Master's Degree Dissertation

Spillovers from the international market and the performance of family firms

evidence from an emerging market

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Abstract

This study analyzes the performance of Ecuadorian firms, depending on their ownership and corporate governance structure, when facing a shock with negative spillovers from the international market. Using data on 67,279 firm-year observations pertaining to 16,468 medium and large companies in Ecuador from 2011 to 2017, I find that firms that are family-owned and controlled suffer more from a negative internationally transmitted shock into the local economy. Furthermore, the results show that the greater negative impact of the shock on family firms could be driven either by their inertia to undertake divestitures or by their lower ability to access alternative sources of financing.

Keywords: family firms, spillovers, international market, trade financing, divestment

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1. Introduction

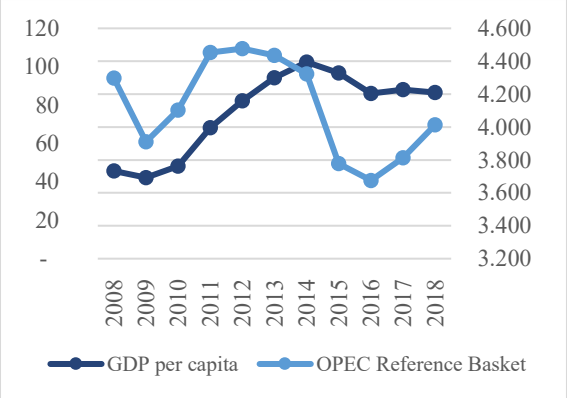
One of the most common forms of ownership around the world is family firms (La Porta et al. 1999). In Ecuador, about two thirds of the companies are family firms, a figure similar to European countries such as Italy. Many studies have provided empirical evidence of the prevalence of this type of ownership structure and its importance as a driving force for economic growth (see Villalonga and Amit, 2020).

The analysis of a financial crisis, a temporal context where firms have been studied in order to understand their responses, has shown that firm performance could be seriously affected in complex periods (Kahle and Stulz 2013; Campello et al., 2010). Along this line, researchers have shown interest in understanding firm performance during a crisis based on their ownership form. The discussion around the impact of a crisis on family firms has been focused on the analysis of the firm's financial instruments and their relation to their ability to overcome difficult periods (Amore and Epure, 2020; Levine et al., 2018; Garcia-Appendini and Montoriol-Garriga, 2013). However, most of these studies have focused on developed markets. An exception is Bunkanwanicha et al. (2013), who focus on Thailand.

Emerging markets, like most Latin America countries, show unique characteristics that require testing if findings from developed countries can be extended to these contexts (Gomez-Mejia et al., 2020; Basco, 2018). An important characteristics of these markets is that they are exposed to spillovers from the international market that can affect their economies, causing drops on GDP even in the absence of a Global Financial Crisis.

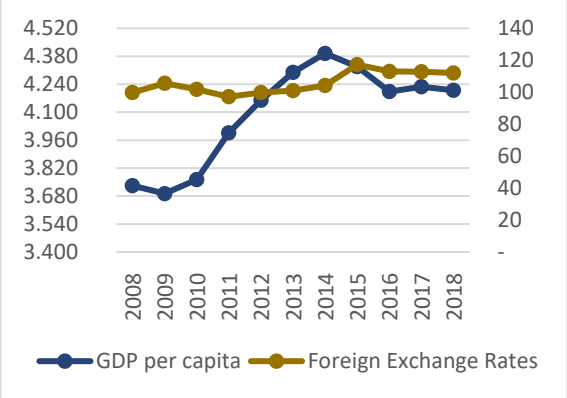
Ecuador, an emerging country in South America with a dollarized economy, is exposed to both positive and negative spillovers from international market (e.g. changes in oil prices and foreign exchange rate). Between 2004 and 2014, Ecuador experienced a positive spillover from the boom in oil prices as can be seen in Figure 1. However, since 2014, Ecuador has been trying to adapt its economy to a challenging international context characterized by low oil prices, appreciation of the U.S. dollar, increasing external financing costs, and growing trade conflicts (World Bank, 2019). In 2015, Ecuador suffered from a sharp increase in the foreign exchange rate and a precipitous decline in oil prices, both important components of its economy. Consequently, Ecuador's GDP (per capita) dramatically dropped due to the negative spillover from these international markets as can be seen in figures 1 and 2.

Figure 1: GDP per capita (constant LCU) vs Oil Price, 2008 – 2018.



Source: Own elaboration based on data from World Bank.

Figure 2: GDP per capita (constant LCU) vs Foreign Exchange Rate, 2008 – 2018.



Source: Own elaboration based on data from World Bank.

As mentioned before, Ecuador is also characterized by a prevalence of family firms in the economy; these companies represent more than two thirds of medium and large firms in the country. Based on these facts, this thesis questions which type of firms, family or non-family firms, are more affected by shocks in this economy.

Ecuadorian companies, especially family owned and managed firms, require more understanding on how these shocks could affect them, either to alleviate the uncertainty or to elaborate better strategies that help them survive. In addition, it is also important for policy makers in Ecuador to craft policies aimed at the predominant firm structure in the country, which could avoid unemployment cycles and related social costs.

Therefore, the objective of this study is to offer an in depth analysis of Ecuadorian companies to reveal how negative spillovers from international market affect firm performance depending on their company's ownership and corporate governance structure. Specifically, it will test whether findings from developed countries, which sometimes indicate that family firms suffer more in crisis times, hold in economies like Ecuador.

I argue that Ecuadorian family firms show family-specific preferences that drive their governance structures and decisions beyond the maximization of shareholders value, even in times of crisis. Extending existing research on performance in a crisis (Amore and Epure, 2020; Feldman et al., 2016; Levine et al. 2018; Lins et al. 2013), I show that negative spillovers from international

markets find family firms are in a worse position than non-family firms to sustain corporate performance.

The analysis goes beyond performance effects to identify the channels driving overall outcomes. Trade financing is an important alternative source of financing when the economy suffers negative shocks (Levine et al. 2018; Garcia-Appendini and Montoriol-Garriga, 2013), and scholars have shown that under certain conditions family firms may not be able to benefit from its advantages (Amore and Epure 2020). In addition, given that divestment has been also recognized as an important financial tool and strategic decision to reconfigure resources and then create value, its role is considered in the analysis as a second channels to explain the worst position of family firms in difficult times (Feldman et al., 2016).

I test these predictions using a sample provided by the "Superintendencia de Compañías, Valores y Seguros" of 67,279 firm-year observations pertaining to 16,468 medium and big companies in Ecuador from 2011 to 2017. Given that the analysis is focused on identifying differences between two different corporate governance structures, it is important to underline that the family business definition used in this study reflects ownership, control and management. Accordingly, firms are classified as family firms if a person or a family group owns at least 50% of the ownership and if this person or a family member is involved in the strategic decisions of the company as a member of the board of directors or a senior manager.

Using this dataset, first I show that Ecuadorian family firms are worse positioned than non-family firms to deal with negative spillovers from the international market. Then, importantly, I reveal that the worse performance on family firms is associated to their unwillingness to undertake divestitures and their lower ability to access credit from suppliers.

Therefore, this study contributes to the existent literature of family business by analyzing to what extent findings from developed markets apply to emerging economies subject to spillovers from the international market. Commonly, the analyses of family firm performance during complex times are based on Global Financial Crisis in the US, developed EU countries or international samples (Amore and Epure, 2020; Levine et al., 2018; Garcia-Appendini and Montoriol-Garriga, 2013). Moreover, this thesis also addresses the call of Gomez-Mejia et al. (2020) to continue the analysis of family firms in emerging countries as Latin America, where this ownership form has been scarcely investigated. Based on this, my work underscores that the Ecuadorian context holds the baseline that family firms show specific preferences, which go beyond the maximization of

shareholders value that could drive their companies to be worst positioned at dealing with negative shocks in the economy.

Finally, I want to underline the consequent managerial implications of this study, especially for countries like Ecuador where family firm's structures are justified as an efficient response to the institutional voids of emerging markets (Aguilera, Kabbach and Crespi-Cladera, 2012; Khanna and Palepu, 2010). As results show, difficult periods could hit more Ecuadorians family firms than non-family firms. This implies that, in a market subject to unexpected and uncontrollable events, family members and managers should reconsider their organizational structure and strategic decisions comparing them with the ones taken by non-family firms, which show better results. When firm survival faces it highest risks, such as turbulent international events spilling over into emerging markets, it is important that firms be able to adapt their strategies and work on their relations although in some cases it implies to give up family-specific preferences.

2. Theory and Hypothesis

2.1. Ecuador

Ecuador is a dollarized emerging economy in South America, which heavily depends on oil and agricultural revenues. It is dollarized since 2000 due to a financial crisis that was driven by a series of external shocks (i.e. El Niño weather phenomenon in 1997 – 1998, Asian and Russian financial crises in 1997 and 1998 respectively, oil price drop in 1998). These shocks generated an uncontrollable growth in the public deficit and a dire lack of liquidity. Furthermore, the Sucre currency was already informally being replaced by U.S. dollars through the financial system increasing the consumer prices and depreciating the local currency. Therefore, as a last resort to survive, the government formally adopted the U.S. dollar in January 2000 (Jácome, 2004).

These facts reveal that the Ecuadorian economy is potentially exposed to negative or positive spillovers from the international market, be they correlated or not with a global financial cycle. Thus, they motivate the objective of this thesis on analyzing how a shock in the economy could affect corporate performance.

In the first years of the sample, Ecuador experienced a GDP growth period due to the boom in oil prices between 2004 and 2014. The country had an average GDP growth of 4.5% in this period, well above the average for Latin America and the Caribbean region of 3.3% (World Bank,

2018). During this period, Ecuadorian policy makers defined the oil sector as a strategic asset, declared the state's inalienable ownership over it and created a law that eliminated the oil funds and their earmarked expenditure (Raftopoulos, 2018). However, the 2014 decline in oil prices from $100 per barrel to $50 revealed the lack of macroeconomic cushions and limited private investment in the country. It showed structural problems such as the inefficiency of the public sector, the large macroeconomic imbalances, the lack of stabilization mechanisms and the deficiency of the private investment (World Bank, 2019).

Although Ecuador was trying to adapt its economy with the help of the International Monetary Fund, in 2015, the country was exposed again to a sharp increase in the foreign exchange rate and a precipitous dropped in oil prices. These shocks increased the international financing costs, restricted the supply of bank credit, generated trade conflict and affected the production. Consequently, Ecuador's GDP declined by 6.3% between 2011-2013, fuelled by the oil price drop in 2014-2016, representing one of the largest contractions among oil-producing countries (World Bank, 2018). Therefore, both positive and negative shocks affect Ecuador's economy due to its institutional voids.

2.2.Family firms performance vs non-family firms

Numerous studies have shown that family firms are the prevalent ownership structure over other forms of ownership around the world (Amit and Villalonga, 2020; La Porta et al. 1999). This fact has attracted public and academic attention to the analysis of how these firms differ from other firm's structures.

Family firms have distinctive financial and non-financial preferences relative to non-family firms (Bertrand and Schoar, 2006; Feldman et al., 2016). From a financial perspective, family firms rely on control mechanisms that allow them to them shield themselves from short-run pressure of the stock-market. In this sense, founding families frequently follow long term orientation strategies. From a non-financial point of view, founding families are embedded in the firms they create; therefore, family firms tend to be more focused on achieving objectives beyond maximizing economic value for shareholders. For example, preserving founder legacy, maintaining social status in community, creating job positions for family members, etc. (Bertrand and Schoar, 2006). Consequently, although family and non-family firms could have the main

objective of maximizing value for shareholders, family members would also consider those different preferences at the moment of taking decisions that propel or affect firm performance.

In this sense, Amit and Villalonga (2013) identified four drivers of variation regarding family firm's financial performance relative to non-family firms: the family business definition (what defines a company as a family firm), geographic location, industry affiliations and intertemporal variation in economic conditions. Regarding the family business definition, most studies rely on ownership; however, three dimensions can be relevant at the moment of classifying companies as such: ownership, control and management. Depending on the level of involvement in each dimension and on the developments in the economic cycle, family strategies could create or destroy value in their companies (see Villalonga & Amit, 2006).

In addition, a different common idea beyond family firm's literature is that outcomes in performance are correlated to the national institutional settings where firms are located. Aguilera, Kabbach and Crespi-Cladera (2012) found that family owners tend to have bigger controlling interests when they invest in emerging markets such as Latin America. Accordingly, Khanna and Palepu (2010) discussed that emerging markets present institutional voids that could justify the existence of unbalanced controlling structures due to an underdeveloped institutional environment that makes these structures an efficient response to reduce the cost of transacting in these markets.

Family firm performance relative to non-family firm has also has been analyzed on different intertemporal variations in economic conditions. Many of these studies have been focused on identifying which of these corporate governance structures perform better during a financial crisis. As mentioned before family firms present specific preferences and governance structures that influence their ways of doing business. This family-specific preferences conduct these firms to be more rigid, less market oriented, less open to end relationships with long-time employees, buyers, or suppliers, and less likely to undertake divestitures (Feldman et al., 2016).

Therefore, it is expected that family firms will be more affected than non-family firms during a crisis. Their preferences and corporate structures influence strategic choices that are less congruent with a market-oriented context, especially if they are not only family owned but also family controlled and managed (Amore and Epure, 2020; Amit and Villalonga, 2020, Lins et al., 2013). Thus, I expect that if there is an "international negative shock", family firms could also be more affected. This rationale maintains that even when facing changing conditions, non-

family firms conduct their management decisions to maximize economic value of their shareholders, while family firms are expected to keep their inertia in deciding based on their family-specific preferences.

Hypothesis 1: A negative international shock will affect more strongly family firms than non-family firms.

2.3.Family firms and Trade Financing

It is expected that a negative international shock would affect more family firms than non-family firms. Taking into account that these companies are usually very important for the economy, it is important to understand how this shock spreads more negatively over those firms. This means which channel is driving the shock to affect more family firm performance. Garcia-Appendini and Montoriol-Garriga (2013) mentioned that firms with more ability to access trade financing could perform better during a crisis. Levine et al. (2018) showed that culture can ease the access to trade financing in a crisis. These works did not focus on firm ownership structure; however, follow-up studies showed that the interaction between being family firms and their ability to access trade financing matter especially in market-oriented contexts (Amore and Epure, 2020).

It is important to mention that a shock on foreign exchange rate, as Ecuador experienced in 2015, affects the supply of bank credit in a dollarized economy. Given that Ecuador is a dollarized economy and the bank credits are in US dollars, when the foreign exchange rate increases, the firms struggle to pay them back and also they avoid increases in bank credits since these become more expensive. Furthermore, the banks have problems to provide credits to them. In view of the fact that bank credits are scarce in the market, firms should try to have access to other sources of financing, in this case trade financing by suppliers.

Accordingly, Amore and Epure (2020), Levine et al. (2018) and Garcia-Appendini and Montoriol-Garriga (2013) analyze the conditions under which a crisis creates a higher necessity to shift from bank credit to trade financing. If trade financing represents an important source of financing when a crisis occurs, this statement plays an important role in identifying how a crisis, or in our case an "international negative shock," affects firms performance. This means that the interaction between being family firm and shocks in the economy should be analyzed to identify

which type of structure, family or non-family, is better to access trade financing, which is especially important during negative times.

Family firms could be more efficient in using networking to obtain certain advantages (Amore and Bennedsen 2013; Bertrand and Schoar 2006), especially in emerging markets in which networking connections may matter more (Gomez-Mejia et al., 2020). However, they are also more opaque (Anderson et al., 2009) and may have worse management practices (Bloom and Van Reenen, 2007), characteristics that may matter more in crisis times (Amore and Epure, 2020). If the trade financing market becomes more competitive during a crisis, these arguments suggests that the negative recognized dimensions on family firms could affect their ability to compete for trade financing in this context, even these dimensions could block their networking advantages. This suggests that a negative international shock in the economy could have a negative effect on trade financing, and also being a family firm could amplify the negative effect of a shock on accessing to this second source of financing.

Hypothesis 2: A negative international shock in the economy affects more strongly the ability of family firms, as compared to non-family firms, to access to trade financing.

2.4. Family firms and Divestment

Divestment is a different strategy that should be considered to analyze how spillovers from the international market could affect more family firm performance. Although it has been conceptualized as a sign of weakness and failure, researchers have been showing its value as an important financial tool and strategy to reconfigure resources, to refocus company's activities and to remove obsolete and misaligned business units (Feldman et al., 2016). Therefore, the implementation of divestitures could also be associated as a corporate strategic decision that plays an important role to create value.

During a crisis or situation where liquidity in the financial market is scarce, an alternative to going to the trade financing market (Garcia-Appendini and Montoriol-Garriga, 2013; Amore and Epure, 2020) is to refocus investments (Duchin et al., 2010). This means adapting the size of operations through divestitures or cancellation of future investments to survive or maintain performance levels.

However, taking into account that family firms show different preferences that influence their corporate strategies, it is important to understand how these preferences drive their decisions on undertaking or not divestments during a negative shock, especially if divestments serve as a financial tool that diminishes the negative effect on performance. Correspondingly, Feldman, Amit and Villalonga (2016) discussed that those families-specific preferences could be drivers of inertia against divestitures in family-firms, considering that divestments could affect their decisions on protecting founding family's histories, preserving founder legacy, create jobs for family members, etc.

This suggests that while a negative shock will drive firms to reduce their assets and adapt their sizes as a tool to diminish the negative effect of the shock on performance, family firms will show inertia to undertake divestitures due to their tendency to maximize their "socioemotional wealth" over their financial wealth (see, e.g., Berrone et al. 2010).

Hypothesis 3: Facing a negative international shock in the economy, family firms will divest less, as compared to non-family firms.

3. Method

3.1. Sample and Data

The sample used to validate the hypothesis mentioned above was confidentially provided by the Ecuadorian institution "Superintendencia de Compañías, Valores y Seguros". The dataset consists of 67,279 firm-year observations pertaining to 16,468 medium and big companies in Ecuador from 2011 to 2017.

Companies in Ecuador are classified by their size in four groups (i.e. microenterprises, small, medium and big) depending on the number of employees and their annually revenues. Given that this analysis will focus on medium and big firms, the dataset is only considering companies with more than 50 employees and revenues higher than 1,000,000 US dollars per year.

Additionally, this period includes shock and non-shock years; this means previous years and after the increase of the foreign exchange rate in 2015. The companies are also classified by their corporate governance structure, family and non-family firms, applying a modification in the methodology proposed by Segundo and Bermudez (2018) for companies in Ecuador.

3.2.Variables

This analysis is focused on identifying the differences between two different corporate governance structures (i.e. family and non-family firms) during intertemporal variations in economic conditions (i.e. shock in foreign exchange rate). In this case, the companies are defined as family firms, using a dummy variable equal to 1, if a person or a family group owns at least 50% of the ownership and if this person or a family member is the legal representative of the company, a member of the board of directors or a senior manager. Therefore, the family business definition reflects ownership, control and management, meaning that family firms are classified not only considering ownership, but also the involvement of the family in the strategic decisions of the company.

Moreover, a dummy variable is created to identify the years affected by the shock in the economy due to the increase in the foreign exchange rate in 2015. This variable takes the value of 1 for years between 2015 and 2017, and 0 for the years 2011 to 2014. A summary of the participation of family firms per year in the economy is shown in Table 1.

Table 1: Participation per year of family firms in Ecuador

Year	Firms	Family Firms	% Total Assets by Family Firms	% Revenues by Family Firms
2011	8439	64%	29%	35%
2012	9134	65%	33%	38%
2013	9881	67%	32%	39%
2014	10208	66%	33%	39%
2015	10181	66%	33%	39%
2016	9519	66%	32%	38%
2017	9917	67%	36%	39%

Firm performance, which is the dependent variable of the first model explained in the methodology section, is measured using operating profitability (i.e. return on assets ROA) and it is computed as the ratio of net profits to the book value of total assets. Trade financing, the dependent variable of the second model to be analyzed, is measured using short term debt ratio computed as current liabilities divided by the book value of total assets. For the third model, the year-on-year change of the fixed assets (yearly difference in fixed assets scaled by current year value of fixed assets) is used as a proxy variable of the divestitures undertaken by companies.

In terms of control variables, natural logarithm of total assets is considered to control for firm size, and the ratio of current and non-current liabilities to total assets is computed to reflect the use of debt in firm's capital structure. Table 2 provides summary statistics of these variables the sample contains 67,279 observations of 16,468 unique firms

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min.	Max.
ROA	67.016	0,10	0,13	0,00	1,00
Total Assets (Ln)	67.016	14,46	1,54	0,00	21,23
Short Term Debt Ratio	66.737	0,49	0,26	0,00	1,00
Long Term Debt Ratio	66.736	0,18	0,21	0,00	1,00
Δ% Investment	64.707	0,13	0,51	-1,00	1,00

3.3. Methodology

Hypothesis 1 predicts that an international negative shock will affect more family firms than non-family firms. To this end, the following model is created:

$$ROA_{it} = \beta_1 Shock_t + \beta_2 Family_{it} + \beta_3 (Shock_t * Family_{it}) + X_{i,t}\eta + \rho_i + \varepsilon_{it} \quad (1)$$

where the dependent variable is operating profitability "ROA" for a firm *i* in a year *t.* The key explanatory variable is the dummy variable "Shock" equal to 1 for years affected by the increase in foreign exchange rate (and 0 for non-shock years), and its interaction with the dummy variable "Family" that identifies if a company is a family firm or not. This model and the followings are run using firm fixed effects to control for time-constant unobserved heterogeneity across firms "ρ_i", and a set of time-varying firms characteristics (i.e. total assets, short term debt ratio and long term debt ratio) "$X_{i,t}$" that affect ROA.

In equation (1) the coefficients of interest are β_1 and β_2 which establish if family firms are more or less affected by a negative shock in the economy. It is expected β_1 and β_2 to be negative: family firms are more affected than non-family firms by a negative shock.

Hypothesis 2 predicts that a negative international shock in the economy affects more strongly the ability of family firms, as compared to non-family firms, to access to trade financing. To analyze this, the model (2) is created:

$$Trade\ Financing_{it} = \beta_1 Shock_t + \beta_2 Family_{it} + \beta_3 (Shock_t * Family_{it}) + X_{i,t}\eta + \rho_i + \varepsilon_{it} \quad (2)$$

The dependent variable is "Trade Financing" that is represented using "Short term debt ratio" as its proxy variable for firm *i* in year *t.* The model is run considering fix effects "ρ_i" and a set of time-varying firm's characteristics (i.e. total assets, ROA and long term debt ratio) "$X_{i,t}$".The coefficients of interest are β_1 and β_2 which establish that the negative effect on the ability of accessing to trade financing by the shock is amplified in family firms. It is expected β_1 and β_2 to be negative: family firm's ability to access to secondary sources of financing is more affected by the negative shock.

Finally, hypothesis 3predicts that a negative international shock in the economy drives less strongly the decisions of family firms, as compared to non-family firms, to undertake divestitures. To study this, the model (3) is constructed:

$$\Delta\%Investment_{it} = \beta_1 Shock_t + \beta_2 Family_{it} + \beta_3 (Shock_t * Family_{it}) + X_{i,t}\eta + \rho_i + \varepsilon_{it} \quad (3)$$

The dependent variable is "Δ% Investment" that is the proxy variable used to represent divestment decisions of firm *i* in year *t.* The model is run considering fix effects "ρ_i" and a set of time-varying firm's characteristics (i.e. total assets, ROA, short term debt ratio and long term debt ratio) "$X_{i,t}$". The coefficients of interest are β_1 and β_2 which establish that the shock will drive non-family firms to divestment decisions, but family firms will show inertia to this strategy. It is expected coefficient$\beta_1$to be negative, meaning that the shock generates the incentives to conduct firms to divestment decisions. However, coefficient $\beta_2$is expected to be positive representing the inertia of family firms to undertake divestitures.

4. Results

The econometric estimations of the three models are shown in the following tables. We first analyze whether family or non-family firm performance is more affected by a negative shock in the economy. Do family-specific preferences and structures drive strategic choices that let them in a worse position during a negative shock? As Table 3 reveals, the shock shows a negative and significant effect on firm performance, and this effect is more negative, also significant, in family-firms. In columns (2)-(5), the effect of the shock can go as high as -2 percentage points with respect to the average ROA, and being family-firm amplifies by -0.8 percentage points with respect to the average ROA of 10%.

These results provide support to the first hypothesis. The negative impact of the shock in firm performance is lower for non-family firms. These firms are more market-oriented; therefore, they follow strategies that shield themselves during these contexts. On the other hand, the negative effect amplifies on family firms. These firms show families-specific preferences that influence their decisions beyond the maximization of their economic value making them more vulnerable.

These results also drive the questions of the second part of this analysis. Trying to identify why the shock affects more family-firms than non-family firms, model (2) and (3) proposed two channels that could explain how negative shocks spread more or less strongly on firm performance.

Table 3: Shock effects on Family and Non-Family firms' performance

Dependent variable: ROA Regressions	(1)	(2)	(3)	(4)	(5)
Total Assets (Ln)	-0.030***	-0.029***	-0.029***	-0.029***	-0.029***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Short Term Debt Ratio	-0.125***	-0.127***	-0.127***	-0.128***	-0.147***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Long Term Debt Ratio	-0.134***	-0.136***	-0.136***	-0.137***	-0.139***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Shock		-0.004***	-0.004***	0.001	-0.019***
		(0.001)	(0.001)	(0.001)	(0.002)
Family Firm			0.002	0.005***	0.005**
			(0.002)	(0.002)	(0.002)
Shock * Family				-0.008***	-0.008***
				(0.002)	(0.001)
Shock * Short Term Debt					0.045***
					(0.003)
Firm fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	66,736	66,736	66,736	66,736	66,736

*, **, *** significant at 10%, at 5%, and 1%, respectively

Trade Financing is considered one of these channels. As mentioned before, this source of financing seems to be very important as a support to survive negative shocks in the economy. However, model (2) tries to identify if the shock affects more strongly the ability of family firms, as compared to non-family firms, to access to trade financing.

Table 4 shows that the shock has a negative and significant effect on the ability of firms to access Trade Financing, and this effect is more negative and significant for family firms. In columns (2)-(4), the effect of the shock ranges between -4.7 and -4 percentage points with respect to the average short term debt ratio. Being family-firm amplifies by -1.2 percentage points the negative effect of the shock.

These results also support the second hypothesis. The international shock has a negative effect on trade financing market making it more competitive. Suppliers become more restrictive to provide credit and prefer firms less opaque and with better management practice. Therefore, family firm reputation (i.e. opacity and worse management practice) makes them less able to access trade financing during a shock. Consequently, this effect spreads on firm performance as seen in Table 4.

Table 4: Shock effects on the Trade Financing of Family and Non-Family firms

Dependent variable: Short Term Debt Ratio				
Regressions	(1)	(2)	(3)	(4)
Total Assets (Ln)	-0.006***	0.012***	0.012***	0.012***
	(0.001)	(0.001)	(0.001)	(0.001)
ROA	-0.277***	-0.273***	-0.273***	-0.274***
	(0.007)	(0.006)	(0.006)	(0.006)
Long Term Debt Ratio	-0.694***	-0.698***	-0.698***	-0.698***
	(0.004)	(0.004)	(0.004)	(0.004)
Shock		-0.047***	-0.047***	-0.040***
		(0.001)	(0.001)	(0.002)
Family Firm			-0.005*	0.0003
			(0.003)	(0.003)
Shock * Family				-0.012***
				(0.002)
Firm fixed effects	Yes	Yes	Yes	Yes
Observations	66,736	66,736	66,736	66,736

*, **, *** significant at 10%, at 5%, and 1%, respectively

Divestment is also considered a channel where the effects of the shock spread on firm performance. Model (3) tries to identify if the shock conducts firms to undertake divestitures and if family-firms show inertia to this type of decisions. Table 5 shows that the shock has a negative and significant effect on investments, but the interaction of it with family firms is positive and significant. In columns (2)-(4), the effect of the shock ranges between –22.5 and -25 percentage

points with respect to the average changes on investments. Being family-firm reduces by 3.9 percentage points the negative effect of the shock.

These results support the third hypothesis. The international shock drives firms to undertake divestitures as a strategy to survive or maintain their performance. However, family firms show inertia to divest given that these decisions are not aligned with their tendency to also maximize their "socio emotional wealth". Therefore, family-firms decisions make them more vulnerable to the negative spillovers from the international market affecting their performance.

Table 5: Shock effects on Investment Changes in Family and Non-Family firms

Dependent variable: Δ% Investment Ratio				
Regressions	(1)	(2)	(3)	(4)
Total Assets	-0.036***	0.059***	0.059***	0.058***
	(0.006)	(0.006)	(0.006)	(0.006)
ROA	0.099***	0.068**	0.068**	0.071**
	(0.030)	(0.029)	(0.029)	(0.029)
Short Term Debt Ratio	0.336***	0.154***	0.154***	0.156***
	(0.020)	(0.020)	(0.020)	(0.020)
Long Term Debt Ratio	0.384***	0.242***	0.241***	0.244***
	(0.022)	(0.021)	(0.021)	(0.021)
Shock		-0.225***	-0.225***	-0.250***
		(0.005)	(0.005)	(0.008)
Family Firm			-0.017	-0.034***
			(0.011)	(0.012)
Shock * Family				0.039***
				(0.009)
Firm fixed effects	Yes	Yes	Yes	Yes
Observations	64,579	64,579	64,579	64,579

*, **, *** significant at 10%, at 5%, and 1%, respectively

5. Discussion

This study is built on the premise that family firms show specific characteristics that influence their strategic choices creating vulnerabilities during negative turns of the economic cycle. Building on this premise, the purpose of this thesis is to identify to what extent findings from developed markets change when analyzing spillovers from the international market in a small emerging economy.

The analysis shows two main results. First, negative spillovers from international market in the form of foreign exchange rate and oil price sharp fluctuations affect more strongly family firms than non-family firms. Second, this work uncovers two channels that explain how such shocks affect more family as compared to non-family firm performance. Analyzing trade financing access, the thesis confirms existing studies from developed markets in that family firms are less able to adapt to fast changing conditions in the market for debt. Also, analyzing divestments of fixed assets, it shows that while non-family firms undertake divestitures in negative contexts, family-firms show inertia to take this type of strategic decisions.

These results provide strong support to the three hypotheses. Family specific preferences and corporate structures influence their strategic choices (Feldman et al., 2016), and it is expected that these decisions affect their performance during a crisis. If trade financing market becomes more competitive due to the scarce liquidity in the bank market, family's opacity and worse management practices and opaqueness will block their ability to access credit from suppliers (Amore and Epure, 2020; Anderson et al., 2009; Bloom and Van Reenen, 2007). At the same time, although refocusing investment could be an alternative to going to the trade financing market during a negative shock (Duchin et al., 2010), family firms are embedded in their business units, and their decisions are driven to maximize their "socio-emotional wealth" over their financial wealth. Therefore, these firms will show inertia to divest decisions because these strategies are not aligned with their preferences (Feldman et al., 2016). These theoretical arguments explain why family firms could be more vulnerable than non-family firms in difficult times, and the results support them.

On the whole, these findings extend the analysis of family firms in emerging markets providing further evidence that these firms in Ecuador are worse positioned than non-family companies to deal with negative spillovers from the international market. Incremental to previous findings, it shows that in an emerging market context, it is not necessary to face a global financial crisis for family firms to experience such differential impacts on their corporate results. Moreover, the results show that family firms' inertia to undertake divestitures and their lower ability to access to alternative source of financing are the drivers that explain their worst position in difficult periods.

6. Conclusion

This thesis analyzes the performance of Ecuadorian firms, depending on their ownership and corporate governance structure, when facing a shock with negative spillovers from the international market. Consistently with findings from existing research, this study established that family-firms are more affected than non-family firms in a negative context. More importantly, I found that worst performance on family firms is associated to their unwillingness to undertake divestitures and their lower ability to access credit from suppliers. The key contribution of this study is to show that family firms in emerging markets are even more exposed than in developed markets to international spillovers that may be more specific to the economic cycle of such economies.

There are policy and managerial implications of this study, especially for countries like Ecuador where these corporate structures exist as a largely efficient response to the institutional voids of emerging markets, and represent two thirds of companies in the economy. As the results show, difficult periods could hit more Ecuadorians family firms than non-family firms. It implies that, expecting long-term unavoidable shocks over the economic cycle, family members and managers may consider reorganizing their corporate structures, control and decisions mechanisms. When firm survival faces its highest risks facing exposure to uncontrollable events in the international market, it is important for firms to exit inertia and be able to adapt their corporate strategy; although in some cases it implies to give up family-specific preferences.

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Appendices

Appendix A

Table A1. Correlation among variables

Variables	ROA	Total Assets (Ln)	Short Term Debt Ratio	Long Term Debt Ratio	Δ% Investment
ROA	1,00				
Total Assets (Ln)	-0,21	1,00			
Short Term Debt Ratio	-0,09	-0,19	1,00		
Long Term Debt Ratio	-0,21	0,11	-0,47	1,00	
Δ% Investment	0,01	0,04	0,02	0,03	1,00

Source: Own elaboration

Appendix B: Definition of variables

The variables were constructed using information provided by the "Superintendencia de Compañías, Valores y Seguros" of 67,279 firm-year observations pertaining to 16,468 medium and big companies in Ecuador from 2011 to 2017.

Table A2. Definition of variables

Variable	Definition
Governance Structure	
Family Firm	A dummy variable that takes the value of one if the firm is a family firm and zero otherwise. The companies are defined as family firms if a person or a family group owns at least 50% of the ownership and if this person or a family member is the legal representative of the company, a member of the board of directors or a senior manager.
International Market Shock	
Shock	Dummy variable equal to 1 during the three years affected by the shock in the economy due to the increase in the foreign exchange rate in 2015 (2015-17), and zero otherwise (2011-2014).
Accounting Variables	
ROA	Return on assets computed as the ratio of net profits to the book value of total assets.
Total Assets (Ln)	The natural logarithm of firm's total assets.
Short term debt ratio	Current liabilities divided by the book value of total assets (negative values and values greater than one are set to 0 and 1, respectively).
Long term debt ratio	Non-current liabilities divided by the book value of total assets (negative values and values greater than one are set to 0 and 1, respectively).
Δ% Investment	Yearly difference in fixed assets scaled by current year value of fixed assets (negative values lower than minus one and values greater than one are set to -1 and 1, respectively).