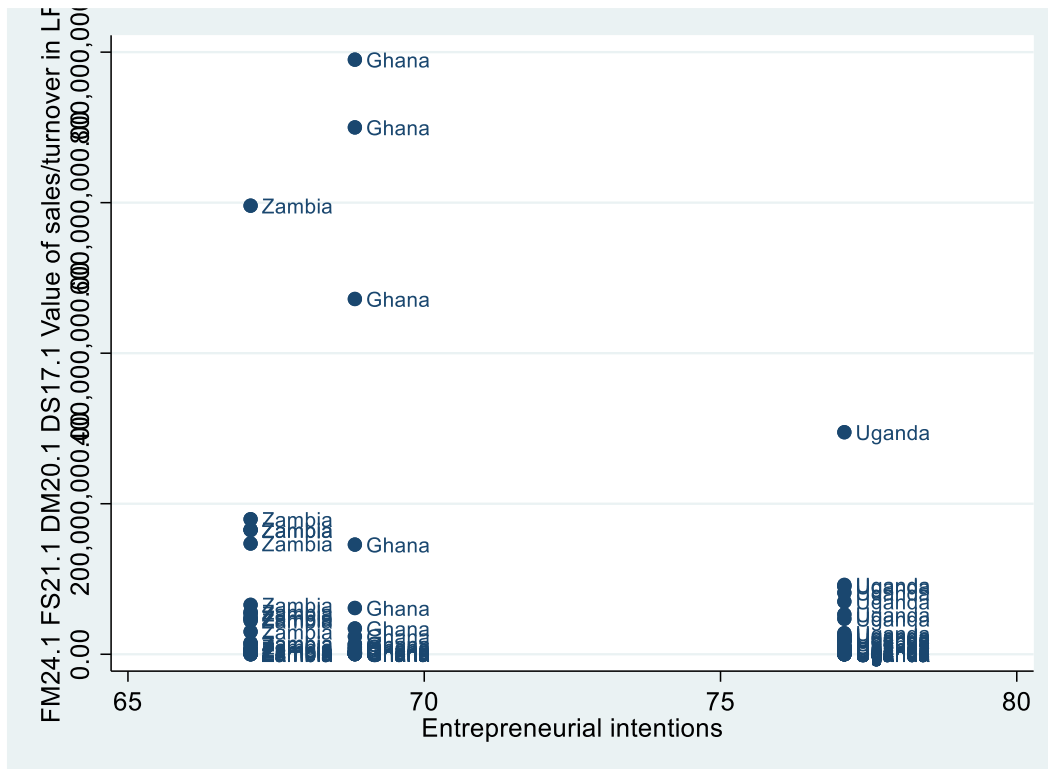


Figure 4.4.

Scatter plot Value of sales and total number of full-time employees (control variable)

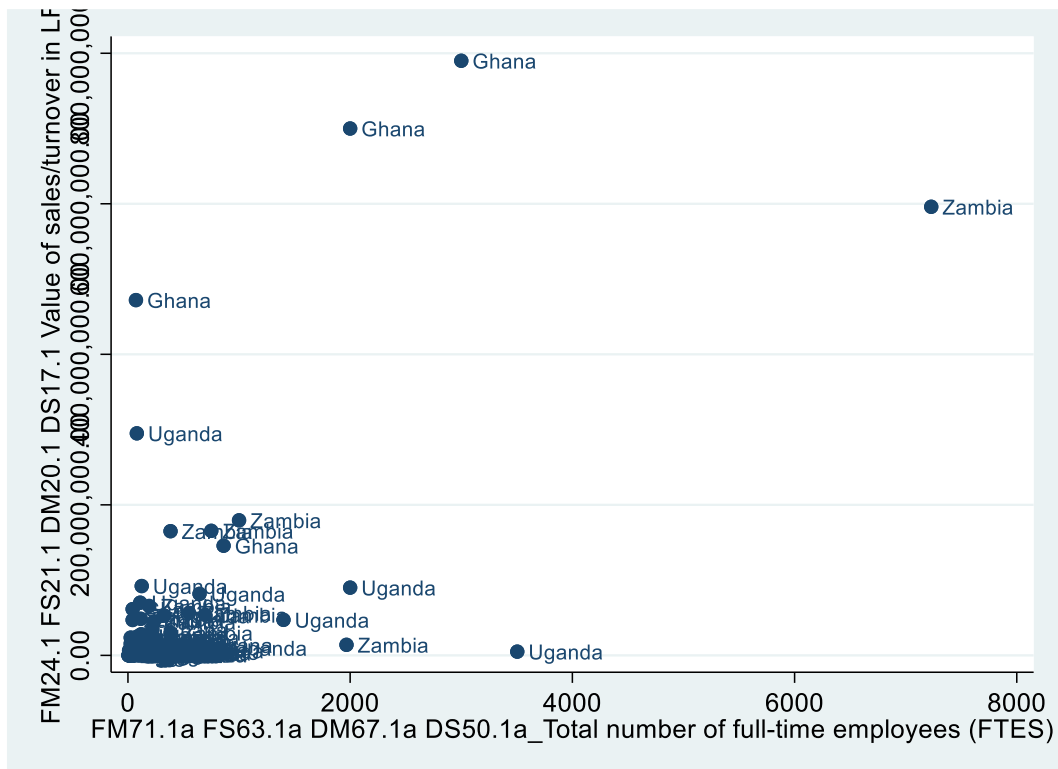


Figure 4.5.

Scatter plot value of sales and labour productivity (control variable)

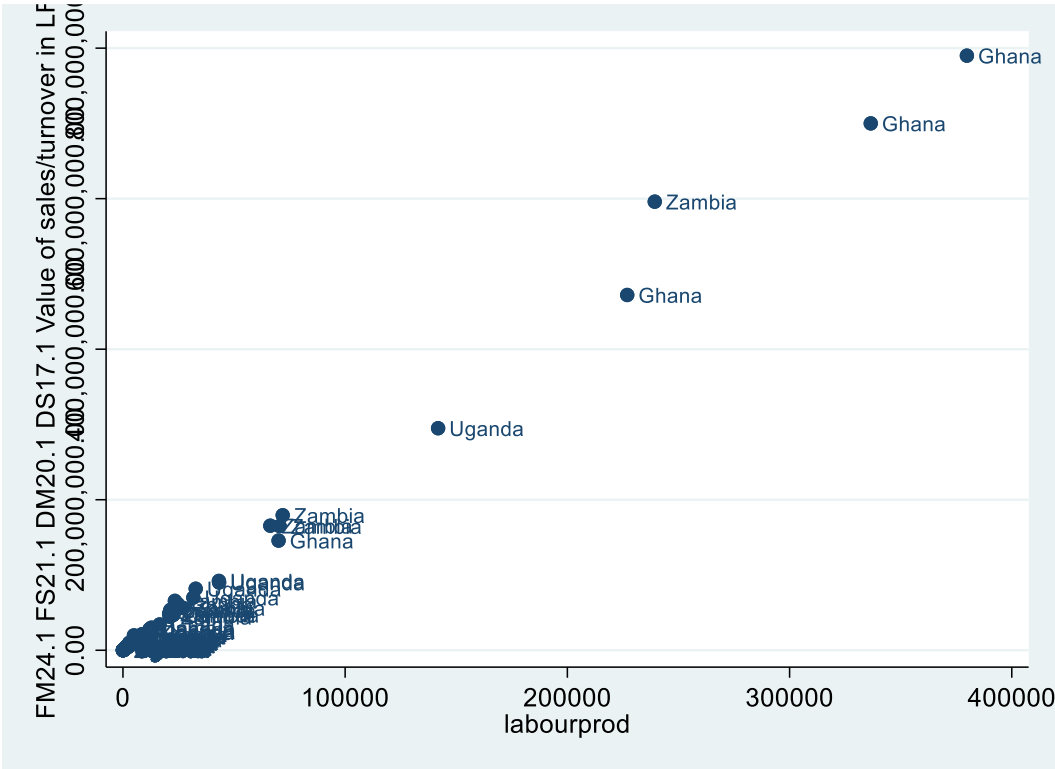


Figure 4.6.

Scatter plot value of sales and year of original foreign investment (control variable)

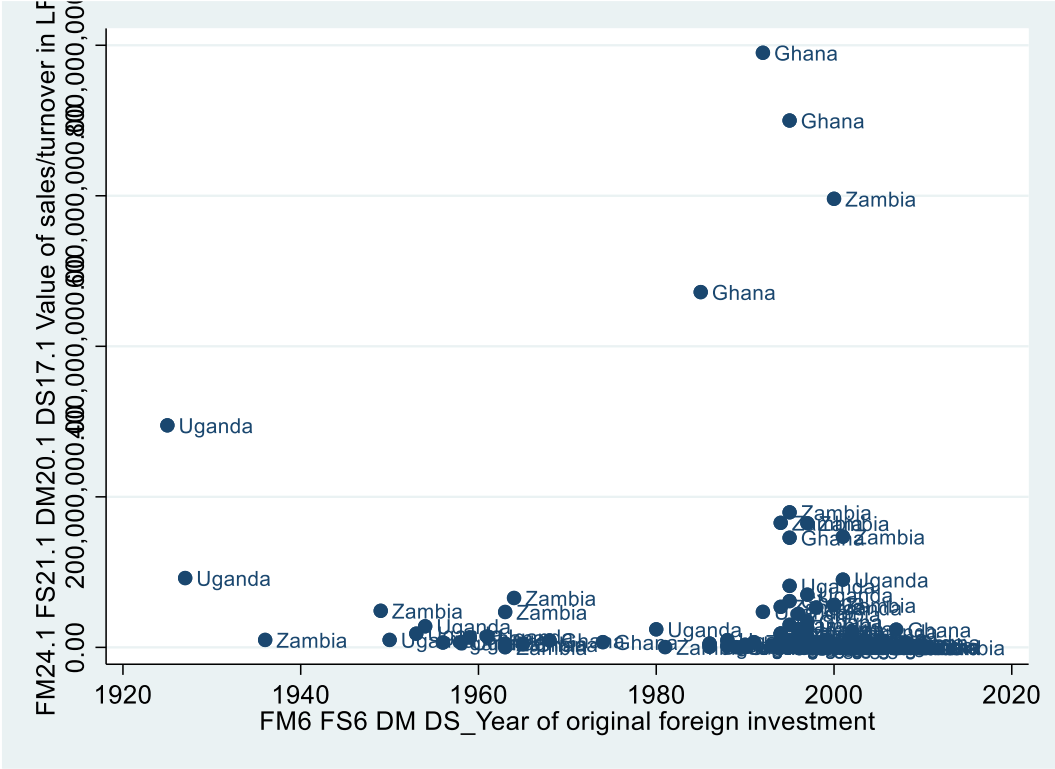


Figure 4.7.

Scatter plot value of sales and power distance (moderating variable)

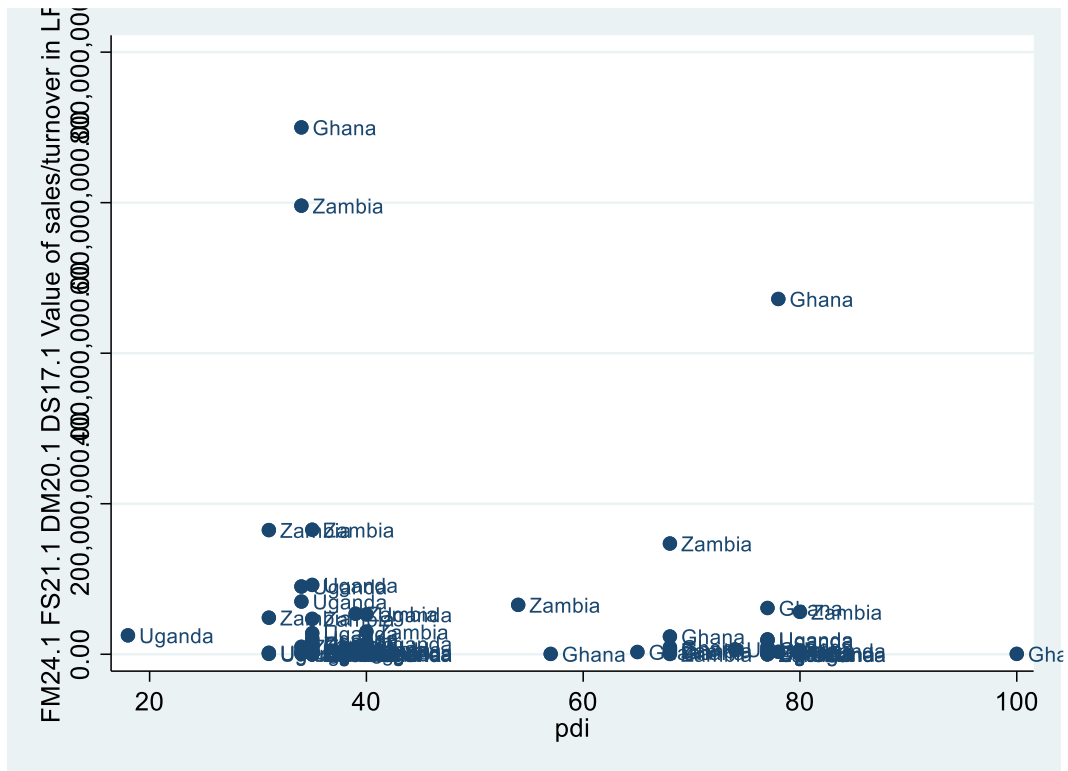


Figure 4.8.

Scatter plot value of sales and individualism (moderating variable)

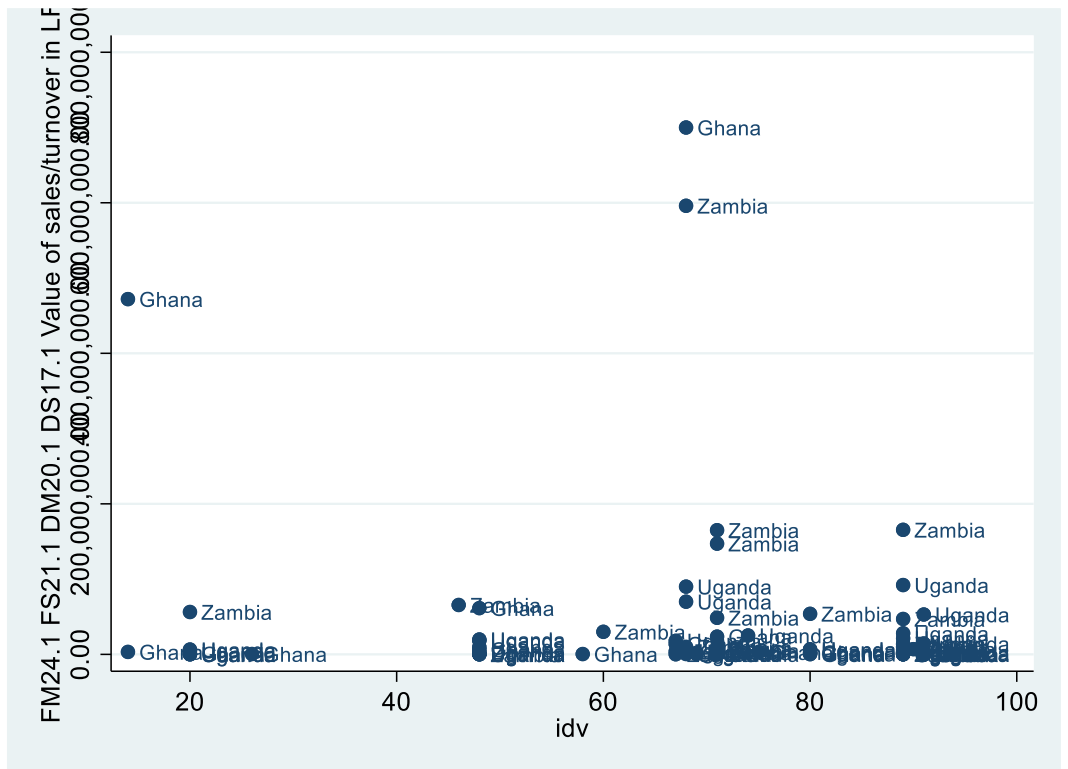


Figure 4.9.

Scatter plot value of sales and masculinity (moderating variable)

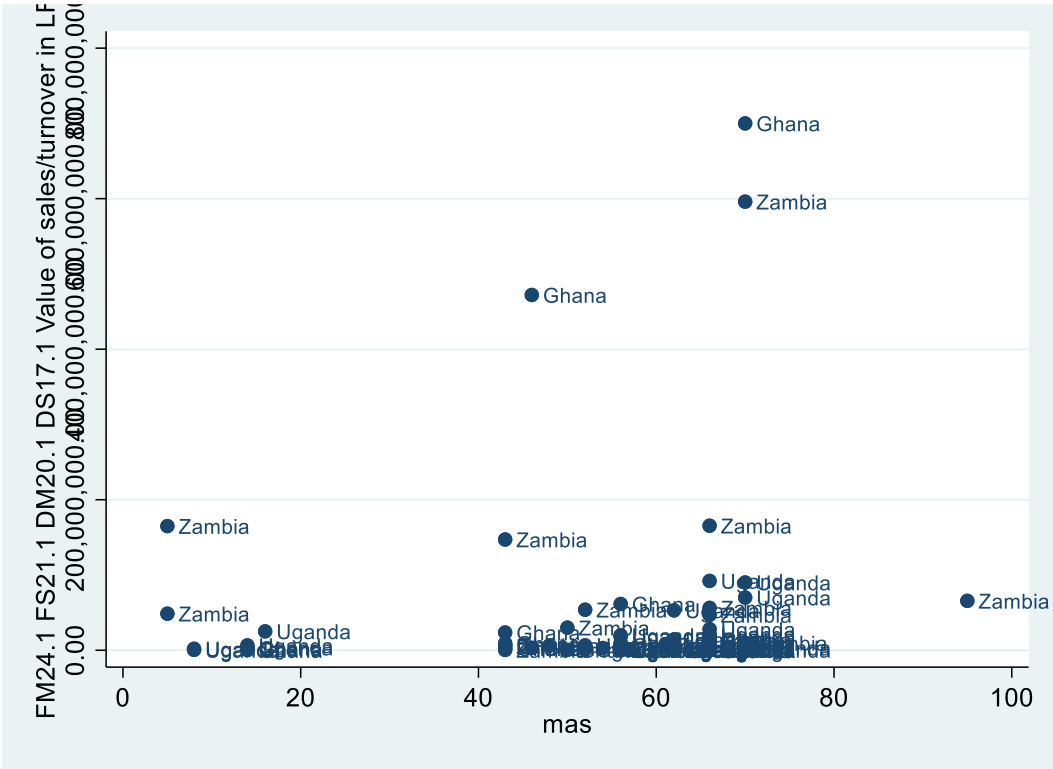


Figure 4.10.

Scatter plot value of sales and uncertainty avoidance (moderating variable)

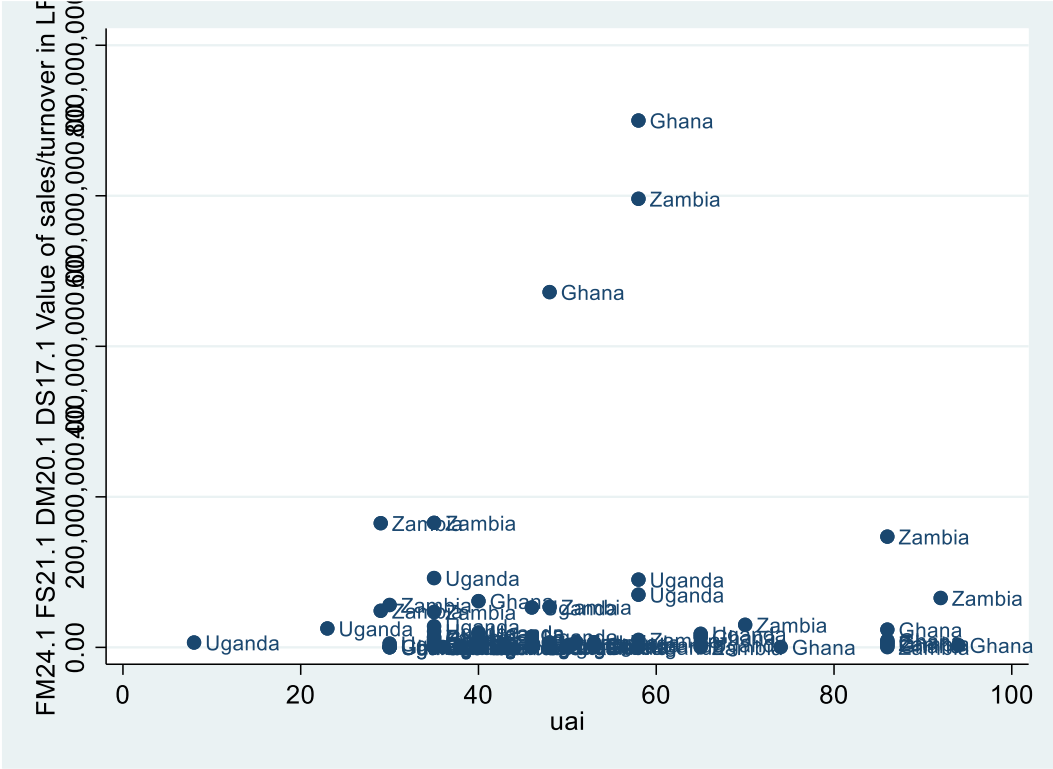


Figure 4.11.

Scatter plot value of sales and long-term orientation vs. short term (moderating variable)

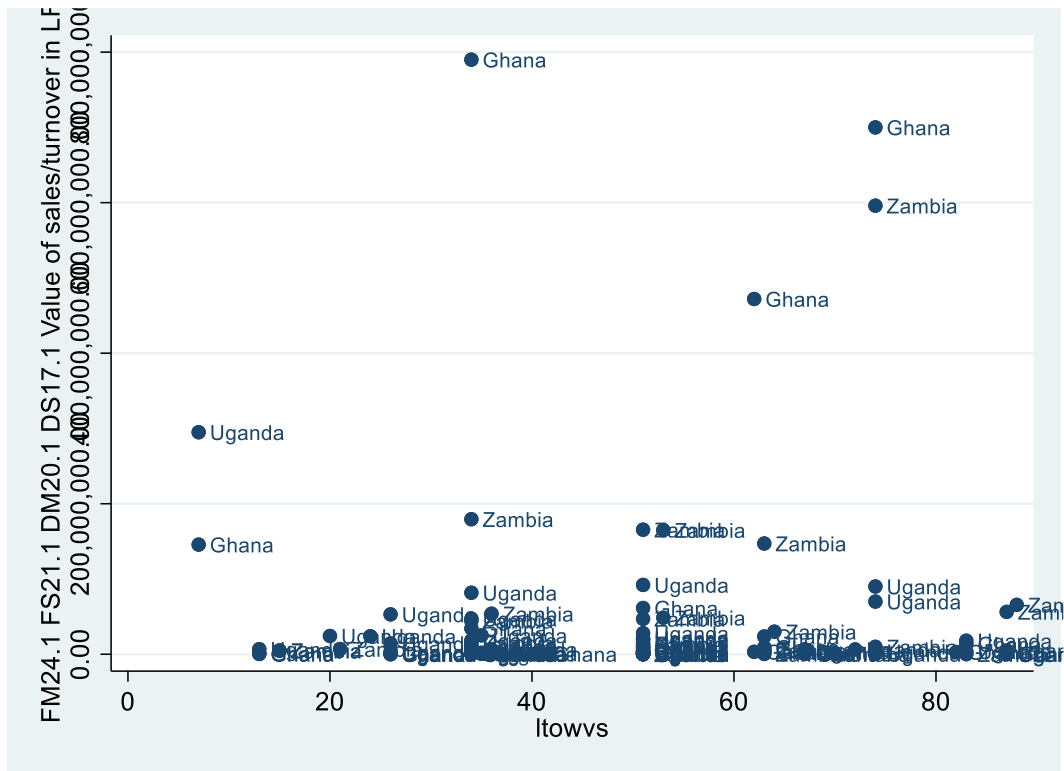
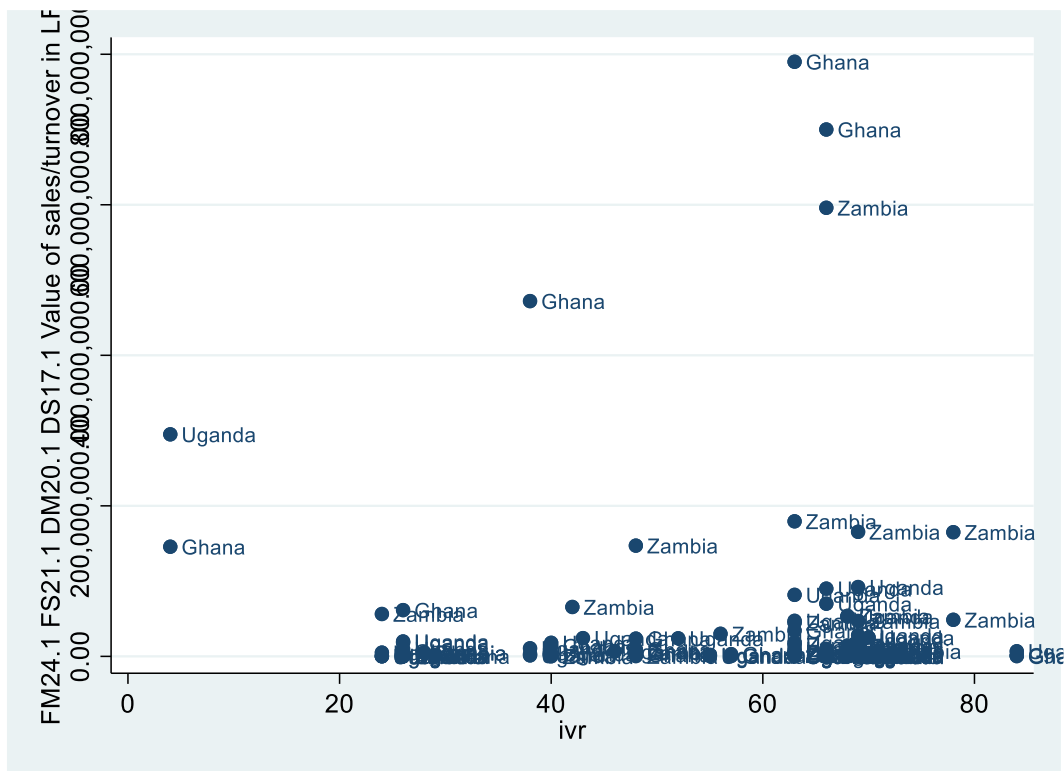


Figure 4.12.

Scatter plot value of sales and indulgence vs. restraint (moderating variable)



APPENDIX C – HISTOGRAMS

Figure 4.13.

Histogram explained variable

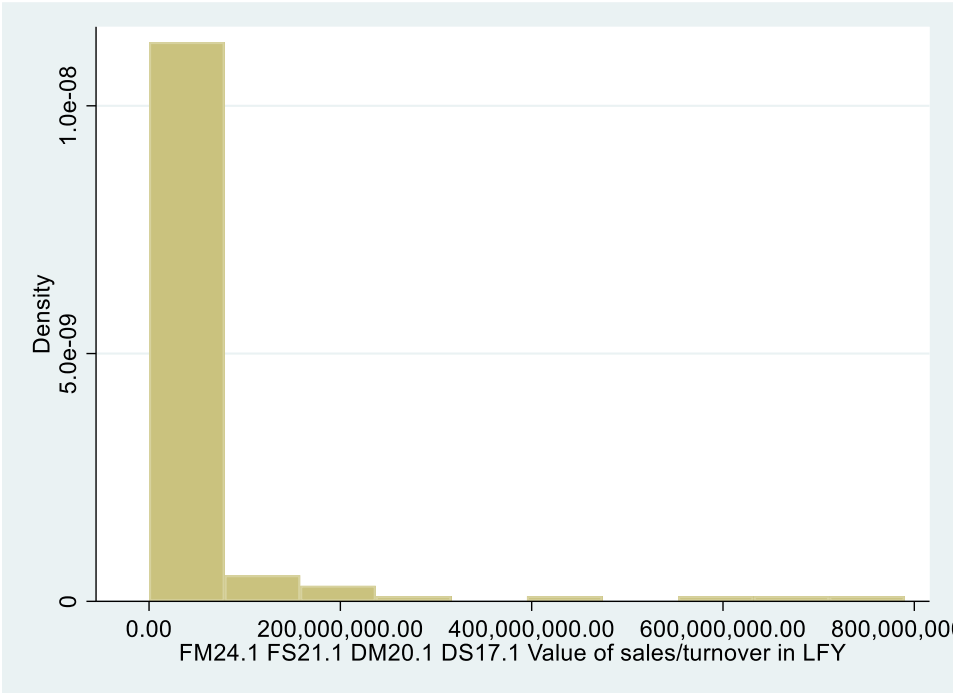


Figure 4.14.

Histogram explained variable in log

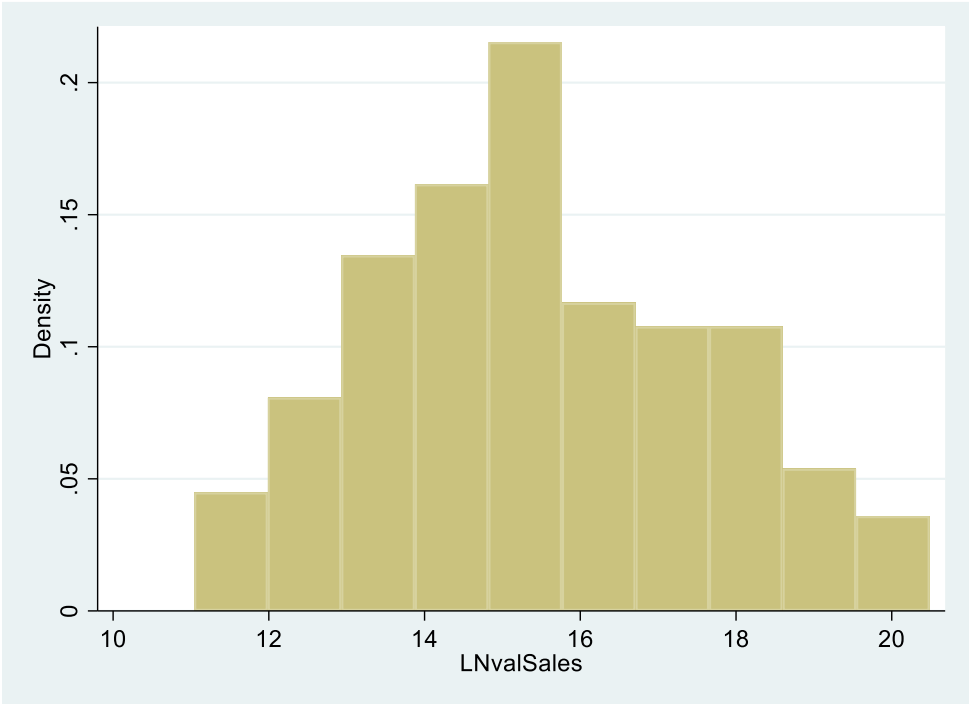


Figure 4.15.

Histogram explanatory variable

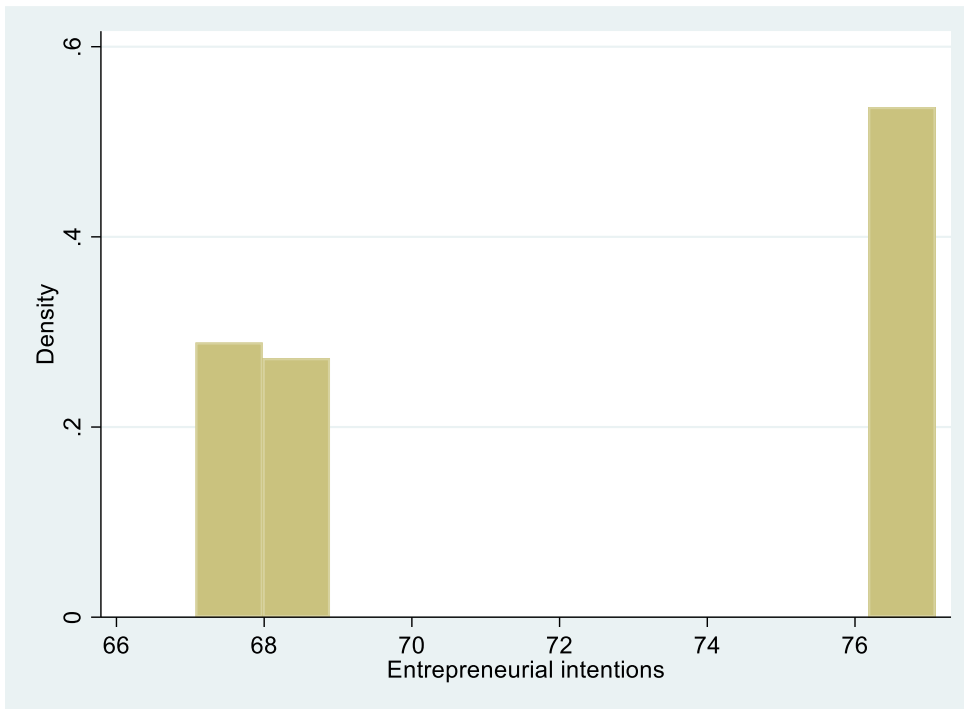


Figure 4.16.

Histogram control variable size

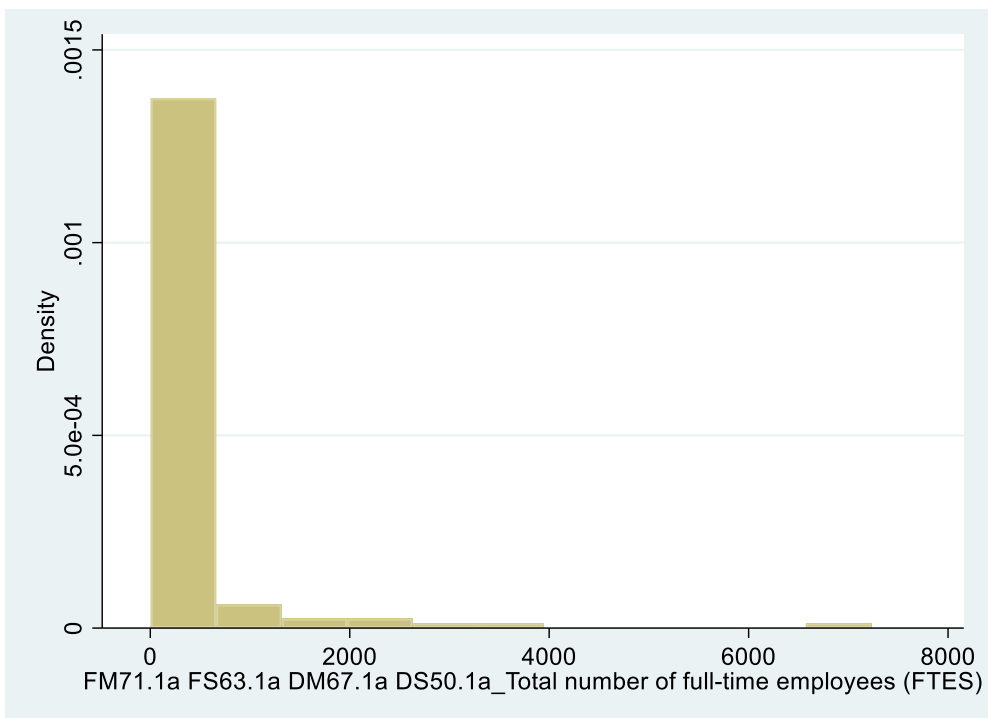


Figure 4.17.

Histogram control variable size in log

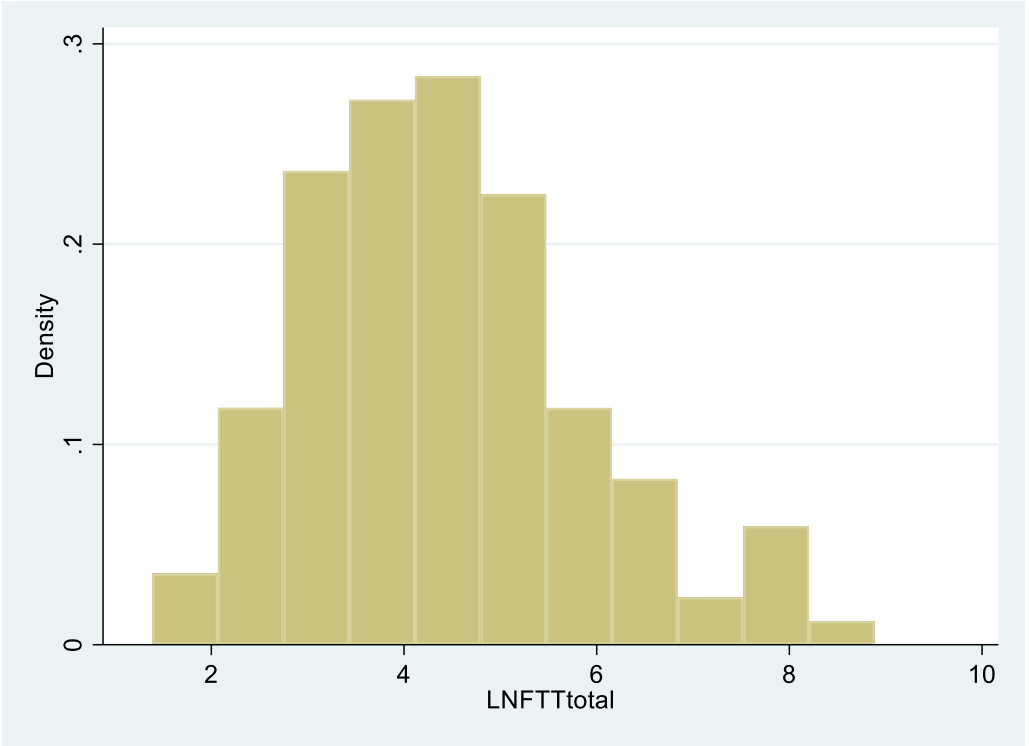


Figure 4.20.

Histogram control variable age

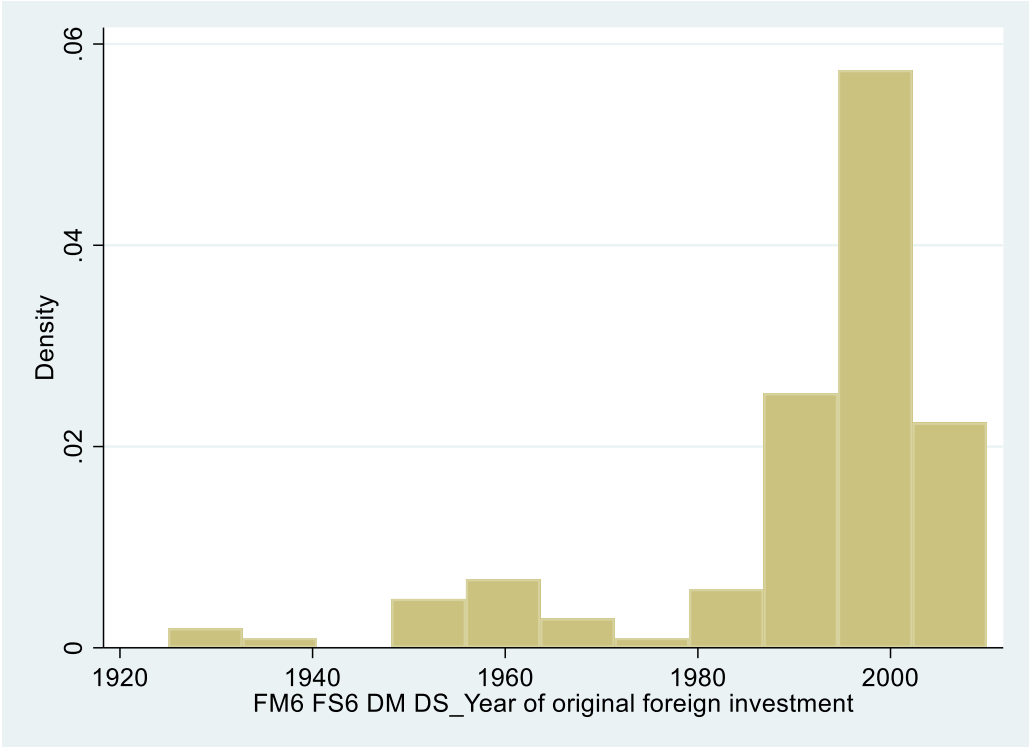


Figure 4.21.

Histogram control variable age

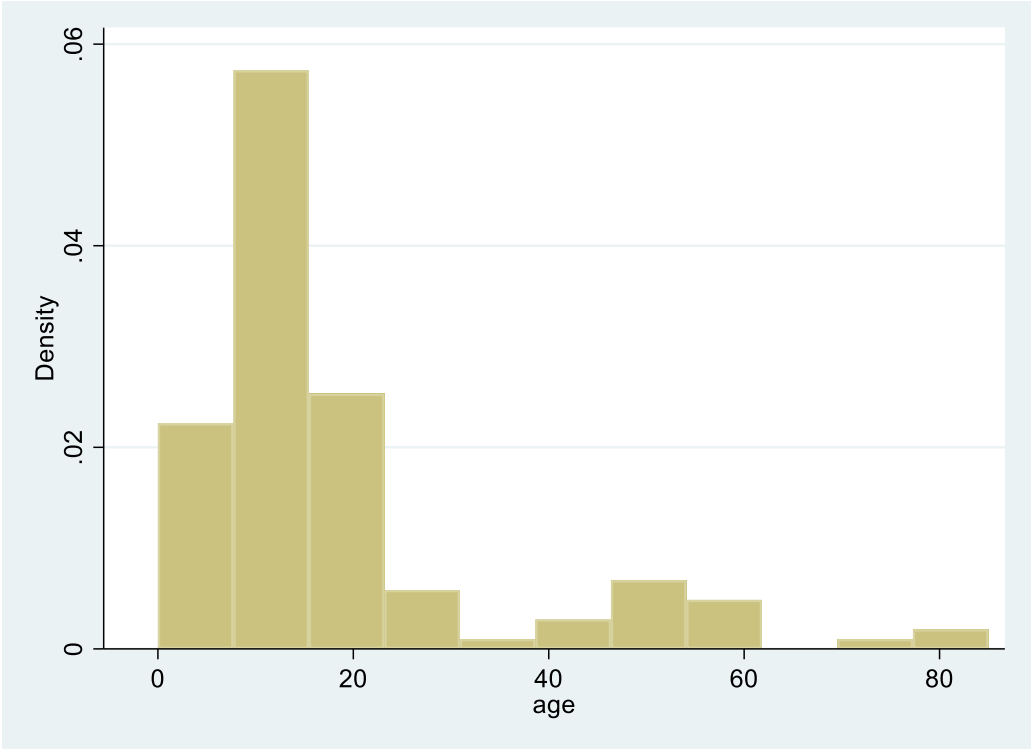


Figure 4.22.

Histogram control variable age in log

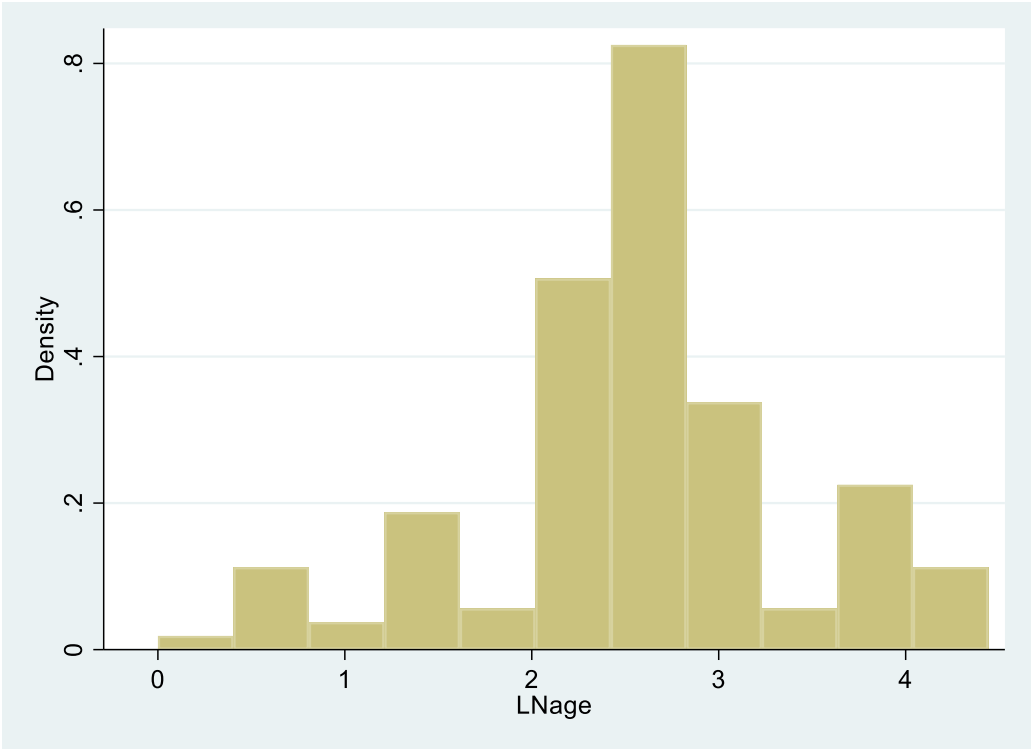


Figure 4.23.

Histogram moderating variable power distance

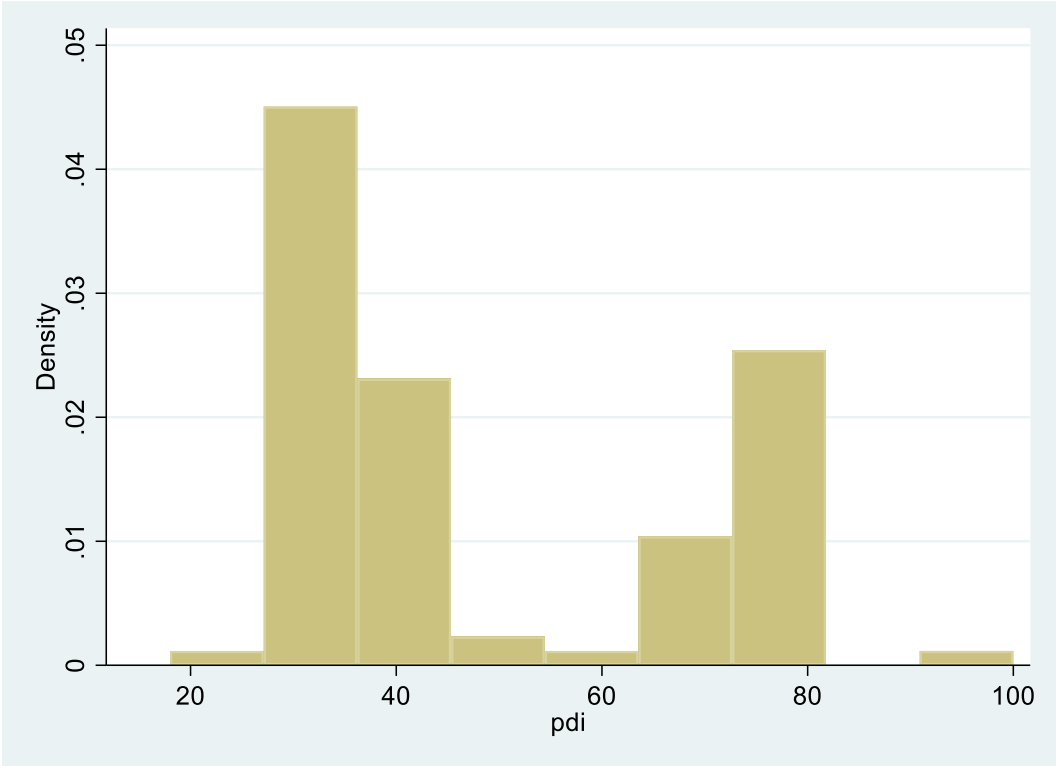


Figure 4.24.

Histogram moderating variable individualism

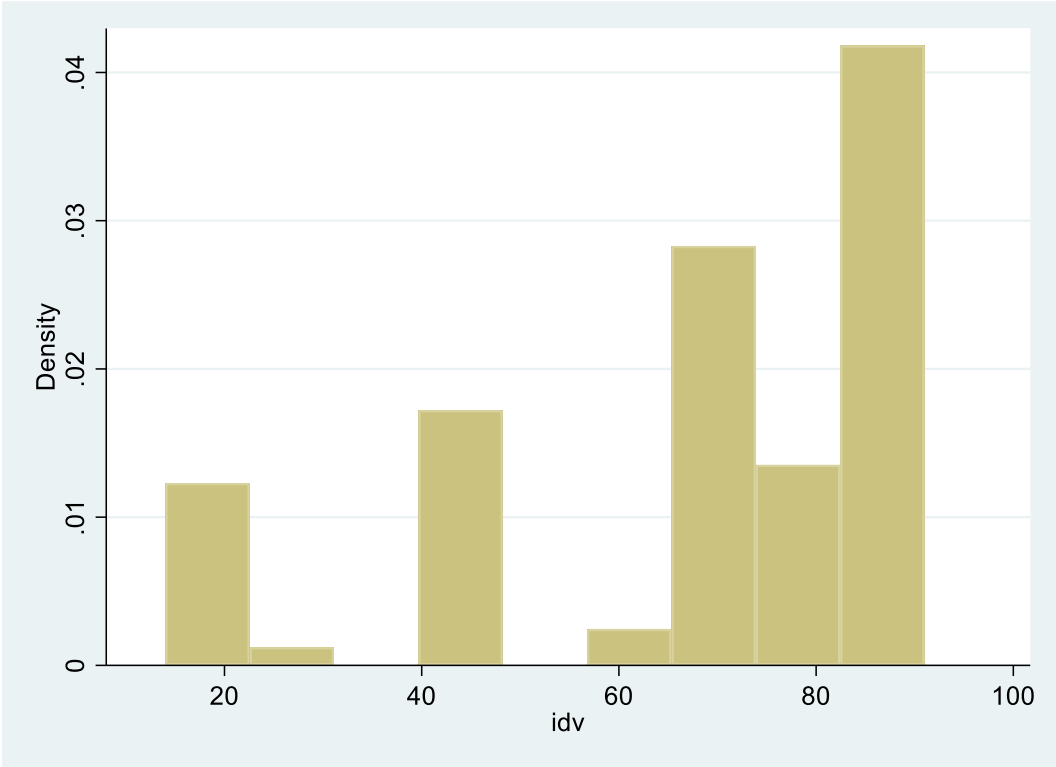


Figure 4.25.
Histogram moderating variable masculinity

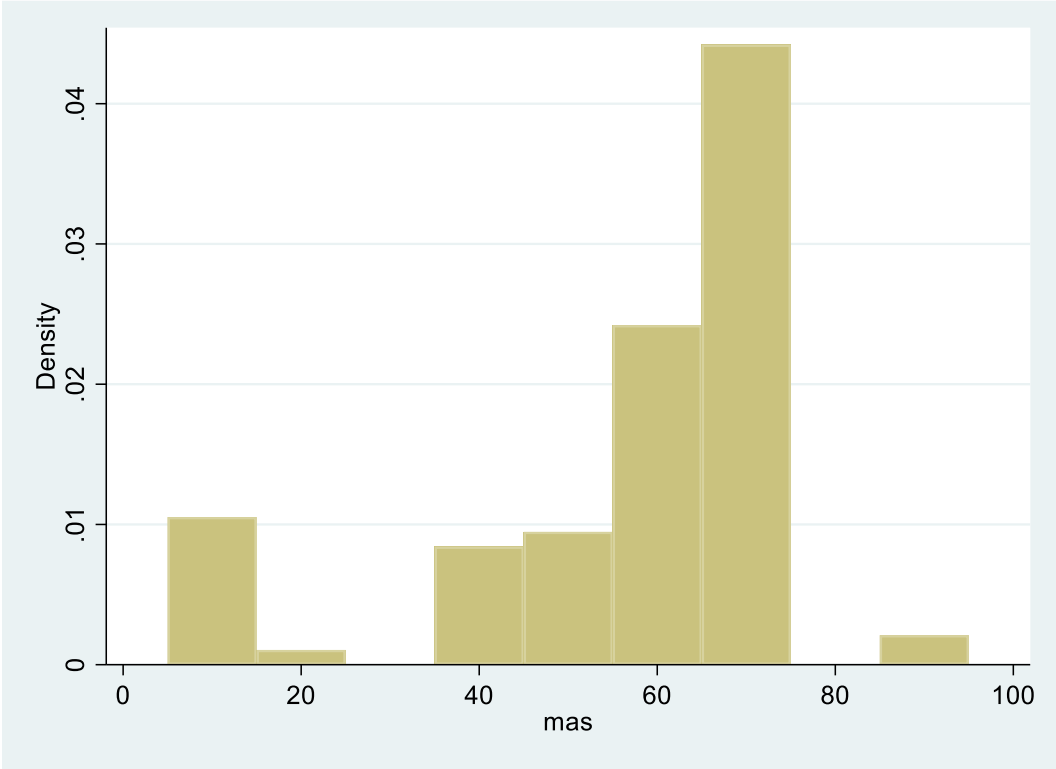


Figure 4.26.
Histogram moderating variable uncertainty avoidance

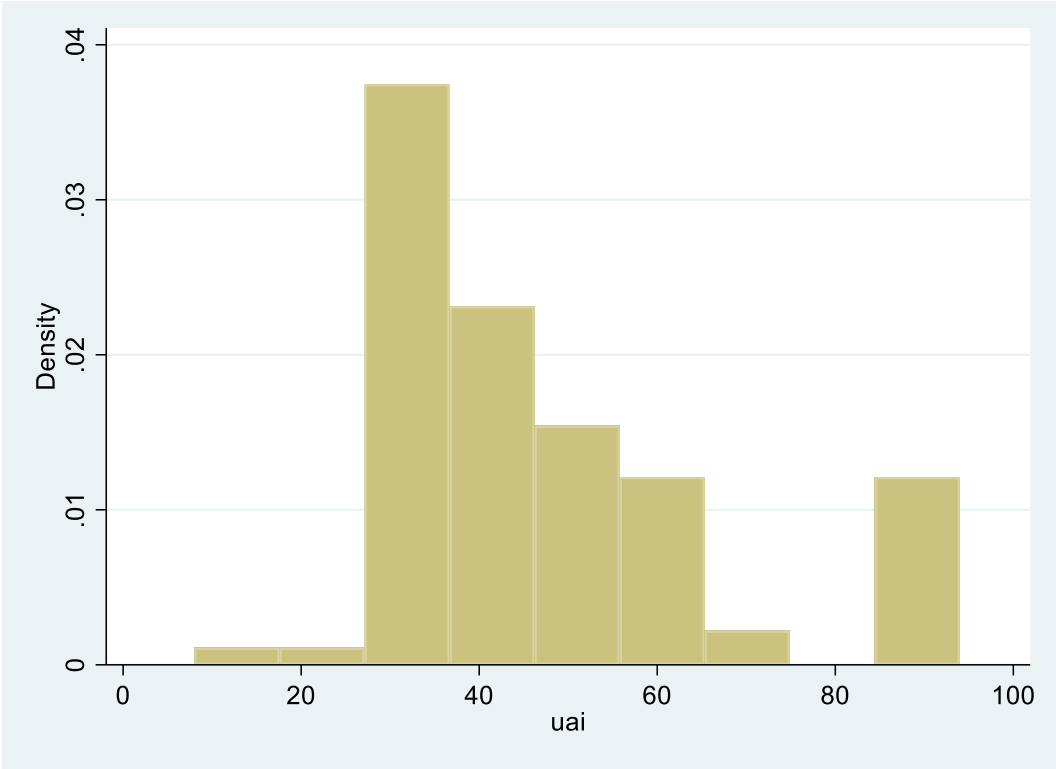


Figure 4.27.

Histogram moderating variable long-term orientation

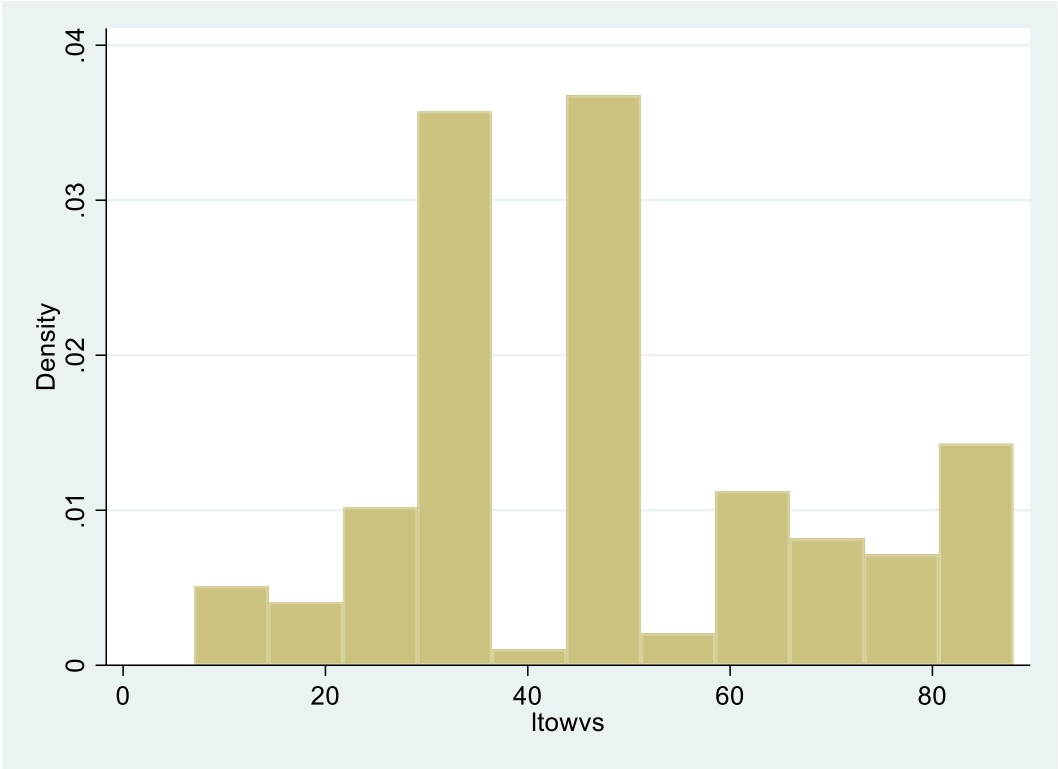


Figure 4.28.

Histogram moderating variable indulgence

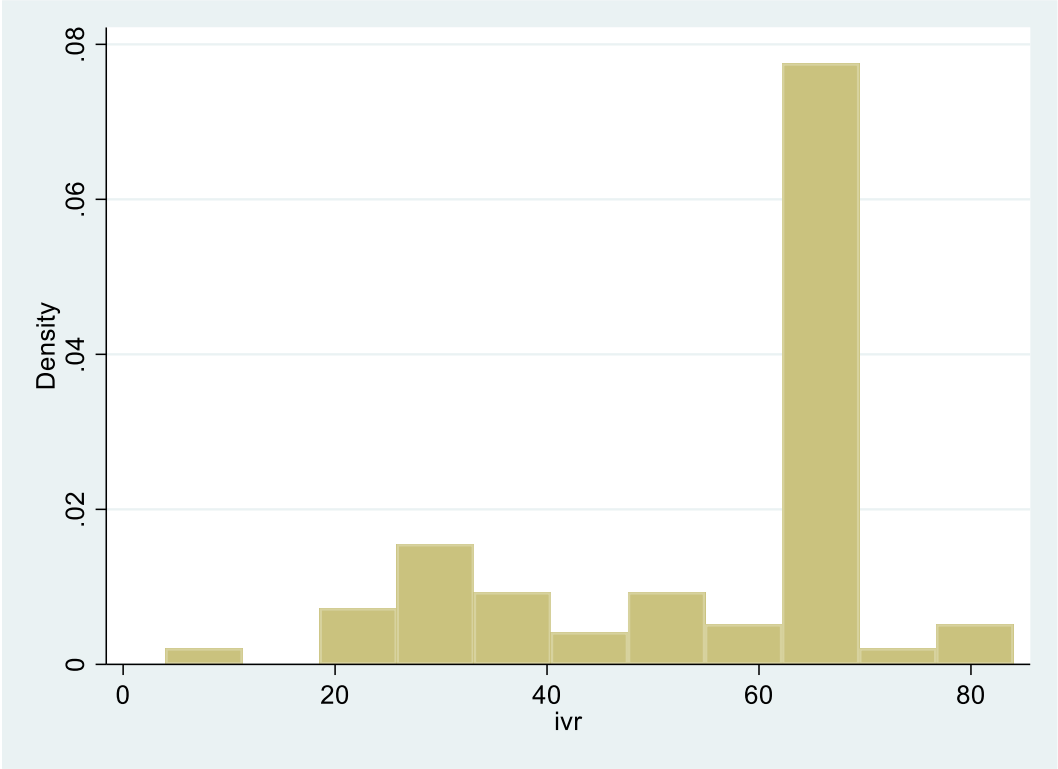


Figure 4.29.

Histogram residuals

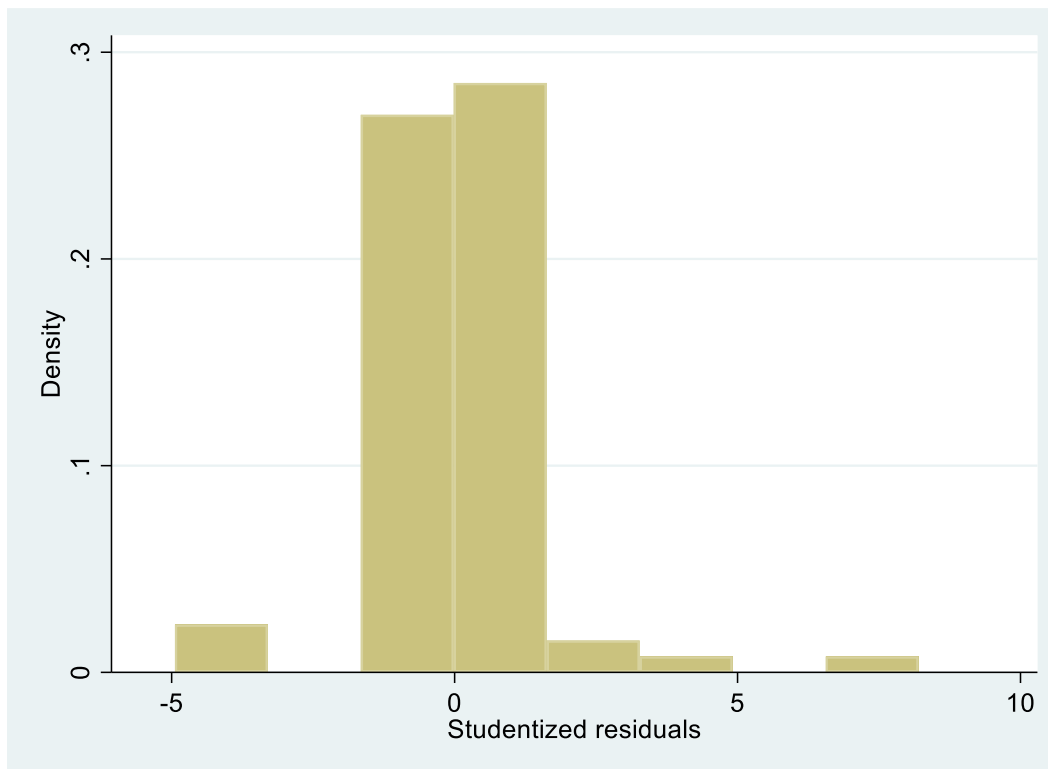


Table 4.5

Residuals ten largest and ten smallest

List of Variables 1/10

country	r
Ghana	-4.943
Zambia	-4.246
Uganda	-3.675
Uganda	-1.336
Ghana	-1.040
Zambia	-0.936
Ghana	-0.788
Ghana	-0.671
Zambia	-0.623
Uganda	-0.527

List of Variables -10/I

country	r
Zambia	.
Uganda	.
Uganda	.
Zambia	.
Zambia	.
Ghana	.
Ghana	.
Uganda	.
Uganda	.
Ghana	.

APPENDIX D – CORRELATION ASSESSMENT

Table 4.6.

Variance inflation factor

	VIF	1/VIF
idv	6.698	.149
pdi	5.732	.174
ivr	5.241	.191
ltowvs	2.173	.46
labourprod	1.89	.529
Firmsize	1.765	.567
uai	1.513	.661
entrepreneurialint~s	1.267	.789
mas	1.236	.809
Firmage	1.105	.905
Mean VIF	2.862	.

Table 4.7.

Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) LNvalSales	1.000									
(2) entrepreneuria~s	-0.241	1.000								
(3) pdi	-0.160	-0.030	1.000							
(4) idv	0.021	0.041	-0.805	1.000						
(5) mas	0.029	0.060	0.033	0.031	1.000					
(6) uai	0.088	-0.291	0.048	0.040	-0.032	1.000				
(7) ltowvs	0.104	-0.231	0.206	-0.480	0.129	0.338	1.000			
(8) ivr	0.169	-0.066	-0.830	0.809	-0.103	-0.103	-0.379	1.000		
(9) LNFTTtotal	0.599	-0.234	-0.209	0.110	0.128	-0.009	0.062	0.215	1.000	
(10) LNage	0.331	0.028	-0.165	0.099	0.081	-0.034	0.006	0.188	0.135	1.000

APPENDIX E – CORRELATION MATRIX RESIDUALS

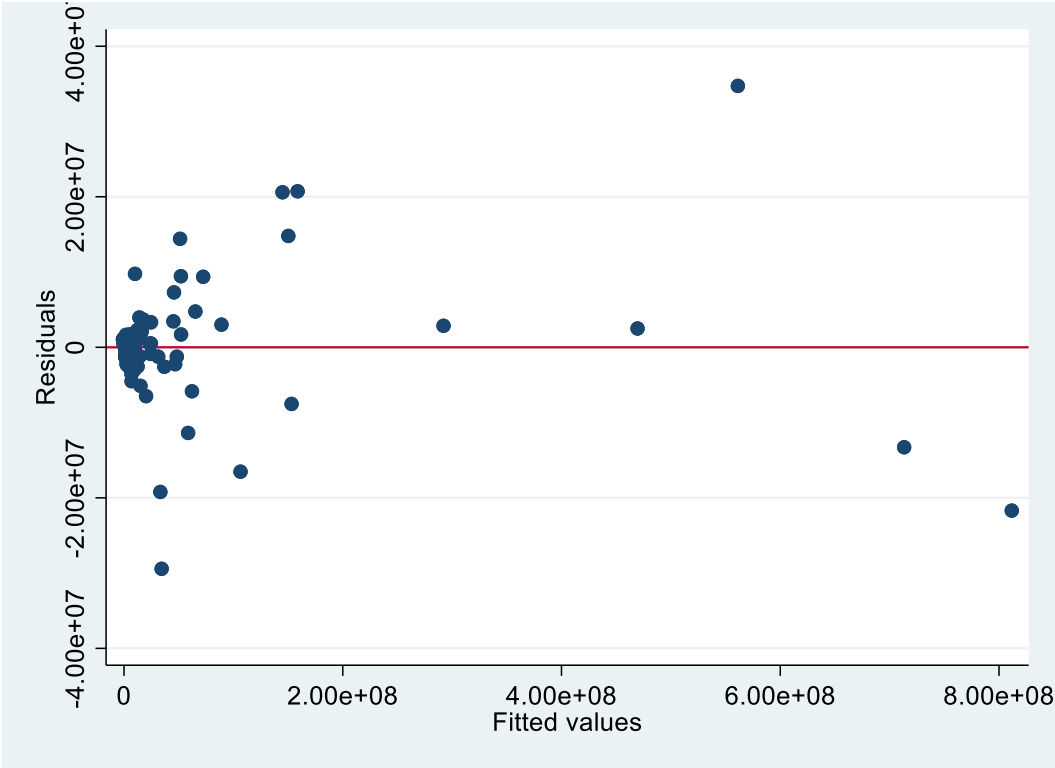
Table 4.8.
Correlation matrix residuals

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) uhat	1.000										
(2) entrepreneurship	-0.000	1.000									
(3) pdi	0.000	-0.051	1.000								
(4) idv	-0.000	0.067	-0.811	1.000							
(5) mas	-0.000	0.061	0.037	0.030	1.000						
(6) uai	-0.000	-0.293	0.050	0.047	-0.050	1.000					
(7) ltowvs	-0.000	-0.272	0.200	-0.458	0.140	0.340	1.000				
(8) ivr	-0.000	-0.032	-0.855	0.815	-0.098	-0.063	-0.329	1.000			
(9) R_FTTotal	-0.000	-0.198	-0.153	0.021	0.147	0.086	0.174	0.120	1.000		
(10) labourprod	-0.000	-0.240	-0.074	-0.123	0.080	0.085	0.183	0.078	0.620	1.000	
(11) origForeignIn~r	-0.000	0.033	0.156	-0.125	-0.083	0.055	0.019	-0.208	0.098	-0.006	1.000

APPENDIX F – HETEROSKEDASTICITY TEST

Figure 4.30.

Checking for homoscedasticity with fitted values and residuals



Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of D_valSalesLY
chi2(1) = 178.60
Prob > chi2 = 0.0000

APPENDIX G – NORMALITY TEST RESIDUALS

Figure 4.31

Kernel density estimate of residuals

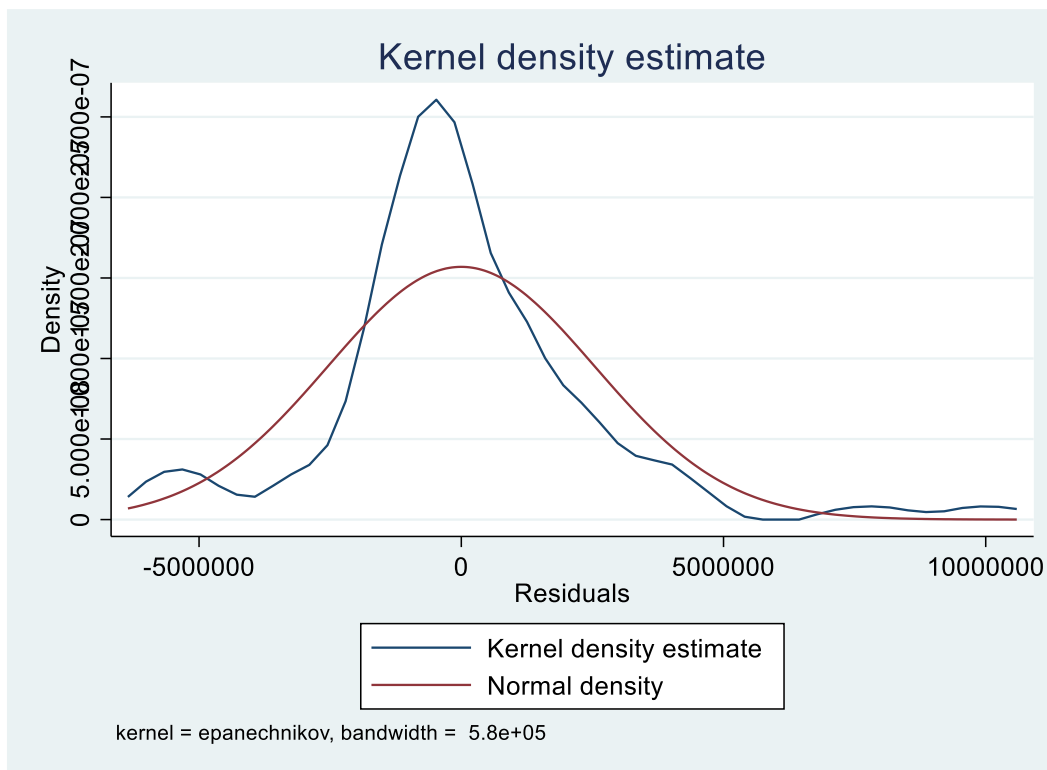


Table 4.9.

Shapiro- Wilk W test for normality residuals

Variable	Obs	W	V	z	Prob>z
r	79	0.656	23.363	6.900	0.000

APPENDIX H – MARGINS PLOT MODERATING EFFECT

Figure 32.

Margins plot power distance

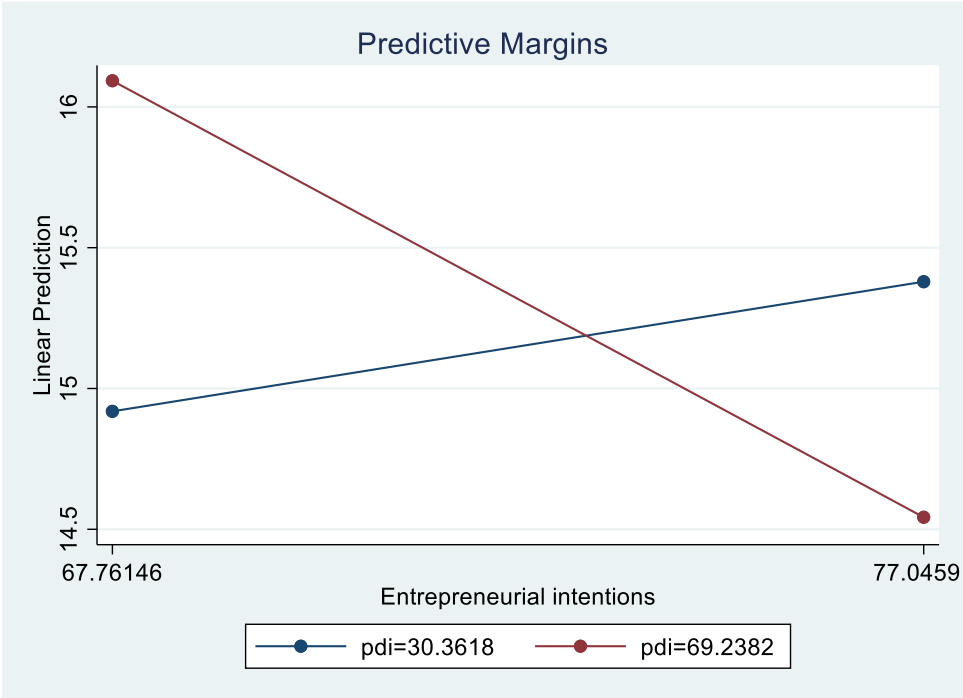


Figure 33.

Margins plot Individualism

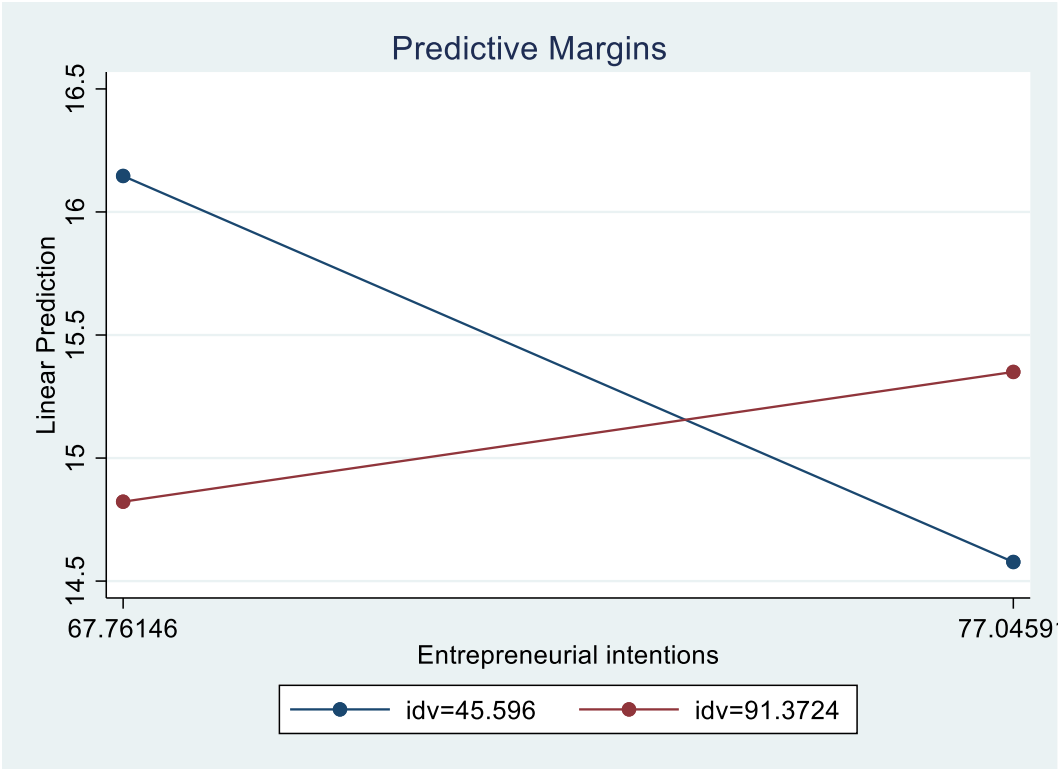
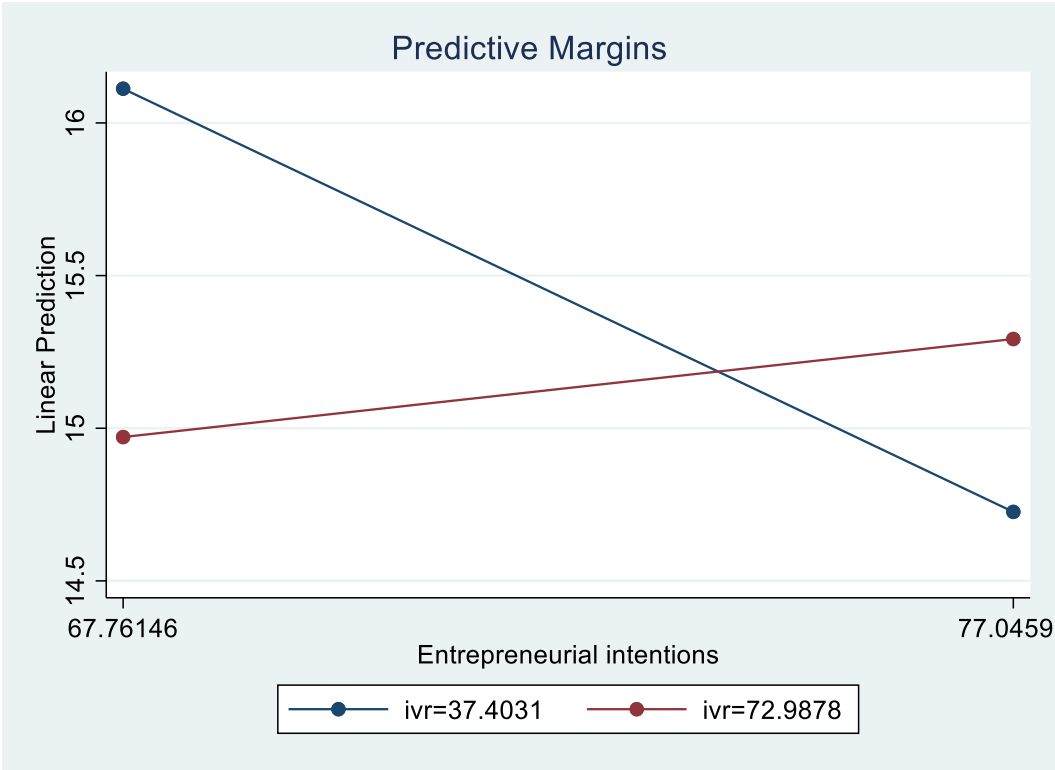


Figure 34.

Margins plot Indulgence versus Restraint



APPENDIX I – ROBUST REGRESSION MODEL

Table 4.10.

Robust regression model results

LNvalSales	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
entrepreneurialintentions	.116	.888	0.13	.896	-1.656	1.889	
Power distance	.355	.47	0.75	.453	-.584	1.294	
Individualism	.02	.405	0.05	.962	-.789	.828	
Masculinity vs. Femininity	-.291	.202	-1.44	.156	-.695	.113	
Uncertainty avoidance	-.018	.274	-0.06	.949	-.565	.53	
Long term vs. short term	.086	.308	0.28	.782	-.529	.7	
Indulgence vs. restraint	.029	.479	0.06	.951	-.927	.985	
El_pdi	-.005	.007	-0.83	.409	-.019	.008	
El_idv	-.001	.006	-0.11	.913	-.012	.011	
El_mas	.004	.003	1.43	.158	-.002	.01	
El_uai	0	.004	0.08	.934	-.007	.008	
El_itowvs	-.001	.004	-0.31	.754	-.01	.007	
El_ivr	-.001	.007	-0.11	.915	-.014	.013	
LNfirmssize	.87	.163	5.33	0	.544	1.196	***
LNage	.791	.252	3.14	.003	.289	1.294	***
Constant	6.171	64.139	0.10	.924	-121.924	134.265	
Mean dependent var		15.408	SD dependent var			2.098	
R-squared		0.499	Number of obs			81	
F-test		4.311	Prob > F			0.000	

*** $p < .01$, ** $p < .05$, * $p < .1$