# Principal-Principal Agency and Financial Flexibility in Transition Economies

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This study examined the impact of principal-principal agency on financial flexibility in transition economies. Such economies are characterized by high ownership concentration. This study analyzed secondary data on publicly listed firms in Jamaica, Trinidad and Tobago, and Barbados during the 2007 to 2013 period, using panel data analysis and Arellano and Bond 2-step Generalized Methods of Moments estimators. Contrary to evidence of past empirical studies in developed jurisdictions, these results suggested that the principal-principal agency relationship might at times enhance the financial flexibility of the firm through higher levels of internal funds, and significantly higher levels of liquidity.

**Keywords**: Principal-Principal Conflict, Financial Flexibility, Corporate Governance, Leverage

JEL Classification: G01, G30, G32, G39

#### I. Introduction

Financial flexibility has received notable attention in recent finance literature. Its value has increasingly been investigated since the start of the 2008 Global Financial Crisis (GFC) and the failure of companies worldwide. Past studies of financial flexibility have been conducted in large developed economies where firms exhibit dispersed share ownership (Bancel and Mittoo, 2011; Marchica and Mura, 2010). Recent corporate governance research however suggests that in transitioning economies, where ownership of firms is shifting away from an era of familial ownership, there is concentrated share ownership, which results in principal-principal agency conflict (Young *et al.*, 2008). It has been argued that this agency conflict impacts the behavior of top management and the financial management practices of the firm (Claessens *et al.*, 2000). Academics and practitioners alike have turned their focus to these transitioning economies, hence reinforcing the need to examine the impact of principal-principal conflict on financial flexibility. The examination of this phenomenon will assist in the formation of appropriate corporate governance policies and mechanisms for such economies.

Financial flexibility (FF) refers to the ability of the firm to respond to investment opportunities, especially in the face of economic crises such as the 2008 GFC. This FF has been defined briefly by Modigliani and Miller (1963) as reserves of untapped borrowing power. FF depends not only on the ability of the firm to fund investments at a low cost, but also on the strategic decisions of the firm and the degree of managerial entrenchment.

The aforementioned definition of FF implies that financially flexible firms possess a degree of excess resources. This makes the issue of agency critical, since from the early work of Jensen (1986), it was argued that excess resources could lead to firm inefficiencies and negatively impact firm performance. However, evidence has supported the argument that this

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flexibility is important if firms are to explore positive net present value investments and maximize shareholder wealth. Although it is evident that FF is necessary, there is still the risk that managers will utilize any surplus to their own advantage. Contemporary corporate governance policies have been formulated based on the ownership models that exist in developed economies, in order to limit the managerial indiscretion that can be caused by managerial flexibility.

Due to the shift away from familial ownership, many firms have concentrated rather than dispersed ownership structure. This has brought the principal-principal (PP) conflict identified by La Porta *et al.* (1997) to the forefront of academic attention, and in this paper, we will examine FF under this type of agency conflict. Under PP conflict, majority shareholders use their influence to their own benefit, at the expense of minority shareholders. It is indeed possible that the existence of FF under concentrated share ownership may necessitate differing corporate governance policies to ensure the maximization of shareholder wealth, which is the overriding aim of the financial manager.

Currently in the Commonwealth Caribbean there are five main stock exchanges, namely the OECS Exchange, the Barbados Stock exchange (BSE), the Bahamas International Securities Exchange, the Jamaican Stock Exchange (JSE), and the Trinidad and Tobago Stock Exchange (TTSE) with approximately 126 publicly listed companies in total. Many of these companies have found it challenging to raise financing for operating and investing purposes. A main contributor to this lack of equity trading is the existence of few dominant shareholders, which increases the probability of PP conflict within the region.

This study is organized as follows. Firstly, the context of the study is examined. This gives in-depth details of the setting used for the study. This is followed by a review of the literature surrounding the FF and PP conflict. Based on the existing literature, the next section proposes the framework to be tested in the study. This is followed by the formulation of the hypotheses, the methodology, the results and analysis, and summary of the results. The paper concludes with a statement of limitations and areas for future research.

# II. Context of the Study

This study focuses on the impact of PP conflict on the management of FF of publicly listed firms in the English speaking Caribbean. The Caribbean is considered a transition economy whose corporate governance environment is influenced by the common-law legal system. Additionally, the corporate governance environment encourages external influences in the management of the firm. The contribution of this study is highlighted by the characteristics of the markets in this region, and the dominant ownership structure of firms in these territories.

While this study does not focus on corporate governance as a key variable to be considered in pursuing the objectives of this research, PP conflict has traditionally been associated with and examined within corporate governance literature (Young *et al.*, 2004). However, the scope of this study transfers the concept of PP conflict into the realm of corporate finance, and explicitly considers the impact of this phenomenon on the corporate financial practices of the firm. It is therefore necessary to consider corporate governance from a contextual standpoint, in an effort to highlight the origins and importance of PP conflict.

Although the governance model witnessed in the Caribbean region is similar to that of many developed countries such as the United Kingdom, there are elements of the Caribbean corporate landscape that necessitate unique corporate governance mechanisms. However, the corporate governance framework has been slow to address the peculiarities of governance in the region.

Caribbean firms are still in the familial era, since high family ownership exists in many public companies. In addition, publicly listed firms exhibit ownership concentration in excess

of 59 percent. This characteristic is one impediment to stock market growth in the Caribbean region, and is a major concern to regulators in the Caribbean. According to Claessens and Yurtoglou (2013), transition economies and Latin American countries tend to have low stock market development, which has consequences for corporate governance.

The high ownership concentration has been partly responsible for some corporate governance initiatives that have been implemented. These initiatives were driven by the concern for minority shareholder protection. Across the region, there has been an amendment to company laws which requires public companies to have at minimum three directors, two of whom must not be officers or employees of the company or its affiliates. There have also been efforts to establish a Caribbean Code of Governance that protects the rights of minority shareholders and requires more accountability by the board of directors, but this has not been well supported by the various Caribbean governments. Refinements to the Company Law Acts in Trinidad and Barbados outline the role of directors, in an effort to increase board effectiveness and control agency problems. For example, the Company Law Act of Barbados specifically states that a director should discharge his duties in the best interests of the employees and shareholders of the company. Though the laws of Caribbean governance provide for protection of minority shareholder rights, in practice, these rights may be seldom enjoyed, with minority shareholders taking a passive role in the decision-making. For example, appointment to the board of directors is usually driven by the preference of the blockholders. According to La Porta et al. (2006), Jamaica scored 35 on a scale of 0-100 on the protection of minority shareholder rights index, which was below the average for similar economies. This statistic justifies the concern for minority shareholder protection in the region.

Weak corporate governance environments tend to favor majority shareholders, and have implications for the financial management of the firm. Claessens and Laeven (2003) found that in weaker legal environments, firms obtained less financing and engaged in sub-optimal investing. Djankov *et al.* (2008) showed that better creditor rights and shareholder rights were associated with more developed capital markets, since lenders were more willing to extend financing. There is also evidence of cost of capital implications. Chen *et al.* (2011) found that U.S. firms with better corporate governance had a lower cost of equity. Effects were stronger for firms with greater agency problems. Skaife *et al.* (2004) reported that firms with more institutional ownership had lower costs of capital.

This study is set in an ideal context to investigate how Caribbean FF is managed and affected in the presence of blockholder managerial influence.

#### **III. Literature Review**

A. Review of Contemporary Theory: Financial Flexibility

In 2001, Graham and Harvey conducted a large study on the practice of corporate finance. This study was motivated by the finding that finance managers are less likely to follow the mainstream early capital structure and capital budgeting best practices. This study asked CFOs to identify factors that affect the company's decision to issue debt. Flexibility ranked highest among the responses, while earnings and cash flow volatility, and lack of internal funds ranked third and fourth respectively. This study led to the re-emergence of the term 'financial flexibility,' and FF was then considered to be the missing link in understanding the practice of corporate finance.

As a result of the findings of Graham and Harvey (2001), contemporary researchers have continued to study FF and its link to capital structure policy, capital budgeting, and payout policy. For example, a study conducted by Byoun (2008) attempted to explain why some firms opt for debt financing if FF is the driver of capital structure choice. His findings were consistent

with the early FF hypothesis, which suggested that the demand for FF is the main driver of the firm's capital structure decisions.

These studies conducted by Graham and Harvey (2001) and Byoun (2008) used sampling populations from the US and Canada, but unfortunately, no similar studies on corporate decision-making have been conducted to date in transition economies such as the Caribbean where financing choice is limited, and ownership structures have the potential to affect corporate finance practice.

# B. The Determinants of Financial Flexibility

The determinants of FF are a work in progress for researchers in the field. It has however been acknowledged that FF may be achieved through more than spare debt capacity, and survey approaches are again being taken by researchers in order to define these determinants. Interestingly, even the early work of Graham and Harvey (2001) highlighted the need for considering liquidity as another determinant of FF when managers identified payback as a critical decision making criteria. Several ensuing studies (DeAngelo and DeAngelo, 2007; Marchica and Mura, 2010) followed the assumptions of Graham and Harvey (2001) and examined the value of unused debt capacity in maintaining FF, but they failed to give explanations for the reluctance of many companies to reduce debt levels. Many studies highlighted the role of transitory debt in maintaining FF (DeAngelo *et al.*, 2011; Denis and McKeon, 2012; Sufi, 2009). While not disputing the definition proposed by Graham and Harvey (2001), it is evident that FF is a dependent variable with many of its determinants yet to be identified and fully tested.

In a more recent study, Bancel and Mittoo (2011) directly focused on assessing the measures that determine FF. Their main finding was that managers use several sources to enhance FF. Managers identified various operational measures, leverage, and working capital ratios in their determinants, and 69 percent of respondents reported increased liquidity concerns during times of economic uncertainty. Firm managers identified using internal funding and maintaining large cash holdings as major methods of liquidity management during the crisis. Although Bancel and Mittoo (2011) proposed, based on the results of correlation tests, that a more all-encompassing measure, such as the Altman Z score<sup>1</sup> may be better in measuring FF, they suggested that more research be conducted to develop a measure that considers leverage, liquidity, and operating ratios.

Past research conducted by Almeida *et al.* (2011) and Campello *et al.* (2010) highlighted the value of liquidity and spare debt capacity in maintaining the FF of the firm during the GFC. Campello *et al.* (2010) examined the effects of the financial crisis on financially constrained companies in the US, Europe, and Asia. They acknowledged that such firms experienced a severe impact from the crisis, using cash and existing lines of credit for fear that banks would eventually desist lending to these corporate entities. They also discovered that firms needed liquidity to embark on profitable projects, due to their inability to borrow. Their study was consistent with the view that during recessionary conditions firms build cash reserves to insulate themselves against credit supply shocks. Almeida *et al.* (2011) demonstrated the importance of spare debt capacity, and pointed out that during the GFC, firms with a larger portion of short-term debt were forced to scale down their investments more than those companies with smaller portions of short-term debt. The findings of the aforementioned study showed strong agreement with Bancel and Mittoo (2011).

<sup>&</sup>lt;sup>1</sup> Altman Z score, developed by Edward I. Altman, is a score used to predict a company's risk of bankruptcy.

#### C. Ownership and Agency

A review of the literature has shown that the majority of studies advanced to date on financial flexibility have been conducted in the US, Europe, and other developed markets. In addition to these capital markets being significantly less constrained than those in transitioning markets, the ownership structure of these firms also differs. In developed markets, ownership may be dispersed, while firms in transitioning markets have concentrated ownership. Research also dictates that such concentrated ownership impacts the management of the firm (Claessens *et al.*, 2000).

A review of the studies conducted on FF showed that traditional owner-manager agency conflict is a key variable considered in its testing (Opler *et al.*, 1999). Academic research has shown that agency has an impact on the strategic financial planning and operations of the firm. Some studies have included traditional agency as control variables in their models (Marchica and Mura. 2010), while some researchers have explicitly considered the link between owner-manager agency and FF (Oded, 2008). Many studies also examined the relationship between agency and the variables critical in determining FF, namely, liquidity and leverage (Kalcheva and Lins, 2007).

As was previously mentioned, although traditional corporate governance research was founded on the premise that share ownership was widely dispersed, subsequent studies found that many companies had blockholder interests (Denis and McConnell, 2003). Mehran (1995) reported that 56 percent of the firms in a sample of randomly selected manufacturing firms from 1979 to 1980 had outside blockholder interest. Studies of ownership structure in the UK followed a similar pattern to that of the US, with many dispersed shareholders. Beginning in the 1990s, governance research examined ownership structures in other parts of the world. It was found that concentrated ownership was very common in these parts of the world. Blass *et al.* (1998) found high ownership concentration in Israel. Xu and Wang (1997) also documented high ownership concentration in China.

A study conducted by La Porta *et al.* (1997) found that in countries with common-law systems, dominant shareholders owned an average of 45 percent of the shares of the company. La Porta *et al.* (1997) found that many publicly-traded firms in underdeveloped markets were characterized by the common-law system and the corporate governance environment reflected this heritage. La Porta *et al.* (1997) further stated that dispersed ownership in large public companies is an academic fairytale. Concentrated ownership has in fact been recommended as a corporate governance mechanism to counter the effect of agency conflict in developed countries (Demsetz and Lehn, 1985). However, in transitioning economies, concentrated ownership is an underlying cause of PP conflict, and serves to only confound the agency problem (Faccio *et al.*, 2010). Young *et al.* (2008, p. 201) continued to state that "...[d]ominant ownership is common among publicly-traded corporations in emerging economies and is a root cause of PP conflicts."

#### D. The Consequences of PP Conflict

PP conflict has been proven to have an impact on many aspects of financial policy, mainly through its effect on the dynamics of the board of directors. Such consequences of PP conflict have been found to be both negative and positive for the firm. The work of Dahya *et al.* (2008) examined the impact of concentrated ownership on board structure. They found in a cross-country analysis of board structure and corporate value that a dominant shareholder could offset the loss in value to the firm caused by poor shareholder protection by appointing an independent board. They argued that this should enhance value-added decision making by the managers and increase the FF of the firm. This is in line with the arguments of Jensen and

Meckling (1979) that high concentration of ownership is expected to lead to greater monitoring of the company's management. Shleifer and Vishny (1986) extended this by concluding that increased monitoring should also result in increased value of the firm. Maury and Pajuste (2005) found that where ownership was concentrated in the hands of multiple large shareholders, there was a positive effect on firm value due to greater levels of monitoring. Lins (2003) found large non-management block holdings were positively related to firm value, especially in countries with low shareholder protection. They attributed this to the ability of such large shareholders to restrict managerial agency costs and substitute for any missing governance mechanisms.

However, there are reasons why PP conflict may result in decreased firm value. It has been argued that concentrated ownership could lead to poor investor protection, which then decreases the ability of the company to raise new equity capital from minority shareholders at low cost (La Porta *et al.*, 1997; Lins, 2003). In addition, La Porta *et al.* (1997) showed that countries with high ownership concentrations that led to poor investor protection had significantly smaller capital markets, which resulted in increased costs of financing.

Several studies examined the impact of PP conflict on various aspects of finance decision making. Ozkan and Ozkan (2004) argued that dominant shareholders have no effect on the degree of managerial entrenchment, while the findings of Lewellyn and Muller-Kahle (2012) suggested that where there are dominant family shareholders, managerial decision making is affected.

Given the importance of maintaining surplus liquidity and debt capacity under constrained financial conditions, it is expected that expropriation would become more severe during times of crisis for firms with concentrated share ownership (Leuz *et al.*, 2009). Liu *et al.* (2012) examined this issue during the GFC and found that ownership concentration mitigates financial constraints and engenders expropriation problems.

A review of these studies on corporate governance details some of the issues that arise with the existence of PP conflict. It is clear from the review of the extant literature on FF and PP conflict that high ownership concentration is a potential threat to the attainment of FF, and the overall performance of the firm. Its actual effect hinges however on the ability of the corporate governance environment to control the risks of asset expropriation. This leads one to concur with Young *et al.* (2008) that PP conflict alters the corporate governance process, the financial management of the firm, and the pursuit of shareholder wealth maximization, and provides the rationale for the chosen topic of study.

#### IV. Purpose of the Study and Proposed Framework

This study seeks to test the relationships between PP conflict and FF in transition economies. Specifically, the study closely examines the impact of PP conflict on the achievement of FF in the Caribbean.

The following is a diagrammatic representation of the framework to be tested in this study. The relationships demonstrated in the framework are based on a review of the literature related to PP conflict and FF.

In Figure 1, the liquidity levels of the firm, spare leverage capacity, and internal funds represent FF. This depiction of FF is in line with past studies that have shown liquidity, internal funds, and debt capacity to be indicators of FF. The framework also introduces components of PP conflict (board size, board dependence, and ownership concentration) as having relationships with the FF of the firm. It is expected that PP conflict will have an impact on the ability of the firm to respond to opportunities in the operating environment as they become available (FF).

**FINANCIAL FLEXIBILITY** H1a PP CONFLICT (+ve) Liquidity H2a **Board Size** (-ve) НЗа H<sub>1</sub>b -ve) (+ve) H2h **Board** Leverage (-ve) Dependence H3b H1c (+ve) (-ve) Ownership Internal Funds Concentration НЗс (-ve)

Figure 1: Conceptual Framework of PP Conflict and Financial Flexibility

#### A. Theoretical Underpinnings of the Framework

This section identifies and discusses the underlying theoretical foundations of the relationships embedded in the proposed framework. This new framework is based on some established theories in corporate financial management, which have been used to extract proven relationships that drive the conceptualization of this framework.

# A.1. Liquidity Theories: Keynes (1973) Liquidity Preference and Baumol (1952) Inventory Management Theories

The conceptual framework outlined above focuses on FF, which is the most current thrust of capital structure research. Contemporary studies in FF have identified liquidity, internal funds, and spare leverage capacity as key contributors to the FF of the firm. Leverage is closely linked to liquidity of the firm since debt capacity gives the firm access to additional liquidity and cash, should the need arise. The importance of liquidity in the achievement of FF leads to the Keynes (1973) liquidity preference and the Baumol (1952) inventory management theories as key theoretical underpinnings of this framework.

Keynes (1973) stated that there are two benefits to holding cash, namely the transaction cost motive and the precautionary motive. The transaction cost motive states that the firm can save the transaction costs of raising funds by holding cash. The precautionary motive states that the firm can use cash to fund its activities and investments if other sources of capital are not available. Keynes' focus on liquidity builds on the models of insufficient liquidity, which were also examined by Myers and Majluf (1984). Keynes (1973) concludes that for a given amount of net debt there is an optimal amount of cash, hence cash is not simply net debt.

Other early cash management research includes the work of Baumol (1952) and Miller and Orr (1966). Baumol (1952) developed a static quantitative model of inventory management that weighed the benefits and costs of holding cash. This work looked at cash as an asset that needs to be managed like another physical commodity. This model underlies the assumption that cash is valuable due to the high costs incurred in converting non-cash assets to cash.

These theories support the use of spare debt capacity and liquidity as critical drivers of the firm's FF, instead of simply using a net-debt measure. Recent empirical studies (Bancel and Mittoo, 2011; Marchica and Mura, 2010) have also been conducted which support these two variables as indicators of FF. Indeed, the Graham and Harvey (2001) study which identified FF as a practical determinant of capital structure policy also found support for spare debt capacity and leverage as drivers of FF. The importance of liquidity is expected to be more heavily emphasized in the Caribbean given the value of liquidity under constrained market conditions. This premise is consistent with Myers and Majluf (1984) and Bancel and Mittoo (2011), who stated that liquidity was critical in managing negative economic shocks.

### A.2. Jensen and Meckling (1979) Agency Theory

A common variable considered in a vast majority of empirical finance studies is agency conflict. Agency conflict arises when one stakeholder of the firm acts in direct opposition to the interest of other stakeholders. The prominent agency theory of financial management is the Jensen and Meckling (1979) theory, which states that firm management at times acts contrary to the interests of the shareholders, and that this can lead to conflict. The proposed framework of this study however considers owner-owner conflict, where the majority owners pursue personal interests to the detriment of minority shareholders.

While the agency conflict variable in this study differs from that of the Jensen and Meckling (1979) theory, literature argues that the effect of PP agency conflict is similar. Management and finance theory dictates that owner-manager conflict leads to non-value maximizing strategies, which are not in the interests of shareholders. Similarly, the owner-owner conflict, which is examined in this study, has been found to lead to expropriation of assets and managerial decisions that are not in the best interests of shareholders. These effects of PP conflict were first highlighted by La Porta *et al.* (1997).

#### V. Formulation of Hypotheses

# A. PP Conflict and Liquidity

While there have been no studies advanced to date which specifically considered the link between PP conflict and the composite construct of FF, there has been research which examined the link between ownership and the two main indicators of FF, namely liquidity and spare leverage capacity. Based on the evidence presented in such research, this paper posits a direct relationship between PP conflict and the indicators of FF.

The presence of PP conflict raises concerns for expropriation of assets, which depends on the perceived effectiveness of the board in controlling the actions of management. Maury

and Pajuste (2005) noted that high cash levels lead to shareholder concern for expropriation. As was noted in the literature review, Hu *et al.* (2010) found that in China, the existence of concentrated shareholders led to inefficient corporate governance, and Dittmar *et al.* (2003) noted that where corporate governance is low, cash is retained. This leads one to question the handling of liquidity under such conditions. Ozkan and Ozkan (2004) however found that cash levels do not change with the existence of ultimate shareholders.

Based on the aforementioned arguments, the existence of PP conflict may result in higher cash levels. This may arise in two possible situations: high levels of cash may be maintained with a view to funneling assets for the private benefit of majority shareholders, or the retention of cash may result from an effort to maintain high levels of FF. The first possibility may arise if boards are ineffective, and this will eventually be detrimental to the achievement of FF through lower levels of overall internal funds. In the second possibility, cash will be retained if, similar to the findings of Bancel and Mittoo (2011), firms accumulate liquidity as a buffer in recessionary conditions. The first hypothesis therefore is:

H1: PP conflict will have a positive impact on the liquidity level of the firm.

### B. PP Conflict and Debt Capacity

One may argue that there has been little research that specifically examines the impact of PP conflict on debt capacity, which is another main determinant of FF. Most research that examines PP conflict and leverage levels focuses on the impact of differing ownership structures on leverage levels, but not the degree of PP conflict. Chaganti and Damanpour (1991), Huang and Song (2006) and Zou and Xiao (2006) directly examined the effect of institutional ownership on leverage levels, with mixed results. Some researchers also conceptualize that high ownership concentrations will shift the monitoring of the firm to the majority owners. It is argued that this shift should result in lower tolerance for risk, and that leverage can then be used as a governance mechanism by management to counter the opportunity cost of high ownership concentration and increase the owner's appetite for risk (Heinrich, 2000). This argument is however built on the Jensen and Meckling (1979) ownermanager agency conflict as opposed to the PP conflict of concentrated ownership. Berglöf (1991) also viewed ownership concentration as leading to increased leverage, due to an increased risk tolerance by owners.

Some research has specifically examined the effect of owner-manager agency conflict on leverage. Leland (1998) examined agency conflict and debt capacity and found that high agency conflict led to higher debt costs and lower levels of leverage. The framework proposed in this study argues that PP conflict will lead to higher equity costs and greater dependence on debt. It has been argued that concentrated ownership could lead to poor investor protection, which then decreases the ability of the company to raise new equity capital from minority shareholders at a low cost (La Porta *et al*, 1997; Lins, 2003). Raising equity should be more expensive due to minority shareholders' fears of expropriation of assets (Maury and Pajuste, 2005). Hence there will be a greater dependence on bank credit, consequently decreasing the leverage capacity of the firm. While this argument coincides with the relationship suggested by Berglöf (1991) and Heinrich (2000), it is based on a different underlying argument. The hypothesis proposed is therefore:

H2: PP conflict will have a negative impact on the unused debt capacity of the firm.

#### C. PP Conflict and Internal Funds

Based on the findings of Bancel and Mittoo (2011), and consistent with the propositions of the pecking order theory of finance, managers should place value on internal funds in maintaining FF. However, since it has been argued by Maury and Pajuste (2005) that PP conflict leads to expropriation of assets, this is expected to lead to lower levels of internal funds. Consistent with this, the next hypothesis is:

*H3*: *PP conflict will have a negative impact on the level of internal funds.* 

#### VI. Methodology

According to Creswell (2009), quantitative research aims at testing objective theories through the statistical analysis of numerical data. Bryman and Bell (2011) argued that quantitative research uses a deductive approach to relate theory to research. Quantitative testing is therefore usually aimed at confirming or rejecting a number of hypotheses, which have been formulated based on a review of the extant literature (Robson, 2002).

In this study, the proposed hypotheses were aimed at extending the prior theory on FF in a new direction. A deductive approach was used, where numerical data were collected to allow the researcher to make generalizations about the operationalization of FF under PP agency in the Caribbean. The hypotheses to be tested were based on a review of the extant literature surrounding these two variables. Liquidity, unused debt capacity, and internal funds were the dependent variables, while PP conflict was seen as an independent variable. The hypotheses developed were tested using Eviews statistical software with regression analysis.

#### A. Secondary Data Analysis

This study used dynamic panel regressions, which were run on secondary data. The data included in the sample were obtained from the publicly available annual reports for the companies. These reports included financial statements and corporate governance disclosures, which were needed to calculate the ratios used in variable measurement. Unfortunately, there is no database available with financial information for listed companies in the Caribbean, and as such, a database was created from which the necessary variables were extracted. As is the norm with developed jurisdictions, International Accounting Standards require that an independent auditor verify all information included in a company's annual report, and assess this information for bias and subjectivity. Hence, data obtained from these reports were considered reliable and credible. In addition to exhibiting high reliability, the use of these secondary data avoided the time and cost necessary if using surveys to obtain the data.

#### B. Sample Description

In order to investigate the effect of PP conflict on FF in transition economies, it was decided to utilize the listed companies of the three most developed stock exchanges in the Caribbean to extract the necessary data, namely the JSE, the BSE, and the TTSE. This region's capital markets are also characterized by a reliance on bank funding and illiquid stock markets. Conceptually, firms in such constrained markets should place high value on FF. The listed companies in the Caribbean were therefore considered ideal for the testing of FF under the PP conflict of high owner concentration. These three stock exchanges were chosen for their comparative level of development, which has resulted in easier access to the financial information of these firms.

The sample used included 74 non-financial companies across the three largest Caribbean stock exchanges, for the period 2007 to 2013. This number included those firms listed on the junior market, as well as the main markets, in these three territories. Financial companies were excluded from the sample since their capital structure and financial-decision making do not follow normal financial management best practices. This sample gave pooled cross-sectional data for these companies across seven firm years, which was considered adequate observation for the statistical data analysis techniques employed.

# C. Variables and Justification

## C.1. PP Conflict

Many measures have been used in contemporary research to measure the degree of PP conflict. These measures include board size (Su *et al.*, 2008), level of board compensation (Su *et al.*, 2008), cash dividends (Banchit and Locke, 2011), cashflow rights of the main shareholder (Renders and Gaeremynck, 2012), excess control rights of the majority shareholder (Jiang and Peng, 2011) and expropriation of minority shareholders (Jiang and Peng, 2011). Young *et al.* (2008) have also shown the link between PP conflict and board dependence. A close examination of these measures however reveals that they are not all suited to the Caribbean dataset.

The use of board size as a measure of PP conflict is based on the argument that there is a positive relationship between ownership concentration and the size of the company's board (Su *et al.*, 2008). Larger boards are then seen as having the ability to exert greater influence over the financial management of the firm. This measure was used for many studies conducted in the Asian economies where there has been underlying exploratory research on board size and its effect on firm performance.

The use of cash dividends to total assets, cash flow rights, and excess control rights to reflect PP conflict are founded in the argument that majority shareholders use their influence to extract excess cash flow to which minority shareholders do not have access. This is made possible where the varying classes of shares have different voting and dividend rights. Across the Caribbean, the one-share/one-vote system is employed, which does not allow blockholders to declare special cash dividends to particular share classes. This measure cannot then be used in a Caribbean context.

PP conflict is by definition expropriation of minority shareholders, and some studies have sought to reflect this in their measurement of PP. This has been captured through a measure of stock return since minority shareholder value is reflected in the stock's performance on the market, with lower stock returns representing increased levels of expropriation. While this may be true for many developed active stock markets, in the Caribbean stock markets are illiquid, and this has resulted in weak-form market efficiency. Stock prices therefore remain stagnant and are not good indicators of shareholder perceptions and company performance.

The degree of ownership concentration has been found to be popular in much contemporary research on ownership structure and PP conflict in Asian economies (Hu *et al.*, 2010). This measure is debatably the best measure of the degree of PP conflict since it recognizes the influence of the effect of the aggregation of several smaller blockholders as opposed to a single concentrated owner. Indeed, research conducted by Maury and Pajuste (2005) found that the existence of multiple blockholders is more common.

Since each measure may capture some unique aspect of PP conflict, it was decided that board size, board dependence (the percentage of non-independent members on the board), and ownership concentration would be used as triple indicators of PP conflict.

In line with studies that have utilized the ownership concentration measurement, the blockholder was defined as a party with a substantial interest in the shares of the company. The threshold used for substantial interest was 5 percent, since this is the definition advanced by International Accounting Standards for corporate disclosures. Consistent with the study of Hu *et al.* (2010), PP conflict was calculated as the ratio of shares owned by substantial owners to the number of shares outstanding.

#### C.2. Financial Flexibility

Nascent research has not yet concluded on the indicators of FF, but most recent research in FF recognizes that surplus liquidity, internal funds, and spare leverage capacity are major contributors to the FF of the firm (Bancel and Mittoo, 2011; Denis and Sibilkov, 2010; Gamba and Triantis, 2008; Marchica and Mura, 2010; Whited and Wu, 2006; Sufi, 2009).

Although research has recognized the importance of these three variables, many studies chose to focus on one indicator as opposed to a combination of the two measures. For example, DeAngelo and DeAngelo (2007) used net debt as the sole determinant of FF and argued that cash and debt are two sides of the same coin. Marchica and Mura (2010) used spare debt capacity to measure FF. However, Acharya *et al.* (2007) modeled cash and debt separately within the same framework and highlighted the fact that cash and debt are not the same, especially when there is uncertainty about future cashflows.

Based on the criticisms of earlier research in FF where leverage was used as the sole determinant of financial flexibility, this study opted to the use the three determinants of FF as suggested by Bancel and Mittoo (2011), namely internal funds, cash holdings, and spare leverage capacity.

#### C.3. Control Variables

This study controlled for several mainstream firm controls, as well as variables specific to the testing of PP conflict. Regression analyses controlled for firm specific factors such as firm size, firm age, financial constraints, and growth opportunities, as well as macroeconomic factors such as state of the economy. These controls are in line with the majority of literature surrounding the determinants of leverage and corporate liquidity (Gao *et al.*, 2013; Opler *et al.*, 1999; Whited and Wu, 2006), and have been included since firm specific effects may account for unobserved heterogeneity. Ozkan and Ozkan (2004) posited that it is critical that such heterogeneity be accounted for in analyzing the liquidity of the firm.

Similar to the work of past researchers such as Marchica and Mura (2010) and Whited and Wu (2006) various levels of the lagged dependent variables were included as exogenous variables in the regression models. The inclusion of these lags reflects the targeting behavior of the firm. Numerous studies confirm the idea that firms have a target level of leverage and cash holdings. Indeed, Graham and Harvey (2001) reported that 35 percent of firms have a strict target debt ratio. Similar results were also found by Bancel and Mittoo (2004). Opler *et al.* (1999) examined the determinants of corporate cash holdings and found evidence to support that firms have a target cash level. Failure to include such lags would result in misspecification error.

Debt capacity and cash holdings are correlated with internal funds. Hence the level of internal funds in the prior year is also expected to be correlated to the current year level of internal funds. However, since internal funds represent an accumulation of funds from inception of the business, deeper lags were used as independent variables in the regressions.

**Table 1: Calculation of Key Study Variables** 

Abbreviation	Variable	Measurement						
own_conc	Ownership	Percentage of shares held by substantial interests						
	concentration	(shareholders with greater than 5% shareholdings)						
brd_dep	Board dependence Percentage of independent directors on the board							
brd_size	Board size	Number of seats on the board						
liquidity	Liquidity Cash scaled by total assets							
DC	Debt capacity	Tangibility/Total assets=						
		((0.715*receivables)+(.547*inventory)+(.535*PPE))/						
		Total assets						
UDC	Unused debt capacity DC - (Debt scaled by total assets)							
intfunds	Internal funds	Retained earnings scaled by total assets						
firm_age	Firm age	Number of years of incorporation						
fin_cons	Financial constraints	KZ index						
growth_opp	Growth opportunities	Market to book ratio						
size	Firm size	Log of revenues						

#### C.4. Regression Models and Testing

Based on the methodology employed, Eviews statistical software was used to test the following models which resulted from the hypothesis development:

```
\label{eq:model 1:} \begin{subarray}{l} Model 1: \\ liquidity_{it} = \alpha + \beta_1 ownconc + \beta_2 brdsize + \beta_3 brddep + \beta_4 liquidity_{t-1} + \beta_5 size \\ + \beta_6 finconst + \beta_7 economy + \beta_8 growthopp + \beta_9 firmage \\ \end{subarray} \begin{subarray}{l} Model 2: \\ intfunds_{it} = \alpha + \beta_1 ownconc + \beta_2 brdsize + \beta_3 brddep + \beta_4 intfunds_{t-1} \\ + \beta_5 intfunds_{t-2} + \beta_6 size + \beta_7 finconst + \beta_8 economy + \beta_9 growthopp \\ + \beta_{10} firmage \\ Model 3: \\ \end{subarray} \begin{subarray}{l} Model 3: \\ UDC_{it} = \alpha + \beta_1 ownconc + \beta_2 brdsize + \beta_3 brddep + \beta_4 UDC_{t-1} + \beta_5 size + \beta_6 finconst \\ + \beta_7 economy + \beta_8 growthopp + \beta_9 firmage \\ \end{subarray}
```

Given the dynamic nature of the regression models, these regressions were conducted using Arellano and Bond (1991) 2-step Generalized Methods of Moments (GMM) estimators with White robust standard errors to account for heteroskedasticity. Given the structure of the dataset, with a number of cross sections observed at different points in time, the panel data testing was necessary to control for unobserved variables and individual heterogeneity.

#### VII. Results

## A. Correlations and Descriptive Statistics

Pearson's correlations were conducted between the variables used in the regression analyses. This analysis revealed significant results at the 1 percent and 5 percent levels of significance, amongst both the main variables of the model and the control variables of the study (see Table 2). Results shown were in line with the underlying conceptual framework and finance theory. These correlations give added support for the use of such variables as controls in the regression analyses that followed.

Descriptive statistics showed that the firms across these three exchanges exhibited an average age of 67 years, and a mean ownership concentration of 59 percent. Approximately 39 percent of the board members were dependent, and the average board size was nine individuals.

**Table 2: Pearson's Correlations and Descriptive Statistics** 

	Mean	SD	own_conc	brd_dep	brd_size	liquidity	intfunds	firm_age	fin_cons	growth_op	size	recession	lag_liquidity	lag_intfunds	UDC	lag_udc
own_conc	0.59	0.25	1													
brd_dep	0.39	0.23	.465**	1												
brd_size	8.4	2.89	440**	134*	1											
liquidity	0.09	0.09	143*	192**	0.038	1										
intfunds	0.48	0.26	-0.014	-0.058	0.008	.252**	1									
firm_age	67.46	34.56	135*	192**	.221**	-0.016	0.013	1								
fin_cons	-25.17	207.62	-0.004	.220**	-0.025	240**	-0.05	0.069	1							
growth_op	9.56	100.38	.143*	173**	-0.075	-0.057	-0.004	-0.055	.145*	1						
size	7.65	0.7	186**	162*	.394**	-0.001	258**	0.096	-0.023	-0.045	1					
recession	0.52	0.5	0.113	0.019	0.059	.151**	0.081	0.045	-0.056	0.081	0.021	1				
lag_liquidity	0.09	0.09	152**	139*	0.026	.708**	.233**	-0.021	184**	-0.047	-0.059	0.098	1			
lag_intfund s	0.48	0.26	0.073	0.058	0.003	.113*	.738**	0.032	-0.073	0.047	228**	.163**	.249**	1		
UDC	0.27	0.17	.152**	0.06	193**	163**	0.038	-0.051	.146*	0.02	145**	165**	124*	0.033	1	
lag_udc	0.27	0.17	.149**	0.032	211**	-0.071	0.009	-0.048	.182**	0.072	128*	135*	165**	0.037	.748**	1

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

### B. Model Testing

The multiple regression analyses tested the various paths between the indicators of PP conflict and the determinants of FF (i.e. liquidity, unused debt capacity, and internal funds). Collinearity statistics were examined and no multicollinearity was identified.

In the first regression, liquidity was regressed on three indicators of PP conflict. Of the three indicators of PP conflict, board dependence was found to be a significant positive predictor of liquidity ( $\beta$  = .0546, p < .05). Amongst the control variables, the level of growth opportunities was a significant predictor of the firm liquidity levels as firms with more growth opportunities carried lower levels of liquidity. The strongest predictor of liquidity was the prior year level of liquidity ( $\beta$  = 0.1977, p < .05). No evidence of second order serial correlation was noted.

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

The second regression regressed internal funds on the three indicators of PP conflict. This regression also yielded significant results, with board size ( $\beta$ =.01144, p <.05) being a significant positive predictor of internal funds. Amongst the control variables, the degree of financial constraints and the level of growth opportunities were significant predictors of the level of internal funds. Constrained firms held higher levels of internal funds, and higher levels of growth opportunities led to lower levels of internal funds. An increase in firm age also led to lower levels of internal funds. The strongest predictor of internal funds was the prior year level of internal funds ( $\beta$ =0.8365, p<.05). No evidence of second order serial correlation was noted.

The final regression regressed unused debt capacity on the three indicators of PP conflict. For this regression, none of the indicators of PP conflict was a significant predictor of internal funds. As expected, previous levels of unused debt capacity were the strongest predictor of the firm's current unused debt capacity ( $\beta$ =.4820, p <.05). Amongst the control variables, an increase in firm age was found to lead to significantly lower levels of unused debt capacity.

**Table 3: Results of Model Testing** 

Panel 1:			Panel 2:			Panel 3:			
Liquidity			Internal Funds			Unused Debt Capacity			
Variables	Coefficient	<i>p</i> - value	Variables	Coefficient	<i>p</i> - value	Variables	Coefficient	<i>p</i> -value	
LIQUIDITY(-1)	0.1977	0.0000	INTFUNDS(-1)	0.8365	0.0000	UDC(-1)	0.4820	0.0000	
OWN_CONC	0.0327	0.1622	INTFUNDS(-2)	-0.0712	0.3080	OWN_CONC	0.1710	0.0907	
BRD_SIZE	0.0010	0.6372	OWN_CONC	0.0952	0.3406	BRD_DEP	-0.0318	0.6446	
BRD_DEP	0.0546	0.0270	BRD_DEP	-0.0008	0.9873	BRD_SIZE	-0.0048	0.5667	
SIZE	0.0158	0.3743	BRD_SIZE	0.0114	0.0037	FIRM_AGE	-0.0080	0.0000	
FIN_CONS	0.0000	0.2322	FIN_CONS	0.0003	0.0000	SIZE	0.0301	0.3199	
RECESSION	0.0058	0.0624	RECESSION	-0.0023	0.7268	RECESSION	0.0106	0.4095	
GROWTH_OP	-0.0103	0.0001	GROWTH_OP	-0.0267	0.0009	FIN_CONS	0.0000	0.9720	
FIRM_AGE	-0.0010	0.0608	FIRM_AGE	-0.0077	0.0064	GROWTH_OP	0.0032	0.8677	
AR(1)		0.9952	SIZE	-0.0376	0.4797	AR(1)		0.9995	
AR(2)		0.9987	AR(1)		0.9830	AR(2)		0.9998	
Sargan Test ( <i>p</i> -value) 0.44		0.4432	AR(2) 0.9774			Sargan Test (p-va	0.4157		
<i>J</i> - statistic		18.510	Sargan Test ( <i>p</i> -value) 0.			J-statistic	19.650		
<i>p</i> -value	<i>p</i> -value 0.4226		<i>J</i> - statistic 14.99			<i>p</i> -value	0.4159		
			<i>p</i> -value		0.5962				

#### B1. Additional Testing

The companies included in the sample were categorized according to high and low levels of financial flexibility. This study was conducted using the median level of ownership concentration (0.65) to separate the companies into these two groups. SPSS statistics were then used to perform independent samples *t*-tests which examined differences in the levels of liquidity, unused debt capacity, and internal funds between firms of high and low ownership concentration. These tests revealed that firms with low levels of ownership concentration (M=.1027, SD=.0864) had significantly higher levels of liquidity than firms with high levels of ownership concentration (M=.2398, SD=.1358) had significantly lower levels of unused debt capacity than firms with high levels of ownership concentration (M=.2987, SD=.1903). There was no significant difference in the levels of internal funds between these two groups.

#### VIII. Analysis of Results

Testing revealed that firms in the Caribbean with high levels of ownership concentration are associated with lower levels of liquidity, but higher levels of unused debt capacity. In light of the evidence provided by Maury and Pajuste (2005), and Dittmar *et al.* (2003), this may reflect the governance environments that exist in these two groups of firms. The handling of cash and unused debt capacity will be dependent on the ability of the firm's board to manage the expropriation risks that are associated with high ownership concentration. Dittmar *et al.* (2003) argued that cash levels are lower when there are higher levels of corporate governance. It is therefore possible that in firms with high ownership concentration, there is a concerted effort by management to use cash as a governance mechanism and alleviate minority shareholder fears (Maury and Pajuste, 2005), while at the same time, using higher levels of unused debt capacity to maintain the FF of the firm.

From the results of the model testing, it is evident that in the Caribbean, higher levels of board dependence lead to significantly higher levels of liquidity. On one hand, these findings suggest that firms with dependent boards are ineffective in their management of the company. This is evidence of a weak corporate governance environment if one follows the arguments of Jensen (1986), who asserted that where corporate governance is weak, cash is retained. The majority shareholders who are represented by a dependent board may retain excess liquidity with a view to extract private benefits.

This finding however also reflects a concern by majority shareholders for maintaining the liquidity of the firm. This concern may stem from a genuine belief that liquidity is extremely critical to firms operating in constrained markets. Moore *et al.* (2009) examined the importance of liquidity for Caribbean firms and found that liquidity was an important contributor to their viability. In alignment with the suggestions of Dittmar and Mahrt-Smith (2007), it can also be claimed that higher cash holdings are retained for use in value maximizing opportunities. Bancel and Mittoo (2011) justified such stockpiling of cash under constrained market conditions, and this is a characteristic of Caribbean firms.

Results revealed that there was a 1.1 percent increase in internal funds for every unit change in board size. Unlike liquidity, which may be viewed as either negative or positive for the firm, high levels of internal funds are definitely good for the firm. Any decrease in internal funds therefore is a negative signal of the performance of the firm. In this case, larger boards, which are

characteristic of firms with high levels of ownership concentration (Su *et al.*, 2008), are auguring well for the performance of Caribbean firms. These findings contradict the findings of Mak and Kusnadi (2005) who found evidence of a negative correlation between board size and firm performance in Singapore and Malaysia. Weisbach and Hermalin (2002) reviewed the literature on board size and concluded that in the US board size negatively impacted firm performance. Board size in this study may be resulting in enhanced monitoring, which in turn is auguring well for the firm.

Regarding unused debt capacity, although high ownership concentration was associated with high levels of debt capacity, regression tests revealed that the existence of concentrated ownership did not significantly impact the levels of unused debt capacity. These findings have implications for the perceived corporate governance effectiveness of board structures in the Caribbean. While it is expected that PP conflict will lead to higher debt levels and higher equity costs due to minority shareholder fears of expropriation, these findings in the Caribbean context suggest that the existence of PP conflict has no significant impact on minority shareholder perception of risk and the resulting cost of equity. These findings undermine the arguments of Berglöf (1991) and Heinrich (2000) who viewed ownership concentration as leading to increased leverage.

Holistically, the results of this study show that in the case of the Caribbean, which is a transition economy, PP conflict may be positively impacting FF through higher levels of liquidity and internal funds. This may be a result of improved monitoring of the company resources by the board, since the concentrated owners represented on the board have invested material assets in the company and need to ensure that their investment is protected. It may also occur if minority shareholders view dominant shareholders as beneficial to the management of the firm and resulting firm value.

### IX. Implications

The investigation of FF under PP conflict in the Caribbean has revealed some critical implications for the corporate governance of firms in transition economies. While many prior studies have examined PP conflict and its impact on business strategies and management of the enterprise, no studies have yet been advanced that consider the effect of shareholder dominance on the maintenance of FF, which has been attributed to the viability of businesses during these tough economic times. This research is capable of informing not only academia, but also practitioners in these transition economies.

The findings of this study show that the existence of concentrated ownership structures in the Caribbean may have some positive impact on the management of FF there. A concern for proper financial management of the firm may stem from the vested interests that blockholders have in the company's future. Since FF is critical for the survival of the firm, especially during economic hardship, policymakers and practitioners alike should pay attention to these findings, and ensure that corporate governance policies do not overly restrict the ability of dominant shareholders to effectively and efficiently manage the firm's FF. These actions are also necessary given the findings of researchers who have found that corporate governance problems may be distinctive (Huntington, 1996; Young *et al.*, 2004) based on the exclusivity of the underlying culture, legal frameworks, and ownership types (Denis and McConnell, 2003).

This research contributes to the ongoing debate regarding the convergence of worldwide corporate governance policies, which has been driven by the current era of internationalization (Rubach and Sebora, 1998; Carati and Rad, 2000). Although increasing globalization requires high

standards of governance, the achievement of high governance standards may differ due to peculiarities that exist across markets. This testing of the determinants of FF in the setting of firms in transition economies reinforces the uniqueness of individual financial markets.

#### X. Limitations, Conclusions, and Areas for Future Research

The ownership concentration statistics were taken from annual reports that disclose substantial ownership. However, ownership concentration may indeed be higher as many shareholders in the Caribbean hold shares indirectly through private holding companies or relatives. The actual relationships with ownership concentration may therefore be even stronger than those displayed by regression results. The sample size used in this study is also considerably smaller than the samples used in corporate finance studies of developed markets. For example, Marchica and Mura (2010) used a sample size of 47,533 observations. While a larger sample size would have limited the influence of any outliers and increase the significance between variables, the sample size used was considered to be appropriate for the data analysis techniques employed. The data were also scrutinized for any extreme outliers.

In summary, the results of the testing of this framework show that the PP conflict of high ownership concentration is not completely negative for Caribbean firms. Further research is needed to ascertain the final impact of high ownership concentration on the value of firms in transition in such economies. Qualitative research is also needed to understand the cultural dimensions that may give rise to the differences in results shown across markets. These findings will allow researchers to reach a conclusion on the full impact of concentrated ownership structures on firm performance and value. Such a conclusion will further reinforce the need for targeted corporate governance policies to control the PP agency problem, and support the adoption of differing financial strategies adopted by the firm's management.

This research will inform the strategic financial decision-making of the firm, since the impact of ownership concentration on the firm's overall financial policies may at times be ignored. The importance of this finding cannot be overly emphasized since the advancement of capital markets in transition economies depends on the ability of corporate governance mechanisms to create confidence amongst potential investors.

#### References

- **Acharya, Viral V., Heitor Almeida, and Murillo Campello**. 2007. "Is Cash Negative Debt? A Hedging Perspective on Corporate Financial Policies." *Journal of Financial Intermediation*, 16(4): 515-54.
- **Almeida, Heitor, Murillo Campello, and Michael Weisbach**. 2011. "Corporate Financial and Investment Policies When Future Financing is Not Frictionless." *Journal of Corporate Finance*, 17(3): 675-93.
- **Arellano, Manuel, and Stephen Bond**. 1991. "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations." *The Review of Economic Studies*, 58(2): 277-97.
- **Bancel, Franck, and Usha R. Mittoo**. 2004. 'Cross-Country Determinants of Capital Structure Choice: A Survey of European Firms.' *Financial Management*, 103-32.

- **Bancel, Franck, and Usha R. Mittoo**. 2011. "Financial Flexibility and the Impact of the Global Financial Crisis: Evidence From France." *International Journal of Managerial Finance*, 7(2): 179-216.
- **Banchit, Azilawati, and Stuart Locke**. 2011. "Principal-principal Conflicts: Is it a Big Problem in ASEAN 4 Markets?" *International Business Research Review Papers*, 2(5): 1-15.
- **Baumol, William J**. 1952. "The Transactions Demand for Cash: An Inventory Theoretic Approach." *The Quarterly Journal of Economics*, 66(4): 545-56.
- **Berglöf, Erik**. 1991. Corporate Control and Capital Structure: Essays on Property Rights and Financial Contracts. Stockholm: Stockholm School of Economics.
- **Blass, Asher, Yishay Yafeh, and Oved Yosha**. 1998. "Corporate Governance in an Emerging Market: The Case of Israel." *Journal of Applied Corporate*, 10(4):79-89.
- **Bryman, Alan, and Emma Bell**. 2011. *Business Research Methods*. New York: Oxford University Press.
- **Byoun, Soku**. 2008. "How and When Do Firms Adjust Their Capital Structures Toward Targets?" *The Journal of Finance*, 63(6): 3069-96.
- **Campello, Murillo, John R. Graham, and Campbell R. Harvey**. 2010. "The Real Effects of Financial Constraints: Evidence from a Financial Crisis." *Journal of Financial Economics*, 97(3): 470-87.
- **Carati, Guido, and Alireza Tourani Rad**. 2000. "Convergence of Corporate Governance Systems." *Managerial Finance*, 26(10): 66-73.
- **Chaganti, Rajeswararao, and Fariborz Damanpour**. 1991. "Institutional Ownership, Capital Structure, and Firm Performance." *Strategic Management Journal*, 12(7): 479-91.
- Chen, Kevin C.W., Zhihong Chen, and K.C. Wei. 2011. "Agency Costs of Free Cash Flow and the Effect of Shareholder Rights on the Implied Cost of Equity Capital." *Journal of Financial and Quantitative Analysis*, 46(1): 171-207.
- Claessens, Stijn, Simeon Djankov, and Larry H.P. Lang. 2000. "The Separation of Ownership and Control in East Asian Corporations." *Journal of Financial Economics* 58(1): 81-112.
- **Claessens, Stijn, and Luc Laeven**. 2003. "Financial Development, Property Rights, and Growth." *The Journal of Finance*, 58(6): 2401-36.
- **Creswell, John W**. 2009. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: Sage.
- **Dahya, Jay, Orlin Dimitrov, and John J. McConnell**. 2008. "Dominant Shareholders, Corporate Boards, and Corporate Value: A Cross-Country Analysis." *Journal of Financial Economics*, 87(1): 73-100.
- **DeAngelo, Harry, and Linda DeAngelo**. 2007. "Capital Structure, Payout Policy, and Financial Flexibility." Working Paper, Marshall School of Business, California.
- **DeAngelo, Harry, Linda DeAngelo, and Toni M. Whited**. 2011. "Capital Structure Dynamics and Transitory Debt." *Journal of Financial Economics*, 99(2): 235-61.
- **Demsetz, Harold, and Kenneth Lehn**. 1985. "The Structure of Corporate Ownership: Causes and Consequences." *The Journal of Political Economy*, 93(6): 1155-77.
- **Denis, David J., and Stephen B. McKeon**. 2012. "Debt Financing and Financial Flexibility Evidence from Proactive Leverage Increases." *Review of Financial Studies*, 25(6): 1897-929.
- **Denis, David J., and Valeriy Sibilkov**. 2010. "Financial Constraints, Investment, and the Value of Cash Holdings." *Review of Financial Studies*, 23(1): 247-69.
- **Denis, Diane K., and John J. McConnell**. 2003. "International Corporate Governance." *Journal of Financial and Quantitative Analysis*, 38(1): 1-36.

- **Dittmar, Amy, Jan Mahrt-Smith, and Henri Servaes**. 2003. "International Corporate Governance and Corporate Cash Holdings." *Journal of Financial and Quantitative Analysis*, 38(1): 111-33.
- **Dittmar, Amy, and Jan Mahrt-Smith**. 2007. "Corporate Governance and the Value of Cash Holdings." *Journal of Financial Economics*, 83(3): 599-634.
- **Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer**. 2008. "The Law and Economics of Self-Dealing." *Journal of Financial Economics*, 88(3): 430-65.
- **Faccio, Mara, Larry H.P. Lang, and Leslie Young**. 2010. "Pyramiding vs Leverage in Corporate Groups: International Evidence." *Journal of International Business Studies*, 41(1): 88-104.
- **Gamba, Andrea, and Alexander Triantis**. 2008. "The Value of Financial Flexibility." *The Journal of Finance*, 63(5): 2263-96.
- **Gao, Huasheng, Jarrad Harford, and Kai Li**. 2013. "Determinants of Corporate Cash Policy: Insights from Private Firms." *Journal of Financial Economics*, 109(3): 623-39.
- **Graham, John R., and Campbell R. Harvey**. 2001. "The Theory and Practice of Corporate Finance: Evidence from the Field." *Journal of Financial Economics*, 60(2): 187-243.
- **Heinrich, Ralph P**. 2000. "Complementarities in Corporate Governance: Ownership Concentration, Capital Structure, Monitoring, and Pecuniary Incentives." Working Paper, Kiel Institute of Work Economics, Kiel.
- **Hu, Helen Wei, On Kit Tam, and Monica Guo-Sze Tan**. 2010. "Internal Governance Mechanisms and Firm Performance in China." *Asia Pacific Journal of Management*, 27(4): 727-49.
- **Huang, Guihai, and Frank M. Song**. 2006. "The Determinants of Capital Structure: Evidence from China." *China Economic Review*, 17(1): 14-36.
- **Huntington, Samuel P**. 1996. "The West Unique, Not Universal." *Foreign Affairs*, 75(6): 28-46. **Jensen, Michael C**. 1986. "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." *The American Economic Review*, 76(2): 323-29.
- **Jensen, Michael C., and William H. Meckling**. 1979. "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure." *Rochester Studies in Economics and Policy Issues*, 1: 163-231.
- Jiang, Yi, and Mike W. Peng. 2011. "Principal-Principal Conflicts During Crisis." *Asia Pacific Journal of Management*, 28(4): 683-95.
- **Kalcheva, Ivalina, and Karl V. Lins**. 2007. "International Evidence on Cash Holdings and Expected Managerial Agency Problems." *Review of Financial Studies*, 20(4): 1087-12.
- **Keynes, John Maynard**. 1973. *The General Theory of Employment, Interest and Money*. New York: Cambridge University Press (Orig. pub. 1936).
- **La Porta, Rafael, Florencio Lopez-de Silanes, and Andrei Schleifer,** 2006. "What Works in Securities Laws?" *The Journal of Finance*, 61(1): 1-32.
- **La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny**. 1997. "Legal Determinants of External Finance." *Journal of Finance*, 52(3): 1131-50.
- **Leland, Hayne E**. 1998. "Agency Costs, Risk Management, and Capital Structure." *The Journal of Finance*, 53(4): 1213-43.
- **Leuz, Christian, Karl V. Lins, and Francis E. Warnock**. 2009 "Do Foreigners Invest Less in Poorly Governed Firms?" *Review of Financial Studies*, 22(8): 3245–85.
- **Lewellyn, Krista B., and Maureen I. Muller-Kahle**. 2012. "CEO Power and Risk Taking: Evidence from the Subprime Lending Industry." *Corporate Governance: An International Review*, 20(3): 289-307.

- **Lins, Karl V**. 2003. "Equity Ownership and Firm Value in Emerging Markets." *Journal of Financial and Quantitative Analysis*, 38(1): 159-84.
- **Liu, Chunyan, Konari Uchida, and Yufeng Yang**. 2012. "Corporate Governance and Firm Value During the Global Financial Crisis: Evidence from China." *International Review of Financial Analysis*, 21: 70-80.
- **Mak, Yuen Teen, and Yuanto Kusnadi**. 2005. "Size Really Matters: Further Evidence on the Negative Relationship Between Board Size and Firm Value." *Pacific-Basin Finance Journal*, 13(3): 301-18.
- **Marchica, Maria-Teresa, and Roberto Mura.** 2010. "Financial Flexibility, Investment Ability, and Firm Value: Evidence From Firms with Spare Debt Capacity." *Financial Management*, 39(4):1339-65.
- Maury, Benjamin, and Anete Pajuste. 2005. "Multiple Large Shareholders and Firm Value." *Journal of Banking & Finance*, 29(7): 1813-34.
- **Mehran, Hamid**. 1995. "Executive Compensation Structure, Ownership, and Firm Performance." *Journal of Financial Economics*, 38(2): 163-84.
- **Miller, Merton H., and Daniel Orr**. 1966. "A Model of the Demand for Money by Firms." *The Quarterly Journal of Economics*, 80(3): 413-35.
- **Modigliani, Franco, and Merton H. Miller**. 1963. "Corporate Income Taxes and the Cost of Capital: A Correction." *The American Economic Review*, 53(3): 433-43.
- **Moore, Winston, Tracey Broome, and Justin Robinson**. 2009. "How Important are Cash Flows for Firm Growth in Barbados?" *Journal of Eastern Caribbean Studies*, 34(3):1-18.
- Myers, Stewart C., and Nicholas S. Majluf. 1984. "Corporate Financing and Investment Decisions When Firms Have Information that Investors do not Have." *Journal of Financial Economics*, 13(2): 187-221.
- **Oded, Jacob**. 2008. "Payout Policy, Financial Flexibility, and Agency Costs of Free Cash Flow." Working paper, Boston University, Boston.
- **Opler, Tim, Lee Pinkowitz, René Stulz, and Rohan Williamson**. 1999. "The Determinants and Implications of Corporate Cash Holdings." *Journal of Financial Economics*, 52(1): 3-46.
- **Ozkan, Aydin, and Neslihan Ozkan**. 2004. "Corporate Cash Holdings: An Empirical Investigation of UK Companies." *Journal of Banking and Finance*, 28(9): 2103-34.
- **Renders, Annelies, and Ann Gaeremynck**. 2012. "Corporate Governance, Principal-Principal Agency Conflicts, and Firm Value in European Listed Companies." *Corporate Governance: An International Review*, 20(2):125-43.
- Robson, Colin. 2002. Real Word Research. Oxford: Blackwell.
- **Rubach, Michael J., and Terrence C. Sebora**. 1998. "Comparative Corporate Governance: Competitive Implications of an Emerging Convergence." *Journal of World Business*, 33(2): 167-84.
- **Shleifer, Andrei, and Robert W. Vishny**. 1986. "Large Shareholders and Corporate Control." *The Journal of Political Economy*, 94(3): 461-88.
- **Skaife, Hollis Ashbaugh, Daniel W. Collins, and Ryan LaFond**. 2004. "Corporate Governance and the Cost of Equity Capital." Working Paper, University of Wisconsin, Wisconsin.
- **Su, Yiyi, Dean Xu, and Phillip H. Phan**. 2008. "Principal—Principal Conflict in the Governance of the Chinese Public Corporation." *Management and Organization Review*, 4(1): 17-38.
- **Sufi, Amir**. 2009. "Bank Lines Of Credit in Corporate Finance: An Empirical Analysis." *Review of Financial Studies*, 22(3): 1057-88.

- Weisbach, Michael S., and Benjamin E. Hermalin. 2002. "Boards of Directors as an Endogeneously Determined Institution: A Survey of the Economic Literature." Working paper, University of California, California.
- Whited, Toni M., and Guojun Wu. 2006. "Financial Constraints Risk." *Review of Financial Studies*, 19(2): 531-59.
- **Xu, Xiaonian, and Yan Wang**. 1997. "Ownership Structure, Corporate Governance, and Corporate Performance: The Case of Chinese Stock Companies." Working Paper, World Bank Publications, Washington D.C.
- **Young, Michael N., David Ahlstrom, and Garry D. Bruton**. 2004. "The Globalization of Corporate Governance in East Asia: The 'Transnational' Solution." *Management International Review*, 44(2): 31-50.
- Young, Michael N., Mike W. Peng, David Ahlstrom, Garry D. Bruton, and Yi Jiang. 2008. "Corporate Governance in Emerging Economies: A Review of the Principal–Principal Perspective." *Journal of Management Studies*, 45(1): 196-220.
- **Zou, Hong, and Jason Zezhong Xiao**. 2006. "The Financing Behaviour of Listed Chinese Firms. "*The British Accounting Review*, 38(3): 239-58.