



Article Small Family Businesses: Innovation, Risk and Value

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Abstract: This article reviews the literature and applies principal-to-principal (PP) conflict theory to small family based businesses. The lack of accurate measurement and communication of risk leading to issues with innovation, is the primary cause of PP agency costs. Careful analysis of the risk levels reflected in the cost of debt and opportunity cost of equity provides a theoretically robust and empirically estimable process for ascertaining the true PP agency cost. Awareness of the constraining governance structures and the suggested method, based on the cost of capital, to assess small business risk can assist SME owners and financiers to SMEs to promote business efficiency and innovation.

Keywords: family business; principal-principal agency conflict; governance; risk; cost of equity

1. Introduction

This paper presents the application of a finance lens to analyse how governance in small family businesses (SFB) impacts the value of the business using agency cost theory. Traditional wisdom suggests there are no agency costs present in SFBs. However, recent developments in the agency theory literature suggest that agency cost can be a very valuable tool for understanding how governance impacts value in SFBs. This breakthrough in modelling is significant in terms of understanding a range of SFB matters including value, mentoring and advising SFBs, debt financing from institutions in the formal and informal financial sectors, policy developments related to SFB operations and succession and exit strategies.

SFB governance is important and may take many forms and develop along pathways that serve the objectives of the business and in some instances, result in less than favourable outcomes. The establishment of policies to control and limit risk is an important element of governance and the possibility that governance directly impacts the risk of SFB owners is of obvious importance. Through this paper the linkage between governance, risk and value is examined. We link principal-principal (PP) agency cost, which examines the way in which majority owners expropriate resources from minority owners, with risk and its consequential impact upon the value of the business. We also take the view that due these governance issues also affect how innovation occurs in SFBs.

Family owned firms are an important form of business in many economies around the world. These firms play a significant role in generating GDP and employment. Family owned firms are most commonly small businesses (Gómez-Mejía et al. 2007) and these small businesses face challenges in managing the business, seeking finance and remaining competitive in their respective economies (Ahmad and Seet 2009; Everett and Watson 1998; Watkins 2007). The risks faced by these small businesses are brought about by both internal and external factors (Everett and Watson 1998; Gaskill et al. 1993). 40% of small businesses do not survive past their first year and 60% of those that survive fail to make it past five years (Amankwah-Amoah 2016; Martineza et al. 2019). The high churn rate of small businesses lends weight to the need to identify and evaluate the nature of these agency conflicts and the value of risk associated with investments made into these small businesses (Ahmad and Seet 2009; Everett and Watson 1998; Gaskill et al. 1993).

Generally, SFBs are defined as small businesses whose ownership and management is concentrated in the hands of the family (Cheung and Au 2010; Ivanova 2009; Stewart and Hitt 2011). SFBs are distinct from start-ups as family businesses are often centred around a family unit and operate with the family at the core of the managerial operations; start-ups on the other hand are either owned by individual entrepreneurs or a group of unrelated individuals (Ljungkvist 2017). Agency conflicts can and do arise within SFBs due to the conflicting interests of the various shareholders of the business (Rachagan and Satkunasingam 2009; Young et al. 2008). The various shareholders consist of the founding family member(s), their immediate family, their extended family and external parties such as non-family shareholders or private institutions, each with different goals and intentions with regards to the business and their personal utility (Su et al. 2008). This type of agency conflict is known in the literature as principal-principal (PP) conflict (Renders and Gaeremynck 2012; Athayde 2009; Su et al. 2008; Ward and Filatotchev 2010; Young et al. 2008; Young et al. 2003).

The next sections of this article will discuss the governance of SFBs and the influence that the controlling family has over the operation of the business. The effects of PP agency cost on small business operations will be outlined and instances of how PP agency costs can arise within a small family business will be discussed. The relationship between small business risk and PP agency cost will be explored and the various means of measuring and estimating the value of small business risk.

2. The Structure and Governance of Family Businesses

A family business will try to balance its needs to generate profit together with its desire to maintain control of the business within the family (Brenes et al. 2011; Gómez-Mejía et al. 2007; Gomez 2007; Memili et al. 2013). However, this need to maintain control of the business tends to dissipate with each subsequent generation. Gómez-Mejía et al. (2007) find that second and third generation olive farm owners are more likely to relinquish control over the business in exchange for more stable returns by joining farming cooperatives. Studying small businesses in the USA, Memili et al. (2013) find that second and third generation family members were more likely to hire non-family managers as compared to first generation family members. As such, the desire to maintain ownership and control over a business reduces with each subsequent generation. As family owned businesses grow, their differing styles of governance used to manage employees, ranging from agency behaviour, where the owning family treats employees as outsiders or stewardship behaviour where employees are treated as valued members of the team, or even as family as well (Madison et al. 2016).

By contrast, in a case study on a large Hong Kong based manufacturing company, Au et al. (2012) find that the older generation of the family members maintain family control of the firm by putting the younger generation of the family members through management school and giving them a small amount of control over various divisions of the parent company. The younger family members will eventually be entrusted with starting their own company as a subsidiary of the parent company or given full responsibility over a company division. This allows the family to ensure that control and management of the company stays within the purview of the family. But this does not stop some members of the younger generation from leaving the company and starting a wholly independent operation of their own. The family business which is the subject of their case study is not a small business as it is a global manufacturer of medical products which it exports to the rest of the world, however it does serve to highlight some characteristics of the family business relating to socio-economical wealth and the degree of perceived ownership felt by subsequent generations of the owning family.

The governance in a family business is often exemplified by the presence of a board of directors in addition to a 'family council' which is made up of the founding or senior members of the controlling family (Brenes et al. 2011). Brenes et al. show that family businesses which understand the importance of having a board of directors and uses their family council in an effective manner perform better in the market when it comes to shoring up investor confidence. The board of directors however more important when they are in listed companies. SFBs on the other hand, are privately owned and do not need to report to a board of directors for governance purposes (Wellalage and Locke 2011; Jackson and Mishra 2007).

As family businesses grow, some will expand into other businesses, creating what is known as a business family (Steier et al. 2015). Business families have investments in different sectors and align their growth towards ventures which are profitable to the family. However, despite their different approaches, family businesses and business families are led by senior family members and younger members of the family are acquiescent to the wishes of the founder or the individual who is currently in charge of the family business (Chua et al. 2003; Schulze et al. 2003b). This centralisation of ownership and control puts the controlling family in a position of power and influence over the business, allowing their management decisions to go unchecked thus increasing the SFB's risk.

Family business exist to increase the socio-economical wealth of the family but as the business grows and the founding family members grow older, there is a need to raise capital by engaging outside investors and there is also the possibility of hiring professional managers to manage the business in the absence of a qualified family successor (Chua et al. 2003; Lee et al. 2003; Paul et al. 2007). This desire to develop the family's socio-economical wealth can put the controlling family at odds with the needs of the minority investors in the business. Some owner-managers of family businesses have been known to try and justify business expenses made to support their own offspring or ensure that their own relatives receive relatively comfortable positions within the business in order to preserve the family's socio-emotional wealth (Schulze et al. 2001). These actions of 'altruism' can lead to a misuse of business funds by the owning-managing family members which can cause PP agency cost and increase the small family business' risk exposure.

With the governance of SFBs in the hands of the controlling family, minority investors and other stakeholders of the business find it difficult to control and monitor the actions and decisions made by the controlling family. This lack of control and oversight can lead to a misappropriation of funds which can affect the SFB's survivability and increase its overall risk. The controlling family has no incentive to act in the best interests of minority investors as the maximisation of their family's socio-economical wealth at the expense of the minority investors allows them to retain control of the business and derive wealth from it.

3. Innovation in SMEs

Innovation is a key factor in ensuring future business survival and the achievement of financial success (Janssen et al. 2011; Vithana et al. 2011). Within a SFB context, innovation can be seen as a desirable characteristic for the management to have (Calabrò et al. 2019).

However, there are issues with encouraging innovative thought in SFBs and as discussed in the previous section, the governance structure of SFBs which favours seniority and familial ties over management expertise may hinder innovative ideas (D'Allura et al. 2019).

In their research, (D'Allura et al. 2019) find that family-owned firms are less willing to innovate, partly due to their higher concentration of ownership which does not allow much room for voices of dissent. As control over the business increases, the less likely the business is to be innovative. However, they also point out that because of the centralisation of control, family businesses also act faster once a decision has been reached, meaning that there are some aspects of family control which can result in a more decisive approach being taken with innovation.

Calabrò et al. (2019) take a similar view in saying that acts of altruism between family members can hinder innovative behaviour in the firm. They further make the connection between agency costs and innovative behaviours in saying that lower agency costs lead to a higher level of innovation in family firms. However, like (D'Allura et al. 2019), they identify a characteristic known as 'inter-generational endurance' as they argue that the family firm governance structure promotes a long-term view that results in pro-organisational views that promote a greater willingness to innovate.

Hillebrand et al. (2019) point out that first-generational family firms experience a higher degree of innovation in terms of their low agency costs, but as the family firm gets larger, and extended family are involved, the degree of innovation becomes lower due to higher agency costs involved. However, when viewed from a resource-based perspective—it was found that the innovation levels

in the German SMEs that they studied, increased over time, which implied that the agency based perspective had less of an impact on innovation in family firms.

As innovation is seen as a factor which can promote business survivability (Chan et al. 2019; Martineza et al. 2019) it can affect the risk associated with running a family business. The literature suggests that there are factors within agency theory that can affect innovation in SFBs, which in turn may affect their long-term survivability and their inherent risk.

4. Defining Principal-Principal Agency

PP agency cost relates directly to how the controlling majority relates to the minority. It is a form of agency cost that occurs between the various principals which have a vested interest in the business or organisation (Rachagan and Satkunasingam 2009). These principals can be the majority shareholders, the minority shareholders, the state, the banks or various other institutions. Often these principals have conflicting interests and priorities and principals in position of power and control are likely to maximise their personal utility at the expense of the other principals (Su et al. 2008).

Agency theory states that agency cost rises due to the unequal access to information that exists between principals (shareholders) and the agents (managers) of the business (Jensen and Meckling 1976). Agency cost relates to the costs spent on monitoring the activities of the agent and compensating them adequately for their services rendered and is typically reflected in the amount of return on investment the principal expects the agent to generate for them (Ang et al. 2000; Eisenhardt 1989; Leland 1998; Yu 2012).

Jensen and Meckling (1976) point out that family owned and managed businesses experience little to no agency cost arising from the principal-agent relationship. They argue that in a family owned and managed business, the owner (principal) and the manager (agent) are one and the same, thus eliminating any potential conflicts between the goals of the principal and the agent. This conventional wisdom is supported by Liu et al. (2012) who argue further that family controlled firms have a positive effect on firm value in less developed economies although the effect is unnoticeable in more developed economies. However this runs counter to the findings of Peng and Jiang (2010) and Young et al. (2008) who find that family control is only good for the firm if there are well developed laws and institutions which can protect the rights of the minority investor, otherwise family control can lead to PP conflict which can hamper the growth and survivability of family firms.

As the wealth of the business is lost through PP agency cost, the minority shareholder's personal wealth is affected and this increases the SFB's financial risk (Avery et al. 1998; Palliam 2005b). These incidences of PP agency cost lead to poor management decisions which can impact the business' ability to turn a profit in the future, reducing the long-term survivability of the business and increasing the SFB's operational risk (McDougall et al. 1993; Wu and Olson 2009).

PP agency cost can negatively affect the earnings of the business as in the case of controlling family members (especially those from the first generation), will prioritise the socio-economic wealth of the family over maintenance and growth of the business (Gómez-Mejía et al. 2007; Zahra 2005). For minority shareholders, this can affect their earning potential from the business. Hence having governance structures within SFBs to mitigate agency conflict is important.

5. PP Conflict in SFBs

Within a SFB, there can be multiple family individuals, with varying levels of control and ownership over the business, each with varying agendas with regards to the business (Schulze et al. 2002; Danielson and Scott 2007). This dispersal of ownership means that within the family, the control of business is not as centralised as it would seem to outsiders. This means that there are parties within the family that have more power and control over the business over others based on their shareholding and their position within the management of the business.

The most common ways a controlling party can misappropriate funds from the business include: (1) Related party transactions—where the controlling party gets the company to enter into

agreements with other companies associated with or owned by the controlling party thus increasing the controlling party's wealth. Often these related party transactions are done at a higher-than-market rate (Renders and Gaeremynck 2012; Ward and Filatotchev 2010; Young et al. 2008). (2) Tunnelling—where the management-owners of the company siphon off funds from the business to other businesses which belong to them (Wellalage and Locke 2011; Jensen and Meckling 1976; Yu 2012). (3) Altruism–closely tied to the socio-economical wealth associated with family businesses where the controlling party will endeavour to retain managerial control and ownership of the business by promoting members of their nuclear family to high ranking managerial positions or even leadership of the company. Such appointments are often made based on family connections and not professional qualification, leading to poor management and inefficiencies in the company (Brenes et al. 2011; Gómez-Mejía et al. 2007; Memili et al. 2013). (4) Dividend manipulation (Attig et al. 2016)

In the earliest stage of growth, the SFB is founded by the lead family members, or the founders (Schulze et al. 2002; Schulze et al. 2003a). As the founders, they wield considerable influence over business operations and how it distributes its profits to other shareholders, who are usually other family members. Not all family members will be shareholders of the business, many will be hired by the founders to work as employees of the business in various managerial and non-managerial roles (Blanco-Mazagatos et al. 2007; Chua et al. 2003). While control and ownership of the company is concentrated in the hands of the founders, this does not prevent PP conflict from arising, and with it, PP agency cost. As Schulze et al. (2002) mention in their research, the family firm is largely motivated by altruism and this altruism brings with it the risk that the founders may make wrong business decisions. These decisions can include electing family members to high-ranking positions in the family business, even if they lack the qualifications. Poor decisions can also arise from the founders adopting an overly conservative stance on a business decision due to their personal lack of knowledge regarding the subject matter. In a family business, junior family members or non-family employees will find it difficult to question the judgment of the founder-CEOs, even if it may cost the business (Chua et al. 2003; Gomez 2007; Schulze et al. 2002). Conversely, founders will be less likely to question the actions or correct wrong decisions made by their family members who are working for them (Schulze et al. 2002).

SFBs that wish to expand may need to look towards other sources of finance to fund their business' expansion. Families which are reluctant to relinquish control of the business tend to opt for debt financing over equity financing (Anderson et al. 2003; Ang et al. 2000; Danielson and Scott 2007; López-Gracia and Sogorb-Mira 2008; Paul et al. 2007). Debt financing brings with it its own agency costs, which are reflected in the interest rates charged by the bank to the business (Anderson et al. 2003). Families which opt for equity financing, either because they have exhausted their debt capacity or they are willing to relinquish some control of the business, often limit the sales of shares so that they are still the controlling shareholders of the company and management of the company is still composed of nuclear family members. Once outside shareholders are brought into the business, the family is still the controlling party in the business but they still need to ensure that the rights of the minority shareholders are taken care of. In more developed countries, there will be laws and institutions to protect the rights of the minority shareholders, however this may not always be the case in less developed countries, allowing the controlling party to misappropriate the wealth of the minority shareholder (Dharwadkar et al. 2000; Young et al. 2003).

As the business expands, the controlling party may hire non-family managers to assist them in running the business (Ingley et al. 2017). These non-family managers play an important role in bringing experience and expertise to the family organisation but they are often secondary in terms of importance as compared to family managers. The loyalty of non-family managers and the potential that they might misappropriate wealth from the business is a concern for many family businesses (J. H. Chua et al. 2003; Lee et al. 2003). As such, non-family managers are rarely considered for succession to the CEO post, even if they are more qualified than family members because the agency risk is seen to too great to the controlling family (Lee et al. 2003). This results in the loss of a highly-skilled employee who can

potentially bring in a lot of profit and growth for the business, and placing a less-skilled member of the family who may increase the SFB's risk.

After the business founder steps down or passes away, there is usually a favoured child or family member (the CEO sibling) that the founder has been grooming for leadership of the family business as part of the SFB's succession plan (Chua et al. 2003; Schulze et al. 2002). However at this stage, each child from the founding family will have grown up and have started their own nuclear families, as such, their priorities have changed to put the needs of their own nuclear families ahead of the need of their extended family (Schulze et al. 2002; Schulze et al. 2003b). This altruism towards their individual families can create PP conflicts where the CEO sibling is in a position to prioritise his/her nuclear family over that of his other siblings. Through tunnelling and related party transactions, the CEO sibling can misappropriate the wealth of the business to increase his/her nuclear family's wealth. These actions can drain wealth away from the business and may lead to infighting over the future of the business (Liu et al. 2012; Schulze et al. 2001). These actions can create intense sibling rivalry which increases the business risk. There is also the potential for other siblings (minority shareholders) to sell off their shares in the business to external parties leading to reduced control over the business for the family as a whole.

If the business continues to grow and the family still maintains a controlling influence within the company, the ownership of the company becomes even more dispersed as the children of the siblings of the founding family each hold smaller, shared interests in the company. These relatives may not have the same motivation to run or develop the company like their parents or grandparents did as many of them may have careers or business of their own (Schulze et al. 2002; Schulze et al. 2003a). However, due to the dispersion of ownership, the family business begins to function more like a non-family business as the individual owners of the business may no longer run the day to day operations of the business, instead hiring non-family managers to run the business, making selections based on merit rather than on family relations (Chua et al. 2003; Schulze et al. 2003b). As ownership is no longer concentrated in the hands of one individual or party, the PP conflicts faced between family members dissipates as each family member holds a somewhat equal share of the business. However, with the hiring of non-family managers and employees, Principal-agent (PA) conflict becomes a possibility and without the institutional or legal framework to support the business, PA agency cost can take its toll on the shareholder's wealth (Leland 1998; Young et al. 2008).

The SFB is a dynamic organisation with a structure that shifts and changes as it grows and expands. The ownership structure of the SFB is fluid and in each stage of life, it faces agency costs which can affect its risk. These agency costs arise as result of conflicts between the family members, non-family members and the non-family managers that they hire to run their business on their behalf. The concentration of ownership and control does not eliminate agency cost as suggested by Jensen and Meckling (1976) but it merely creates opportunities for other forms of agency cost to arise (Rachagan and Satkunasingam 2009; Renders and Gaeremynck 2012; Young et al. 2003). The SFB is vulnerable to risk at all stages of growth and it is important for small business owners, finance providers and policy makers to understand the value of the risk associated with investments made into SFBs to enable the measuring of SFB risk.

6. SFB Risk

Risk is a central component in the valuation of small business but the ambiguity of financial information regarding the business and the opacity of its transactions makes valuation a difficult process (Fourati and Affes 2013; St-Pierre and Bahri 2006; Wu and Olson 2009). Small business risk is affected by both internal (operations, finance, management,) and external (policies, competition, economy) factors (Everett and Watson 1998). Calculation of small business risk involves estimating how internal and external factors impact the small business.

A source of risk emanates from the concentration of control and ownership in the hands of one party increases the likelihood that misappropriation can occur, thus increasing the small family business' risk. Arguably, family businesses are often rated as having a better credit rating than non-family businesses (Wiener-Fererhofer 2017), however PP conflict leads to PP agency cost which will affect the wealth of the minority shareholders and the business' survivability over the long term (Peng and Jiang 2010; Schulze et al. 2001; Su et al. 2008). PP conflict may be especially prevalent within small family businesses and the measurement of PP conflict can be useful to understand the value of small family business risk. A search of academic literature revealed three empirical studies relating to the measurement of PP conflict.

From Table 1, PP conflict is measured via shareholding variables, such as concentration of ownership, the percentage of shareholding by the largest shareholders and the ownership structure of the company and control variables such as management expenditure and voting rights (Renders and Gaeremynck 2012; Su et al. 2008; Ward and Filatotchev 2010). The research is more applicable for larger companies and uses measures such as dividend, cashflow and percentage of shareholding which may not be applicable for SFBs. Prior research focuses on publicly listed companies and businesses which are not necessarily family owned but it is still possible to adapt the measurements used by these research in the context of small family businesses to estimate the amount of PP conflict faced by SFBs.

Author	Measurement Used to Evaluate PP Conflict	Context	Comments
(Su et al. 2008)	Concentration of ownership; Presence of board of directors	State-owned corporations in China	The higher the degree of ownership concentration, the higher the PP agency cost for the company
(Ward and Filatotchev 2010)	Management expenditure incurred; Ownership structure of the company; free cashflows	Insurance companies	Insurance markets with independent agents and varied products have lower PP agency costs
(Renders and Gaeremynck 2012)	Ownership percentage of the largest shareholders; cashflow, voting and dividend rights	SMEs in European countries	Firms with good corporate governance have lower PP agency costs and a higher firm value
(Songini and Gnan 2015)	Board control of the company by family members; concentration of ownership	146 Italian Family Firms	Having family members on the board negatively affects agency cost control mechanisms
(Calabrò et al. 2017)	The variable size of the family group	265 large German Family Firms	The size of the family group necessitates different management of their diverse interests.

Table 1. Measurement of PP conflict in the literature.

The slowly emerging discourse of agency cost in smaller businesses mainly relate to PA conflicts and relationships. In Table 2, the findings of 4 exemplars are noted.

Author	Measurement Used to Measure Agency Cost	Context	Comments
(Blanco-Mazagatos et al. 2007)	Debt/equity ratio	Small family businesses in Spain	Owners who relinquish control of the business via equity finance expose themselves to greater PA agency cost
(Chua et al. 2003)	The presence of non-family managers in the business	Small family businesses in Canada	Hiring non-family managers can increase the SFB's exposure to PA agency cost
(Schulze et al. 2003b)	Dispersion of ownership; control over the business	Small businesses in USA taken from the 1995 Arthur Andersen small business survey	PP Agency cost exists when control and ownership is situated in the hands of the founder and as the business grows, PA agency cost will exist

Author	Measurement Used to Measure Agency Cost	Context	Comments
(Danielson and Scott 2007)	Level of internal/ external funding	Small businesses in USA taken from the NFIB small business survey	Stringent financing requirements for small businesses leads to underinvestment whereas excessive external financing can create overinvestment, both of which create agency costs for the smal business
(Estwick 2016)	Excess Cash; existence of blockholders of shares; ownership concentration; dominant shareholders/share ownership	Case studies on publicly listed firms in the English-speaking Caribbean	Separation between ownership and control may allow for greater financial flexibility in firms
(Brewer and Featherstone 2017)	Economic efficiency of the farm's minimum operating costs	Farms based in Kansas, USA	Agency costs arising from debt negatively affect farm efficiency.
(Martin et al. 2017)	A binary variable indicating if the firm is family owned or not	10-k report data extracted from publicly traded corporations	The study finds that minority shareholders as a whole do not feel 'exploited' by the majority family owners

The relationship between family and non-family managers are seen as a source of conflict for family owned businesses as family managers treat non-family managers with distrust (Blanco-Mazagatos et al. 2007; Chua et al. 2003). The conflict between family and non-family managers can cause management inefficiencies in the form of poor decision making by family managers or misappropriation of wealth by the non-family managers. As such the conflict here is more of a PA conflict but it still affects the risk of the small family business. Most literature surrounding small family business agency costs deal with PA agency costs related with bringing in non-family managers into the business and still cling to the conventional wisdom of Jensen and Meckling (1976) that family owned and controlled businesses experience no agency cost (Blanco-Mazagatos et al. 2007; Chua et al. 2003; Lee et al. 2003).

Variables such as the concentration of ownership can be applicable to small family businesses where the high degree of control that the controlling family has over the business creates PP conflict. In this respect, Schulze et al. (2003b) look at how the dispersion of ownership in family businesses affect the structure and operation of the business through the altruistic behaviour exhibited by the controlling party towards their family members. In line with the findings of Su et al. (2008), the higher the dispersion of ownership, the less likely the controlling party is to exhibit altruistic behaviour. This altruistic behaviour reflects PP conflict indicating the usefulness of concentration of ownership as a proxy measurement.

PP conflict stems from the family's need to maximise the socio-economical wealth of the family through the small family business. The controlling party will be reluctant to relinquish or dilute their control over the business even when they wish to grow and expand their business further. With regards to financing decisions for small family businesses, Danielson and Scott (2007) observe the owner's attitudes towards growth and expansion by looking at their willingness to obtain external financing. Owners which are stringent in obtaining outside capital (either equity or debt) are said to face the risk of underinvestment, which is a form of PP agency cost where the owner-manager does not take full advantage of business opportunities. On the other end, owners who obtain a large amount of external financing and are pressured to hire non-family managers face the risk of overinvestment, that their manager-agents will invest their funds in non-positive NPV projects, which is a form of PA agency cost.

Agency cost within small family businesses affects its risk. By understanding how agency cost can arise within a small family business, the sources of small family business risk can be identified. Both PP and PA agency cost result in a misappropriation of business wealth and inefficient use of business resources. In order to capture the value of these losses, some authors have devised methods of evaluating small business risk.

Table 3 shows the empirical research conducted on small business risk valuation in the literature. The research shows the use of a diversity of models from the balanced scorecard approach to statistical

models. From 1999, authors have been searching for a means of effectively capturing the value of small business risk. The most recent research suggests that cost of capital can be a means of evaluating small business risk.

Author(s)	Measurement Used to Evaluate Small Business Risk	Context	Comments
(Cheung 1999)	Probability of business failure	Small businesses in New Zealand	Develops a formula to measure small businesses cost of capital based on the probability of business failure.
(Everett and Watson 1998)	External factors such as unemployment, consumer purchasing index and the economy	A group of small retail business in a location in the USA	There is a relationship between external factors and the likelihood of failure for the businesses in the location
(Palliam 2005a)	Multi-risk model using business operations	Case Study of a Small business in South Africa	The implementation of the model relies heavily on input from business management, making it difficult to use.
(Wu and Olson 2009)	Balanced scorecard	A bank's list of business borrowers	Balanced scorecards offer appropriate measures for risk within the business
(Bernd Britzelmaier et al. 2013)	Cost of capital	Case Study of a German SME	Uses a WACC with modified inputs in calculating the cost of capital for a German SME.
(Gleißner 2019)	Changes in enterprise and shareholder value	A study examining the use of Enterprise Risk Management (ERM) systems	Looks at the usage of ERM systems to predict the probability of debt default
(Marom et al. 2019)	Firm size	184 small businesses	Firm size has an impact on the entrepreneurial orientation of the business and thus its level of innovation and risk

Table 3. Measurement of small business risk used in the literature.

Internal factors influencing the business'; operation are a useful way of estimating small family business risk but the complexity associated with such measurement makes it difficult to implement in most family business settings (Palliam 2005a). Furthermore, the development and identification of these internal factors relies heavily on management input and in a business where the family has a high degree of influence over the management of the business, the objectivity of the weights assigned to these factors is questionable.

External factors also affect the small family business but are not reflective of the agency cost borne by the small family business and are more appropriate to be used as macro level measurements of the general level of risk faced by small businessess within a given area (Everett and Watson 1998; Wu and Olson 2009). Using external factors to evaluate an individual small family business' risk may be inaccurate and not take into consideration the relationship between the controlling family members, their investors and other providers of finance.

For individual small businesses, the calculation of the small business' cost of capital can prove to be useful in deteremining the amount of risk associated with investments made into the small business. The cost of capital is taken as the weighted average of the small business' cost of debt and its cost of equity where the cost of debt is determined by the prevailing interest rates on the small business' debt and the cost of equity is taken as the return required by shareholders of the small business (Bruner et al. 1998; Palliam 2005b). The cost of capital reflects the financial risk borne by the small business and serves as an objective measurement of its risk exposure. The cost of capital is commonly used to evaluate the risk exposure for publicly listed companies and assists in investment decision making (Diamond and Verrecchia 1991; Miles and Ezzell 1980). In the case of the small family business, risk is closely tied to PP conflict arising from the use of debt or equity financing in the business, making it a suitable indicator for small family business risk (Anderson et al. 2003; Berger and Frame 2007; Danielson and Scott 2007).

Calculation of small business cost of capital is hampered by the lack of relevant market information to estimate the small business' beta, or the risk volatility associated with equity investments made into the business. For publicly listed companies, beta can be estimated by the movement of their stock prices on the share market. For small businesses however, this information may not be available. Several authors have suggested the use of alternative forms of beta calculation in order to work around this issues, such as the use of accounting betas, based on the historic accounting returns of the small business (Almisher and Kish 2000; St-Pierre and Bahri 2006) and the use of pure-play betas, based on market benchmarks of listed companies in similar industries (Bernd Britzelmaier et al. 2013; Collier et al. 2007; Fuller and Kerr 1981). Agency cost within small businesses (which is usually PP in nature) has an indirect impact on small business risk and its PP conflict exposure can be estimated. Caculating this cost of capital allows for a measurement of risk for the SFB, assisting in governence and decision making procedures for the SFB.

7. Discussion

SFBs are owned and controlled by the founding family which creates governance issues for the SFB as power and control is centralised within the hands of the founding family, making them the controlling party of the business. This structure of governance allows for the minimisation of conflict arising from principal-agent conflict and promotes the managers as stewards acting in the best interests of the business (Madison et al. 2016) However, altruism shown by the controlling party towards members of their family can result in poor decision-making, unqualified managers and related party transactions. Furthermore, feuds between family members will impact business operations and can cause conflict with minority shareholders within the SFB.

The centralisation of ownership and control causes these PP conflicts as the controlling party seeks to consolidate their control over the SFB and maximise their personal utility through the SFB. Minority shareholders within an SFB are at a disadvantage against the controlling party unless they operate within an environment which has a well-developed institutional framework to protect their rights. Non-family members may be brought in to assist with the management of the business but their responsibilities will be limited as the controlling party fears PA agency cost arising from these non-family managers. Because of this, these non-family employees may find it difficult to question the decisions of higher-ranking family employees, even if such decisions may negatively affect the SFB.

Through the centralisation of ownership and control, the controlling party can nullify agency costs that arise from PA conflicts however, agency cost can still arise from PP conflicts. Agency costs from PP conflicts include the opportunity costs due to poor decision making by family management, losses due to misappropriation of funds and threats to the SFB's survival due to underinvestment.

PP Agency cost will increase the risk associated with the SFB. It represents hidden costs to the SFB's operations which affect its efficiency and profits. By estimating the risk associated with investments made into the business the SFB can be valued, increasing its transparency and allowing external investors and policy makers to assist in the development of the SFB.

The nature of governance within SFBs create an environment which is ripe for PP conflict, which in turn causes the SFB to experience agency costs. These agency costs then increase the risk of the business which will affect the value of the SFB in the long run.

By understanding the links between these various elements, the stakeholders of a small family business are in a better position to value the risk associated with their investments in a small family business. Family businesses are not immune to the risks associated with agency cost as the family-centric governance practiced by SFBs causes PP conflict which can lead to agency costs. Because of this, there is a need to monitor and control risks effectively within a small family business to have a better understanding of the value of SFBs and how PP conflict can affect that value.

8. Conclusions

The main objective of most family businesses is to retain and grow the socio-economical wealth of the family through the business. To achieve this, the controlling family will prioritise actions that keep the management and control of the business firmly in the family's hand by minimising the amount of outside equity investors, prioritising debt finance and promoting family members to managerial positions within the company. However, this need to pursue socio-economical wealth can lead to PP conflict which causes agency cost and increases the small family business' risk.

The small family business remains one of the most common types of business in the world and the survival and protection of these businesses, especially in developing countries are important to the development of the nation's economy. Agency cost exists in small family businesses despite concentration of ownership and control due to the PP conflicts within the business and if left unchecked, it can affect the long-term survivability of the small family business.

By understanding the nature of the agency costs faced by these businesses and the risk associated with investments made into them, policies regarding their financial access, minority investor protection and risk awareness can be put in place to further enhance the development of small family businesses. Valuing the risk associated with the investments made into small businesses will also allow providers of debt and investors to understand the level of risk exposure faced by the small businesse. This will help to create better access to debt and equity financing for small family businesses where currently poor pricing of risk drives some borrowers into the informal finance sector.

This article has highlighted the nature of small businesses, their importance to the development of national economies, the threat they face from PP conflict and agency costs and how these threats affect the valuation of their risk. By defining PP conflict and explaining how agency cost can arise within a small family business, this article ties together the research threads of governance, PP conflict, agency cost, risk measurement and cost of capital to bring attention towards the issue of agency cost within SFBs and how it affects SFB risk and value.

Empirical means of calculating the SFB risk using the cost of capital and the effect that family control, inter-family relationships and family-outsider relationships have upon small business risk are a potential area for future research. By calculating small family business risk via its cost of capital, it opens up avenues for research into how different internal and external factors can affect the small family business' risk. With the development of this means of measurement, more effective legislation and enforcement can be put into place to ensure the safeguarding of minority investor rights in small family businesses and the promotion of the small family businesse' growth and survivability. Future research can also lead to several policy implications for small family businesses. The valuation of the risk associated with investments made into small family businesses can influence the interpretation and implementation of laws relating to business liquidation, transfer of assets and minority shareholder rights. With the availability of this information, national organisations that oversee growth and development of small businesses can incorporate the valuation of small business risk into their training and development programs in efforts to build a more informed and educated generation of small family business owners and financial providers.

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