Mind the Gap: Public Equity as a Financing Solution for Medium-Sized Enterprises and the Influence of National Culture

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Abstract

Purpose: This research focuses on the demand from medium-sized firms to access public equity as a source of finance. However, the acceptance of public equity differs strongly between countries, particularly between the United Kingdom and Germany. Therefore, this research aims to identify the impact of national culture on the decision to go public in those two countries.

Design/methodology/approach: The theoretical framework builds on the Satisficing Theory of Rationality, the Pecking-Order Theory as well as Hofstede’s Cultural Dimension Theory. Using a questionnaire, over 1,000 medium-sized businesses in the United Kingdom and Germany have been surveyed.

Findings: The findings demonstrate that UK medium-sized firms are more open to using public equity than their German counterparts as a source of finance. The results show that national culture has an impact on the decision to go public, in particular, a negative impact of long-term orientation and uncertainty avoidance.

Originality: The originality of the research lies in the focus on medium-sized firms and the effects of cultural differences between the UK and Germany. No previous research has explored how culture influences the decision to go public using a dataset generated from medium-sized firms in the UK and Germany.

Keywords: SMEs, financing gap, national culture, public equity

Article Classification: Research paper
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1 Introduction

Small and medium-sized enterprises (SMEs) are important because they are the backbone of today’s economies in terms of their quantity, employment and contribution to economic growth (European Commission, 2019a). In order to be able to persist sustainably, sufficient access to finance is necessary (Ayyagari et al., 2008). However, since the financial crisis in 2008/09, access to finance has been significantly exacerbated, particularly for SMEs (Carbó-Valverde et al., 2016). The most often used source of external capital for SMEs, bank financing, has become more difficult for some firms to access due to ever more constraints such as increased credit rationings and risk premiums (Coluzzi et al., 2015). Based on Berger and Udell’s (1998) Financial Growth Cycle Model, this article proposes the use of public equity, in particular for medium-sized enterprises, to gain funding. However, although Europe’s biggest stock exchanges are in London and Frankfurt (World Federation of Exchanges, 2020), the acceptance of public equity differs strongly between the United Kingdom and Germany. These countries represent two polar extremes of financial behaviour, with the United Kingdom being a typical equity-based economy and Germany being a typical bank-based economy (Kwok and Tadesse, 2006). Therefore, the aim of the article is to identify the influence of national cultural dimensions on the decision of medium-sized enterprises to raise capital through public equity financing for medium-sized enterprises in the United Kingdom and Germany.

Whilst previous studies have considered the impact of culture on SMEs financing decisions, few if any paper have focused on how culture influences the decision to seek equity financing. The only recent paper looking at this specific issue (Gupta et al, 2018) focuses on SMEs and not medium-sized firm. This paper also adds to the literature in this field through collecting a primary data set from the relevant decision makers in a sample of UK and German medium-
sized firms, offering a unique insight into the issue under consideration.

The rest of the article is structured as follows. First, the theoretical background will be explained on the basis of which the hypotheses will be determined. Subsequently, the methods with the data collection and analysis approach will be covered. In addition, the findings will be reported and discussed before a conclusion is put forward to finalise this article by giving recommendations to improve the financing gap situation through public equity.

2 Theoretical Background, Context and Hypotheses Development

The research is informed by three theories: Hofstede’s Cultural Comparison Theory (Hofstede et al., 2010), Simon’s (1955) Satisficing Theory of Rationality and Myers and Majluf’s (1984) Pecking-Order Theory. The latter two theories underpin a central assumption of this work that public equity financing is not popular amongst medium-sized firms. Whilst the Cultural Comparison Theory provided the rationale for the central hypothesis that there would be a difference in the likelihood of German medium-sized firms seeking public equity as a method of financing when compared with firms from the UK. We draw upon structural differences between the UK and Germany in terms of their respective banking systems, firm ownership and capital structures to enhance the study. Many researchers agree that access to finance is the primary factor affecting the ability of SMEs to persist, develop and grow (Ayyagari et al., 2008; Berger & Udell, 2006), especially since the financial crisis (Carbó-Valverde, Rodríguez-Fernández & Udell, 2016; Lee, Sameen & Cowling, 2015; Wehinger & Kaousar Nassr, 2016). “The role of finance has been viewed as a critical element for the development of small and medium-sized enterprises” (Cook, 2001, p. 18). The easier SMEs find it to access external finance, the more likely they are to grow bigger and survive longer (Wiklund & Shepherd, 2003).
However, although sufficient finance is important for the success of SMEs, access to finance is by no means guaranteed. Numerous studies confirm that a financing gap for SMEs does exist and is a real issue of concern for these firms (Becchetti & Trovato, 2002; Berger & Udell, 1998; Gregory, Rutherford, Oswald & Gardiner, 2005; Wehinger & Kaousar Nassr, 2016). We postulate that most of the previous literature has a focus on micro and small firms as they tend to dominate the data within any sample of SMEs as the vast majority of all firms, in all countries fall into this category, e.g., in the EU-28, 98.9 percent of all firms are micro or small and only 0.9 percent are medium-sized firms (European Commission, 2019c).

The majority of SMEs in Europe rely on debt financing with only 5% of European SMEs using equity financing (Oliver Wyman, 2014). Around half of SMEs use external financing, with the proportion rising to 78% when we consider only medium-sized firms (BVA BDRC 2019).

There is no universally adoptable rule of thumb concerning which form of capital is ideal for businesses, especially since SMEs have very differing stakeholder and owner structures (Deloitte, 2012). The firm size, firm age as well as the information available determine which form of financing is most suitable for a firm. These three determinants usually positively correlate with each other, meaning the bigger a firm, the older it is and the more information it normally has access to. The Financial Growth Cycle Model for small businesses, developed by Berger & Udell (1998) summarises which forms of finance are most suitable for each stage of a firm. It is based on the assumption that financing needs and options change as the firm develops in terms of size, age and information availability.

Hence, small firms at a very early stage “must rely on initial insider finance, trade credit, and/or angel finance” (Berger & Udell, 1998, p. 622) and usually have better access to finance from government and venture capital sources (Pickernell, Senyard, Jones, Packham & Ramsey, 2013) whereas larger, older and better informed firms have more options of finance. Medium-
sized firms have a wide range of external financing option open to them and it is not just a trade-off between debt and public equity, as well as traditional alternatives such as angel investors, mezzanine finance and leasing etc., there are also newer options such as crowdfunding etc (Purnima, Kum, Chavan & Lim, 2021). We have assumed that firms would use public equity as a mean to grow their firms, however as noted by DeTiene (2010) and Hohen and Schweizer, entrepreneurs could use public equity financing as an exit strategy. Whilst our data do not explore this issue directly, it is discussed further in the following section on family business (2.1).

According to the Department for Business, Innovation & Skills equity financing attains the best scores in risk-return ratio compared to other forms of finance for SMEs and this does propose the question of why it is not more prevalent amongst medium-sized firms.

2.1 Family Firms

A characteristic that distinguishes many medium-sized enterprises from larger businesses is the high proportion of family firms. “Family firms are the predominant organizational structure around the world” (Ampenberger, Schmid, Achleitner & Kaserer, 2013, p. 247). Whilst both Germany and the UK follow this pattern, the percentage of family-owned medium-sized firms in the UK at 48.8% (IFB Research Foundation, 2019) is lower than in Germany where the figure is 57% (Stiftung Familienunternehmen, 2019). This difference is mirrored when we concentrate on medium-sized firms; in the UK, where 48% of medium-sized firms are classified as being family-owned (BEIS 2018), whilst in Germany this figure is 58% (Seibold, Lantelme & Kormann 2019).

Although the universe of family firms is heterogeneous (Chua, Chrisman, Steier & Rau, 2012), some common characteristics can be observed. As such, family firms are characterised by their high independence and control due to pure ownership (Carney, van Essen, Gedajlovic &
Heugens, 2015; Croci, Doukas & Gonenc, 2011). They are usually very traditional and therefore long-term committed to a good reputation of the business (Ampenberger et al., 2013). Thus, long planning horizons and sticking to well-proven strategies are common ways to run the business. Given the value of tradition, conservative management operations are often followed and change is not implemented easily (Cruz & Nordqvist, 2012; Zellweger & Sieger, 2012). Thus, family businesses are usually rather risk averse (Carney et al., 2015; Croci et al., 2011; González, Guzmán, Pombo & Trujillo, 2013; Michiels & Molly, 2017). Nonetheless, it can be observed that family businesses running in the second generation or further, are generally more open to unconventional strategies, innovation, proactiveness and change (Cruz & Nordqvist, 2012; Zellweger & Sieger, 2012).

The same is observable with capital structure decisions of family firms. First-generation firms are usually more conservative and prefer to completely fund their operations internally in order not to threaten their full control of the business (Ampenberger et al., 2013; Carney et al., 2015; Koropp, Kellermanns, Grichnik & Stanley, 2014; Michiels & Molly, 2017; Wu, Chua & Chrisman, 2007). In contrast, later-generation firms are more open towards external financing (Amore, Minichilli & Corbetta, 2011; Koropp et al., 2014). Nonetheless, given that in family firms the financial decisions are often made by a single person; and that person’s behaviour (Koropp et al., 2014) and thus cultural background also influences the capital structure, which supports the main argument of this research. A general tendency towards traditional forms of external finance such as debt financing can be observed (Croci et al., 2011; González et al., 2013). Given that more medium-sized firms in German are family-owned than their British counterparts, this will reinforce the likelihood of equity financing being more popular amongst British SMEs.

2.2 Country Level Banking

On a national level, countries have evolved their preference for either debt or equity financing,
which defines their predominant financial system (Kwok & Tadesse, 2006). Multiple studies have confirmed that Anglo-Saxon countries are usually typical (equity) market-based countries, as opposed to countries like Germany or Japan, which are typical bank-based countries. Thus, countries such as the United Kingdom are more used to sophisticated capital markets. The United Kingdom, for example, has the world’s fourth oldest stock market and a banking and financial system largely developed centuries ago to support the British Empire. In bank-based countries, debt financing through financial institutions is the predominant way to access capital (Barth, Nolle & Rice, 1997; Demirgüç-Kunt & Levine, 1999; Kwok & Tadesse, 2006; La Porta et al., 1997; Lavezzolo, Rodríguez-Lluesma & Elvira, 2018; Li, 2007).

Historically the German banking industry, along with many other European countries were developed to be an important source of finance for industry, they offered long term loans and took equity position in the firms. However, in the UK, the banking industry was developed with a focus on joint stock banks which preferred short-term “self-liquidating investments” and this limited their willingness to engage in a more long-term relationship with firms and enterprises (World Development Report, 1989).

More recently the German banking system has invested heavily in human capital and the organisational capabilities needed to support a more relationship style of banking were they are able to offer financial advice, a quality service and a long-term outlook, rather than the more transactional approach favoured in countries like the US and the UK (Keltner, 1995). The relationship banking approach in Germany is associated with a financial system that has a large number of small and regional banks and this “short distance” between the firms and the banks, allows for more soft information to be considered in the decision-making progress (Behr et al. 2013; Lee & Brown 2017; Zhao & Jones-Evans 2017). This contrasts with the financial sector in the UK which is dominated by large banks, transactional lending and, more recently, a move
by the UK government to foster competition in the banking sector by making it easier for individuals and Businesses to change banks.

In terms of culture, it is argued that the individualist nature of the UK shows that although individuals are similar, they have no obligation to one another. Therefore, UK banks are individualist and have a propensity to externalise risk by transferring onto customers. In contrast, German banks exhibit collectivist behaviour, and their banks have a strong orientation towards the common good, both in their locality, and the welfare of their members (Lane and Quack, 2001).

These conditions add to the growing literature suggesting that the UK and Germany will have different attitudes towards going public and thus to the development of the first hypothesis to be tested in this study.

**H1: Decision makers/ owners of medium-sized firms in the United Kingdom have a more positive attitude toward going public than their Germany counterparts.**

2.3 National Culture

It is often argued that national culture is an important influential factor for managerial decisions in organisations but it has largely been ignored in research until the 1980s (Adler and Jelinek, 1986; Hofstede et al., 2010). Since national culture influences organisational behaviour, the study of cultures and its values and impact is essential for a more holistic understanding of the social construct of decision making. This enhanced understanding can then adjust and improve managerial behaviour which, in the long run, improves the performance and thus sustainable growth of an organisation. This is due to the fact that culture forms a part of the entrepreneurial ecosystems which support innovation and the growth of businesses (Spigel, 2017).

We adopt Hofstede’s (1980) Cultural Dimension Theory. The concept consists of six
dimensions, four of which were defined in 1980 (power distance, uncertainty avoidance [UAI], individualism [IDV] and masculinity), followed by the fifth dimension (long-term orientation [LTO]) in 1988 and the additional sixth dimension (indulgence [IND]) in 2010 in order to complete the model.

We use Hofstede’s work as a basis for this paper because it incorporates similar features to other cultural dimension models (for example House et al., 2004; Lewis, 2006; Schwartz, 1994). However, the two countries of observation, the United Kingdom and Germany, are culturally more distinct in Hofstede’s framework than in other cultural dimension frameworks. Thus, Hofstede better highlights the cultural distance between the countries and is, therefore, more comprehensive. In addition, we use it for the scope of this research because it is “still the most widely used cultural indices in the international business literature” (Chui and Kwok, 2008, p. 91) and it has been empirically demonstrated to have an impact on numerous organisational and managerial aspects (Beugelsdijk et al., 2017; Çetenak et al., 2017; Chui and Kwok, 2008; Hsu et al., 2013; Minkov and Hofstede, 2011; Tung and Verbeke, 2010).

2.4 Capital Structure Decisions

The main thesis of this paper is that national culture has an influence on the decision to go public. In order to justify this thesis, we adopt Simon’s (1955) Satisficing Theory of Rationality and Myers and Majluf’s (1984) Pecking-Order Theory. We argue that the Pecking-Order Theory and Satisficing Theory offer insight into why medium-sized firms do not have a strong preference for using equity finance. However, we suggest that on their own they are insufficient to explain the differences between the UK and Germany. Some of the differences can be explained by the influence of culture.

Simon (1955) postulates that decisions are not always made to reach maximum utility, but to reach satisficing utility. This is to say that decisionmakers exhibit bounded rationality (March,
1978) and do not decide for the best option, but for the option that is good enough for their
needs given their limited cognition of alternatives (Simon, 1955). Thus, many decisionmakers
in SMEs lack understanding of the financing alternatives which are available to them, which
leads to bounded rationally satisficed decisions due to lack of awareness of alternatives
(Hutchinson, 1999). Even if decision-makers are aware of the alternative financing options,
y they may lack understanding of what the consequences are from choosing a particular
alternative in a risky situation. Whilst we accept that many medium-sized firms have the same
structures and organisational attributes of larger firms, we argue that medium-sized firms differ
in both size and organisational maturity and that some of these firms may be dominated by
senior decision-makers who exhibit satisficing behaviour.

The Pecking-Order Theory from Myers and Majluf (1984) claims that firms follow a
hierarchical pecking order of preferred forms of capital. The first choice is self-financing
through retained earnings. If this source does not provide sufficient capital, the second choice
for firms is debt financing. The third and final choice of capital procurement is through equity
financing. This is the last choice because equity financing leads to constraints on the owner’s
decision-making independence. However, in order to have sufficient capital, firms with growth
opportunities usually need to choose equity financing. That is how, by following this
hierarchical pecking order, the value of the firm can be maximised (Myers and Majluf, 1984).
This is analogue to the financing gap explained above in the sense that SMEs’ most relevant
form of finance is internal financing through retained earnings and personal savings (Carpenter
and Petersen, 2002; Ou and Haynes, 2006), followed by credit financing proving their heavy
reliance on banks (European Commission, 2019b; Oliver Wyman, 2014). Once again, we
would argue that the focus on much of the research in this area has been on SMEs in general
and not medium-sized firms. Nevertheless, the proposition that medium-sized firms prefer
other forms of financing to equity, is supported strongly in our finding and the idea of equity
finance being at the bottom of the rung holds for our dataset.

The practical application of the Pecking-Order Theory has been proven by various studies (Adair and Adaskou, 2015; de Jong et al., 2011; Kumar et al., 2017; Sardo and Serrasqueiro, 2017; Yazdanfar and Öhman, 2016), but is still under-researched in relation to SMEs in general and in particular to medium-sized firms (Becker et al., 2015; Kumar and Rao, 2015).

[insert Figure 1]

**Fig. 1: Conceptual framework**

By combining the Satisficing Theory of Rationality and the Pecking-Order Theory, it can be deduced that medium-sized firms are not always able to choose the best financing option for them, which is criticising the rational application of the Pecking-Order Theory. Thus, we assume that the principles of pecking order apply to capital structure decisions in medium-sized firms, but due to limited awareness and cognition, those decisions are influenced by irrational behaviour. Since national culture influences behaviour (Hofstede, 1991), the overall research aim of this study is justified. Hence, it is not only the rational balance of costs and benefits of an IPO that is important in the decision to go public, but also other “soft” factors. Therefore, we question the general application of the principles of the Expected Utility Theory (von Neumann and Morgenstern, 1944) on the going-public decision. Instead, we postulate that maximising utility is not always the rationale behind the IPO decision and that reaching a satisficing level utility is sufficient for many. The appropriate of neoclassical economic theory’s ability to fully explain business decision-making has long been open to debate. We suggest that even in medium-sized firms which have many of the structures of larger firms, theories that assume human beings engage in optimal decision-making might not offer a full insight into managerial decision making (Crossan, 2010).
The second hypothesis allows us to investigate in more depth the role cultural differences play by looking at individual aspects of culture and how they impact on the decision to seek public equity. The data for these variables is taken from the authors’ primary research as we feel this data is more focused on private equity in Germany and the UK and is, therefore, less generic than Hofstede’s data.

Despite the hard nature of financial decisions, soft factors such as the cultural background of the decisionmakers have an impact on financial decisions (Chen, Dou, Rhee, Truong, & Veeraraghavan, 2015; Çetenak et al., 2017; Kumar & Rao, 2015; Kurtz, 2003). “Executives’ financial decisions show variance from society to society as a result of their cultural differences” (Çetenak et al., 2017, p. 355). This is particularly due to cultural perceptions, as concordant to Singer’s (1998) perceptual model of culture, which impact corporate financial decisions (Chang & Noorbakhsh, 2009). Hence, the values and beliefs, composing the core of a culture, influence decision making not only on an individual but also on an organisational level (Podrug, 2011). This effect is even more noticeable in family-owned businesses and SMEs (Ayadi, 2009; Kumar & Rao, 2015). The literature to prove this connection between cultural background and corporate financial decisions, however, is still limited, but the awareness that culture can influence financial decisions is a growing relevant topic (Çetenak et al., 2017; Chang & Noorbakhsh, 2009; Giannetti & Yafeh, 2012; Li, Griffin, Yue & Zhao, 2013; Shao, Kwok & Guedhami, 2010).

This research postulates that cultural dimensions have an influence on the decision of medium-sized enterprises to go public. Thus, it argues that national culture influences the acceptance of public equity, which is backed up by financial systems literature. The United Kingdom and Germany mark the polar extremes of both systems with an equity market capitalisation in relation to the national GDP of 93% in the United Kingdom to only 22% in Germany (Li,
This is also reflected in the different stock market activities between the countries, as commented on in the previous section. Thus, countries such as the United Kingdom are more used to sophisticated capital markets, whereas in bank-based countries debt financing through financial institutions is the predominant way to access capital (Barth, Nolle & Rice, 1997; Demirgüç-Kunt & Levine, 1999; Kwok & Tadesse, 2006; La Porta et al., 1997; Lavezzolo, Rodríguez-Lluesma & Elvira, 2018; Li, 2007).

Furthermore, Hirshleifer & Thakor (1992) have identified that countries with high individualistic values tend not to finance business projects with debt in order to maintain their performance. This would support the postulation of this research as the United Kingdom with a high IDV value, has a market-based culture, relying less on debt capital than Germany.

**H2a: Public equity individualism has a positive impact on the general attitude of going public.**

Kwok & Tadesse (2006), Aggarwal & Goodell (2010) and Lavezzolo et al. (2018) indicated that national culture has significant influence on the financial system of a country. As such, these authors have proven that countries with a higher UAI prefer bank-based systems, and vice versa. These findings are in line with the values for Hofstede’s UAI dimension for the United Kingdom and Germany. The former has a low value of 35 and is a typical market-based country, whereas the latter has a high value of 65 and is a typical bank-based country (Hofstede Insights, 2020a).

Çetenak et al. (2017), Chang and Noorbakhsh (2009), Chen et al. (2015), Fauver and McDonald (2015), Li et al. (2013), Mihet (2013) and Petersen et al. (2015) have shown that countries with a high uncertainty avoidance (UAI) tend to have more cash holdings, take less corporate risk, have less debt financing, and countries with a high long-term orientation have more cash holdings and are more debt financing oriented.
**H2b: Public equity uncertainty avoidance has a negative impact on the general attitude of going public**

The same trend applies for LTO. Family businesses (which most Mittelstand businesses are), are generally more long-term oriented than other businesses, prefer bank-based systems (Ampenberger, Schmid, Achleitner & Kaserer, 2013).

**H2c: Public equity long-term orientation has a negative impact on the general attitude of going public**

Finally, the value of IND has an influence on the financial system of a country. As such, countries with a low levels of IND values place emphasis on preserving their public image and on tradition (Chui et al., 2002) and might therefore prefer debt over equity financing. Çetenak et al. (2017), Chen et al. (2015), Li et al. (2013), Mihet (2013) and Rehbein (2014) found that individualism is positively impacting corporate risk-taking, decreased cash holdings and increased capital expenditures.

**H2d: Public equity indulgence has a positive impact on the general attitude of going public**

An important assumption underpinning our research design is that primary data collected from senior decision-makers in German and UK medium-sized enterprises, will offer a better insight into the areas of concern than the more generic data provided by Hofstede.

Hofstede’s work has often been criticised as being outdated (McSweeny, 2002). In addition, Kirkman et al. (2017) and Tung and Verbeke (2010) argue that the model does not sufficiently capture the complex malleability of culture over time. However, “substantial recent research has upheld the validity of Hofstede’s conclusions” (Chang and Noorbakhsh, 2009, p. 328). Also, Hofstede Insights, an organisation supporting and continuing Hofstede’s work, is constantly collecting and publishing new up-to-date country data (Hofstede Insights, 2020).
addition, Hofstede (2001) highlights that culture develops only very slowly over time. “There is no reason why [differences between national cultures] should not play a role until 2100 or beyond” (Hofstede, 2011, p. 22). Minkov and Hofstede (2011) and Inglehart (2008) also confirm that cultures do not move much unless a radical event takes place. Thus, Hofstede’s cultural dimension model is relatively robust over time. Another major point of criticism is that a national culture is not homogenous, cannot to be stereotyped, and does not represent every single citizen of that nationality due to numerous subcultures which exist in every country as well as in the individual context (Hsu et al., 2013; Kirkman et al., 2017; Minkov and Hofstede, 2011; Osland and Bird, 2000; Tung and Verbeke, 2010). Nonetheless, Hofstede (2001) highlights the clear distinction between national culture and individual context: “Cultures are not king-size individuals. They are wholes, and their internal logic cannot be understood in the terms used for the personality dynamics of individuals. Eco-logic differs from individual logic.” (p.17). In addition, Beugelsdijk et al. (2017) and Hsu et al. (2013) have argued that national culture is a meaningful proxy to explaining behaviour because common values and beliefs are the core of every shared culture.

The main criticism this research focuses on is the lack of context of the model. Similar to Beugelsdijk et al. (2017) and Tung and Verbeke (2010), we criticise the fact that Hofstede’s model does not take into account the specific situational context. Thus, there is a need for a more context-specific model to conceptualise culture. In particular, this study focuses on the context of the decision to go public.

3 Methods
3.1 Sample and Data Collection

Data were collected from senior decision makers (e.g., CEOs) in medium-sized firms in the UK and Germany. The sampling frame was the FAME database for British medium-sized
enterprises and the Orbis database for German enterprises. The databases were filtered to meet the numerical definition of medium-sized enterprises of the European Commission, as well as for enterprises with a provided email address (see appendix I for details). A random sampling approach was utilised in order to increase the likelihood of a non-biased sample. About 12% of the email invitations sent were unable to be delivered, leaving a sample frame of 20,801 companies which have been invited to participate in the survey. The response rate was 4.21% form British companies and 6.31% for German.

Table I summarises the amount of businesses as well as the number of employees for the sample and the population (which is the entirety of medium-sized enterprises in the countries). In terms of numbers, the sample only represents 1.12% of the population, with a higher representation in the United Kingdom compared to Germany. This is due to the smaller population but bigger sample size in the United Kingdom compared to Germany. However, looking into the main characteristics of the businesses, it can be asserted that the mean number of employees is marginally higher in the sample than in the population. Nevertheless, this is favourable for this study as public equity is more relevant for bigger companies (Berger & Udell, 1998). Thus, the sample represents the population well in terms of employment size and relevance to public equity.

[insert Table I]

**Tab. I: Survey response rate**

In order to minimise the potential risks connected with the survey and to ensure its high quality (Bell et al., 2019), a pilot study has been conducted. Prior to the pilot study, the questionnaires were given to native speakers in both countries to proofread and ensure the clear understanding of the questions. The sampling for the pilot study followed the same approach as the sampling
for the actual survey as outlined above. Thus, simple random sampling was used sending out the pilot survey to a sample 500 businesses, 250 per country. The response rate of 5.6% led to 28 returned questionnaires. The pilot has proven that non-sampling error is inevitable to occur due to non-response error (Bell et al., 2019). Some businesses have argued that their policies do not generally allow participation in surveys. This also justifies the uneven answer distribution between the two countries.

Based on the pilot results, the questionnaire design has been largely supported. A notable finding from the pilot study was that some firms might be completely disinterested in public equity as they might have no ambition to grow. This was incorporated in the questionnaire by adding a question on firm growth aspiration.

The questionnaire included some optional questions (question 6, 8 and 9 although only the responses to question 6 are used in this analysis) asking what further aspects might enhance the chances of the company to consider getting listed on a stock exchange. This question was open-ended to provide the opportunity to discuss and comment on as many issues as the respondents wanted to. The question asked the respondent to write text in the appropriate box and 33 respondents completed this question. The text generated was then coded in NVivo and used to generate a number of themes.

3.2 Variable

The variables used in the analysis have been collected through the questionnaire (see appendix II). The first variable concerning the decision to go public is taken directly from the questionnaire. Whilst also taken from the questions, the remaining variables have to be developed in a more complex method.

Two questions were asked per cultural variable, resulting in eight questions in block 4. Thus, transferring these values to the topic of public equity, the first two questions asked to what
extent the respondents agree that public equity does not provide any benefits to their company
(as an indicator for high PEIDV) or to their economy (as an indicator for low PEIDV).
Analogue to the following questions, a five-point Likert-type scale has been used, similar to
Hofstede’s (2013) questionnaire, ranging from “strongly agree” (1) to “strongly disagree” (5).
The second cultural dimension, UAI, was addressed in the following two questions. Major
values of high UAI are discomfort with uncertainty and the request to control the future with
fixed principles instead of letting it happen (Hofstede Insights, 2020b). Relating these values
to public equity, the respondents were asked about their opinion on share price movements
being too unpredictable and risky (as an indicator for high PEUAI) and on their willingness to
try out new forms of financing (as an indicator for low PEUAI).
LTO was the next cultural dimension to be covered. Long-term oriented cultures are
characterised by the values of tradition and norms, as opposed to welcoming and encouraging
change (Hofstede Insights, 2020b). Referring to those values, it was asked if they agree to have
a defined corporate strategy with little room for amendments (as an indicator for high PELTO).
The next question asked if they plan to adhere to their known financing methods without
planning to change anything (also as an indicator for high PELTO).
The final cultural dimension to be addressed was IND. High-scoring countries value free
gratification of the desire to enjoy life, whereas low-scoring countries value strict social norms
(Hofstede Insights, 2020b). The last two questions of question block 4 therefore asked the
respondents to evaluate the low importance of the opinion of society (as an indicator of high
PEIND) and the importance of comparison and social norms (as an indicator of low PEIND).
The public equity cultural dimensions were therefore calculated using the following equations:

\[ \text{PEIDV} = (\frac{6-x_a}{x_b} ) \times 10 \]
\[ \text{PEUAI} = (6 - x_\text{d} \bar{c} + x_\text{c}) \times 10 \]
\[ \text{PELTO} = (6 - x_\text{e} \bar{c} + [6 - x_\text{f} \bar{d}]) \times 10 \]
\[ \text{PEIND} = (6 - x_\text{g} \bar{h} + x_\text{h}) \times 10 \]

where \( x_\text{i} \) = mean score for question i

Each dimension is based on answers to two questions, both of which are equally weighted. In the case that a question is stated indicating a high value for a dimension, the mean score is subtracted from 6 in order to obtain a high mean score for a high corresponding value. By adding up the mean scores from the two questions per dimension, a maximum value of 10 can be obtained. In order to be consistent with Hofstede & Minkov’s (2013) model, the values are multiplied by 10, creating a potential range from 0 to 100.

3.2.1 Controls

Both the linear regression and probit models were estimated whilst controlling for country, growth aspiration and the size of the organisation. The inclusion of such controls does not significantly alter the findings (see appendix III & IV).

3.3 Models

In order to test the second hypotheses, a linear multiple regression analysis is used to predict the outcome value based on several predictors (Field, 2018). Since all public equity cultural variables have been proven to have a significant linear positive or negative relationship with the general attitude of going public, the Enter regression method was used, meaning that all independent variables have been entered simultaneously into the regression equation. None of the public equity cultural variables correlate more than 0.5 with each other, indicating that they all measure a different cultural aspect, which increases the reliability of this model.

As a linear probability model implies a continuous dependent variable, and it can be argued that the decision to go public is a dichotomous variable (the businesses either consider going
public or not), a probit model has been generated which depicts the probability of businesses choosing either one side or the other. The dependent variable has therefore been recoded into a binary variable, with 0 = do not consider going public (sum of answers “very unlikely” and “unlikely” for question 2) and 1 = consider going public (sum of answers “very likely”, “likely” and “undecided” for question 2).

4 Findings

4.1 General Attitude of Going Public

To test H\textsubscript{1}, an independent sample t-test was used. A significant difference between the means of the two groups can be asserted, \( t(1,005.19) = -5.944, p < .001 \). The effect size, measured through Cohen’s \( d \), equals .29. Thus, the means of the two countries differ by 0.29 standard deviations, which is why it is considered a medium effect (Cohen, 1992). Hence, British businesses are significantly more likely to go public than German businesses.

H\textsubscript{1} is therefore accepted.

The United Kingdom is more open towards public equity with 14 percent of the British respondents potentially considering public equity financing compared to 5 percent in Germany. Also, with 10 percent of the British respondents, the United Kingdom has a three times higher proportion of undecided enterprises. Moreover, within our sample, both countries have a similar level of firms that have already been listed on a market. This highlights that British enterprises are much less conservative and more open towards public equity financing than German ones. Figure 2 summarises these findings.

[insert Figure 2]

**Fig. 2: Likelihood of going public in the United Kingdom and Germany**

In addition, there are significant differences in the likelihood of going public for the different
intentions where to lead the business size in the future, Welch’s $F(2, 30.380) = 12.404, p < .001$. With 81 percent, the vast majority of medium-sized businesses seek growth for their business. Most of the respondents selecting public equity financing are very likely to (87 percent), likely to (100 percent) or who are already listed (97 percent) also aspire to grow their business. Only one percent ($n=11$) wants to downsize, all of claim to be either unlikely or very unlikely to go public. The same applies to 89 percent out of the 18 percent that want to remain their current size. Also, all of the already listed firms mostly want to grow. Thus, those businesses aiming to grow in size are more likely to go public.

Comparing the countries, it can be asserted that generally more British businesses (87 percent) aspire to grow than German ones (73 percent). There is a significant difference between the likelihood of going public for British and German businesses wanting to grow, $t(779.122) = -5.545, p < .001$. The mean difference of .441 points on the Likert-type scale indicates that British businesses aiming to grow are more likely to go public than German businesses wanting to grow. For businesses aiming to maintain their current size, no significant difference in attitude toward going public between the countries can be asserted, $t(123.739) = -1.096, p = .275$, nor for the businesses aiming to reduce their size, $t(9) = -.129, p = .900$.

4.2 Cultural Impact on the Going Public Decision

A probit estimation has been generated in order to predict the probability of businesses choosing either to go public or not. To this end, the variables have been tested for multicollinearity using the variance inflation factor. A range of diagnostic tool to test for multicollinearity have been used and no serious issue have been identified with the model (see appendix IV).

Out of the 890 valid answers for the probit model composition, 81.3 percent do not consider going public ($y=0$) and 18.7 percent potentially consider going public ($y=1$). The results of the
probit estimation are summarised in table II.

[insert Table II]

Tab. II: Probit Regression

The prediction equation for the decision to go public is therefore expressed as:

\[
\text{Decision to go public} = -2.755 - 0.028 \times \text{PEIDV} - 0.023 \times \text{PEUAI} - 0.023 \times \text{PELTO} + 0.018 \times \text{PEIND} + \varepsilon_i
\]

The chi-square test statistic confirms that the model fits better than a model with just an intercept, \( \chi^2(4) = 288.010, p < .001 \). In addition, with a McFadden pseudo R Square of .336, a good model fit is attained (McFadden, 1979).

The estimators of the probit modelling are still significant after controlling for country, growth aspiration and size.

Figure 3 summarises the findings in the conceptual framework.

[insert Figure 3]

Fig. 3: Overview of findings in the conceptual framework

Subsequent to the questionnaire, an open-ended question was asked to determine which aspects need to change in order for the firms to consider public equity. Several themes emerged from the answers.

The most mentioned theme was the desire for fewer requirements. In particular, reduced costs and fees were mentioned. In addition, some mentioned that accelerated processes of an IPO and shorter admission documents would be necessary to improve the chances of being considered. Another theme that emerged was the desire of the businesses to retain their independence. The participants mentioned that they do not want to lose control over their
business and they do not want it to be too transparent. Moreover, when corporate strategic change was mentioned, it was expressed that public equity would become more interesting in case of sudden growth and therewith increased demand for finance. In addition, it has been asserted that public equity is too short-term oriented. The businesses would prefer to be able to plan more long-term. Another theme raised by the respondents was that public equity financing would become more likely if other forms of traditional financing became less attractive. As such, it was mentioned that they would potentially opt for public equity if other financing forms disappear or become less efficient, particularly if the interest rates rise again. In addition, a change in investor behaviour was expressed. The businesses would rather consider being listed if there is a general increased willingness of the population to invest in shares. Finally, the need for consultation and training was mentioned in the context of learning more about how their business could be integrated in the capital markets.

5 Discussion

5.1 General Attitude of Going Public

The results have shown that the general attitude towards public equity financing is negative. Only 10% of the respondents considered this mode of financing either likely or very likely for their business, while 80% agreed on it being unlikely or very unlikely. This confirms previous studies such as Deloitte (2012) or Oliver Wyman (2014) who observed that public equity is not being used or considered by many SMEs.

In addition, it was identified that British medium-sized businesses are significantly more likely to go public than German ones. This difference is in line with the diverging actual numbers of SMEs being listed. The British Alternative Investment Market (AIM) lists over 17 times more firms than the German Scale segment (London Stock Exchange, 2020; Deutsche Börse, 2020), even though the technical and economical requirements are (fairly) comparable. It is also
consistent with the private stock market investor activity, which is much higher in the United Kingdom than in Germany (Deutsches Aktieninstitut, 2011, 2019). Thus, the research from Aggarwal and Goodell (2010), Kwok and Tadesse (2006) and Lavezzolo et al. (2018) has been confirmed by supporting the fact that the countries are based on different financial systems, with the United Kingdom being rather market-based and Germany being very bank-based. Thus, national financial systems literature has been shown to also be applicable to the group of medium-sized enterprises.

Furthermore, participants (responses to the open-ended question) have highlighted that internal financing is used as a primary form of finance. In case the businesses need further finance, their first point of contact is their bank. Only if bank financing is not an option anymore due to too many constraints or the unavailability of loans, businesses start looking for other forms of finance and would also consider public equity.

Whilst we are aware that equity financing might only be an option for a limited number of medium-sized firms, it may be that given the increase in debt levels associated with the recent pandemic that it offers some firms an opportunity to finance the growth of their firm post pandemic in the current difficult financial market.

5.2 Cultural Impact on the Going Public Decision

Furthermore, the public equity cultural variables of individualism, uncertainty avoidance and long-term orientation have a negative impact on the decision to go public, while the opposite applies for the public equity cultural variable of indulgence. Most former studies do not support the finding concerning individualism, rather they find that individualism is positively impacting corporate risk-taking, decreased cash holdings and increased capital expenditures. Thus, there is limited validity to this result Çetenak et al. (2017), Chen et al. (2015), Li et al. (2013), Mihet (2013) and Rehbein (2014). However, the other cultural variables are in line with
extant literature. As such, Çetenak et al. (2017), Chang and Noorbakhsh (2009), Chen et al. (2015), Fauver and McDonald (2015), Li et al. (2013), Mihet (2013) and Petersen et al. (2015) have shown that countries with a high uncertainty avoidance tend to have more cash holdings, take less corporate risk, have less debt financing, and countries with a high long-term orientation have more cash holdings and are more debt financing oriented. Therefore, these findings have a high validity and fit in well with previous findings. Regarding the indulgence variable, the comparison to previous studies is limited due to the relative novelty of this cultural dimension. There is only one relevant study which has observed the impact of indulgence on IPO activity and no significant relationship could be determined (Gupta et al., 2018). Thus, the results of this research add to the pool of literature on this specific issue and need to be validated or disproved in the future.

The probit model brings together those findings and demonstrates how the cultural dimensions independently influence the decision to go public after controlling for one another. With a McFadden pseudo R Square of .336, a good model fit, and thus relatively high explanatory power and reliability, is attained. The strongest impact on the decision to go public is public equity long-term orientation, followed by uncertainty avoidance, indulgence and individualism. Thus, businesses willing to plan operate on a short-term basis, take risks, follow unconventional ways and to prioritise their own wellbeing over the wellbeing of the community, are more likely to go public.

6 Conclusion and Recommendations

To summarise, the results show that 80% of medium-sized enterprises would not consider public equity financing. In addition, British businesses are significantly more likely to go public than German ones. Computing cultural variables specific to the decision to go public is a major original contribution of this research. The cultural variables of public equity individualism,
uncertainty avoidance and long-term orientation have been shown to have a negative impact on the decision to go public, while the opposite applies for the public equity indulgence cultural variable.

Thus, this paper adds both theoretical and practical contributions. Theoretical contributions include new knowledge on the limited generalisability of Hofstede’s cultural dimension model, a survey method to contextualise Hofstede’s approach to the context of public equity financing as well as improved understanding of social phenomena supporting financial decision making in SMEs. The Satisficing Theory of Rationality and the Pecking-Order Theory have been supported to an extent, as well as the impact of behavioural aspects on the latter. Thus, capital structure decisions are not always rational and aimed at maximising utility, but are also dependent on other unconscious aspects. The impact of cultural variables on the national financial system has been confirmed in this study and the context of medium-sized enterprises to this adds an original contribution.

Practical contributions include suggested policy guidelines which support making the option to go public less bureaucratic. These guidelines would evolve around reducing IPO requirements, simplifying processes, enhancing independence, improved catering for strategic change, improved long-term orientation, more stock market investors and enhanced training activities.

More generally it is noted that firms currently see debt as the second most popular method of finance and given smaller firms experience during the pandemic, it maybe that some firms in the future may question the wisdom of being overly dependent on external debt.

Limitations of this paper, and thus opportunities for future research, include our focus on the demand side of public equity financing. However, stock markets, like any other markets, are controlled by supply and demand. Thus, not only the SME’s point of view towards public
equity needs to change, but also the investors’ viewpoint. Therefore, public equity financing 
also needs to be appropriately promoted among private and institutional investors. 
Furthermore, this research could be expanded to also include the two remaining cultural 
variables of the applied Hofstede model, power distance and masculinity, as well as further 
countries. The focus of this paper lies on the United Kingdom and Germany, where these two 
of Hofstede’s variables are equal for both countries. By expanding the research to further 
countries and variables, the results can gain more geographical generalisability. In addition, as 
there is generally very little research on the influence of Hofstede’s newest cultural variable, 
indulgence, there is a need to conduct more research on it in order to close this gap in the 
literature and test the validity of this study’s results.

A further limitation is that as we are asking questions that consider culture in terms of financing 
decisions the close relationship with attitude to going public may be an artefact of both the 
dependent and independent variables being general attitudes to finance, and that future studies 
may wish to consider the relationship between manager’s culture as captured by more general 
measures, the cultural measures specifically relating to finance decisions, and the attitude to 
going public.

Finally, the implications of Brexit and the Corona crisis provide a new field for further research. 
The impact of those events on both national culture, as well as on stock market behaviour, are 
difficult to predict and are therefore of interest to the research topic and its long-term 
applicability.
References


Tianshu Zhao, Dylan Jones-Evans; SMEs, banks and the spatial differentiation of access to finance, Journal of Economic Geography, Volume 17, Issue 4, 1 July 2017, Pages 791–824


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## Appendices

### I. Appendix 1 – Respondents descriptive statistics

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II. Appendix 2 – Questionnaire

Financing medium-sized enterprises in the United Kingdom

Information Form

My name is Lisa Koch and I am a PhD student from the Business School at Edinburgh Napier University. As part of my degree course, I am undertaking a research project for my dissertation. The title of my project is: Public equity financing for medium-sized enterprises in the United Kingdom and Germany. This study will investigate the influence on financing decisions in medium-sized enterprises. The findings of the project will be valuable because they are aiming to ensure more sustainable financing. I am looking for volunteers from medium-sized enterprises to participate in the project. There are no criteria for being included or excluded – everyone is welcome to take part. If you agree to participate in the study, you will be asked to complete the following questionnaire. The whole procedure should take no longer than 5 minutes. You will be free to withdraw from the study at any stage until submission of the questionnaire, you do not have to give a reason. All data will be anonymised as much as possible. Your name will be replaced with a participant number, and it will not be possible for you to be identified in any reporting of the data gathered. All data collected will be kept in a secure place (stored on a university pc that is password protected) to which only the researcher has access. These will be kept until the end of the examination process, following which all data that could identify you will be destroyed.

If you have read and understood this information sheet, any of your questions have been answered, and you would like to be a participant in the study, please now see the consent form.

In case of any questions, please contact me at lisa.koch@napier.ac.uk

Next

Informed Consent Form

Edinburgh Napier University requires that all persons who participate in research studies give their written consent to do so. Please read the following and agree if you do so.

1. I freely and voluntarily consent to be a participant in the research project on the topic of public equity financing for medium-sized enterprises to be conducted by Lisa Koch, who is a postgraduate student at Edinburgh Napier University.
2. The broad aim of this research study is to explore the influences of medium-sized enterprises on the decision to go public. Specifically, I have been asked to complete a questionnaire, which should take no longer than 5 minutes to complete.
3. I have been told that my responses will be anonymised. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.
4. I also understand that if at any time during the survey I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been anonymised or after publication of results it will not be possible for my data to be removed as it would be untraceable at this point.
5. In addition, should I not wish to answer any particular question or questions, I am free to decline.
6. I have been given the opportunity to ask questions regarding the survey and my questions have been answered to my satisfaction.
7. I have read and understood the above and consent to participate in this study. My agreement is not a waiver of any legal rights. Furthermore, I understand that I will be able to keep a copy of the informed consent form for my records.

1. Do you agree to the above terms and conditions?

☐ I agree

Next

Q1: answer required

Public equity financing describes the procurement of capital by getting listed on a public stock exchange such as London Stock Exchange and selling shares of the company to the public in exchange for capital.

2. How likely would you consider public equity as a financing source for your business?

☐ Very likely  ☐ Likely  ☐ Undecided  ☐ Unlikely  ☐ We are already listed on a public stock exchange

3. Where do you want your business to be in the long term?

☐ We want to grow the size of our business  ☐ We want to maintain our current size  ☐ We want to reduce the size of our business

Next

Q2: if answer is “we are already listed on a public stock exchange”, forward to Q12 (submission)
4. Do you agree with the following statements?

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<td>The development of share price movements is too unpredictable and risky.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>We would like to try out new forms of financing.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<td>We have a well-defined and agreed corporate strategy for our future development. There is little room for amendments such as including public equity.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>We prefer to stick to our established methods of financing as they have proven to work.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>We want the best for the financial success of our company, no matter how the financing method is accepted by society.</td>
<td>○</td>
<td>○</td>
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<tr>
<td>We don’t consider public equity financing as it is not a common method for medium-sized enterprises to raise capital.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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5. If the following circumstances would occur, would you consider public equity financing as an option for your enterprise?

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<th>No change</th>
<th>...less attractive</th>
<th>...much less attractive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most businesses are public and the whole economy benefits and is more efficient.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Stock prices cannot fall below a certain threshold, generating a security cushion to not lose everything.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Public equity financing has proven to be a sustainable success for one of your competitors over the last decade.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>No other medium-sized enterprise has gone public: We would be the first.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Going public involves less bureaucracy with clear and easy legislation.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The economy is performing really well with no outlook for a slowdown or potential crisis.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>More people are being active on the stock markets investing in shares.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The process of getting and remaining publicly listed is 100% online, with no need to be somewhere in person.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

6. Are there any other aspects that could improve your willingness to procure capital on the stock markets?

7. There are specialised platforms for small and medium-sized enterprises at the stock exchanges (i.e. AIM at London Stock Exchange). Did you know that?

- Yes
- No

Q7: if answer is “yes”, forward to Q8; if answer is “no” or no answer, forward to Q10

8. Do you think the services provided from these specialised stock exchange platforms satisfy the demands of your company?

- Strongly agree
- Agree
- Undecided
- Disagree
- Strongly disagree

9. What do these platforms need to incorporate in order for you to consider public equity financing?

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10. Now that you know about the existence of specialised stock exchange platforms for smaller businesses, would you rather consider public equity financing?
   Public equity financing would become...
   ○ much more attractive  ○ more attractive  ○ No change  ○ less attractive  ○ much less attractive

11. What do these platforms need to incorporate in order for you to consider public equity financing?

Submission

12. What is the name of the business you are working for?
   This information is needed to allocate openly accessible data such as firm size and location to the dataset. After the inclusion of these information, the dataset will be completely anonymised. The confidential treatment of your data is guaranteed at all times.

13. Please enter your email address in case you are available for a follow-up interview on the topic.

14. By selecting the "Submit" button, you will submit your answers and will no longer have the opportunity to withdraw from this survey.
   □ I confirm my consent to the usage of my provided answers for the scope of this research.

Q12 & Q14: answer required

Thank you for responding to this survey and supporting my research!
If you have any comments, questions or want further information on the topic, please contact me.

Lisa Koch
lisa.koch@napier.ac.uk
Edinburgh Napier University
Craiglockhart Campus
219 Colinton Road
Edinburgh
EH14 1DJ

Edinburgh Napier UNIVERSITY
### III. Appendix 3 – Results of OLS linear multiple regression analysis

**OLS (VIF)**

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F(6, 825) = 31.59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>23,704.092</td>
<td>6</td>
<td>3,950.682</td>
<td>Prob &gt; F = .000</td>
</tr>
<tr>
<td>Residual</td>
<td>103,163.09</td>
<td>825</td>
<td>125.046</td>
<td>R-Squared = .187</td>
</tr>
<tr>
<td>Total</td>
<td>126,867.18</td>
<td>831</td>
<td>152.668</td>
<td>Adj. R-Squared = .181</td>
</tr>
</tbody>
</table>

Root MSE = 11.182

| Coefficient | Std. err. | t     | P>|t| | 95% conf. interval |
|-------------|-----------|-------|------|-------------------|
| PEIDV       | -.235     | .025  | -9.52| .000              | -.283 -.186 |
| PEUAI       | .210      | .024  | 8.63 | .000              | .162 .257  |
| PELTO       | -.114     | .026  | -5.21| .000              | -.184 -.083 |
| PEIND       | .766      | 1.080 | .71  | .479              | -1.355 2.887 |
| GrowthAP    | 3.267     | .831  | 3.93 | .000              | 1.636 4.899 |
| Country     | .000      | .000  | .60  | .550              | -.000 .000 |
| Balance     | 75.427    | 2.988 |25.24| .000              | 69.561 81.293 |

<table>
<thead>
<tr>
<th></th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>PELTO</td>
<td>1.35</td>
<td>.741</td>
</tr>
<tr>
<td>PEUAI</td>
<td>1.24</td>
<td>.806</td>
</tr>
<tr>
<td>PEIND</td>
<td>1.11</td>
<td>.900</td>
</tr>
<tr>
<td>Country</td>
<td>1.06</td>
<td>.945</td>
</tr>
<tr>
<td>GrowthAP</td>
<td>1.04</td>
<td>.964</td>
</tr>
<tr>
<td>Balance</td>
<td>1.00</td>
<td>.998</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.13</td>
<td></td>
</tr>
</tbody>
</table>
Correlation coefficients between the variables

<table>
<thead>
<tr>
<th></th>
<th>PEIDV</th>
<th>PEUAI</th>
<th>PELTO</th>
<th>PEIND</th>
<th>GrowthAP</th>
<th>Country</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEIDV</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEUAI</td>
<td>-.156</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PELTO</td>
<td>.242</td>
<td>.435</td>
<td>1</td>
<td></td>
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<td></td>
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<tr>
<td>PEIND</td>
<td>-.214</td>
<td>-.193</td>
<td>-.302</td>
<td>1</td>
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<td></td>
<td></td>
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<tr>
<td>GrowthAP</td>
<td>-.032</td>
<td>-.037</td>
<td>-.106</td>
<td>.068</td>
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<td></td>
</tr>
<tr>
<td>Country</td>
<td>.174</td>
<td>.062</td>
<td>.175</td>
<td>-.093</td>
<td>-.168</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>.027</td>
<td>-.000</td>
<td>.000</td>
<td>-.040</td>
<td>.001</td>
<td>.010</td>
<td>1</td>
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</table>

IV. Appendix 4 – Collinearity Diagnostics

<table>
<thead>
<tr>
<th></th>
<th>VIF</th>
<th>SQRT VIF</th>
<th>Tolerance</th>
<th>R-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEIDV</td>
<td>1.23</td>
<td>1.11</td>
<td>.813</td>
<td>.187</td>
</tr>
<tr>
<td>PEUAI</td>
<td>1.38</td>
<td>1.17</td>
<td>.727</td>
<td>.273</td>
</tr>
<tr>
<td>PELTO</td>
<td>1.47</td>
<td>1.21</td>
<td>.680</td>
<td>.320</td>
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<tr>
<td>PEIND</td>
<td>1.15</td>
<td>1.07</td>
<td>.871</td>
<td>.129</td>
</tr>
<tr>
<td>GrowthAP</td>
<td>1.04</td>
<td>1.02</td>
<td>.964</td>
<td>.036</td>
</tr>
<tr>
<td>Country</td>
<td>1.08</td>
<td>1.04</td>
<td>.928</td>
<td>.073</td>
</tr>
<tr>
<td>Balance</td>
<td>1.00</td>
<td>1.00</td>
<td>.998</td>
<td>.002</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eigenvalue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>6.291</td>
<td>1.000</td>
</tr>
<tr>
<td>2</td>
<td>.786</td>
<td>2.829</td>
</tr>
<tr>
<td>3</td>
<td>.612</td>
<td>3.207</td>
</tr>
<tr>
<td>4</td>
<td>.141</td>
<td>6.692</td>
</tr>
<tr>
<td>5</td>
<td>.086</td>
<td>8.573</td>
</tr>
<tr>
<td>6</td>
<td>.051</td>
<td>11.091</td>
</tr>
<tr>
<td>7</td>
<td>.027</td>
<td>15.365</td>
</tr>
<tr>
<td>8</td>
<td>.007</td>
<td>29.445</td>
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</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition Number</td>
<td>29.445</td>
</tr>
</tbody>
</table>

Eigenvalues & Cond Index computed from scaled raw sscp (w/ intercept)

Det(correlation matrix) 0.5553

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Fig. 1: Conceptual framework

266x141mm (300 x 300 DPI)
Fig. 2: Likelihood of going public in the United Kingdom and Germany

178x107mm (300 x 300 DPI)
Fig. 3: Overview of findings in the conceptual framework
Table I:

Survey response rate

<table>
<thead>
<tr>
<th></th>
<th>UK</th>
<th>DE</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total no. of invitations sent</td>
<td>16,552</td>
<td>7,168</td>
<td>23,720</td>
</tr>
<tr>
<td>Email delivery errors</td>
<td>2,338</td>
<td>581</td>
<td>2,919</td>
</tr>
<tr>
<td>Net emails sent (Σ)</td>
<td>14,214</td>
<td>6,587</td>
<td>20,801</td>
</tr>
<tr>
<td>Returned questionnaires with both consents given</td>
<td>598</td>
<td>410</td>
<td>1,008</td>
</tr>
<tr>
<td>Proportion of responses</td>
<td>59.3%</td>
<td>40.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Response rate</td>
<td>4.21%</td>
<td>6.22%</td>
<td>4.85%</td>
</tr>
</tbody>
</table>
Table IV:

Probit Regression

LR chi2(7) = 304.66
Prob > chi2 = .000
Log likelihood = -243.246
Pseudo R² = 0.3851

| Coefficient | Std. err. | z   | P>|z|  | 95% conf. interval |
|-------------|-----------|-----|------|-------------------|
| PEIDV       | -.018     | .006| -2.98| .003              | -.030 -.006 |
| PEUAI       | -.024     | .004| -5.66| .000              | -.033 -.016 |
| PELTO       | -.023     | .004| -5.85| .000              | -.031 -.015 |
| PEIND       | .022      | .004| 5.03 | .000              | .013 .030  |
| GrowthAP    | .126      | .193| .65  | .515              | -.253 .504 |
| Country     | -.716     | .159| -4.52| .000              | -1.027 -.406 |
| Balance     | -.000     | .000| .76  | .447              | -.000 .000 |
| _Cons       | 1.973     | .687| 2.87 | .004              | .626 3.320 |