Trust and SME attitudes towards equity financing across Europe

Michael Dowling*[1], Colm O'Gorman[2], Petya Puncheva[1], Dieter Vanwalleghem[1] and [2]

[1]Rennes School of Business, France
[2]DCU Business School, Dublin City University, Ireland

Abstract

The decision by a small and medium-sized enterprise (SME) to take on equity requires trust, due to reliance on the good intentions of the parties involved. Drawing on a social capital perspective, we argue that national interpersonal and institutional trust positively influences SME attitudes towards equity financing. We also hypothesize a substitution effect between interpersonal and institutional trust. Through a large survey of European SMEs in 26 countries, we confirm the presence of these direct and interaction effects. By making explicit the link between trust and attitudes to equity financing we extend the theory on institutional drivers of SME financing.

Keywords: SME, interpersonal trust, institutional trust, equity financing, social capital

*Corresponding author: Michael Dowling, Rennes School of Business, Rennes, France. Email: michael.dowling@rennes-sb.com

1 Introduction

Small and medium-sized enterprises (SME) are considered a core engine for future growth in Europe, and indeed beyond. However, to fulfill this potential, SMEs need a sustained supply of long-term funding. They also need to be willing to take on this funding in order to invest in growth opportunities. SMEs, however, tend to excessively rely on internal and short-term financing sources (Ayyagari et al., 2017; Behr and Güttler, 2007). Short-term financing has been established, both in theory and practice, as not suitable for supporting SMEs making long-term corporate investments, in sustaining their innovation programs, and in achieving consistent growth (Lee et al., 2015; Schneider and Veugelers, 2010). This has led policy makers such as the OECD to call for governments to encourage SMEs to take greater advantage of external sources of long-term financing such as equity (OECD, 2017).

Relatively little is known about what determines SME[1] willingness to take on equity finance and their attitudes towards[2] this form of finance. We do have some indirect insights into these attitudes, such as that demand for equity by SMEs is partially, but incompletely, explained by firm characteristics including industry composition, firm size, ownership type, and growth rates (Degryse et al., 2012; Mac an Bhaird and Lucey, 2010). We also know that constraints in the availability of equity finance is a major determinant of use by SMEs (Casey and O'Toole, 2014). Equity financing is further known to be particularly important for SMEs with high growth potential. These firms tend to depend on more difficult to value intangible assets, which makes obtaining traditional debt more difficult (Gregory et al., 2005; North et al., 2013).

However, these findings do not directly inform us about the attitudes of SMEs to equity financing. This is an important omission as attitudes towards equity finance will naturally influence the decision to seek this form of financing. For SMEs, equity financing normally includes greater involvement of the financing provider in the firm compared to the bank lending that SMEs rely on as their main form of long-term financing. Bank lending tends to be primarily 'transactional', and based on historic strength of financial statements, availability of assets as security, or through using

[1] We will generally refer to 'SME' in this study as short-form to be taken to mean 'SME owner-manager'

[2] 'attitudes towards' is an umbrella term used in the study to cover both SME confidence in equity providers and their preference for equity capital over debt capital. We elaborate on this further at the start of Section 2.3.

credit histories (Berger and Udell, 2006). There is limited bank involvement in the firm after the decision to lend is made unless a problem occurs. By contrast, equity providers primarily invest for the future potential of the firm and as partial owners have an interest in, and some control over, how this value is created. The forms of equity financing that SMEs normally access, such as venture capital and private equity investments, are also significantly more involved than the equity raised on stock markets by larger firms.

The process of raising equity for SMEs has been described as 'intense' (Cressy and Olofsson, 1997). SMEs face a number of potential conflicts with outside equity investors after equity has been raised. Equity investors, for example, might differ with the SME on the strategic direction of the firm and seek to impose their own vision (Kaplan and Strömberg, 2004). There can also be active monitoring of the SMEs management which has the potential to be perceived as intrusive. Lastly, due to high levels of information sharing and therefore knowledge of the firm's intellectual property and trade secrets, there is a risk of expropriation by the equity investor (Atanasov et al., 2012; Fairchild, 2011). This close relationship and the associated risks is likely to place trust at the centre of SME attitudes towards equity providers. Trust in this case can be taken to mean SME confidence that equity investors will perform their role in a manner that is not detrimental to the firm. Despite the potential role for trust as an influence on SME attitudes to equity finance, this has not been previously investigated.

Research in the international business domain on SME financing has touched on some aspects of trust, even if not directly addressing trust. These studies look at the role of formal institutions and cultural factors as a means of understanding cross-country differences in SME financing behavior. Formal institutional development has been posited as one important cross-country explanation in this regard (Whitley, 1999; Hall and Soskice, 2001). Formal institutions, such as the financial system, the legal system, or regulatory quality, determine rules for accountability and liability in financial transactions (La Porta et al., 1997; Berger and Udell, 2006). These institutions can therefore be argued to foster trust through imposing sanctions for improper behavior (Williamson, 2003). Researchers drawing on cultural relativity theory have built on the explainability gaps in formal institution studies and argued that culture can also drive SME financing behavior and

performance (Chui et al., 2002; Gaganis et al., 2018; Kong, 2016). These studies suggest a potential role for trust, as interpersonal trust is an outcome of culture (Doney et al., 1998). We thus have two bodies of research applying institutional and cultural approaches, and both implicitly examining aspects of trust as a driver of SME financing behavior.

In this paper we make explicit the link between trust and SME attitudes to equity financing. We draw on the social capital perspective of trust, which highlights the role of societal trust at different levels in fostering cooperation (Fukuyama, 1995; Paxton, 2002; Woolcock and Narayan, 2000). The social capital view emphasizes that cross-country variations in interpersonal and institutional trust influences perceptions on the likelihood or ability of counter parties in business to act opportunistically. In turn, this influences willingness to engage in collaborative relationships with counter parties (Knack and Keefer, 1995; Glanville and Paxton, 2007). By focusing on institutional and interpersonal trust we draw on an emerging body of research that has established how various forms of country-specific trust are associated with economic behavior (Ahlstrom et al., 2014; Bidault et al., 2018; Guiso et al., 2008; Outila et al., 2018; Pevzner et al., 2015; Wu et al., 2014).

We therefore hypothesize that differences in countries' social capital of interpersonal and institutional trust can be directly related to cross-country variations in SME attitudes towards equity financing; namely their confidence in equity suppliers and preference for equity financing. We also hypothesize that interpersonal and institutional trust will act as substitutes in countries where one of these forms of social capital is low. Lastly, we argue that interpersonal trust and institutional trust will have different impacts depending on firm size. We test our hypotheses on a survey sample of nearly 20,000 SMEs from 26 European countries.

We find that both interpersonal trust and institutional trust are positively related to SME attitudes to equity financing. In doing so we make a number of contributions to the SME financing and the broader international business literature. First, by drawing on the social capital perspective of trust, we extend the theory on institutional drivers of SME financing behavior. We do this by showing a common link, based on trust, between the institutional development literature and the cultural drivers literature. We also contribute to an understanding of the mechanisms by which trust influences financing behavior through exploring the differences in influence of institutional and

interpersonal trust, as well as how these two forms of trust can substitute for each other. Lastly, we show that a classical financing perspective of how an SME approaches financial decision making is incomplete. While the financing perspective largely ignores non-financial factors, we show that trust is also vital in determining SME attitudes to financing choices.

In the following section we develop the theoretical basis and hypotheses for why national trust should influence SME confidence in equity providers and preferences for equity. Section 3 presents the dataset, range of variables, and testing approach. Section 4 contains the findings. We conclude the paper with a discussion of the findings, an elaboration of the managerial implications, as well as outlining some limitations of the study and avenues for future research.

2 Theory and hypotheses

2.1 Institutions, culture, and firm financing

Variations in the formal institutional environment influence the risk perceptions of investors and firm decision makers. This should therefore influence both the availability and demand for different types of external funding. Well-developed formal institutions serve to reduce the risk of unfair and opportunistic counterparty behaviour in financial transactions, a danger particularly acute when a firm raises outside equity. While numerous institutional frameworks have been proposed that can help explain the relative country-by-country prevalence of equity financing, these individual frameworks can lead to often-conflicting empirical predictions. We therefore identify three different perspectives, which combined, should account for most of the cross-country variation in equity financing due to formal institutional features.

First, from a legal institutional perspective; formal contracts, bankruptcy laws, and defined and enforced property rights, reduce the potential for opportunistic behaviour in business exchange. In financial markets, scholars have argued that stronger legal (minority) shareholder rights, liability rules, and requirements for information disclosure, have favoured the development of strong public equity markets and hence stimulated firms to use these markets as a funding channel (Beck and Levine, 2005; Porta et al., 1997, 1998). Although the proportion of SMEs who turn directly to

public equity markets for funding is limited, SMEs often rely on private equity which is heavily dependent on well-developed public markets for liquidity and exit (Bonini and Alkan, 2012; Black and Gilson, 1998). Owing to this greater supply and hence lower cost of outside equity, we expect SMEs will tend to be more in favour of raising (private) equity capital in Common Law countries compared to, for instance, French or German civil law countries.

Secondly, political conditions, regulatory quality, and taxation policy, all affect overall financial market development. Of particular relevance for SMEs, lower corporate gains taxes and quality of governance are identified in the literature as important drivers of venture capital (VC) market development (Da Rin et al., 2006; Li and Zahra, 2012). Since SMEs frequently rely on VC for funding their growth, countries with a VC-friendly regulatory system should have SMEs expressing higher confidence in, and greater preference for, external equity financing.

Thirdly, the development of equity markets relative to financial institutions (such as commercial banks) will determine their proportional importance in a country and hence the availability of both public and private equity funding for SMEs (Black and Gilson, 1998). In line with this Čihák et al. (2013) measure equity market and financial institutional development along the dimensions of financial depth, access, efficiency, and stability. Financial depth captures the size of financial institutions and markets and hence the availability of finance. Financial access reflects the extent to which capital is allocated based on project quality and less on accumulated wealth or social networks. Financial efficiency measures the ability of financial institutions to efficiently intermediate credit and the liquidity of public markets. Finally, financial stability governs the extent to which households will trust their savings to financial institutions or actively participate in public markets. As these dimensions can be measured at both the financial institution and equity market level, it is possible to create constructs which classify a country on the relative development of their equity markets versus banks and hence likelihood firms will resort to equity or debt financing.

For example, in the United Kingdom both equity markets and financial institutions are deeper, more accessible, more efficient, and more stable than those in other European countries. However, their equity markets are also relatively better developed than their financial institutions compared to other nations. Therefore, despite the absolute strength of UK financial institutions in their

own right, this contributes to why UK firms nevertheless show a greater reliance on external equity compared to non-UK firms. Germany, on the other hand, has, in absolute terms, a better-developed equity market compared to several other European nations, but their financial institutions are relatively better developed than their equity market. This greater comparative advantage of German financial institutions contributes to German firms relying more on bank lending and less on private or public equity.

For SMEs in particular, Beck and Demirguc-Kunt (2006) argue that although outside funding is crucial for their growth and development, they are also comparatively more constrained than larger firms in their access to this funding. As a result we expect SME financing choices to be particularly sensitive to financial system orientation. This is more likely to arise when financial institutions are relatively less developed than equity markets (Čihák et al., 2013). For example, Hogan et al. (2017) finds that small high-tech ventures turn to external equity funding particularly when information asymmetries with lenders are perceived to be bigger. Overall, we therefore expect SMEs to have a more favourable attitude towards external equity funding in nations where the relative orientation of the financial system leans towards equity markets.

To this institutional and financial institution context, we can add culture. Culture, as it matters in our context, defines legitimate behaviour and what is considered right and wrong in a society (Deephouse et al., 2016; North, 1990). National culture therefore sets limits on, or boundaries to, the practices of firms (Dimitratos et al., 2011; Williams and Vorley, 2015) and influences a diverse range of firm practices. An extensive body of research has applied empirical measures of cultural dimensions as suggested by Hofstede, Schwartz or the GLOBE project to multiple business settings, firmly establishing the importance of culture (Hofstede et al., 2010; House et al., 2004; Ralston et al., 1997; Schwartz, 2006).

National culture and its embodiment in informal institutions influences firm processes such as strategic decision making (López-Duarte et al., 2016) and internationalization decisions (Samiee, 2013). Most pertinently cultural differences across countries have been shown to explain differences in financing decisions in large firms. For example, senior executives across a range of countries pursue quite different stakeholder goals due to different culturally-influenced notions of who firms

should serve (Witt and Redding, 2011). National culture influences dividend policy (Shao et al., 2010) and explains differences in corporate governance practices (Licht et al., 2007). Chui et al. (2002) and Mac an Bhaird and Lucey (2014) are among the limited number of studies to directly apply culture to explain SME financing behaviour. Notwithstanding the extant body of research that relates national culture to firm practices, there are a number of difficulties with applying national culture to understanding firm financing behavior. For example, it is difficult to identify how individual dimensions of culture might be directly related to firm-level behavior (Aguilera and Jackson, 2010; Kirkman et al., 2006; Sapienza et al., 2013). In the next section we explore trust as a more relevant perspective on culture for SME attitudes towards equity financing, as well as showing how trust is also linked to the institutional context which started this section.

2.2 Trust as a perspective on the role of institutions and culture

There are significant cross-country differences in trust and this influences business practices (Bidault et al., 2018). This trust influence has been connected to the role of institutions and culture in society (Uslaner, 2002). In this section the case is therefore made for a national trust perspective on firm financing taking account of institutional and cultural factors.

International business research tends to draw on an economic perspective of trust which focuses on the systemic and cultural mechanisms that regulate opportunistic and cooperative behaviour between economic actors (Whitley, 1999; Woolcock and Narayan, 2000). For example, systemic trust captured by differences in the quality of legal institutions helps explain cross-national differences in the financial governance of firms (Zattoni et al., 2017).

In contrast to the economic perspective, the social capital perspective on trust views trust as an outcome of social learning. It makes the case that, via socialization, individuals develop a predisposition to trust other individuals, groups and institutions (Delhey et al., 2011; Fukuyama, 1995; Paxton, 2002). For example, individuals from collectivist cultures tend to relate to others based on their group memberships leading to lower levels of trust in out-group members and in-group favoritism (Van Hoorn, 2015). Within this framework, trust can vary across several dimensions such as trust in others (interpersonal trust), be they specific individuals (particularistic trust) or trust in

most people (generalized interpersonal trust), and trust in institutions, governments and political parties (institutional trust) (Bachmann and Inkpen, 2011; Muethel and Bond, 2013; Paxton, 1999; Uslaner, 2002). This perspective has been applied to understanding the importance of trust in SMEs, particularly around the cooperative behaviour of economic actors (Mesquita, 2007; Welter, 2012; Welter and Smallbone, 2011).

In the social capital view of trust there is a distinction between institutional trust perceptions and objective quality of institutions supporting trust. The institutional trust dimension is seen as complementary to other culturally-bond forms of trust. Notably, sociological research on social capital accumulation treats generalized interpersonal trust and institutional trust as two dimensions defining how individuals deal with situations when the trustor has no or limited personal relationships or experience with the trustee (Glanville and Paxton, 2007).

Interpersonal trust represents the general disposition of individuals to trust others in a society (Paxton, 2002). This form of trust is culturally bonded and tends to vary across countries with different levels of individualism-collectivism and social acceptance of uneven distribution of power present in a given country (Realo et al., 2008). Institutional trust refers to the confidence in a country's law system and governance institutions (Mathews and Stokes, 2013). The historical evolution of the market systems and the functioning sanctions supporting cooperative (trusting) behaviours in a society explain the role of formal institutions in the development of institutional trust (Hohmann and Malieva, 2005). For this reason, studies show that institutional trust tends to be higher in countries with high levels of institutional regulation (Lane and Bachmann, 1997).

Of the various forms of trust, institutional and generalized interpersonal trust are considered the most important in modern contexts, compared to particularistic trust. This is due to daily life now requiring individuals to interact with and to trust more beyond traditional networks (Delhey et al., 2011). In an SME context, interpersonal trust is considered an influential factor on trustworthiness expectations in other business parties (Welter and Smallbone, 2011). While institutional trust has also been argued to influence owner-manager beliefs as to whether the other party will engage in cooperative behaviors. In the institutional trust context this is due to confidence in the institutional mechanisms imposing sanctions and controlling these exchanges (Williamson, 2003; Welter, 2011).

2.3 Hypotheses

Our primary hypotheses center on SME owner-manager attitudes to equity financing. The attitudes towards equity financing that we hypothesize are confidence in equity providers and preference for equity over debt. Envisaging attitudes using the classic Multicomponent Model (Eagly and Chaiken, 1993) there are three components to attitude formation: cognitive, affective, and behavioral. Where cognitive is the beliefs and attributes we associate with something, affective is our feelings towards something, and behavioural is either the actual behavior or intention to behave. Business confidence has both an affective and cognitive component (Child and Möllering, 2003) and thus our hypotheses for confidence in equity providers explore these two formative parts of attitudes towards equity financing. The expressed preference for equity financing over debt financing covers the intention to behave aspect of these attitudes. We now proceed to develop the hypotheses.

2.3.1 Trust and confidence in equity providers

Raising external equity involves a transfer of ownership and intense strategic interaction between owner-managers and equity investors (Berggren et al., 2000; Cressy and Olofsson, 1997). Equity investors not only provide financial resources but also share their expertise and give strategic direction (Davila et al., 2003). They also closely monitor the activities of the firm (Kaplan and Strömberg, 2004). This shared ownership and close strategic interaction has the potential to create conflicts between the firm and the equity investor. These can result from divergent interests and agency problems, disagreement on who is entitled to make strategic and tactical decisions, and perceptions of lack of fairness or opportunistic behavior (Forbes et al., 2010; Khanin and Turel, 2015).

SMEs face a number of particular risks related to potential conflicts with outside equity investors. Equity investors might differ with SME owner managers on the strategic direction of the firm and try to impose their vision to the detriment inside equity owners (Kaplan and Strömberg, 2004). Equity investors in SMEs tend to have close access to the proprietary technology and trade secrets of the firm, and this introduces the risk of expropriation (Atanasov et al., 2012; Fairchild, 2011). Equity investors might also take an active monitoring approach to the firm's management, and SMEs can perceive this investor activism as an excessive intrusion in the firm's day to day operations (Kaplan

and Strömberg, 2004). In the face of these potential conflicts and associated costs, SMEs need sufficient trust in equity investors that they won't act opportunistically or that any divergence of opinion is resolved with a minimum of time and energy.

This trust in equity investors will partially be relationship-specific and depend on the characteristics of the cooperating partners. However, we also expect it to be driven by the wider cultural, social capital, and institutional context, as expressed by national interpersonal trust and institutional trust. As argued by Uslaner (2002) and Freitag and Traunmüller (2009), countries with higher social capital at the general interpersonal level should facilitate the building of particular trust by SMEs towards equity investors. General interpersonal trust then becomes an important conducive factor for attitudes towards equity financing. Specifically, the societal belief in the cooperative nature of individuals is likely to exert positive influence on SMEs' confidence that equity suppliers will engage in cooperative business relationships. Similarly, institutional trust has been argued to stimulate the building of inter-organizational relationships such as between SMEs and equity providers. It positively influence managers' concept of trust and trust building (Bachmann and Inkpen, 2011; Muethel and Hoegl, 2012; Rao et al., 2005). Institutional trust can therefore increase SME confidence in equity suppliers due to the general societal belief that there will be institutional safeguards to opportunistic behaviors between parties. Our first set of hypotheses are therefore:

Hypothesis 1.a *Higher levels of interpersonal trust positively influences SME confidence in equity providers.*

Hypothesis 1.b *Higher levels of institutional trust positively influences SME confidence in equity providers.*

2.3.2 Trust and preference for equity

SMEs tend to follow pecking order theory in choice of financing preference, and therefore have an initial preference for internal sources of finance, followed by debt, and lastly equity (López-Gracia and Sogorb-Mira, 2008). However, equity offers a variety of benefits for SMEs not available from the

other forms of financing. It can include expertise or certification from equity investors (Kaplan and Strömberg, 2004). It is also normally tied to future benefits rather than current situation (unlike the normal conditions of debt) and allows investing in long-term risky projects as there is no definitive payback date. The potential benefits of equity over bank debt however are conditional on SMEs sufficiently trusting that they won't suffer from conflicts with equity investors (these potential conflicts were outlined for the prior set of hypotheses). Higher levels of generalized interpersonal and institutional trust can help foster greater confidence by SMEs in positive dynamics with equity investors, and thus increase preference for equity financing.

Higher levels of trust might also increase the provision of equity financing to SMEs, and the attractiveness of SMEs to equity investors (Maxwell and Lévesque, 2014). If potential equity investors in a country have higher trust in the SME decision makers then, even in the face of significant information asymmetries, they could make equity financing available in sufficient quantities and at sufficiently attractive terms. Consistent with this point, evidence suggests that generalized interpersonal trust increases the levels of investment in entrepreneurial opportunities across countries (Kwon and Arenius, 2010). A similar conclusion was reached by Bottazzi et al. (2016) who find higher cross-border venture capital investments between countries with a higher level of bilateral trust. Finally, higher levels of generalized interpersonal trust lead to increased equity market participation by the general public, making equity financing more available and cheaper (Guiso et al., 2008). As noted previously, institutional trust also has a positive effect on equity market development. Given that high levels of interpersonal and institutional trust should lower the barriers to SMEs preferring equity capital, as well as lowering the barriers to equity providers funding SMEs, we hypothesize the following:

Hypothesis 2.a *Higher levels of interpersonal trust positively influences SME preferences for equity financing*

Hypothesis 2.b *Higher levels of institutional trust positively influences SME preferences for equity financing*

2.3.3 Interaction between interpersonal and institutional trust

Our two trust dimensions, interpersonal and institutional trust, refer to the social capital that is built up respectively around a nation's culture and its formal institutions. The literature on institutions in turn has shown that cultural institutional dimensions, such as interpersonal trust and formal institutions which support contractual design and enforcement, can both dampen and reinforce each other's impact on business outcomes depending on the setting.

Prior research shows institutional trust can foster cooperation even if the level of generalized interpersonal trust is low (Cook et al., 2005; Irwin, 2009). In countries with low interpersonal trust, entrepreneurs have been found willing to enter in business transactions with unknown partners thanks to their confidence in institutional safeguards against opportunistic behaviour (Howorth and Moro, 2012). For financial development, with its inherently complex transactions, formal institutional quality has been argued to be particularly important (Ayyagari et al., 2010). Consequently, high institutional trust can become more salient as a determinant of financial decision making in countries with low interpersonal trust.

Entrepreneurship research also suggests the effect can work in the opposite direction with interpersonal trust counterbalancing the negative effects of lower institutional trust. For instance, Welter and Smallbone (2011) have shown this to be the case for the propensity of entrepreneurs to interact with business partners outside their personal family network. In addition, higher generalized interpersonal trust can help alleviate an entrepreneur's anxiety about contracting parties' opportunities for opportunistic behaviour. The latter are arguably more prominent in a low institutional environment reflecting lower trust in the design and enforcement of contractual obligations (Chen and Saparito, 2002). This argues then for interpersonal trust playing a more prominent role in attitudes towards equity investors in settings with lower institutional trust.

While both of these points suggest a substitution effect between interpersonal and institutional trust, an alternative view evidenced in the literature is that trust and related informal governance structures can enhance the impact of formal institutions on business exchange. According to Bottazzi et al. (2016), contracts in venture capital dealings only become effective as a safeguard against

opportunistic behaviour in high trust environments. Contracts are inherently incomplete and potential partners to a business exchange might simply refrain from interacting if mutual trust fails to provide the assurance that the counterparty will not exploit unforeseen contingencies. Institutional trust would then only step in in full force when interpersonal trust provides the basis for an anticipated fair business exchange.

Poppo and Zenger (2002) also argues that the gains from relational trust-based norms such as flexibility, solidarity, bilateralism and continuance can only be realized if contractual safeguards have limited the potential for short term opportunistic behaviour. The authors find evidence that formal contracts and relational trust complement each other in their effect on exchange performance in the information services industry. Interpersonal trust and its enhancement of informal governance of business exchange therefore needs a primary level of contractual safeguards for its beneficial effects on business exchange to take root.

This latter evidence in favor of reinforcing or complimentary effects between formal and informal institutions however appears to be primarily focused on contract design. This is a part of, but decidedly narrower than, the ensemble of formal institutions. Since we focus in this study on trust in the overall formal institutional framework rather than contracts alone, we argue there is greater support for a substitution effect between interpersonal and institutional trust in the financial decision-making context. We therefore posit that interpersonal and institutional trust will act as substitutes in enhancing SME confidence in equity providers and preference for equity. We hypothesize:

Hypothesis 3.a *Interpersonal and institutional trust can act as substitutes in their influence on SME confidence in equity providers.*

Hypothesis 3.b *Interpersonal and institutional trust can act as substitutes in their influence on SME preferences for equity financing.*

2.3.4 Trust and firm size

Prior research tends to group smaller firms into the general category of small and medium-sized enterprises. However, there may be heterogeneity within groupings of SMEs as the levels of managerial discretion differ by firm size. High levels of managerial discretion mean stakeholders accept broad freedoms in managerial actions and/or that stakeholders' power to limit, or sanction, managerial actions are constrained (Crossland and Hambrick, 2011).

SMEs in general are characterized by high levels of CEO discretion, and this influences a broad range of firms' practices, including financing. For example, high CEO discretion is cited as a distinguishing factor in determining SME internationalization efforts (Hsu et al., 2013). Flexible organizational structures (Qian and Li, 2003), and less systematized approaches to decision making (Turner et al., 2010), contribute to increased levels of managerial discretion in smaller firms. In larger firms managerial discretion will likely be lower due to greater organizational rigidity (Levie and Lichtenstein, 2010). There will also be more structured forms of decision making in larger firms (Auvray and Brossard, 2012). For example, in large firms with business units across multiple countries, parent firm effects are stronger than national culture influences in terms of design of corporate management control and incentive systems (Van der Stede, 2003).

The personal beliefs and values of owner-managers have a greater influence on the managerial decisions of smaller enterprises due to the simpler organizational structure and reporting levels (Wiklund and Delmar, 2003). This is partially because these personal beliefs and values are embedded in a given societal context (Altinay et al., 2014; Boubakri and Saffar, 2016; Muethel and Hoegl, 2012). Accordingly, the individual propensity to trust others is reflective of societal levels of trust as it is learned via socialization and culturalization (Glanville and Paxton, 2007). At this small firm level it is likely to be personal relationships between the SME owner-manager and (unknown) equity finance providers that determines trust. Interpersonal trust should therefore be particularly important. As firms grow in size and adopt more formal separation of ownership and control, formal institutions might be expected to exert a greater influence on firm practice. Thus, we expect that institutional trust will exert a stronger influence on attitudes to equity financing

(i.e. both confidence in equity providers and preference for equity) for medium-sized firms. We hypothesize as follows:

Hypothesis 4.a *The positive effect of interpersonal trust on SME confidence in equity providers is more important in smaller firms.*

Hypothesis 4.b *The positive effect of interpersonal trust on SME preference for equity financing is more important in smaller firms.*

Hypothesis 4.c *The positive effect of institutional trust on SME confidence in equity providers is more important in larger firms.*

Hypothesis 4.d *The positive effect of institutional trust on SME preference for equity financing is more important in larger firms.*

3 Methods

3.1 Data and sample

Our sample of firms begins with the European Commission and European Central Bank *Survey on Access to Finance of Enterprises* (SAFE). This survey has been carried out twice yearly since 2009 questioning primarily SMEs on access to finance issues, as well as collecting a range of demographic and other firm information. The survey includes all 28 EU countries, with representative sampling per country carried out using telephone and online interviews by professional polling firms. The SAFE dataset has attracted considerable recent interest from researchers in the field of SME financing (Casey and O'Toole, 2014; Gómez, 2019; Mac an Bhaird et al., 2016; Moritz et al., 2016), supporting the robustness of the survey for studying SMEs and the innovative scope of the dataset.

For this study we take the surveys from the second half of each year from 2013 to 2017, as these waves include deep sampleshttps://www.overleaf.com/project across all countries. To create a suitable sample to enable testing of our hypotheses we employ several initial filters that result in

a final dataset of 19,905 SME firm observations in 26[3] countries. The main filters are the removal of firms from non-EU countries and firms that do not match the EU criteria for being an SME. This latter filter involves removing micro firms, and firms with a turnover greater than €50 million as these are classified as large firms by the EU irrespective of employee numbers. We also only include firms that make independent financial decisions, and of course those who answered the dependent variable questions as noted in the following section.

3.2 Dependent variables

We develop two primary dependent variables which focus on attitudes towards equity financing among SMEs. These variables are constructed from questions asked in the survey about confidence of SMEs in talking to providers of equity financing, as well as their preference for equity over bank loans and other types of loans. The first variable, *equity confidence*, is constructed from the survey question:

> Do you feel confident talking about financing with ... equity investors/venture capital enterprises ... and that you will obtain the desired results?[4]

with positive responses coded as 1. We code *don't know* and *not applicable* responses as missing rather than 0. The second variable, *equity preference*, is based on the choice of 'equity capital' as a response to the survey question:

> If you need external financing to realise your growth ambitions, what type of external financing would you prefer most?

with equity capital responses coded as 1. The alternative financing preference responses for this question are bank loans and loans from other sources, and these are coded as 0. *Don't know* and *other* responses are coded as missing.

[3]Of the 28 EU countries two, Romania and Slovenia, had to be excluded due to missing data on financial institutions that was necessary for model control variables.

[4]There was a very minor clarification change in this question's wording between 2013 and subsequent years. The 2013 wording was "Do you feel confident to talk about financing with [equity investors/ venture capital firms] and to obtain the desired results?"

3.3 Explanatory variables

3.3.1 Interpersonal and institutional trust

We measure country levels of generalized interpersonal trust and institutional trust based on responses to trust questions asked in the 2008 European Values Survey (EVS)[5]. The EVS surveys population representative samples across European countries on moral and social values and has overlap with the World Values Survey (Inglehart, 1997). They have consistent questions with the World Values Survey for trust as used in prior studies on trust and financial behavior (Ahern et al., 2015; Guiso et al., 2008).

As defined in Section 2, *interpersonal trust* measures the extent to which the people in a country trust other people. We calculate this from the percentage of people per country responding positively with *most people can be trusted* to the EVS question "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?". *Institutional trust* captures the trust of people in a country towards key institutions. We use an EVS set of questions asking "How much confidence do you have in ...?" where respondents are asked to state their confidence in 18 national and international institutions. We select responses for confidence in (1) government, (2) the justice system, (3) the European Union, and (4) the civil service. These institutions are judged to have the most relevant for business impact from the list of available institutions for which this question is asked. There are four potential responses to these questions of: *none at all*, *not very much*, *quite a lot*, and *a great deal*. We assign values of 0-3 to these responses respectively and from this calculate average institutional trust per country. This is re-scaled out of 100 to be consistent with the interpersonal trust variable. The Cronbach's alpha for the four institutional trust questions is 0.69 suggesting our aggregation of the questions is reasonable.

3.3.2 Equity availability

Section 2 highlighted the importance of effective financial institutions for access to equity financing. We therefore construct four measures of equity availability in a country based on the framework

[5]This is the most recently published wave of the EVS. A new survey wave started in 2017, but will not be released until the end of 2019.

provided by Čihák et al. (2013). This framework includes four dimensions of national financial system effectiveness: depth, access, efficiency, and stability. For each dimension we take both a financial institutions (banks) and financial markets (equity) measure. We then capture the extent to which a country's financial system is relatively geared more towards equity by calculating a ratio of the equity measure divided by the bank measure. *Equity depth* is measured as stock market capitalization as a percent of GDP divided by private credit provided by banks as a percent of GDP. *Equity access* is number of stock market listed companies per 10,000 population divided by the number of bank branches per 100,000 adults. *Equity efficiency* is the stock market turnover ratio (%) divided by bank net interest margin (%). And lastly, *equity stability* is (the inverse of) stock market volatility divided by bank Z-score (a measure of likelihood of bank defaults). In each case these variables are calculated as annual measures, and the selection of relevant measurement source follows the guidelines in Čihák et al. (2013).

3.4 Control variables

For model controls we include a range of firm-level and country-level controls. At the firm level, *firm sector* is included to capture any differences between sectors. *Firm turnover*, for categories of annual revenue, and *firm employees*, for number of employees, are included as these size-based differences might drive attitudes to equity financing. Two further factors that could influence attitudes to financing are *firm age*, a variable dividing firms into categories of how old the firm is, and *firm turnover growth*, which measures rate of revenue growth over the prior three years. The selection of these firm-level measures is supported by prior studies on SME financing (Casey and O'Toole, 2014; Degryse et al., 2012; Mac an Bhaird and Lucey, 2010; North et al., 2013).

At the country-level we include controls that may influence financing attitudes apart from the equity market development variables already described. *Common Law origin* is a dummy variable that equals one if the country's legal system is based on the UK legal system. La Porta et al. (1997) show that the Common Law system tends to offer higher creditor protection rights which might affect access to finance. We include *GDP growth* to represent recent economic conditions which have a well-known impact on firm performance (Li and Zajac, 2018). A *corporation tax* measure

is also included as debt is normally viewed more favorably than equity in high corporation tax countries due to the tax deductibility of interest payments on debt (Gordon and Lee, 2001). This is calculated as a country's corporation tax receipts as a percentage of corporate profits. We chose this direct measure of corporation tax as opposed to statutory corporation tax rates as it more directly represents effective corporation tax rates. Table 1 contains all definitions, construction approaches, and sources for the variables used in the study.

Insert Table 1 here

3.5 Testing approach

The testing takes the form of logistic regressions. We use the Stata 'svy' framework to account of the multiple waves over which the sample is conducted. A weighting variable *wgtCommon* is provided by ECB SAFE and is used to calibrate survey samples to national industrial characteristics including firm size and sectors. The data structure is an unbalanced panel, and our main tests consider the full available sample of firms in each wave. However, about half of our firms are repeat surveyed at some point across all panel waves conducted by the ECB. We therefore, as a robustness check, run the same tests excluding entries of any firm after the first entry when they are represented more than once in the survey waves we use in our study. Generally we find no substantive difference between using the full panel and using only those firms that are not repeated. We therefore report the findings from the full sample, and include the results without repeated firms in the online appendix. Lastly, to account for likely causal and time effects, we lag by one year all equity market development and country control variables when testing within a panel wave. The equation for the example of *equity confidence* for the full tests including the interaction effect is therefore:

$$EquityConf_{i,t} = f(InterTrust_i, InstitTrust_i, InterTrust_i * InstitTrust_i, EquityAvail_{i,t-1}, CountryControls_{i,t-1}, FirmControls_{i,t}) + \varepsilon_{i,t}$$

Thus, for example, the testing of the 2017 wave of survey responses is against 2016 measures of the country-level variables. This helps address endogeneity concerns in our testing. It is also the more appropriate approach as the SAFE survey in a given year starts before the end of the calendar year. Financial measures from the same calendar year could therefore include events that had not occurred at the time the survey was carried out.

For comparing the relative influence of interpersonal and institutional trust between small and medium-sized firms as per Hypotheses 4.a, 4.b, 4.c, and 4.d we introduce an additional technique proposed by Williams (2010). This technique, Ordinal Generalized Linear Models (OGLM), allows a comparison between groups while controlling for heterogeneity in variance between the groups. It therefore enables a direct comparison of the relative influence of variables between models tested on different groups of firms. We discuss this further in the relevant part of the results.

4 Results

Tables 2 contains descriptive statistics for the variables in the study, and a correlation table is provided in Table 3. The correlations as well as (unreported) Variance Inflation Factors (VIF) show there is no multicollinearity problems with including all variables in the same model. The average variable VIF for the main tests is 2.06.

A visual exploration of the variation in the dependent and trust variables across countries is included in Figures 1 and 2. Looking first at trust scores in Figure 2, we see particularly high levels of interpersonal trust in the Scandinavian countries of Denmark, Finland, and Sweden. The Netherlands also has high interpersonal trust. Low interpersonal trust countries tend to be from

Eastern Europe as well as Portugal and Cyprus. Institutional trust is less clearly defined along historical country groupings. Cyprus, for example, has high institutional trust despite their low interpersonal trust levels. Twelve of the 26 countries have different signs (positive / negative) between interpersonal and institutional trust. In the large majority of cases the direction of this difference is countries with negative interpersonal trust also having positive institutional trust. This loosely suggests a substitution effect for interpersonal and institutional trust.

For equity confidence and equity preference, as explored in Figure 1, we see that firms generally feel confident talking to providers of equity capital, but they also have a low preference for equity financing. Overall, 51% show equity confidence, but just 8% have a preference for equity financing. We see some evident differences across countries. For example, Danish SMEs have very high equity confidence, while Italian SMEs have very low confidence. The differences across countries are even more evident when looking at equity preference. We now proceed, in the next section, to formally examine the relationship between trust and attitudes towards equity financing.

Insert Tables 2, 3, and Figures 1, 2 here

4.1 Main findings

The results of the testing of the main hypotheses are reported in Tables 4 (equity confidence) and 5 (equity preference). These tables each follow the same format. Model 1 reports the baseline model of all non-trust variables. Model 2 adds interpersonal trust to the baseline model and Model 3 adds institutional trust to the baseline model. Model 4 includes both trust variables together and Model 5 includes both trust variables and the interaction effect.

Insert Tables 4 and 5 here

Hypotheses 1.a and 1.b state that higher levels of interpersonal and institutional trust, respectively, will positively influence SME confidence in equity providers. We see strong support for these hypotheses in Table 4. In Model 2 interpersonal trust is positively related to confidence in talking to providers of equity capital (exp(B)=1.009, $p<0.001$). In Model 3 institutional trust is positively related to confidence (exp(B)=1.022, $p<0.001$).

We include both forms of trust together in Model 4, and both trust variables remain significant, albeit that institutional trust, in particular, has a reduced level of significance. Hypothesis 3.a argues that interpersonal and institutional trust are substitutable in their influence on SME confidence in equity providers. We test this in Model 5 and find a strong substitution effect in the interaction variable (exp(B)=0.999, $p<0.001$), thus supporting the hypothesis. The main effect of interpersonal trust remains strongly positively significant ($p<0.001$) while the main effect of institutional trust loses significance. This absence of an institutional trust main effect but a strong interaction effect in Model 5 suggests the role of institutional trust is primarily as a moderator of the interpersonal trust relationship. We visualize the interaction effect in Figure 3 for a normal range of institutional trust and low, medium, and high levels of interpersonal trust. Of particular interest is the interaction between low interpersonal trust and institutional trust. We see that equity confidence rises from about 35% for firms in countries with both low interpersonal and institutional trust, to about 50% for firms in countries with low interpersonal trust and high institutional trust.

Insert Figure 3 here

Hypotheses 2.a and 2.b are the equivalent of Hypotheses 1.a and 1.b except related to SME preference for equity capital. The tests of these hypotheses are reported in Table 5, and support the hypotheses. Model 2 shows interpersonal trust to be strongly positively related to equity preference (exp(B)=1.030, $p<0.001$), and Model 3 shows institutional trust to also be strongly positively related (exp(B)=1.082, $p<0.001$). Both trust variables remain significant when included in the same model in Models 4 and 5. We do not find support for Hypothesis 3.b which proposed that

institutional and interpersonal trust can act as substitutes in their influence on SME's preference for equity capital (Model 5).

4.2 Trust and firm size

Table 6 reports the tests of Hypotheses 4.a, 4.b, 4.c, and 4.b which propose that interpersonal trust will be more important in smaller firms, and institutional trust more important in larger firms (respectively). Of first note in this table is the variable *firm size (het)*. This is the OGLM measure of whether there is heterogeneity in the variance between the group of small firms and the group of medium-sized firms. As it is insignificant, it means there is no significant difference in variance and the two groups are comparable on their variable coefficients. The OGLM technique determines if the differences in the value of each variable coefficient between the small and medium firm groups is significant. This is reported in the OGLM columns in the table: Model 3 reports the comparison for equity confidence, and Model 6 reports the comparison for equity preference.

We see in Model 3 that institutional trust is a significantly higher influence for medium-sized firms compared to small firms for equity confidence ($\exp(B)=1.034$, $p<0.001$). Hypothesis 4.b is therefore supported. There is a similar finding for equity preference in Model 6, thereby supporting Hypothesis 4.d. For interpersonal trust and equity confidence in Model 3 there is a higher significance of interpersonal trust for small firms, but the difference with medium firms is not significant. However, the Model 6 comparison of interpersonal trust and equity preference does show a significantly higher influence for interpersonal trust in small firms ($\exp(B)=1.015$, $p<0.001$). There is therefore support for Hypothesis 4.d but not for Hypothesis 4.a.

4.3 Robustness

We run a number of additional tests to explore reasonable alternative specifications. These are reported in the online appendix that accompanies this paper. The first set of additional tests is alternative measures that might proxy for trust. For interpersonal trust Hofstede's *power distance* is tested as an alternative to interpersonal trust (Hofstede et al., 2010). Power distance is argued to influence the development of interpersonal trust in a country (Doney et al., 1998). A second

constructed alternative to interpersonal trust is the level of control aversion in a country. Control aversion, if measured as obedience, is an outcome of power distance. We therefore include a direct measure of this as it might be a pertinent trust-related factor in the determination of attitudes to equity financing. Control aversion has previously been suggested as a factor for choice of SME financing (Berggren et al., 2000). Our construction of the control aversion variable is based on an obedience question in the EVS (as detailed in the appendix). Lastly we test Hofstede's individualism measure as an alternative to interpersonal trust due to the noted variation in national social capital along the individualism-collectivism dimension of country culture (Van Hoorn, 2015).

For alternatives to institutional trust we test the World Bank governance quality indicators average score as a first alternative to institutional trust (Kaufmann et al., 1999, 2009). The second measure is an expanded version of the main institutional trust variable. This measure, termed *institutional trust (plus)* is a combination of confidence responses to all 18 institutions on which participants were surveyed by EVS.

The tests of these alternative measures shows power distance and governance have a similar impact to the interpersonal trust and institutional trust measures for which they proxy. This provides support for the model specification. The measures of individualism, control aversion and expanded institutional trust do not show a relationship.

5 Discussion and contributions

A growing body of research recognizes that in addition to formal and informal institutions, trust also influences the way individuals behave in firms (Ahlstrom et al., 2014; Guiso et al., 2008; Muethel and Bond, 2013). In the context of SMEs, trust matters as equity financing requires trust on both sides of the financing relationship to reduce the perceived risk resulting from differing opinions, interests or opportunistic behavior (Maxwell and Lévesque, 2014; Shepherd and Zacharakis, 2001).

No prior studies have addressed whether trust influences SME attitudes towards financing. We address this absence by first showing how trust builds from formal institutions and culture, and through this provide a theoretical rationale for why this influence should exist in SMEs (Bachmann

and Inkpen, 2011; Freitag and Traunmüller, 2009; Welter, 2012). Our investigation of this relationship using a sample of nearly 20,000 SME observations from 26 European countries finds a strong role of trust. Specifically, interpersonal and institutional trust positively influences SME confidence in equity providers and their preferences for using equity financing. There is also a substitution effect between interpersonal trust and institutional trust, thus allowing low levels of one form of trust in a country to be compensated by high levels of another form of trust. Lastly, interpersonal trust is shown to be a more important trust measure for smaller firms and institutional trust a more important trust measure of larger firms among our SME firm population.

This study makes a number of contributions to the SME financing and the broader international business literature. We noted these contributions in the introduction to this study, but now elaborate further. The first contribution is to the emerging body of research that relates cross-country differences in trust to firm level preferences. Building on work that shows the influence of formal institutions and national culture on cross country difference in firms, we show that national social capital of trust also influences firm choices (Bidault et al., 2018; Boubakri and Saffar, 2016). Our findings support the sociological perspective on trust that emphasizes the difference between the objective quality of institutions and trust as reflecting social learning (Paxton, 1999). They also extend the theory on institutional drivers of SME financing by demonstrating that both institutional and cultural forms of trust positively determine SME attitudes towards equity financing.

A second contribution is that we find an important substitution effect between interpersonal and institutional trust. High institutional trust can overcome the discouraging barrier of low interpersonal trust in a country. Similarly, high interpersonal trust in a country can promote confidence in equity financing when there are low levels of institutional trust. This finding is important as it demonstrates how differences in forms of trust within national contexts, as well as across national contexts, are suggestive of different policy choices (Johns, 2017; Kwon and Arenius, 2010; Welter, 2011). It is also a reassuring finding, as it suggests that a country is not fully tied to its deep-seated cultural influences, but rather can make improvements to institutional trust to overcome low levels of interpersonal trust. We noted in the results how nearly half of the countries in our sample (12 of 26 countries) have different directions - positive or negative - between levels of institutional and

interpersonal trust.

A third contribution is exploring how the relationship between interpersonal trust and institutional trust and SME financing attitudes might vary by firm size. We apply an innovative OLGM technique developed by Williams (2010) to overcome specific difficulties with testing for differences between groups, to show that the medium-sized firms are more sensitive to the effects of institutional trust and small firms more sensitive to interpersonal trust. The hypothesized reason for these differences is lower levels of managerial discretion and less embeddedness in national contexts by medium sized firms, and greater emphasis on personal relationships in smaller firms. This finding provides a framework for the refined application of the influence of trust in future studies. We expand on how this can be developed further in the directions for future research section below.

Lastly, we contribute to research that uses cultural relativity theory. We show that, when focusing on financial attitudes in SMEs, measures of interpersonal trust and institutional trust offer compelling advantages over commonly applied measures of national culture used in cross-country studies. The first advantage is that trust, when measured through both interpersonal and institutional dimensions, accounts for both institutional and cultural influences. Secondly, there are known difficulties in associating various dimensions of national culture to specific firm-level practices (Sapienza et al., 2013). Third, trust is a transaction focused concept and therefore closer to the types of firm activities that are normally studied in cross-country studies. Trust has been increasingly applied as a transaction-focused measure of culture in other fields of finance (Bottazzi et al., 2016; Guiso et al., 2008; Wu et al., 2014).

Overall, our findings are supportive of the argument that in the context of SMEs, societal trust fosters cooperation (Paxton, 2002; Woolcock and Narayan, 2000). This is in contrast to the 'financing thesis' (Monk, 2009, p.52) which argues that due to increased financial integration, firm financing preferences are solely driven by the cost of capital, irrespective of national context. Our work thus responds to calls for a 'more complete framework' for understanding SME financing (Berger and Udell, 2006).

5.1 Managerial implications

For policy makers in the European Union, the issue of cross-country differences in the behavior of firms and in their economic performance has long been a puzzle, the so-called 'country puzzle' (Schwartz, 2006). The results of this research suggest that both interpersonal trust and institutional trust is an important piece of the answer to this puzzle. In seeking to encourage greater use of equity financing in SMEs, policy-makers need to be cognizant of the role that non-economic variables play in influencing SME preferences. Importantly, our findings suggest policy makers have choices in that countries with low levels of interpersonal trust can particularly benefit from strengthening institutional trust if they wish to increase SMEs confidence in equity finance. While interpersonal trust builds strongly on the cultural features of a country and thus changes slowly, institutional trust is at least partially reflective of the quality of formal institutions.

For owner-managers of SMEs there are also implications from these findings. We draw awareness to social capital influences that might be preventing some firms taking on favorable opportunities to finance long-term growth. This should cause reflection by managers and owners as to whether these influences are indeed beneficial. One perspective would be that financing of the firm needs to be approached in a more objective needs-resourcing fashion. This would involve putting processes in place to reduce the influence of trust factors. An alternative, and perhaps more beneficial response, would be to acknowledge the innate importance of trust in relationships such as those involving raising equity capital. Trust should be an important feature of such relationships and seeking to reduce or avoid this goes against the societal social capital role of trust. An approach of objectively assessing the basis of trust attitudes with specific equity providers could be followed. This would involve, for example, information gathering on past equity financing participation by the provider to assess the quality of these prior relationships. In that way, the assessment by the SME will move towards being driven by particularistic trust towards the provider, rather than generalized societal trust.

5.2 Limitations and directions for future research

There are some limitations and boundary conditions that apply to this study. We are limited by the financing data and countries available from the SAFE dataset. While 26 countries and nearly 20,000 firms is a large sample for SME research, being able to test more countries with more extreme variations in interpersonal and institutional trust would be informative. A limitation of the survey nature of our data and the questions asked, is that we could not ascertain the actual extent to which equity financing was used by individual firms, only whether it was used or considered. This data limitation also prevented us controlling for past experience by the SME with equity issuance which would have a natural influence on attitudes to equity financing. However, the survey does provide, quite uniquely, measures of equity financing confidence and preference, allowing a broader investigation than a pure financial dataset would have allowed. Nevertheless there would be advantages to further exploring how these attitudes convert into actual capital structures. There would also be a benefit to exploring SME attitudes to financing other than equity, and a more fine-grained exploration of attitudes to the different types of equity.

From a theoretical perspective, trust is a multi-faceted concept that can be considered across multiple levels - from the individual, the organizational, the institutional and the national. In this paper we adopt country-specific measures of trust, informed by institutional and cultural relativity theory. While our study overcomes problems of hypothesizing from broad culture dimensions and incomplete formal institution perspectives, it is still cross-country in focus. The use of country-specific measures have been critiqued on the grounds that through focusing on country measures, intra-country differences are downplayed (Sivakumar and Nakata, 2001). However, there is some evidence that country level measures can be applied at the individual or firm level. For example, Taras et al. (2010) re-tests Hofstede's dimensions at the individual level and concludes that the dimensions do have significant predictive power at this level. However, it is still a limitation, and one suggestion for future study that would overcome this would be rich within-country studies of the role of trust in SME attitudes to equity financing. This would allow deeper measures of trust and the forms of trust, including the role of role of social ties (Pinho and Prange, 2016), to

be elaborated upon. Other factors that could be covered in a deeper within-country study could include educational experience, outside country exposure, and more on the personal motivations of the owner-managers of SMEs.

Other factors might be important in explaining attitudes to financing, or interact with trust in explaining these attitudes. While we control for a country's level of financial system development using measures developed by Čihák et al. (2013), as well as a range of other controls, there are also other reasonable factors that could have been considered subject to data availability. Financial literacy, for example, would be interesting. We considered literacy for this study, but were not able to include the measure due to excessive correlation with the equity availability variables. Future research could also fruitfully explore how variation across SMEs in terms of organizational capabilities and experiences interact with trust to influence SME financing preferences. Another interesting application could be to consider trust within an institutional logics perspective of firm decision making.

6 Conclusions

Our study makes explicit the influence of both interpersonal and institutional trust on SME attitudes to equity finance. This is important as SME growth and funding remains a major policy concern globally. In the European Union it is estimated that SMEs benefited from at least €150 billion of EU public financial measures (such as grants, loans and equity) in the period 2007 to 2013 (Asdrubali and Signore, 2015). Notwithstanding the significant government resources directed towards SMEs, the OECD recently argued that governments need to encourage greater use of equity-based financing by SMEs (OECD, 2017). Despite governments committing significant resources to supporting SMEs to access finance, research shows both persistent cross-country differences in the financial decision making in SMEs and a general low level of equity-based financing. Our research suggests that country-specific interpersonal and institutional trust needs to be part of how researchers and policy-makers seek to understand why in some countries SMEs appear reluctant to take on equity financing. Trust is a complex concept, drawing from both formal institutional

and cultural sources, but trust clearly matters to understanding SMEs attitudes towards equity financing.

7 Acknowledgements

We thank the European Central Bank for providing access to the raw data of the Survey on the Access to Finance of Enterprises. We also acknowledge the excellent direction provided by the two anonymous reviewers as well as the Senior Editor who managed our paper, Professor Martina Musteen. Please note that author order is alphabetical.

References

Aguilera, R. V. and G. Jackson (2010). Comparative and international corporate governance. *Academy of Management Annals 4*(1), 485–556.

Ahern, K. R., D. Daminelli, and C. Fracassi (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics 117*(1), 165–189.

Ahlstrom, D., E. Levitas, M. A. Hitt, M. T. Dacin, and H. Zhu (2014). The three faces of China: Strategic alliance partner selection in three ethnic Chinese economies. *Journal of World Business 49*(4), 572–585.

Altinay, L., M. N. Saunders, and C. L. Wang (2014). The influence of culture on trust judgments in customer relationship development by ethnic minority small businesses. *Journal of Small Business Management 52*(1), 59–78.

Asdrubali, P. and S. Signore (2015). The economic impact of EU guarantees on credit to SMEs evidence from CESEE countries. Technical report, European Commission.

Atanasov, V., V. Ivanov, and K. Litvak (2012). Does reputation limit opportunistic behavior in the VC industry? Evidence from litigation against VCs. *The Journal of Finance 67*(6), 2215–2246.

Auvray, T. and O. Brossard (2012). Too dispersed to monitor? Ownership dispersion, monitoring, and the prediction of bank distress. *Journal of Money, Credit and Banking 44*(4), 685–714.

Ayyagari, M., A. Demirgüç-Kunt, and V. Maksimovic (2010). Formal versus informal finance: Evidence from China. *The Review of Financial Studies 23*(8), 3048–3097.

Ayyagari, M., A. Demirgüç-Kunt, and V. Maksimovic (2017). SME finance. Technical report, The World Bank.

Bachmann, R. and A. C. Inkpen (2011). Understanding institutional-based trust building processes in inter-organizational relationships. *Organization Studies 32*(2), 281–301.

Beck, T. and A. Demirguc-Kunt (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & finance 30*(11), 2931–2943.

Beck, T. and R. Levine (2005). Legal institutions and financial development. In *Handbook of New Institutional Economics*, pp. 251–278. Springer: New York.

Behr, P. and A. Güttler (2007). Credit risk assessment and relationship lending: An empirical analysis of German small and medium-sized enterprises. *Journal of Small Business Management 45*(2), 194–213.

Berger, A. N. and G. F. Udell (2006). A more complete conceptual framework for SME finance. *Journal of Banking & Finance 30*(11), 2945–2966.

Berggren, B., C. Olofsson, and L. Silver (2000). Control aversion and the search for external financing in swedish SMEs. *Small Business Economics 15*(3), 233–242.

Bidault, F., R. José, S. H. Zanakis, and P. S. Ring (2018). Willingness to rely on trust in global business collaborations: Context vs. demography. *Journal of World Business 53*(3), 373–391.

Black, B. S. and R. J. Gilson (1998). Venture capital and the structure of capital markets: banks versus stock markets. *Journal of financial economics 47*(3), 243–277.

Bonini, S. and S. Alkan (2012). The political and legal determinants of venture capital investments around the world. *Small Business Economics 39*(4), 997–1016.

Bottazzi, L., M. Da Rin, and T. Hellmann (2016). The importance of trust for investment: Evidence from venture capital. *The Review of Financial Studies 29*(9), 2283–2318.

Boubakri, N. and W. Saffar (2016). Culture and externally financed firm growth. *Journal of Corporate Finance 41*, 502–520.

Casey, E. and C. M. O'Toole (2014). Bank lending constraints, trade credit and alternative financing during the financial crisis: Evidence from European SMEs. *Journal of Corporate Finance 27*, 173–193.

Chen, C.C., P. M. and P. Saparito (2002). Individualism, collectivism, and opportunism: A cultural perspective on transaction cost economics. *Journal of Management 28*(4), 567–583.

Child, J. and G. Möllering (2003). Contextual confidence and active trust development in the Chinese business environment. *Organization Science 14*(1), 69–80.

Chui, A. C., A. E. Lloyd, and C. C. Kwok (2002). The determination of capital structure: Is national culture a missing piece to the puzzle? *Journal of International Business Studies 33*(1), 99–127.

Čihák, M., A. Demirgüč-Kunt, E. Feyen, and R. Levine (2013). Financial development in 205 economies, 1960 to 2010. Technical report, National Bureau of Economic Research.

Cook, K. S., R. Hardin, and M. Levi (2005). *Cooperation Without Trust?* Russell Sage Foundation: New York.

Cressy, R. and C. Olofsson (1997). European SME financing: An overview. *Small Business Economics 9*(2), 87–96.

Crossland, C. and D. C. Hambrick (2011). Differences in managerial discretion across countries: How nation-level institutions affect the degree to which CEOs matter. *Strategic Management Journal 32*(8), 797–819.

Da Rin, M., G. Nicodano, and A. Sembenelli (2006). Public policy and the creation of active venture capital markets. *Journal of Public Economics 90*(8-9), 1699–1723.

Davila, A., G. Foster, and M. Gupta (2003). Venture capital financing and the growth of startup firms. *Journal of Business Venturing 18*(6), 689–708.

Deephouse, D. L., W. Newburry, and A. Soleimani (2016). The effects of institutional development and national culture on cross-national differences in corporate reputation. *Journal of World Business 51*(3), 463–473.

Degryse, H., P. de Goeij, and P. Kappert (2012). The impact of firm and industry characteristics on small firms' capital structure. *Small Business Economics 38*(4), 431–447.

Delhey, J., K. Newton, and C. Welzel (2011). How general is trust in "most people"? Solving the radius of trust problem. *American Sociological Review 76*(5), 786–807.

Dimitratos, P., A. Petrou, E. Plakoyiannaki, and J. E. Johnson (2011). Strategic decision-making processes in internationalization: Does national culture of the focal firm matter? *Journal of World Business 46*(2), 194–204.

Doney, P. M., J. P. Cannon, and M. R. Mullen (1998). Understanding the influence of national culture on the development of trust. *Academy of Management Review 23*(3), 601–620.

Eagly, A. H. and S. Chaiken (1993). *The Psychology of Attitudes*. Harcourt Brace Jovanovich: San Diego.

Fairchild, R. (2011). An entrepreneur's choice of venture capitalist or angel-financing: A behavioral game-theoretic approach. *Journal of Business Venturing 26*(3), 359–374.

Forbes, D. P., M. A. Korsgaard, and H. J. Sapienza (2010). Financing decisions as a source of conflict in venture boards. *Journal of Business Venturing 25*(6), 579–592.

Freitag, M. and R. Traunmüller (2009). Spheres of trust: An empirical analysis of the foundations of particularised and generalised trust. *European Journal of Political Research 48*(6), 782–803.

Fukuyama, F. (1995). Social capital and the global economy. *Foreign Affairs 74*(5), 89–103.

Gaganis, C., F. Pasiouras, and F. Voulgari (2018). Culture, business environment and SMEs' profitability: Evidence from European countries. *Economic Modelling* -, forthcoming.

Glanville, J. L. and P. Paxton (2007). How do we learn to trust? A confirmatory tetrad analysis of the sources of generalized trust. *Social Psychology Quarterly 70*(3), 230–242.

Gómez, M. G.-P. (2019). Credit constraints, firm investment and employment: Evidence from survey data. *Journal of Banking & Finance 99*, 121–141.

Gordon, R. H. and Y. Lee (2001). Do taxes affect corporate debt policy? evidence from us corporate tax return data. *Journal of Public Economics 82*(2), 195–224.

Gregory, B. T., M. W. Rutherford, S. Oswald, and L. Gardiner (2005). An empirical investigation of the growth cycle theory of small firm financing. *Journal of Small Business Management 43*(4), 382–392.

Guiso, L., P. Sapienza, and L. Zingales (2008). Trusting the stock market. *The Journal of Finance 63*(6), 2557–2600.

Hall, P. A. and D. Soskice (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford University Press: Oxford.

Hofstede, G., G. J. Hofstede, and M. Minkov (2010). *Cultures and Organizations: Software of the Mind*. McGraw-Hill: New York.

Hogan, T., E. Hutson, and P. Drnevich (2017). Drivers of external equity funding in small high-tech ventures. *Journal of Small Business Management 55*(2), 236–253.

Hohmann, H.-H. and E. Malieva (2005). The concept of trust: Some notes on definitions, forms, and sources. In H. Hohmann and F. Welter (Eds.), *Trust and Entrepreneurship: A West-East Perspective*. Cheltenham: Edward Elgar.

House, R. J., P. J. Hanges, M. Javidan, P. W. Dorfman, and V. Gupta (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Sage Publishing: Thousand Oaks.

Howorth, C. and A. Moro (2012). Trustworthiness and interest rates: An empirical study of Italian SMEs. *Small Business Economics 39*(1), 161–177.

Hsu, W.-T., H.-L. Chen, and C.-Y. Cheng (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business 48*(1), 1–12.

Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*. Princeton University Press: Princeton.

Irwin, K. (2009). Prosocial behavior across cultures: The effects of institutional versus generalized trust. In S. Thye and E. Lawler (Eds.), *Altruism and Prosocial Behavior in Groups*. Emerald: Bingley.

Johns, G. (2017). Reflections on the 2016 decade award: Incorporating context in organizational research. *Academy of Management Review 42*(4), 577–595.

Kaplan, S. N. and P. E. Strömberg (2004). Characteristics, contracts, and actions: Evidence from venture capitalist analyses. *The Journal of Finance 59*(5), 2177–2210.

Kaufmann, D., A. Kraay, and M. Mastruzzi (2009). Governance matters VIII: Aggregate and individual governance indicators, 1996-2008. Technical Report 4978, World Bank.

Kaufmann, D., A. Kraay, and P. Zoido (1999). Governance matters. Technical Report 2196, World Bank.

Khanin, D. and O. Turel (2015). Conflicts and regrets in the venture capitalist–entrepreneur relationship. *Journal of Small Business Management 53*(4), 949–969.

Kirkman, B. L., K. B. Lowe, and C. B. Gibson (2006). A quarter century of culture's consequences: A review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies 37*(3), 285–320.

Knack, S. and P. Keefer (1995). Institutions and economic performance: Cross-country tests using alternative institutional measures. *Economics & Politics 7*(3), 207–227.

Kong, D. T. (2016). A gene-dependent climatoeconomic model of generalized trust. *Journal of World Business 51*(2), 226–236.

Kwon, S.-W. and P. Arenius (2010). Nations of entrepreneurs: A social capital perspective. *Journal of Business Venturing 25*(3), 315–330.

La Porta, R., F. Lopez-de Silanes, A. Shleifer, and R. W. Vishny (1997). Legal determinants of external finance. *The Journal of Finance 52*(3), 1131–1150.

Lane, C. and R. Bachmann (1997). Co-operation in inter-firm relations in Britain and Germany: The role of social institutions. *British Journal of Sociology 48*(2), 226–254.

Lee, N., H. Sameen, and M. Cowling (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy 44*(2), 370–380.

Levie, J. and B. Lichtenstein (2010). A terminal assessment of stages theory: Introducing a dynamic states approach to entrepreneurship. *Entrepreneurship Theory and Practice 34*(2), 317–350.

Li, J., X. J. and E. Zajac (2018). On the duality of political and economic stakeholder influence on firm innovation performance: Theory and evidence from Chinese firms. *Strategic Management Journal 39*(1), 193–216.

Li, Y. and S. A. Zahra (2012). Formal institutions, culture, and venture capital activity: A cross-country analysis. *Journal of Business Venturing 27*(1), 95–111.

Licht, A. N., C. Goldschmidt, and S. H. Schwartz (2007). Culture rules: The foundations of the rule of law and other norms of governance. *Journal of Comparative Economics 35*(4), 659–688.

López-Duarte, C., M. M. Vidal-Suárez, and B. González-Díaz (2016). International business and national culture: A literature review and research agenda. *International Journal of Management Reviews 18*(4), 397–416.

López-Gracia, J. and F. Sogorb-Mira (2008). Testing trade-off and pecking order theories financing SMEs. *Small Business Economics 31*(2), 117–136.

Mac an Bhaird, C. and B. Lucey (2010). Determinants of capital structure in Irish SMEs. *Small Business Economics 35*(3), 357–375.

Mac an Bhaird, C. and B. Lucey (2014). Culture's influences: An investigation of inter-country differences in capital structure. *Borsa Istanbul Review 14*(1), 1–9.

Mac an Bhaird, C., J. S. Vidal, and B. Lucey (2016). Discouraged borrowers: Evidence for Eurozone SMEs. *Journal of International Financial Markets, Institutions and Money 44*, 46–55.

Mathews, M. and P. Stokes (2013). The creation of trust: The interplay of rationality, institutions and exchange. *Entrepreneurship & Regional Development 25*(9-10), 845–866.

Maxwell, A. L. and M. Lévesque (2014). Trustworthiness: A critical ingredient for entrepreneurs seeking investors. *Entrepreneurship Theory and Practice 38*(5), 1057–1080.

Mesquita, L. (2007). Starting over when the bickering never ends: Rebuilding aggregate trust among clustered firms through trust facilitators. *Academy of Management Review 32*(1), 72–91.

Monk, A. H. (2009). The financial thesis: Reconceptualizing globalisation's effect on firms and institutions. *Competition & Change 13*(1), 51–74.

Moritz, A., J. H. Block, and A. Heinz (2016). Financing patterns of European SMEs: An empirical taxonomy. *Venture Capital 18*(2), 115–148.

Muethel, M. and M. H. Bond (2013). National context and individual employees' trust of the out-group: The role of societal trust. *Journal of International Business Studies 44*(4), 312–333.

Muethel, M. and M. Hoegl (2012). The influence of social institutions on managers' concept of trust: Implications for trust-building in Sino-German relationships. *Journal of World Business 47*(3), 420–434.

North, D., R. Baldock, and F. Ullah (2013). Funding the growth of UK technology-based small firms since the financial crash: Are there breakages in the finance escalator? *Venture Capital 15*(3), 237–260.

North, D. C. (1990). *Institutions, Institutional Change and Economic performance*. Cambridge University Press: New York.

OECD (2017). Financing SMEs and entrepreneurs 2017. Technical report, Organisation for Economic Co-operation and Development.

Outila, V., I. Mihailova, B. S. Reiche, and R. Piekkari (2018). A communicative perspective on the trust-control link in Russia. *Journal of World Business* -, forthcoming.

Paxton, P. (1999). Is social capital declining in the united states? A multiple indicator assessment. *American Journal of Sociology 105*(1), 88–127.

Paxton, P. (2002). Social capital and democracy: An interdependent relationship. *American Sociological Review 67*(2), 254–277.

Pevzner, M., F. Xie, and X. Xin (2015). When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. *Journal of Financial Economics 117*(1), 190–223.

Pinho, J. C. and C. Prange (2016). The effect of social networks and dynamic internationalization capabilities on international performance. *Journal of World Business 51*(3), 391–403.

Poppo, L. and T. Zenger (2002). Do formal contracts and relational governance function as substitutes or complements? *Strategic management journal 23*(8), 707–725.

Porta, R., F. Lopez-de Silanes, A. Shleifer, and R. W. Vishny (1997). Legal determinants of external finance. *The Journal of Finance 52*(3), 1131–1150.

Porta, R. L., F. Lopez-de Silanes, A. Shleifer, and R. W. Vishny (1998). Law and finance. *Journal of Political Economy 106*(6), 1113–1155.

Qian, G. and L. Li (2003). Profitability of small-and medium-sized enterprises in high-tech industries: The case of the biotechnology industry. *Strategic Management Journal 24*(9), 881–887.

Ralston, D. A., D. H. Holt, R. H. Terpstra, and Y. Kai-Cheng (1997). The impact of natural culture and economic ideology on managerial work values: A study of the United States, Russia, Japan, and China. *Journal of International Business Studies 28*(1), 177–207.

Rao, A. N., J. L. Pearce, and K. Xin (2005). Governments, reciprocal exchange and trust among business associates. *Journal of International Business Studies 36*(1), 104–118.

Realo, A., J. Allik, and B. Greenfield (2008). Radius of trust: Social capital in relation to familism and institutional collectivism. *Journal of Cross-Cultural Psychology 39*(4), 447–462.

Samiee, S. (2013). International market-entry mode decisions: Cultural distance's role in classifying partnerships versus sole ownership. *Journal of Business Research 66*(5), 659–661.

Sapienza, P., A. Toldra-Simats, and L. Zingales (2013). Understanding trust. *The Economic Journal 123*(573), 1313–1332.

Schneider, C. and R. Veugelers (2010). On young highly innovative companies: Why they matter and how (not) to policy support them. *Industrial and Corporate Change 19*(4), 969–1007.

Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology 5*(2), 137–182.

Shao, L., C. C. Kwok, and O. Guedhami (2010). National culture and dividend policy. *Journal of International Business Studies 41*(8), 1391–1414.

Shepherd, D. A. and A. Zacharakis (2001). The venture capitalist-entrepreneur relationship: Control, trust and confidence in co-operative behaviour. *Venture Capital 3*(2), 129–149.

Sivakumar, K. and C. Nakata (2001). The stampede toward Hofstede's framework: Avoiding the sample design pit in cross-cultural research. *Journal of International Business Studies 32*(3), 555–574.

Taras, V., B. Kirkman, and P. Steel (2010). Examining the impact of culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *The Journal of Applied Psychology 95*(3), 405–439.

Turner, R., A. Ledwith, and J. Kelly (2010). Project management in small to medium-sized enterprises: Matching processes to the nature of the firm. *International Journal of Project Management 28*(8), 744–755.

Uslaner, E. M. (2002). *The Moral Foundations of Trust*. Cambridge University Press: Cambridge.

Van der Stede, W. A. (2003). The effect of national culture on management control and incentive system design in multi-business firms: Evidence of intracorporate isomorphism. *European Accounting Review 12*(2), 263–285.

Van Hoorn, A. (2015). Individualist–collectivist culture and trust radius: A multilevel approach. *Journal of Cross-Cultural Psychology 46*(2), 269–276.

Welter, F. (2011). Contextualizing entrepreneurship—conceptual challenges and ways forward. *Entrepreneurship theory and Practice 35*(1), 165–184.

Welter, F. (2012). All you need is trust? A critical review of the trust and entrepreneurship literature. *International Small Business Journal 30*(3), 193–212.

Welter, F. and D. Smallbone (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management 49*(1), 107–125.

Whitley, R. (1999). *Divergent Capitalisms: The Social Structuring and Change of Business Systems*. Oxford University Press: Oxford.

Wiklund, J., D. P. and F. Delmar (2003). What do they think and feel about growth? An expectancy–value approach to small business managers' attitudes toward growth. *Entrepreneurship Theory and Practice 27*(3), 247–270.

Williams, N. and T. Vorley (2015). Institutional asymmetry: How formal and informal institutions affect entrepreneurship in Bulgaria. *International Small Business Journal 33*(8), 840–861.

Williams, R. (2010). Fitting heterogeneous choice models with OGLM. *Stata Journal 10*(4), 540–567.

Williamson, O. (2003). Examining economic organization through the lens of contract. *Industrial and Corporate Change 12*(4), 917–942.

Witt, M. A. and G. Redding (2011). The spirits of corporate social responsibility: Senior executive perceptions of the role of the firm in society in Germany, Hong Kong, Japan, South Korea and the USA. *Socio-Economic Review 10*(1), 109–134.

Woolcock, M. and D. Narayan (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer 15*(2), 225–249.

Wu, W., M. Firth, and O. M. Rui (2014). Trust and the provision of trade credit. *Journal of Banking & Finance 39*, 146–159.

Zattoni, A., M. A. Witt, W. Q. Judge, T. Talaulicar, J. J. Chen, K. Lewellyn, H. W. Hu, J. Gabrielsson, J. L. Rivas, S. Puffer, et al. (2017). Does board independence influence financial performance in IPO firms? The moderating role of the national business system. *Journal of World Business 52*(5), 628–639.

Table 1: Variable definitions

Variable	Description	Source
Dependent variables		
Equity confidence	Firms responding yes to to the survey question "Do you feel confident talking about financing with ... equity investors/venture capital enterprises?"	ECB SAFE
Equity preference	Firms responding 'equity capital' for survey question "If you need external financing to realise your growth ambitions, what type of external financing would you prefer most?"	ECB SAFE
Trust		
Institutional trust	Country aggregated average responses on European Values Survey 2008 to question "How much confidence do you have in...?" for options: government, justice system, European Union, civil service. Scores re-scaled out of 100.	European Values Survey.
Interpersonal trust	Country aggregated responses saying 'most people can be trusted' on European Values Survey 2008 to question "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"	European Values Survey
Equity availability		
Equity depth	Annual measure of country stock market capitalization as a percent of GDP divided by private credit provided by banks as a percent of GDP.	World Bank
Equity access	Annual measure of number of stock market listed companies per 10,000 population divided by the number of bank branches per 100,000 adults	World Bank
Equity efficiency	Annual measure of stock market turnover ratio divided by average bank net interest margin	World Bank
Equity stability	Annual measure of the inverse of stock market volatility divided by average bank Z-score	World Bank
Controls		
Firm sector	Categorical variable for the four EU NACE business economy sectors: industry, construction, services, trade. Industry is used as the contrast category	ECB SAFE
Firm turnover	Firm turnover in the prior year. Possible response choices are: up to €2m, more than €2m and up to €10m, more than €10m and up to €50m	ECB SAFE
Firm turnover growth	Average firm turnover in the prior three years. Possible response choices to the question "how much did your enterprise grow on average ... in terms of turnover ... per year ...?" are: over 20% per year, less than 20% per year, no growth, got smaller	ECB SAFE
Firm employees	Firm current employees. Possible response choices are: 1 to 9 employees, 10 to 49 employees, 50 to 249 employees	ECB SAFE
Firm age	Stated age of the firm, in the categories of: less than 2 years, 2 up to 5 years, 5 up to 10 years, 10 or more years	ECB SAFE
Common Law origin	Country dummy variable based on La Porta et al. (1997) which takes a value of 1 if a country's legal system is based on the UK common law legal system	Andrei Shleifer database
GDP growth	Annual measure of country GDP growth rates	World Bank
Corporation tax	Annual measure of country corporation tax receipts as a percentage of corporate profits	World Bank

Table 2: Descriptive statistics

	Mean	Std Dev	Min	Max
Equity confidence	0.51	0.50	0.00	1.00
Equity preference	0.08	0.26	0.00	1.00
Institutional trust	43.81	4.94	31.43	58.80
Interpersonal trust	35.35	14.73	9.19	76.04
Equity depth	-0.80	0.62	-3.41	0.34
Equity access	3.96	0.94	1.63	6.00
Equity efficiency	3.34	1.58	-1.74	5.71
Equity stability	-5.45	0.62	-6.99	-3.58
Firm sector				
: Manufacturing	0.32	0.47	0.00	1.00
: Construction	0.11	0.32	0.00	1.00
: Service	0.23	0.42	0.00	1.00
: Trade	0.33	0.47	0.00	1.00
Firm turnover				
: Up to €2m	0.32	0.47	0.00	1.00
: From €2m to €10m	0.44	0.50	0.00	1.00
: From €10m to €50m	0.24	0.43	0.00	1.00
Firm turnover growth				
: Grew over 20%	0.19	0.39	0.00	1.00
: Grew less than 20%	0.56	0.50	0.00	1.00
: No growth	0.14	0.35	0.00	1.00
: Got smaller	0.11	0.32	0.00	1.00
Firm employees				
: 1-9 employees	0.04	0.19	0.00	1.00
: 10-49 employees	0.53	0.50	0.00	1.00
: 50-249 employees	0.43	0.50	0.00	1.00
Firm age				
: Less than 2 years	0.84	0.37	0.00	1.00
: 2 up to 5 years	0.12	0.32	0.00	1.00
: 5 up to 10 years	0.04	0.20	0.00	1.00
: 10 or more years	0.01	0.08	0.00	1.00
Common Law origin	0.13	0.34	0.00	1.00
GDP growth	1.61	3.05	-7.30	25.56
Corporation tax	14.30	7.01	-0.20	30.30

All variables as defined in Section 3 and Table 1. The number of firms across all survey waves is 19,905. Note that the large maximum annual GDP growth figure of 25.6% is due to a significant level of multinational firms re-domiciling in Ireland in 2015, causing extreme GDP growth there in that year.

Table 3: Correlation matrix

	DV1	DV2	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DV1. Equity confidence	1.00															
DV2. Equity preference	0.12	1.00														
1. Institutional trust	0.09	0.08	1.00													
2. Interpersonal trust	0.12	0.11	0.48	1.00												
3. Equity depth	0.09	0.04	0.16	0.45	1.00											
4. Equity access	0.16	0.10	0.06	0.41	0.25	1.00										
5. Equity efficiency	-0.05	-0.02	0.18	0.40	0.36	-0.25	1.00									
6. Equity stability	0.03	0.03	-0.40	-0.03	-0.11	0.21	-0.42	1.00								
7. Sector	0.03	0.03	0.06	0.09	0.08	0.11	-0.02	-0.00	1.00							
8. Turnover growth	0.08	-0.01	-0.04	0.00	0.02	0.04	-0.07	0.05	0.05	1.00						
9. Turnover	0.12	0.01	0.16	0.12	0.13	-0.01	0.15	-0.13	-0.16	-0.02	1.00					
10. Employees	0.09	-0.00	-0.07	-0.07	-0.02	-0.02	-0.06	0.03	-0.15	-0.02	0.42	1.00				
11. Age	-0.02	-0.06	0.05	-0.00	0.02	-0.02	0.05	-0.07	-0.08	-0.13	0.15	0.11	1.00			
12. Common Law	0.06	0.03	-0.08	0.05	0.23	0.21	-0.03	0.32	0.09	0.04	0.02	0.01	-0.01	1.00		
13. GDP growth	0.07	0.00	0.07	-0.02	0.17	0.11	-0.23	0.11	0.06	0.11	-0.03	0.02	-0.01	0.32	1.00	
14. Corporation tax	0.05	-0.00	0.04	0.35	0.12	-0.01	0.47	-0.12	0.05	0.01	0.09	-0.04	-0.00	0.19	0.01	1.00

All variables as defined in Section 3 and Table 1. The number of firms across all survey waves is 19,905.

Table 4: Trust and equity confidence

	(1) Baseline	(2) w/Inter.Trust	(3) w/Instit.Trust	(4) w/All.Trust	(5) w/All.Trust+Interact
Interpersonal trust		1.00939***		1.00671**	1.01470***
		(0.002)		(0.002)	(0.003)
Institutional trust			1.02201***	1.01259*	1.00714
			(0.005)	(0.006)	(0.006)
Inter.Trust x Instit.Trust					0.99854***
					(0.000)
Equity depth	1.35979***	1.27850***	1.33627***	1.28797***	1.19254***
	(0.055)	(0.054)	(0.055)	(0.055)	(0.054)
Equity access	1.42511***	1.35033***	1.41913***	1.36771***	1.37241***
	(0.033)	(0.036)	(0.034)	(0.037)	(0.037)
Equity efficiency	0.85498***	0.83155***	0.83674***	0.82789***	0.82300***
	(0.018)	(0.019)	(0.019)	(0.019)	(0.019)
Equity stability	0.93353+	0.88928**	0.95421	0.91316+	0.95452
	(0.038)	(0.038)	(0.041)	(0.043)	(0.045)
Firm sector (con: Industry)					
: Construction	0.87280*	0.86738*	0.86369*	0.86371*	0.86126*
	(0.056)	(0.056)	(0.056)	(0.056)	(0.056)
: Services	0.95829	0.95837	0.95588	0.95697	0.95692
	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
: Trade	1.05863	1.04612	1.04882	1.04406	1.03816
	(0.051)	(0.051)	(0.051)	(0.051)	(0.051)
Firm turnover	1.34047***	1.32509***	1.32214***	1.31895***	1.31618***
	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
Firm turnover growth	1.22811***	1.22760***	1.23102***	1.22945***	1.23113***
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
Firm employees	1.19507***	1.20967***	1.21257***	1.21566***	1.21702***
	(0.048)	(0.049)	(0.049)	(0.049)	(0.049)
Firm age	0.89035**	0.89128**	0.89050**	0.89108**	0.89079**
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Common Law origin	0.88436+	0.96852	0.92590	0.96910	0.87313+
	(0.060)	(0.068)	(0.063)	(0.068)	(0.065)
GDP growth	1.01627+	1.01853*	1.01310	1.01608+	1.02159*
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Corporation tax	1.01965***	1.01518***	1.02381***	1.01880***	1.01346***
	(0.003)	(0.004)	(0.003)	(0.004)	(0.004)
Number of observations	16,215	16,215	16,215	16,215	16,215
F-statistic	68.35	66.69	66.52	63.89	60.33

Results from logit models with exponentiated coefficients reported and standard errors in parentheses. Dependent variable is equity confidence. Variables as defined in Table 1. $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5: Trust and equity preference

	(1) Baseline	(2) w/Inter.Trust	(3) w/Instit.Trust	(4) w/All.Trust	(5) w/All.Trust+Interact
Interpersonal trust		1.03002***		1.01864***	1.01441***
		(0.003)		(0.003)	(0.004)
Institutional trust			1.08242***	1.04656***	1.04722***
			(0.008)	(0.009)	(0.009)
Inter.Trust x Instit.Trust					1.00062+
					(0.000)
Equity depth	1.01746	0.90992	1.04433	0.96390	0.99708
	(0.073)	(0.063)	(0.063)	(0.062)	(0.067)
Equity access	1.50536***	1.21466***	1.40736***	1.25940***	1.25901***
	(0.063)	(0.048)	(0.055)	(0.049)	(0.049)
Equity efficiency	1.05612	0.92527*	0.99254	0.93421*	0.93910+
	(0.038)	(0.032)	(0.028)	(0.030)	(0.031)
Equity stability	1.34568***	1.14425*	1.53045***	1.30169***	1.28905***
	(0.092)	(0.073)	(0.102)	(0.096)	(0.096)
Firm sector (con: Industry)					
: Construction	0.79754+	0.76921*	0.76568*	0.76056*	0.76093*
	(0.095)	(0.092)	(0.092)	(0.091)	(0.092)
: Services	0.88175	0.87912	0.86947	0.87172	0.86980
	(0.084)	(0.084)	(0.083)	(0.084)	(0.084)
: Trade	1.26504**	1.19862*	1.20693*	1.18784*	1.19131*
	(0.105)	(0.100)	(0.101)	(0.100)	(0.100)
Firm turnover	1.13191*	1.07071	1.06458	1.05364	1.05507
	(0.062)	(0.060)	(0.060)	(0.060)	(0.060)
Firm turnover growth	0.94583	0.94990	0.95720	0.95491	0.95417
	(0.040)	(0.040)	(0.040)	(0.041)	(0.040)
Firm employees	0.91621	0.97224	0.97745	0.98761	0.98520
	(0.061)	(0.066)	(0.065)	(0.067)	(0.067)
Firm age	0.75077***	0.75630***	0.74962***	0.75387***	0.75429***
	(0.040)	(0.041)	(0.041)	(0.041)	(0.041)
Common Law origin	0.82638+	1.16125	0.99630	1.14745	1.18858
	(0.093)	(0.128)	(0.102)	(0.122)	(0.130)
GDP growth	0.99497	0.99090	0.97422+	0.98075	0.97896
	(0.015)	(0.013)	(0.013)	(0.013)	(0.013)
Corporation tax	0.98900+	0.97802***	1.00200	0.98920+	0.99096
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Number of observations	19,905	19,905	19,905	19,905	19,905
F-statistic	15.61	25.35	25.81	27.92	27.84

Results from logit models with exponentiated coefficients reported and standard errors in parentheses. Dependent variable is equity preference. Variables as defined in Table 1. $^{+}$ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6: Trust differences between small and medium-sized firms

	Equity confidence			Equity preference		
	(1)	(2)	(3)	(4)	(5)	(6)
	Small	Medium	OGLM	Small	Medium	OGLM
Institutional trust	0.99849	1.02834**	1.03358***	1.04016**	1.05619***	1.03029***
	(0.008)	(0.010)	(0.005)	(0.013)	(0.014)	(0.008)
Interpersonal trust	1.01876***	1.01173*	1.00447	1.01735**	1.01115	1.01522***
	(0.004)	(0.005)	(0.003)	(0.006)	(0.006)	(0.004)
Inter.Trust x Instit.Trust	0.99822***	0.99876**	0.99978	1.00061	1.00062	1.00049
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)
Equity depth	1.14303*	1.30692***	1.20940***	1.06980	0.92407	0.92022
	(0.067)	(0.094)	(0.046)	(0.096)	(0.093)	(0.047)
Equity access	1.36912***	1.36891***	1.28201***	1.33555***	1.17138**	1.25534***
	(0.048)	(0.058)	(0.033)	(0.072)	(0.068)	(0.048)
Equity efficiency	0.84647***	0.80481***	0.87307***	0.88298**	1.01219	0.93448*
	(0.024)	(0.031)	(0.017)	(0.038)	(0.051)	(0.026)
Equity stability	0.95763	0.92255	1.02125	1.20592	1.38897**	1.14705*
	(0.060)	(0.066)	(0.040)	(0.125)	(0.148)	(0.067)
Firm sector (con: Industry)						
: Construction	0.86426	0.83894	0.90759	0.72853	0.77865	0.84263
	(0.075)	(0.082)	(0.052)	(0.119)	(0.140)	(0.079)
: Service	1.02027	0.90019	0.96778	0.79941	0.96521	0.91157
	(0.076)	(0.075)	(0.046)	(0.107)	(0.128)	(0.066)
: Trade	1.04936	0.88874	1.03710	1.06465	1.30592*	1.14797*
	(0.069)	(0.064)	(0.044)	(0.125)	(0.152)	(0.073)
Firm turnover growth	1.23114***	1.24588***	1.22760***	0.96680	0.93934	0.94614
	(0.034)	(0.042)	(0.025)	(0.055)	(0.060)	(0.028)
Firm age	0.89209*	0.97352	0.91137**	0.77090***	0.73525***	0.78491***
	(0.041)	(0.062)	(0.028)	(0.054)	(0.064)	(0.035)
Common Law origin	0.88538	0.90741	1.00571	1.21319	1.15656	1.31321**
	(0.087)	(0.103)	(0.062)	(0.185)	(0.185)	(0.112)
GDP growth	1.02001	1.01286	1.01098	0.99721	0.95309*	0.98322
	(0.012)	(0.013)	(0.007)	(0.016)	(0.022)	(0.010)
Corporation tax	1.00865	1.02168***	1.02602***	0.98952	0.99397	0.98831*
	(0.005)	(0.006)	(0.003)	(0.008)	(0.009)	(0.005)
Firm size			0.61198***			1.34727
			(0.026)			(0.284)
Firm size (het)			1.02707			0.86891
			(0.071)			(0.085)
Number of observations	9,337	6,878	16,215	10,458	9,447	19,905
F-statistic	35.59	25.43		18.29	14.22	

Small and medium columns report logit models on either equity confidence or equity preference for firms that are either small- or medium-sized. Standard errors are in parentheses. OGLM column reports tests following the OGLM model of Williams (2010). The 'Firm size (het)' variable is the test of heterogeneity of residuals between the two groups. All other variables as defined in Table 1. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 1: Top figure: Percentage of SMEs in a country expressing confidence in talking to equity providers. Bottom figure: Percentage of SMEs in a country who say they would prefer equity financing over bank loans.

Figure 2: Top figure: Average country scores for interpersonal trust. Bottom figure: Average country scores of institutional trust.

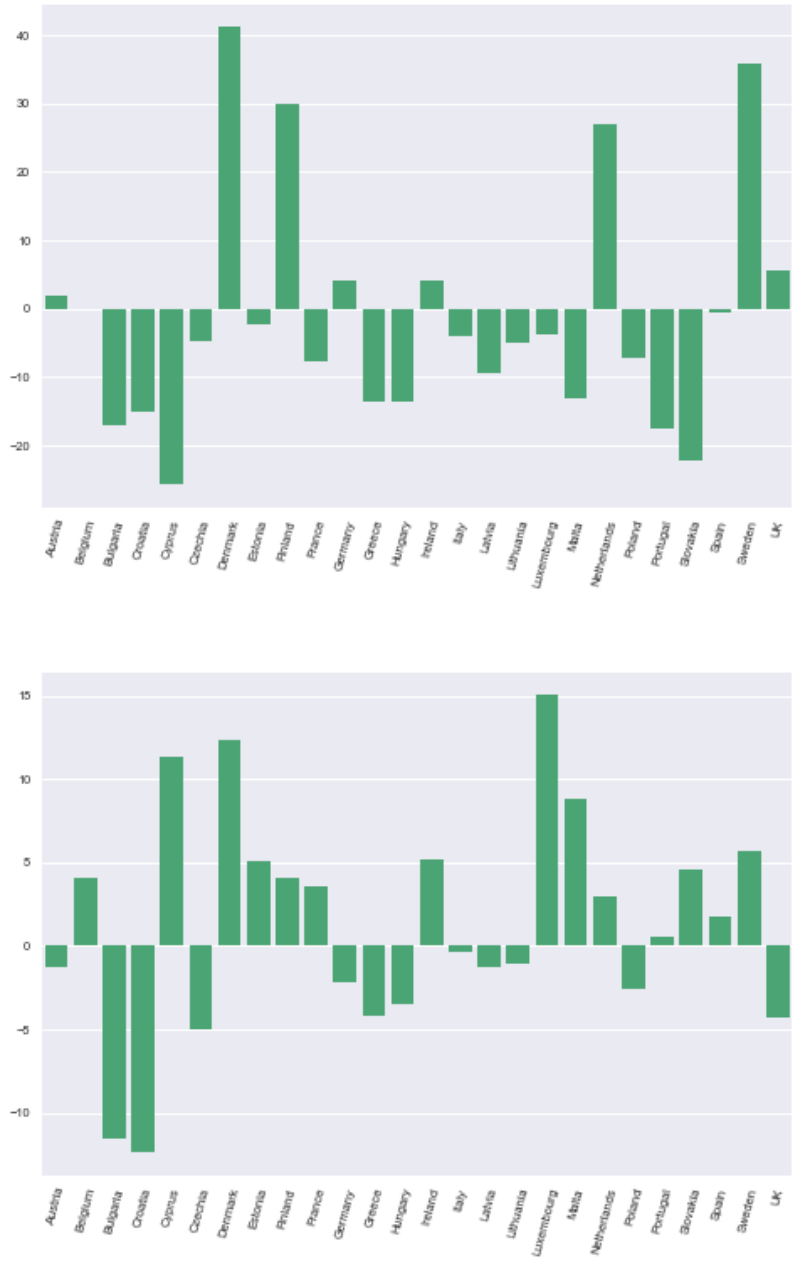

Figure 3: Trust interaction effects for equity confidence