

# **Does Country-Specific Globalization Impact Private Loan Contracts?**

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## **ABSTRACT**

In this study I investigate the impact that operating in specific foreign countries has on the bank loan contracts of multinational companies. While previous research has shown that increased firm globalization leads to a lower cost of bank debt, I find that this relationship is attenuated when firms operate in countries with certain institutional attributes. Using income levels, creditor rights, and property rights as institutional indices, I test the association of country-level factors with the priced and non-priced components of bank loan contracts. I find that globalized firms operating in low income countries, countries with weak creditor rights, or countries with weak property rights do not receive the same positive debt contracting features as do firms operating in high income countries, countries with strong creditor rights, or countries with strong property rights.

## **DEDICATION**

This dissertation is dedicated to my wife and best friend, Abbey, my children, Parker and Meyer, and my parents, Bob and Jeanie. Abbey, without your love and support none of this could have been possible. You have encouraged me to reach my full potential and for that I can never repay you. Thank you for picking up the slack when I needed to focus on this dissertation. Parker and Meyer, I love you both so much and I hope that you will look back on our days in Blacksburg with fondness. You are amazing kids and I know you will both do great things. To my parents, thank you for always supporting me and teaching me the value of an education. Your encouragement helped put me on this path.

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## TABLE OF CONTENTS

<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
<b>CHAPTER 2: PRIOR LITERATURE .....</b>	<b>7</b>
2.1 Globalization .....	7
2.2 Country-Specific Institutions.....	10
2.3 Bank Loan Contracts.....	14
<b>CHAPTER 3: HYPOTHESIS DEVELOPMENT .....</b>	<b>15</b>
3.1 Hypothesis 1 – Country-Specific Globalization and Loan Spreads .....	15
3.2 Hypothesis 2 – Country-Specific Globalization and Collateral Requirements....	16
3.3 Hypothesis 3 – Country-Specific Globalization and Loan Maturities .....	17
3.4 Hypothesis 4 & 5 – Country-Specific Globalization and Syndicate Composition.....	18
<b>CHAPTER 4: SAMPLE, VARIABLES, &amp; SUMMARY STATISTICS .....</b>	<b>21</b>
4.1 Sample Selection.....	21
4.2 Variable Definitions & Summary Statistics .....	22
<b>CHAPTER 5: RESEARCH DESIGN .....</b>	<b>30</b>
<b>CHAPTER 6: RESULTS .....</b>	<b>32</b>
6.1 Test of H1.....	32
6.2 Test of H2.....	33
6.3 Test of H3.....	35
6.4 Test of H4.....	35
6.5 Test of H5.....	36
<b>CHAPTER 7: ADDITIONAL TESTS .....</b>	<b>38</b>
<b>CHAPTER 8: CONCLUSION &amp; LIMITATIONS.....</b>	<b>44</b>
8.1 Conclusion .....	44
8.2 Limitations.....	45
<b>REFERENCES.....</b>	<b>46</b>
<b>APPENDIX A: VARIABLE DEFINITIONS .....</b>	<b>49</b>
<b>APPENDIX B: EXAMPLE OF DISSAGREGATION OF GLOBALIZATION INTO COUNTRY SPECIFIC GROUPS .....</b>	<b>51</b>
<b>APPENDIX C: VARIABLE DEFINITIONS FOR TABLES 15 – 29 .....</b>	<b>54</b>

## LIST OF TABLES

<b>TABLE 1: SAMPLE SELECTION AND DISTRIBUTION BY YEAR AND LOAN TYPE .....</b>	<b>56</b>
<b>Panel A: Sample Selection.....</b>	<b>56</b>
<b>Panel B: # of Loans by Year and Loan Type – Global Firms.....</b>	<b>56</b>
<b>Panel C: # of Loans by Year and Loan Type – Domestic Firms .....</b>	<b>56</b>
<b>TABLE 2: SEGMENT DISTRIBUTION BY INCOME LEVEL, CREDITOR RIGHTS, AND PROPERTY RIGHTS .....</b>	<b>57</b>
<b>Panel A: One Dimension .....</b>	<b>57</b>
<b>Panel B: Two Dimensions.....</b>	<b>57</b>
<b>Panel C: Three Dimensions.....</b>	<b>57</b>
<b>Panel D: Pearson Pairwise Correlation between IL, CR, and PR by Country .....</b>	<b>57</b>
<b>TABLE 3: SUMMARY STATISTICS BY COUNTRY .....</b>	<b>58</b>
<b>TABLE 4: SUMMARY STATISTICS.....</b>	<b>60</b>
<b>TABLE 5: PEARSON CORRELATION MATRIX.....</b>	<b>61</b>
<b>Panel A: Globalization Proxy .....</b>	<b>61</b>
<b>Panel B: Loan Facility Characteristics .....</b>	<b>61</b>
<b>Panel C: Firm Characteristics .....</b>	<b>61</b>
<b>TABLE 6: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO LOAN PRICE – SINGLE DIMENSION .....</b>	<b>62</b>
<b>TABLE 7: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO LOAN PRICE – MULTIPLE DIMENSIONS .....</b>	<b>64</b>
<b>TABLE 8: REGRESSIONS RELATING FOREIGN SALES RATIO TO LOAN PRICE .....</b>	<b>66</b>
<b>TABLE 9: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO LOAN PRICE .....</b>	<b>67</b>
<b>TABLE 10: REGRESSIONS RELATING GLOBALIZATION TO THE PROBABILITY OF A LOAN BEING SECURED.....</b>	<b>68</b>
<b>TABLE 11: REGRESSIONS RELATING GLOBALIZATION TO THE LENGTH OF THE LOAN MATURITY .....</b>	<b>69</b>
<b>TABLE 12: REGRESSIONS RELATING FOREIGN ASSET RATIO TO THE SIZE OF LOAN SYNDICATE .....</b>	<b>70</b>

<b>TABLE 13: REGRESSIONS RELATING GLOBALIZATION TO THE SIZE OF LOAN SYNDICATE.....</b>	<b>71</b>
<b>TABLE 14: REGRESSIONS RELATING GLOBALIZATION TO LOAN OWNERSHIP.....</b>	<b>72</b>
<b>TABLE 15: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO LOAN PRICE – ADDITIONAL TESTS.....</b>	<b>73</b>
<b>TABLE 16: REGRESSIONS RELATING FOREIGN SALES RATIO TO LOAN PRICE – ADDITIONAL TESTS .....</b>	<b>74</b>
<b>TABLE 17: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO LOAN PRICE – ADDITIONAL TESTS .....</b>	<b>75</b>
<b>TABLE 18: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO THE PROBABILITY OF A LOAN BEING SECURED – ADDITIONAL TESTS .....</b>	<b>76</b>
<b>TABLE 19: REGRESSIONS RELATING FOREIGN SALES RATIO TO THE PROBABILITY OF A LOAN BEING SECURED – ADDITIONAL TESTS .....</b>	<b>77</b>
<b>TABLE 20: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO THE PROBABILITY OF A LOAN BEING SECURED – ADDITIONAL TESTS .....</b>	<b>78</b>
<b>TABLE 21: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO THE LENGTH OF LOAN MATURITY – ADDITIONAL TESTS.....</b>	<b>79</b>
<b>TABLE 22: REGRESSIONS RELATING FOREIGN SALES RATIO TO THE LENGTH OF LOAN MATURITY – ADDITIONAL TESTS.....</b>	<b>80</b>
<b>TABLE 23: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO THE LENGTH OF LOAN MATURITY – ADDITIONAL TESTS.....</b>	<b>81</b>
<b>TABLE 24: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO THE SIZE OF LOAN SYNDICATE – ADDITIONAL TESTS .....</b>	<b>82</b>
<b>TABLE 25: REGRESSIONS RELATING FOREIGN SALES RATIO TO THE SIZE OF LOAN SYNDICATE – ADDITIONAL TESTS.....</b>	<b>83</b>
<b>TABLE 26: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO THE SIZE OF LOAN SYNDICATE – ADDITIONAL TESTS.....</b>	<b>84</b>
<b>TABLE 27: REGRESSIONS RELATING FOREIGN SEGMENT LOCATION TO LOAN OWNERSHIP – ADDITIONAL TESTS .....</b>	<b>85</b>



<b>TABLE 28: REGRESSIONS RELATING FOREIGN SALES RATIO TO LOAN OWNERSHIP – ADDITIONAL TESTS .....</b>	<b>86</b>
<b>TABLE 29: REGRESSIONS RELATING FOREIGN ASSETS RATIO TO LOAN OWNERSHIP – ADDITIONAL TESTS .....</b>	<b>87</b>
<b>TABLE 30: REGRESSIONS RELATING GLOBALIZATION TO LOAN CONTRACT FEATURES – PRE 2004 .....</b>	<b>88</b>

# **CHAPTER ONE**

## **INTRODUCTION**

The expansion of U.S. multinational companies (MNCs) continues as firms explore more opportunities abroad (Barefoot and Mataloni Jr 2011). Sales of foreign affiliates of MNCs increased from 30 percent of total firm sales in 1999 to 35 percent in 2009. Further, this expansion has continued to shift from developed countries (e.g., Germany, the U.K., Australia) to emerging markets such as China, India, Brazil, and Eastern Europe. In 2009, sales of foreign affiliates in emerging markets represented 20 percent of total foreign sales, up from 16 percent in 1999 (Barefoot and Mataloni Jr 2011). Due to their expansion in emerging markets, MNCs are increasingly operating in a diverse mix of political, economic, and legal environments. Accordingly, the objective of this study is to investigate the effect of country-specific globalization on the debt contracts of MNCs.

The globalization of a firm is of interest to all stakeholders of the firm, as it provides opportunities to expand their product market, but also exposes the firm to increased competition (Jones 2002). Research to date has focused primarily on the impact of globalization, as measured by reported foreign sales or assets, on the public equity and bond markets. Findings on the impact of firm globalization on equity markets has been mixed, with Denis et al. (2002) concluding that globalization has negative effects on firm value. However, in more recent research, Gande et al. (2009) find that after controlling for country-level creditor rights, globalization leads to increased firm value. There has been greater consensus on the impact of globalization on the bond market, with findings pointing toward increased globalization leading to a reduction in firm risk, which enhances bondholder value and reduces the cost of public debt

(Reeb et al. 2001; Mansi and Reeb 2002a, 2002b). However, there has been little research done regarding the value placed on globalization by the primary creditors of firms—banks.

A notable study in this area is Li et al. (2011), who find that increased globalization leads to a reduction in the interest rate spread on bank loans for a sample of U.S. firms. They also find that firms with operations outside the U.S. are not saddled with unfavorable non-priced terms such as short maturities or restrictive collateral requirements. However, Li et al. (2011) do not attempt to measure the country-specific diversification of the firm, implicitly taking the position that globalization is homogenous.

Expanded globalization into emerging markets brings this implicit assumption into question and makes an evaluation of the impact of country-specific determinants on debt contracting critical. Two cross-country studies have found results indicating that country-level factors impact debt contracting. In a sample of firms located in 43 countries (excluding the U.S.), Qian and Strahan (2007) find that more favorable loans, in terms of priced and non-priced components, are afforded to firms located in jurisdictions with stronger creditor rights. They also find that in countries with weak creditor rights, the participation of foreign banks in syndicated loans is lower and more lending is done by domestic banks. In a related study, Bae and Goyal (2009), sampling both U.S. and non-U.S. firms, find that while country-level creditor rights are important in the negotiation of interest rate spreads, it is the country-level *enforcement* of these rights that is a larger determinant of not only priced terms, but also non-priced terms such as loan amounts and maturities. However, these studies only investigate the impact of country-specific factors on domestic firms without regard to the globalization of firms.

The implementation of Statement of Financial Accounting Standards No. 131 (SFAS 131), effective for fiscal years beginning after December 15, 1997, affords a unique opportunity

to measure varieties of globalization based on the set of specific countries in which firms operate. In addition to requiring disclosure of total foreign and domestic sales and assets, SFAS 131 requires firms to report “material” segments by country. The descriptive evidence available for comparison shows that firms have followed this mandate. In the year 1996, prior to the implementation of SFAS 131, only 20.5 percent of segments in the Compustat segment file were reported based on an identifiable country. In 2000, two years following implementation of SFAS 131, this grew to 42.2 percent. This provides evidence that the geographic disclosure requirement of SFAS 131 has led to an increased granularity in the reporting of both sales and long-lived assets for globally diversified firms. Prior research has measured globalization as either the number of foreign segments or the ratio of foreign sales (assets) to total sales (assets), without regard to the country-specific location of the foreign segments, sales, or assets (Mansi and Reeb 2002a, 2002b; Gande et al. 2009; Li et al. 2011). Using the finer information provided by firms under SFAS 131, I am able to construct a measure of globalization, which reflects systematic variation in where the foreign operations occur. With this measure, I am thus able to test the impact that the institutional characteristics of the specific countries in which a firm operates have on the loan contracts of MNCs.

Bank loan contracting is important to study for two reasons. First, debt is the primary source of external capital for firms as new debt issuances dwarf new equity issuances (Graham et al. 2008), and bank debt is, on average, the largest source of debt financing (Houston and James 1996; Graham et al. 2008). Second, bank debt allows for the inspection of not only priced components of debt, in the form of interest rate spreads, but also non-priced components such as maturities, loan sizes, collateral requirements, and covenants. Prior research has found that both

priced and non-priced terms are used by banks as compensatory responses to borrower risk (Strahan 1999; Graham et al. 2008).

To evaluate how globalization may impact a bank's risk assessment of a firm, I examine the effect on bank loan contracts of institutional characteristics of the countries where firms operate, which prior research indicates are related to lender risk. First, I find that loan spreads are lower for firms that operate in high income countries, countries with strong creditor rights, or countries with strong property rights. I produce these findings through standard multivariate regressions, after controlling for relevant borrower and loan characteristics. These effects suggest that banks evaluate not only the extent of their customers' globalization, but also where this globalization occurs. Second, I find that firms operating in low income countries, countries with weak creditor rights, or countries with weak property rights are less likely to have their loans secured by collateral. This finding contradicts prior research that suggests loan contract terms are complementary, and it provides evidence that when the ability to repossess is potentially low, banks must rely on other methods to mitigate the risk posed by borrowers (Strahan 1999). Third, I find no relation between the lengths of maturity for new loans and the location of firm globalization. Fourth, I find that when firms operate in poor countries or countries with weak property rights, the number of banks participating in a syndicated loan increases. Finally, I find that when firms operate in countries with low income levels, weak creditor rights, and weak property rights, the percentage of loans owned by U.S. located banks declines. Together, the results suggest the impact of firm globalization on bank loan contracting is dependent upon the income levels, creditor rights, and property rights of the foreign countries in which the firm operates.

This study contributes to the literature in three ways. First, I expand on research related to the implementation of SFAS 131. Prior research on the geographic segment disclosure component of SFAS 131 has generally focused on two key items: the granularity of information and the voluntary nature of continuing to disclose earnings at the segment level. Several papers find that the encouragement of country-level disclosure under SFAS 131 leads to an increase in the specificity of information provided by firms (Herrmann and Thomas 2000; Douppnik and Seese 2001; Behn et al. 2002). Additional research has investigated the impact of the choice to disclose or not to disclose geographic segment earnings on a variety of factors, including value relevance (Thomas 2000; Hope et al. 2009), taxation (Hope et al. 2013), and empire building (Hope and Thomas 2008).<sup>1</sup> To my knowledge, mine is the first study to focus on the impact that the additional geographic detail provided by firms under SFAS 131 has on bank lending.

Second, I propose a new measure of globalization that relaxes the assumption that globalization is homogenous. While disclosure flexibility does limit my ability to fully disaggregate globalization by country, I find that the available segment information is disaggregated by country enough to permit some substantiated, persuasive hypothesizing about the impact of globalization on a firm's value as determined by one important stakeholder that consults a firm's financial statements: i.e., banks.

Third, I add to the growing number of studies that investigate country-specific factors impacting MNCs (Qian and Strahan 2007; Bae and Goyal 2009). While previous country-level debt studies have focused only on the country of domicile, using the information provided under SFAS 131, I am able to investigate the impact that operating in countries with different income levels, creditor rights, or property rights has on the cost of debt for U.S. MNCs. Moreover, this

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<sup>1</sup> Prior to the implementation of SFAS 131 firms were required to disclose earnings (in addition to sales and assets) for any reported geographic segments. SFAS 131 lifted this requirement for any firms that report operating segments not based on geographic location (e.g., by product line, industry, etc.).

study adds to the literature surrounding the impact of globalization on firm value (Denis et al. 2002; Mansi and Reeb 2002a; Gande et al. 2009; Li et al. 2011), specifically the value of country-specific globalization as assessed by the firm's primary source of external capital, banks.

## CHAPTER TWO

### PRIOR LITERATURE

#### 2.1 Globalization

MNCs are a diverse and expanding group of firms. According to the United Nations Conference on Trade and Development (UNCTAD 2009), the growth of MNCs has been rapid, with an estimated 82,000 MNCs in 2008 as compared to only 37,000 in the early 1990s. MNCs are also investing heavily in foreign economies. Foreign direct investment was \$1.35 trillion in 2012, with \$703 billion flowing to developing economies (UNCTAD 2013). The foreign affiliates of MNCs have increased from 170,000 in the early 1990s to 810,000 in 2008. These foreign affiliates were expected to account for roughly one-third of the total worldwide export of goods and services in 2008 and to employ 77 million people, more than double the labor force of Germany. Given the documented growth of MNCs in recent years, it is important to investigate how these economically important firms are valued by various stakeholders.

The value that creditors place on firm globalization is an important consideration because debt, specifically bank debt, is a firm's primary source of external capital (Houston and James 1996; Graham et al. 2008; Chava et al. 2009). There are three leading theories regarding the valuation of a globalized firm by creditors. These theories are based on the financial and real dimensions of globalization. From a financial point of view, creditors should not prefer globalized firms over purely domestic firms under the assumption of perfect capital markets, as creditors can choose lending portfolios that produce their optimal level of diversification. However, under the theory of *imperfect world capital markets*, MNCs "complete" markets by providing participants with indirect access to countries that they otherwise would be constrained from entering (Errunza and Senbet 1981, 1984). For banks, this feature of MNCs is especially



valuable, as banks often operate under strict regulations and have significant barriers to entry in foreign markets (Li et al. 2011). Globalized MNCs give banks opportunities to diversify internationally and should thus be favored by banks as evidenced by favorable loan terms.

Second, *internalization* theory (Caves 1971) suggests that firms can increase their value by internalizing the markets for certain intangible assets that are based on propriety information, such that they cannot be exchanged at arm's length. Examples of such intangible assets are R&D and advertising expenditures. Internalization of intangible assets should be viewed favorably by creditors, as intangible assets are a significant component of the liquidation value of a firm (Li et al. 2011). The value of these intangibles increases with a firm's globalization, due to expanded market potential, which should lead to a reduced cost of bank debt.

In contrast to the above theories, which predict that banks will value globalization positively, *agency* theory suggests that a firm's globalization may be viewed negatively by banks. Globalization gives managers access to more markets across which to allocate a firm's resources, thereby making it more difficult for banks to monitor all managerial decisions. Access to additional markets may encourage self-serving managers to misuse internal capital markets and free cash flow for investment in suboptimal projects (Jensen 1986; Rajan et al. 2000). Further, poorly monitored managers, acting in the interest of shareholders, may expropriate debt holder wealth by engaging in risky asset substitution (Jensen and Meckling 1976). These increased agency costs may force lenders to offer less favorable loan contracts.

In an examination of overall globalization (i.e., not country specific) Li et al. (2011) find that increased globalism decreases the cost of bank debt. They argue that the positive benefits of globalization can be attributed to a firm's ability to both internalize intangible assets and to provide a "complete" market for lenders. Combined, these benefits outweigh any increased

agency costs. The objective of this study is to evaluate these findings when considering the particular countries where foreign segments are located. The fact that the enactment of SFAS 131 has encouraged more granular geographic segment reporting makes evaluating the countries in which firms operate a realizable undertaking.

Prior to the implementation of SFAS 131 (i.e., for fiscal years beginning before December 15, 1997) the pronouncement that governed the reporting of geographic segments was Statement of Financial Accounting Standards No. 14 (SFAS 14), which required that firms report all sales to unaffiliated customers, identifiable tangible and intangible assets, and earnings by geographic segment. However, SFAS 14 allowed significant flexibility in determining what constituted a geographic segment (FASB 1976). Due to this flexibility, the majority of firms elected not to report geographic segment information by country but rather grouped such information by region.

Take, for example, Baker Hughes, an oilfield services firm. In 1996 Baker Hughes derived 56 percent of its sales from locations outside the U.S. and had 51 percent of its assets located outside the U.S. The firm elected to report only four geographic segments: the U.S., Europe, Other–Western Hemisphere, and Other–Eastern Hemisphere. In contrast, as part of complying with SEC regulation S-K, Baker Hughes disclosed in Exhibit 21 of their 1996 Form 10-K the existence of operations in over 35 sovereign states. However, while Exhibit 21 requires firms to provide the name and location of all subsidiaries, it does not require the disclosure of any financial information related to these subsidiaries, thus limiting its usefulness to investors or creditors.<sup>2</sup>

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<sup>2</sup> Recent research suggests that information contained in Exhibit 21 of Form 10-K has tax and earnings management implications. Dyreng and Lindsey (2009) find that the existence of certain low-tax countries on Exhibit 21 of Form 10-K is related to foreign and domestic tax rates. Dyreng et al. (2012) find that firms manage earnings less when

In spite of this limitation, prior research has found that there is value in knowing the national location of foreign segments if this information is disclosed jointly with disaggregated financial information, as required by SFAS 131. In a study testing the predictive ability of geographic segment information, Herrmann (1996) finds that country-level data are more informative than continent-level data when forecasting sales. Balakrishnan et al. (1990) argue that country-level macroeconomic data are useful inputs for forecasting models. Additionally, many political and legal risk factors are measured at the country level, further necessitating the need for disaggregation (Herrmann and Thomas 1997).

The Financial Accounting Standards Board (FASB) recognized that external users of financial statements rely on disclosures to better assess the concentration of risk a firm faces and that reporting broad geographic regions was lacking in utility (FASB 1997). SFAS 131 was implemented, in part, to encourage the disaggregation of information related to geographic segments (FASB 1997). Regarding revenue and assets, SFAS 131 states, “If revenues from external customers attributed to an individual foreign country are material, those revenues shall be disclosed separately. . . . If assets in an individual foreign country are material, those assets shall be disclosed separately” (FASB 1997). While what qualifies as “material” is not explicitly defined, the general consensus has been to follow the threshold outlined in SFAS 14 and provide country-level disclosures whenever revenues or long-lived assets exceed 10 percent of a firm’s respective totals.

## **2.2 Country-Specific Institutions**

There exists significant variation—politically, culturally, economically, and legally—between countries, and banks have good reason to heed the national affiliations of their

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they operate in a high concentration of high rule-of-law countries. Black et al. (2014) use Exhibit 21 of Form 10-K to identify firms that utilize tax havens.

borrowers. This is especially so for banks lending to MNCs, whose revenues used to repay the loan and assets used as collateral, are domiciled in foreign jurisdictions. Prior literature has documented three country-level factors that are key to analyzing the features of private debt contracts. First, the income level of a country influences the development of debt markets as a whole (Djankov et al. 2007) and also impacts components of debt contracts at a firm level (Bae and Goyal 2009). The second is creditor rights, which are broadly defined as the set of procedures in place to protect the ability of creditors to collect amounts owed to them that are in arrears (La Porta et al. 1998; Djankov et al. 2007; Qian and Strahan 2007; Bae and Goyal 2009). The third and final factor, property rights are the extent to which countries not only enforce the rights of creditors, but also generally protect private property rights (La Porta et al. 1997; Bae and Goyal 2009).

To illustrate how country-level information is now more easily retrieved from publicly reported financial information, we can return to the former example of Baker Hughes. Following the implementation of SFAS 131, the granularity of the company's disclosure increased demonstrably. In the year 2000, Baker Hughes reported seven geographic segments, six of which were country specific: the U.S., the U.K., Venezuela, Norway, Canada, and Nigeria. While one cannot determine whether these countries would have been significant enough to be disclosed separately had SFAS 131 been in effect in 1996, they were all listed on Exhibit 21 in 1996. Taking a closer look at three of the countries in which Baker Hughes operates—Nigeria, Norway, and the U.K.—provides some insight. While Nigeria is separated geographically and economically from Norway and the U.K., when the three countries are compared according to institutional dimensions, the similarities and differences among them show more complexity.

Djankov et al. (2007) argue that for credit markets to function effectively they may require significant institutional costs. Only sufficiently large economies can afford to bear these costs. Every year the World Bank classifies countries into four income-level groups, based on gross national income per capita, designated as high, upper middle, lower middle, and low. Every year since classification began in 1987 the U.K. and Norway have been classified as high-income countries, whereas Nigeria, for the majority of those years, has been classified as low-income, only moving into the lower-middle group starting in 2008. The variation in income level for the countries in which Baker Hughes operates, along with the relative size of the operations therein, should impact debt contracting terms if banks use this information to evaluate borrower risk.

Economic theory related to incomplete contracts suggests that the power of creditors to recoup, by legal means, capital lent to delinquent borrowers is an important determinant in explaining the availability of credit and the willingness of lenders to lend at favorable terms (Townsend 1979; Aghion and Bolton 1992; Hart and Moore 1994, 1998). Creditor power is generally defined as the creditor's ability to force repayment, seize collateralized assets, or take control of the firm in the event of a default. Research supports this theory of creditor power. Using data collected from the Bureau of Economic Analysis, Desai et al. (2004) show that affiliates of U.S. parent corporations utilize less external debt and that affiliates located in countries with weak creditor rights have, on average, higher interest rate spreads. My study differs from Desai et al. (2004) in that I use loan-level data to evaluate priced and non-priced loan terms, and I investigate in detail the effect of operating in foreign jurisdictions on the parent company, rather than its subsidiaries. Again, Baker Hughes provides an instructive example. Using an index of creditor rights created by La Porta et al. (1997), which was amended and

significantly expanded by Djankov et al. (2007), I am able to determine that, on average, the U.K. and Nigeria give greater power to creditors than Norway does.

In addition to country income levels and creditor rights, Bae and Goyal (2009) show that property rights, including the enforcement of creditor rights, is also a strong predictor of debt contracting terms. In fact, La Porta et al. (1998) argue that, conceptually, a strong system of legal enforcement can substitute for weak creditor rights. A wide range of measures from a variety of sources have been used to proxy for the property rights of the firm, but the main tenants are measurements of corruption, rule of law, risk of government expropriation, and the likelihood of contract repudiation by the government (La Porta et al. 1998). Additionally, evidence has shown that, on a macroeconomic level, stronger judiciary enforcement leads to the growth of a country's debt capital markets (La Porta et al. 1997). Using property rights scores collected by the World Bank Institute and applying them to the Baker Hughes example, I find that Nigeria, on average, ranks in the bottom quartile for property rights. By contrast, the U.K. and Norway score, on average, above the 90th percentile on property rights scales.

It follows then that banks would prefer to lend to firms that operate in countries with a high income, with strong creditor rights, and with strong property rights. A high income level would suggest that sufficient institutional mechanisms are in place to foster a robust credit market, while strong creditor rights would give the lender legal standing to maximize recovery in the event of default; finally, strong property rights would guarantee that those rights would be enforced. I expect therefore that the overlap of these dimensions would be of interest to banks. Accordingly, my aim in this study is to test the impact of multiple dimensions of country-level institutions on the terms of bank loan contracts.

### **2.3 Bank Loan Contracts**

Bank loan contracts provide a unique case for testing the impact of country-level diversification due to the wealth of information they contain. Banks serve as intermediaries who reduce the information asymmetry between borrowers and ultimate lenders (depositors) (Leland and Pyle 1977). Banks reduce information asymmetry initially by evaluating the creditworthiness of an applicant firm. In addition to their lending decision, banks use both priced and non-priced terms to limit their risk exposure (Melnik and Plaut 1986). Empirical research has supported this argument, showing that non-priced terms such as maturity, collateral requirements, loan sizes, and covenants are jointly determined with pricing and are used as complementary mechanisms to address borrower risk (Smith Jr and Warner 1979; Stiglitz and Weiss 1981; Diamond 1991; Rajan and Winton 1995; Strahan 1999; Easley and O'Hara 2004; Qian and Strahan 2007; Graham et al. 2008; Bae and Goyal 2009).

## CHAPTER THREE

### HYPOTHESIS DEVELOPMENT

#### 3.1 Hypothesis 1 – Country-Specific Globalization and Loan Spreads

The impact of country-level factors on bank loan pricing has been supported by prior research on firms domiciled in foreign jurisdictions (Qian and Strahan 2007; Bae and Goyal 2009). However, this study differs in that it tests the impact to U.S. MNCs operating in foreign countries. To provide empirical evidence of the role that selected institutional factors play on banks' loan pricing, I make a series of predictions about the effects that national income level, creditor rights, and property rights have on loan contracts. Expressed as hypotheses, these predictions are stated in the alternative form, with the anticipated (and antithetical) outcome:

**H1a:** Controlling for other determinants, if globalization of a firm is higher in countries with high (low) incomes, loan spreads for the firm will be more (less) favorable.

**H1b:** Controlling for other determinants, if globalization of a firm is higher in countries with strong (weak) creditor rights, loan spreads for the firm will be more (less) favorable.

**H1c:** Controlling for other determinants, if globalization of a firm is higher in countries with strong (weak) property rights, loan spreads for the firm will be more (less) favorable.

**H1d:** Controlling for other determinants, if globalization of a firm is higher in countries with high incomes, strong creditor rights, and strong property rights, loan spreads for that firm will be more favorable than those for a firm whose globalization is higher in countries with low income levels, weak creditor rights, and weak property rights.



### 3.2 Hypothesis 2 – Country-Specific Globalization and Collateral Requirements

Bank loan contracts contain information beyond simply priced terms (i.e., loan spread) such as collateral requirements and loan maturities. There are two competing theories to explain the use of collateral in debt contracts. Adverse selection models suggest that borrowers are able to signal their quality by agreeing to provide collateral (Bester 1985; Besanko and Thakor 1987). This theory would suggest that collateral and loan spreads act as substitutes and that a higher-quality borrower's willingness to post collateral should reduce the interest rate cost of the loan. Moral hazard models suggest that there exists ex ante incentive for asset substitution when firms take on risky debt (Stulz and Johnson 1985). Empirical evidence suggests that these incentives are highest for borrowers with opaque information, who are often seen as high credit risks (Rajan and Winton 1995). Risky borrowers are able to commit to lower asset substitution by providing collateral. However, the objective of this study is to determine the impact of country-level institutions on the requirement of collateral. Qian and Strahan (2007) find that as creditor rights in the country of domicile increase, the probability that a loan includes collateral increases as well. Therefore, I expect that as a firm's globalization increases in risky countries, the value of secured collateral decreases. This leads to my second set of hypotheses, stated in the alternative form:

**H2a:** Controlling for other determinants, if globalization of a firm is higher in countries of high (low) income, loans are more (less) likely to require collateral.

**H2b:** Controlling for other determinants, if globalization of a firm is higher in countries with strong (weak) creditor rights, loans are more (less) likely to require collateral.

**H2c:** Controlling for other determinants, as globalization of a firm increases in countries with strong (weak) property rights countries, loans are more (less) likely to require collateral.

**H2d:** Controlling for other determinants, if globalization of a firm is higher in countries with a high income, strong creditor rights, and strong property rights, loans are more likely to require collateral than those for firms whose globalization is higher in countries with low income levels, weak creditor rights, and weak property rights.

### **3.3 Hypothesis 3 – Country-Specific Globalization and Loan Maturities**

The maturity of a loan contract represents another opportunity for banks to reduce borrower risk through contracting. Diamond (1991) argues that the maturity of loans demonstrates a relationship with borrower risk that is not monotonic. High-credit-quality firms will demand short-term debt as they will not suffer from liquidity risk. On the other hand, low-credit-quality firms will only be offered short-term debt as they require more intense monitoring. Only the firms with intermediate credit quality will accept long-term debt, as they do not require as intense monitoring, but do not want to be exposed to liquidity risk. Applying this theory to country-level institutions, I predict that if a firm has higher levels of globalization in either high- or low-risk countries across all dimensions, maturities will be shorter than those for firms that have higher levels of globalization in countries that fall into both high and low groups across multiple dimensions. This leads to my third set of hypotheses stated in the null:

**H3a:** Controlling for other determinants, loan maturities will not differ if globalization is higher in high- or low-income countries.

**H3b:** Controlling for other determinants, loan maturities will not differ if globalization is higher in countries with strong or weak creditor rights.

**H3c:** Controlling for other determinants, loan maturities will not differ if globalization is higher in countries with strong or weak property rights.

**H3d:** Controlling for other determinants, loan maturities will not differ if globalization of a firm is higher in countries of high income level, with strong creditor rights, and with strong property rights, or if globalization of a firm is higher in countries with low income levels, weak creditor rights, and weak property rights.

### **3.4 Hypothesis 4 & 5 – Country-Specific Globalization and Syndicate Composition**

The majority of cross-country bank lending involves syndicated loans. Syndicated loans are commercial loans provided by a group of lenders and are structured, arranged, and administered by one or more commercial or investment banks (Standard & Poor's 2012). Syndicated loans came into prominence during the leveraged buyouts of the mid-1980s and have become the dominant source of private bank debt for U.S. firms. Due to the ability of syndicate participants to diversify their loan portfolio across more borrowers, syndicated loans are less expensive and more efficient to administer than traditional single-lender loans. Many syndicated loans are arranged or negotiated in either New York or London, and include clauses that allow for either U.S. or U.K. law to supersede the law of the borrower's country. However, these "choice of law" clauses only govern the loan or credit contract and do not extend to bankruptcy and rarely to property (Esty and Megginson 2003; Qian and Strahan 2007). This indicates that lenders must understand the legal environments before they agree to loan to a firm domiciled or operating in a foreign country.

The income level, creditor rights, and property rights of a country are especially important for foreign lenders and debt investors (located in a different country than the borrower). Investigating a sample of *Yankee bonds*, Miller and Puthenpurackal (2002) find that

investors require significant premiums for bonds issued by firms located in countries with weak creditor rights.<sup>3</sup> Directly related to bank lending, Mian (2006) finds, in a limited sample, that in emerging markets foreign banks rely more on formal legal remedies and are less likely to renegotiate than are their domestic counterparts. However, foreign banks succeed in recovering defaults at a rate less than half that of domestic lenders, even when controlling for borrower characteristics (Mian 2006). Similarly, Qian and Strahan (2007) find that as country-level creditor rights decrease, the syndicate participation of foreign banks also declines. This leads to the conclusion that domestic banks are better suited to seek remedy privately through renegotiation, whereas foreign banks rely more on their formal rights as creditors (Mian 2006; Qian and Strahan 2007). However, foreign lenders are a significant source of external capital for firms in emerging markets, as often the intra-country credit market is not sufficiently developed to satisfy the debt financing needs of all firms (La Porta et al. 1997; Miller and Puthenpurackal 2002). There is also evidence that when the rights of banks are weak the concentration of bank loan syndicates becomes more diffuse (Qian and Strahan 2007). This allows banks to reduce their risk in two ways. First, banks reduce their risk by increasing the diversification of their loan portfolio. Second, by increasing the number of participating banks in the syndicate, the borrower's ex post cost of restructuring increases, which reduces risk of strategic default (Bolton and Scharfstein 1996). This leads to my fourth and fifth hypotheses.

**H4:** Controlling for other determinants, if globalization of a firm is higher in countries with high (low) income levels, strong (weak) creditor rights, and strong (weak) property rights, the number of lenders participating in the loan syndicate will be lower (higher).

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<sup>3</sup> Public bond issuances in the U.S. by foreign firms are commonly referred to as *Yankee bonds* and provide a major source of capital for non-U.S. firms, \$643 billion in 2010 alone according to data compiled by Dealogic.

**H5:** Controlling for other determinants, if globalization of a firm is higher in countries with high (low) income levels, strong (weak) creditor rights, and strong (weak) property rights, syndicate participation by U.S. banks will be higher (lower).

## CHAPTER FOUR

### SAMPLE, VARIABLES, & SUMMARY STATISTICS

#### 4.1 Sample Selection

My sample covers all loans in the Dealscan database for non-utility and non-financial publicly traded U.S. firms with available financial information in Compustat from January 1999 to December 2013. SFAS 131 was required to be followed for all fiscal years beginning after December 1997, so the first mandated adopters have December 1998 year-ends. The sample starts the first year following implementation, 1999, to ensure that all financial information was disclosed under SFAS 131 and available to banks prior to loan origination. The Dealscan database is compiled by Thomson Reuters using information gathered from SEC filings and self-reported loan activity by participating banks. Dealscan provides the identity of the borrower and lender, as well as loan-specific data related to interest rate, maturity, collateral requirements, loan size, syndicate partners, and the location of loan origination. Each loan deal, or package, can be comprised of one or more loan facilities. There are many types of loan facilities or tranches; they include revolving lines of credit, term loans, and letters of credit. The priced and non-priced terms can vary across loan facilities in the same package. Due to this variance, each loan facility is treated as a separate observation in my sample. Accounting data are taken from two Compustat databases. Firm-level financial statement information is retrieved from the Compustat North America database. Country-specific segment financial information is retrieved from the Compustat Historical Segment database. All Compustat variables are measured as annual amounts. Following prior research, I require that the sum of the sales of reported segments be within one percent of total sales reported in the financial statements (Denis et al. 2002; Gande et al. 2009). This ensures that all segment sales are allocated geographically. Additionally, I restrict

my sample to only firm years with sales in excess of \$20 million to ensure that the results are not driven by small firms (Gande et al. 2009). My final sample consists of 15,214 loan contracts covering 9,001 firm-years for 2,931 U.S. public firms. Of these firms 1,880 (64.1 percent) report at least one foreign segment during my sample period.

Table 1 reports the sample selection procedure and the distribution of loan observations in my sample by year and loan type. My sample consists of 55.4 percent revolving loan facilities and 29.6 percent term loan facilities. This distribution is consistent with prior research (Kim et al. 2011).

#### **4.2 Variable Definitions & Summary Statistics**

Following prior literature, I measure total globalization in three ways (Mansi and Reeb 2002b; Gande et al. 2009; Li et al. 2011). First, a count of the number of disclosed foreign segments allows for an overall measure of the global dispersion of the firm. Next, the ratio of foreign sales to total sales allows me to measure the degree to which the firm relies on foreign sales. Third, the ratio of foreign assets to total assets indicates the extent to which resources are deployed abroad. The objective of this study is to disaggregate total globalization into country-specific globalization and test the impact that operating in systematically different countries has on debt contracting. As already discussed, there are three country-specific dimensions that prior research has shown to impact debt contracting: income level, creditor rights, and property rights. Next, I explain how I measure these variables.

The first country-level dimension that prior research has shown to impact the components of debt contracts is the income level of the country (Djankov et al. 2007; Qian and Strahan 2007; Bae and Goyal 2009). As proxy for income level, I use time-series country classifications generated annually by the World Bank. Each year in July, the World Bank assigns countries to

one of four groups based on the estimated gross national income per capita in U.S. dollars of the previous year. The four groups are high, upper middle, lower middle, and low. Table 2 panel A shows that 77.9 percent of my sample segments are located in high-income countries. Due to the skewed nature of my sample I label *Income Level* as high or low, with the low group capturing the three lowest income groups as measured by the World Bank.

The second country-specific dimension prior research has shown to impact debt contracting is creditor rights (Djankov et al. 2007; Qian and Strahan 2007; Bae and Goyal 2009). Djankov et al. (2007) collected data related to the power of creditors for 129 countries for all years from 1978 to 2003. Using this publicly available data, I create the metric of *Creditor Rights* and classify a segment as high if the country grants both of the following powers to creditors in bankruptcy. The first power is that secured creditors are paid first following the liquidation of a bankrupt firm instead of having other claims taking precedence. The second power is that secured creditors are able to seize collateral following an approved petition for reorganization without a court superseding or forestalling such action by imposing an automatic stay or “asset freeze.” If the country fails to grant *both* of these rights to creditors, then the segment is classified as low. Djankov et al. (2007) find that these two powers are the most important components of the set of powers used to construct their creditor rights index.<sup>4</sup> Creditor rights are available for the first six years of my sample; for all years following 2002, I use the creditor rights score as of 2003.<sup>5</sup> This increases the potential for measurement error, but I find that the correlation between the 1998 and 2003 creditor indices is .97. Table 2 shows that my

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<sup>4</sup> I am grateful to Andrei Shleifer for making these data publicly available at <http://scholar.harvard.edu/shleifer/publications?page=2>.

<sup>5</sup> In additional testing, I test my findings with the years after 2003 dropped from the sample. The results remain qualitatively similar.



sample includes 8,312 country-year segments that have creditor scores, with 35 percent of these segments classified as high creditor rights segments.

The third country-specific dimension previously shown to impact debt contracting is the degree to which a country enforces and respects the private property rights of lenders. Following prior literature, I measure property rights enforcement based on three general dimensions: rule of law, control of corruption, and the risk of government expropriation or contract repudiation (La Porta et al. 1998; Bae and Goyal 2009). As proxy for these dimensions, I use the World Governance Indicators developed by Kaufmann et al. (2011).<sup>6</sup> The World Governance Indicators are a collection of six dimensions of governance. Data are currently collected annually from 32 different sources, scaled, and combined to create the six aggregate indicators.<sup>7</sup> The World Governance Indicators are useful for broad cross-country comparisons (Kaufmann et al. 2011). The four World Governance Indicators that map most directly onto property rights enforcement are government effectiveness, regulatory quality, rule of law, and control of corruption. Government effectiveness captures perceptions related to the quality of civil service, policy formulation, and implementation. Included in this measure is how independent these qualities are from political pressure. Regulatory quality is a measure of the government's ability to formulate and implement policies and regulations that promote private sector expansion. Rule of law is designed to capture the perceptions of agents regarding the quality of contract enforcement and property rights. Finally, control of corruption is a proxy for the extent to which public officials refrain from using their power for private gain. I measure property rights relative to the U.S.

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<sup>6</sup> The World Governance Indicators database is updated annually and made publicly available at <http://info.worldbank.org/governance/wgi/index.aspx#home>.

<sup>7</sup> The World Governance Indicators were collected every two years from 1996 to 2002 and then every year starting in 2003. The number of sources has steadily increased from 11 in 1996, the first year data was collected, to 32 in 2012. It is also important to note that not all sources provide information about every country. However, half of the sources provide information for at least 100 countries.

using the aggregate percentile rank of each of the four relevant World Governance Indicators by country and year. I set the minimum aggregate percentile rank for inclusion in the strong property rights group as three standard deviations below the sample mean of the U.S. aggregate percentile rank. This choice makes it unlikely that a country classified as weak overlaps with the U.S. based on its aggregate percentile rank. Each country is then classified as having weak or strong *Property Rights* based on the aggregate percentile rank, as compared to the U.S. As shown in Table 2 panel A, 62.3 percent of the sample segments are located in countries with strong property rights.

Panels B and C of Table 2 show the reported segments allocated over multiple dimensions. I classify countries as high if they score high (or strong) on all dimensions and low (or weak) if they score low on all dimensions. Otherwise, they are classified as part of the mixed-rating group. Panel D of Table 2 shows that the pairwise correlation between all three country-level measures is significant at the 5 percent level with the correlation between income level and property rights being the strongest at 0.66.

As shown in Table 3, my sample covers 89 countries. Thirty-seven countries appear in my sample for 10 or more years, with 11 countries appearing every year during my sample period. With the exception of Canada (24.5 percent) and the U.K. (13.6 percent), no other country contributes more than 10 percent of the total segments in my sample. Botswana, Cameroon, Republic of the Congo, Haiti, Morocco, Tanzania, Ukraine, and Zimbabwe each appear only once during my sample period. I also observe that for the majority of the countries in my sample there is no change in income level or property rights during my sample period.<sup>8</sup>

After classifying countries based on country-level institutions, I disaggregate the previously defined measures of globalization into country-level groups utilizing the country-

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<sup>8</sup> Creditor rights are held constant for all years after 2002 due to data availability.

specific segment information disclosed by firms. To disaggregate the number of disclosed foreign segments, I count the number of country-specific segments that fall into each income level group, creditor rights group, or property rights group by facility observation. To construct disaggregated measures of the foreign sales and foreign assets ratios, I create ratios similar to total globalization, but with the numerator set as foreign sales (assets) by income level group, creditor rights group, or property rights group. I also include the amount of each globalization measure that is not country specific.<sup>9</sup>

After disaggregating my measures of globalization, I merge the bank loan information with the prior year financial statement data (Chava and Roberts 2008). This ensures that the information being contracted on was available to the lenders prior to loan inception<sup>10</sup>. The dependent variables are the priced and non-priced terms. Following prior literature, *Spread* proxies for the priced term of the bank loan and is measured as the all-in spread drawn (including any upfront or annual fees) of the facility in basis points above the London InterBank Offer Rate (LIBOR) (Bharath et al. 2008; Bae and Goyal 2009; Kim et al. 2011; Li et al. 2011). Next, I measure the following non-priced terms: *Amount*, which is the facility amount in millions of dollars; *Maturity*, which is the facility maturity in months; and *Security*, which is an indicator variable taking the value of one if the facility is secured and zero otherwise. Finally, to measure the size of the loan syndicate, I create a variable *Syndicate Participants* that is equal to the number of lenders participating in each loan facility.

To measure the participation by U.S. headquartered lenders I hand collect the country of origin for a selection of lenders in my sample. I drop any loan observations if the data to measure each lender's allocation is not present or if the total loan allocation does not equal one

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<sup>9</sup> Appendix B provides an example of how one observation is split into groups across the dimensions in this study.

<sup>10</sup> I am grateful to Michael Roberts for making public the data necessary to merge the Compustat and Dealscan databases at <http://finance.wharton.upenn.edu/~mrrrobert/styled-9/styled-12/index.html>.

hundred percent. I only keep borrowing firms that report at least one foreign segment in the year preceding the loan origination. I am then able to identify the headquarter location of 2,748 of the 3,199 lenders in my sample. Finally, I create a variable *U.S. Ownership* measured as the percentage of each loan that is owned by a U.S. headquartered lender. My final sample for testing H5 is reduced to 2,261 loan observations and the mean U.S. loan ownership is 75%.

Next, I create variables to control for firm and loan characteristics that have been shown to impact debt contracts. These include measures of firm size, profitability, leverage, tangibility, market-to-book ratio, default probability, return volatility, loan purpose, and loan type (Strahan 1999; Bharath et al. 2008; Bae and Goyal 2009; Kim et al. 2011; Li et al. 2011). I measure firm *Size* using the total assets of the firm. *Profitability* is the ratio of operating income to total assets. *Leverage* is the ratio of total long-term debt to total assets. *Tangibility* is measured as the ratio of net property, plant, and equipment to total assets. *Market-to-Book* is measured by summing the public value of equity and book value of long-term debt, and dividing by total assets. *Expected Default Probability (EDF)* is measured following Bharath and Shumway (2008) as a forward-looking measure of a firm's expected default frequency. *Return Volatility* is measured as the standard deviation of monthly stock returns over the four years prior to loan inception. I also include indicators for *Loan Purpose* (e.g., asset acquisition, takeover, debt restructuring, working capital, etc.) and *Loan Type* (e.g., revolving loan, term loan, etc.).

Table 4 reports summary statistics for firm- and loan-specific characteristics for all loan contracts and subgroups for global and domestic firms. Panel A shows that for globalized firms the average number of foreign segments reported is 2.45, with 39.6 percent of these being country-specific segments. The average foreign sales ratio is 28.9 percent, with 27.7 percent of

this ratio allocated by country. The average foreign assets ratio is 4.8 percent, with 39.6 percent of this ratio attributed to individual countries.

Table 4, panel B, shows that global firms pay lower spreads, are less likely to have secured loans, and have, on average, larger loans. Global firms, however, borrow with shorter maturities. Loans to global firms also, on average, have more participating lenders. As shown in panel C of Table 4, global firms are larger, more profitable, and have higher market-to-book ratios. Global firms are also less leveraged, rely less on tangible assets, have more-volatile stock returns, and are less likely to default.

Table 5 displays the Pearson pairwise correlation matrix between loan- and firm-level characteristics. As expected, the number of foreign segments is highly correlated with the foreign sales ratio, but not as strongly related to the foreign asset ratio. Loan spread is significantly negatively correlated with all measures of globalization except for the country-specific foreign sales ratio. Maturity has weak negative correlations with all the general measures of globalization but shows no relationship to the country-specific measures of globalization. Whether a loan is secured is negatively correlated to all measures of globalization including the country-specific measures. The size of the loan is positively correlated with all measures of globalization. The number of lenders participating in the loan is positively correlated to all measures of globalization except for the country-specific foreign sales ratio. Loan spread is positively correlated with maturity and collateral requirements and negatively correlated with loan amount and the number of syndicate participants. Loan maturity is positively correlated with collateral requirements and the number of syndicate participants, and negatively correlated to loan amount. Collateral requirements are negatively correlated to loan size and the number of

syndicate participants. Finally, loan size is positively correlated to the number of syndicate participants.

**CHAPTER FIVE**  
**RESEARCH DESIGN**

To evaluate the impact of country-level diversification on loan characteristics, I use the following general regression specification:

$$\begin{aligned}
 \text{Loan Feature} = & \beta_0 + \beta_1 \text{High Country} - \text{Specific Globalization} \\
 & + \beta_2 \text{Low Country} - \text{Specific Globalization} + \beta_3 \text{Non} - \text{Country} - \\
 & \text{Specific Globalization} + \sum \beta_4 \text{Loan Controls} + \sum \beta_5 \text{Firm Controls} \\
 & + \sum \beta_6 \text{Year Indicators} + \sum \beta_7 \text{Industry Indicators} + \mu
 \end{aligned} \tag{1}$$

The dependent variable *Loan Feature* refers to one of the following loan-contract-specific features: (1) the loan spread; (2) the non-priced terms, maturity or the likelihood that the loan includes the requirement of collateral; (3) the number of participating lenders in the syndicate; or (4) the percentage of the loan that is owned by a U.S. headquartered bank. The measure of country-specific globalization is the amount of each globalization measure (i.e., sales, assets, or number of segments) that can be attributed to a specific country group based on income level, creditor rights, property rights, or the intersection of these dimensions. When evaluating countries over multiple dimensions of country-level institutions (e.g., income level and creditor rights), I place countries into one of three groups, a high group for countries classified as high (or strong) for all dimensions, a low group for countries classified as low (or weak) across all dimensions, and finally a mixed group for countries that score high in at least one dimension and low in at least one dimension. For regression analysis of observations with globalization spread over multiple dimensions of income level, creditor rights, or property rights, I specify the following general model:

$$\text{Loan Feature} = \beta_0 + \beta_1 \text{High Country} - \text{Specific Globalization}$$

$$\begin{aligned}
& +\beta_2 \text{Low Country – Specific Globalization} + \beta_3 \text{Mixed Country –} \\
& \text{Specific Globalization} + \beta_4 \text{Non – Country – Specific Globalization} + \\
& \sum\beta_5 \text{Loan Controls} + \sum\beta_6 \text{Firm Controls} + \sum\beta_7 \text{Year Indicators} \\
& + \sum\beta_8 \text{Industry Indicators} + \mu
\end{aligned}
\tag{2}$$



## CHAPTER SIX

### RESULTS

#### 6.1 Test of H1

Table 6 reports the results of the test of H1, which is the impact of country-level globalization on the loan spread. Column 1 shows that as the number of foreign segments reported is higher, loan spread is lower. This result is consistent with Li et al. (2011). In column 2, I disaggregate the number of foreign segments into high- and low-income groups based on the World Bank classification system. Consistent with my hypothesized prediction, I find that if the number of segments reported in high-income countries is higher, spread is lower, and more reported segments in low-income countries results in a higher loan spread. I also find that if the number of non-country specific segments reported is higher, loan spreads are lower. Columns 3 and 4 report similar findings related to disaggregating foreign segments based on creditor rights and property rights.

I next test the impact of allocating the number of reported foreign segments across multiple dimensions. The results of this test are shown in Table 7. Column 4 indicates that reporting a foreign segment in a country classified as high across all dimensions, as opposed to reporting a segment in a country classified as low in all dimensions, is predicted to lead to a 5.25 percent drop in loan spread.

In Table 8, I change the measure of globalization from foreign segments to the foreign sales ratio.<sup>11</sup> Similar to prior research and my results in Table 6, I find that if a higher ratio of foreign sales to total sales is reported, loan spreads will be lower (column 1). While the results are not as conclusive as the prior measure of globalization, there is a consistent pattern that, if

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<sup>11</sup> In an effort to conserve space, I include, but do not report, the regression coefficients for the loan and firm characteristic controls in Tables 8, 9, and 10.

foreign sales are higher in low-income countries, loan spreads are higher. Additionally, if the foreign sales ratio in segments that are not country specific is higher, there is a significantly lower loan spread. It is possible that reporting sales in a particular country is a sign that a firm is too heavily concentrated in a foreign country and lacks proper diversification. This may also explain why sales in non-country specific segments appear to be evaluated as less risky. This result requires further investigation beyond the scope of this study.

I report the impact of the foreign assets ratio on the loan spread in Table 9. Results show that when the foreign assets ratio is disaggregated across each country-level dimension (e.g., income level), there is a significantly lower loan spread for the high-rated country groups (columns 2, 3, and 4). The same tendency holds as the foreign assets ratio is disaggregated across multiple dimensions (columns 5, 6, 7, and 8). This indicates that banks offer lower interest rates to firms that deploy assets in high income countries, countries with strong creditor rights countries, or those with strong property rights. However, the largest benefit is given to firms that operate in countries that have all three of these attributes.

Collectively, all three measures of globalization, when disaggregated into income level, creditor rights, and property rights, provide support for H1.

## **6.2 Test of H2**

As shown in Table 10, the effect of globalization on the probability that a loan is secured is not consistent across all measures or country characteristic dimensions. Columns 1 to 4 indicate that there is no relationship between the number of foreign segments reported and collateral requirements. However, Column 5 indicates that if the foreign sales ratio is higher in high-income countries, the probability of a loan being secured is lower. This result is inconsistent with the prediction in H2a. On the other hand, columns 6 and 7 indicate that if the foreign sales

ratio is higher in countries with weak creditor rights or with weak property rights, the secured probability is lower. This result is consistent with the hypothesized relationship in H2b and H2c, and concordant with the findings in Qian and Strahan (2007) that debt is unlikely to be secured in countries with weak creditor rights. The opposite results for income level and property rights are interesting given their high correlation (0.66). This alleviates some of the concern that income level and property rights are measuring the same underlying country-level characteristics.

The overlap of all three dimensions (income level, creditor rights, and property rights) in column 8 of Table 10 indicates no effect on the secured probability for countries that are high or low across all dimensions. However, there is a strong negative effect for countries that vary across dimensions. It is possible that the foreign sales ratio is not the proper measure to assess collateral requirements, as the results for the foreign assets ratio by country, shown in Table 10 columns 9 to 12, are more consistent across all dimensions. Columns 9 to 11 show that if the foreign assets ratio is higher in countries with low income, weak creditor rights, or weak property rights, the secured probability is lower. This is consistent with the hypothesized relationship in H2. Column 12 shows that engaging in the mean level of globalization with respect to the foreign assets ratio in a wealthy country with strong creditor rights and enforcement versus a poor country with weak creditor rights and enforcement is predicted to lead to a 12.7 percent higher probability of the loan being secured. This finding suggests that, for firms reliant on higher degrees of foreign assets, those assets are more likely to be secured in countries where they can be seized in the event of a default. Taken together with the results of Table 9, these findings are consistent with loan spread and security requirements acting as substitutes rather than as complementary components of debt contracts.

### **6.3 Test of H3**

Table 11 provides evidence in support of H3. H3 predicts that there will be no difference in the maturity of loans between firms operating in high or low risk environments. Regardless of the globalization measure or the country-level characteristic, I find no difference between the high or low country-level groups. Diamond (1991) suggested that there exists a non-monotonic relationship between firm risk and maturities. To test my sample for the possibility of this result, I evaluate the relationship between loan maturity and the level of globalization that occurs in the mixed country group. The mixed-country group captures the reported activity in segments located in countries that are classified as high and low in at least one of the country-level dimensions. As shown in column 12 of Table 11, if the foreign assets ratio is higher in the mixed country group, I find that this is associated with a longer length of loan maturity in relation to higher levels of assets deployed into the high country group. This result is consistent with the argument that high quality borrowers will prefer, and accept, short maturities and medium risk borrowers will be offered, and accept, longer maturities. However, I do not find similar results when testing the differences between the low country group and the mixed country group. I also find no results when evaluating these same tests using the number of foreign segments or the foreign sales ratio.

### **6.4 Test of H4**

My fourth hypothesis states that as globalization increases in high-risk countries, the number of banks participating in a syndicated loan increases. The test of this hypothesis is shown in Table 12. Columns 1 and 3 show that if the foreign assets ratio is higher in countries with low income or weak property rights, the number of participating lenders will be higher. As shown in column 4, the magnitude of this increase in syndicate size is largest when the foreign asset ratio

is higher in low income countries with weak creditor rights and weak enforcement. These results are consistent with H4; namely, that as firms deploy more assets in riskier countries, lenders protect themselves by diversifying their loan portfolio and increasing the cost of strategic default to the firm.

Table 13 suggests that this result does not hold when the globalization proxy is the number of foreign segments or the foreign sales ratio. In fact, when the countries are grouped together based on property rights, I find results opposite to the predicted relationship in H4. These tests suggest that if the number of foreign segments or the foreign sales ratio is higher in high property rights countries, the number of lenders participating in the loan syndicate will be lower while higher reported values in the low property rights countries will cause the number of participating lenders to be lower. However, when all three country-level dimensions are tested, I find no difference between higher levels of globalization in the high or low country-level groups.

### **6.5 Test of H5**

Table 14 provides evidence in support of H5. I find that higher levels of globalization regardless of country-level characteristics are associated with lower participation by U.S. lenders. However, as predicted in H5, this decrease is larger in magnitude for firms that report higher levels of globalization in low income level, weak creditor rights, and weak property rights countries. Specifically, Columns 1 and 3 show that, as the number of foreign segments reported in low income or weak property rights countries is higher, the percentage of U.S. banks participating in the loan syndicate is lower in relationship to higher reported segments in high income or strong property rights countries. Column 4 shows that when all three country level dimensions are considered this result holds. Column 5 and Column 8 report similar results using the foreign sales ratio as the globalization proxy. Columns 9 to 12 report no relationship when

evaluating the foreign assets ratio as the globalization proxy. Overall, I find support for H5 when globalization is measured as the number of foreign segments or the foreign sales ratio.

## CHAPTER SEVEN

### ADDITIONAL TESTS

While the choice of country-level dimensions was guided by theory and prior research, there exist other measures used in the literature. Additionally, for the three measures chosen; income level, creditor rights, and property rights, choices were made as to how to calculate these measures using the available data. To strengthen my results, I propose six additional methods for aggregating globalization across countries.

In my original tests I measure income level as high if the World Bank classifies a country as having a high income level. I measure the income level as low for all other World Bank classifications (upper middle, lower middle, low). In additional testing I take into account all four classifications and measure *ILMED* as high if the World Bank classification is above the sample median, low otherwise.

Originally, I measure creditor rights as high if the country's bankruptcy law affords priority to secured creditors and allows creditors to seize collateral following an approved petition for reorganization, and low otherwise. In additional testing, I measure creditor rights using all four criteria as prescribed by La Porta et al. (1997) and Djankov et al. (2007). This method creates a score, zero to four, for each country in each year by adding one for the existence of each right of four rights of secured creditors in bankruptcy. These rights include the two previously mentioned rights as well as two additional rights; (1) if the creditor must consent when a debtor files for reorganization and (2) if an administrator rather than management runs the firm during reorganization. *CRMED* is measured as high if country's creditor rights score is above the sample median; otherwise it is measured as low. Additionally, while the U.S. is classified as high income and high property rights in all years of my sample, the creditor rights of

the U.S. is not. In fact, on the zero to four creditor rights scale developed by La Porta et al. (1997) the U.S. scores a one. Taking this into account, I create a measure *CRUSA* that is labeled as strong if the country has a creditor rights score above the U.S. score of one, weak otherwise. My measurement of *CRMED* and *CRUSA* produces an identical variable. The results for tests using these country-level intuitions are the same. Due to this only *CRMED* is discussed and shown in the tables.

Property rights are measured as compared to the sample mean of U.S. property rights. To add to the robustness of my tests, I also split the property rights scores at the median and classify a country as having high property rights, *PRMED*, if they are above the sample median, and low otherwise.

Previous research has underscored the necessity for creditor's to not only have rights, but for these rights to be enforced (Bae and Goyal 2009). In addition to using property rights to measure debt enforcement, I also use an additional measure borrowed from Djankov et al. (2008). Using a case study survey sent to 344 attorneys and 34 judges in 88 countries, a measure of debt enforcement efficiency was calculated. The benefit of this measure of debt enforcement is that the same case study was used for all participants which allows for better comparison across jurisdictions. I measure *DEFF* as high if the country's debt enforcement efficiency is above the sample median, low otherwise.

The measure of property rights that I use in my main tests is calculated based on four of the six World Governance Indicators. For my tests I selected the four indicators that I felt best mapped into property rights enforcement: Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. However, to increase the robustness of my results, I now include the two additional governance indicators; (1) Voice and Accountability, and (2) Political



Stability and Absence of Violence. Using all six World Governance Indicators, I create two additional measures of property rights enforcement. First, *PR6MED* is classified as strong if the country is above the sample median using all six World Governance Indicators, weak otherwise. Second, *PR6USA* is classified as strong if the percentile ranking is not more than three standard deviations below the sample mean for the U.S. percentile ranking, weak otherwise.

The results of testing H1, that interest rate spreads will be higher if firms are more globalized into low income level, weak creditor rights, or weak property rights countries, using the six additional country-level institutional variables, are consistent with my prior conclusions. I continue to find the strongest results when aggregating countries based on income levels and property rights. I also continue to reach the strongest conclusions when using the number of foreign segments as my measure of globalization.

In my prior tests of H2, that higher levels of globalization in low income level, weak creditor rights, or weak property rights countries will result in lower probabilities of loans being secured, I found the most conclusive results when measuring globalization as the foreign assets ratio. In my additional tests, I continue to find this to be true in regards to my measures of creditor rights and property rights, with the exception of the debt enforcement efficiency. In this case, I find results opposite of the hypothesized predictions.

Evaluating the use of the new country-level variables provides quantitatively similar results for the re-testing of H3, loan maturities, and H5, percentage of loan ownership by U.S. banks. Utilizing these additional country-level variables related to property rights continues to provide evidence opposite of the hypothesized relationship in H4. H4 predicts that higher levels of globalization in weak property rights countries will be associated with more banks being included in the loan syndicate. However, I find the opposite when measuring globalization as

the foreign sales or assets ratios. I continue to find the hypothesized results when measuring the globalization of the firm using the number of foreign segments. I also find support for H4 when measuring globalization as the foreign sales or assets ratios and aggregating countries based on the additional creditor rights variable. I believe that these contradictory results give way to an opportunity for further study to evaluate why the different measures of globalization have different relationships with property rights.

Overall, the additional country-level variables support my previous conclusions.<sup>12</sup> My additional country-level variables were chosen with data limitations in mind and my preference for using publically available data that has been used previously in the debt literature stream. In general, income level has been used sparingly in the debt literature and is likely the least subjective measure that I include in my analysis. The data is taken from the World Bank and with my sample composition being heavily skewed towards high income countries, I find quantitatively similar results regardless of how I aggregate countries based on income level.

Creditor rights scores are the most frequently used measure in my analysis. Since their introduction in La Porta et al. (1997), they have been used frequently in cross-country debt and equity studies (Qian and Strahan 2007; Bae and Goyal 2009; Gande et al. 2009). To my knowledge, there exists no other publically available alternative. My initial analysis focused on the two components of creditors' rights that Djankov et al. (2007) claim to be the most relevant to lenders. I find quantitatively similar results when expanding the measure to include all four creditors' rights as described in La Porta et al. (1997) and Djankov et al. (2007).

Finally, property rights scores, or the enforcement of creditor rights, is becoming more heavily used in the literature. This is likely the most subjective measure I use in aggregating my data. The World Governance Indicators that I use in my study are being used in a variety of

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<sup>12</sup> The results of these additional tests are shown in tables 15 – 29.

settings, but my study is that first that I am aware of to apply them in a debt setting. There exist many private databases that attempt to measure property rights across countries, including the International Country Risk Guide, International Country Risk, and Property rights index from the Index of Economic Freedom. I was unable to include these databases in my analysis due to lack of availability. However, they all purport to measure similar constructs of rule of law, political corruption, and risk of government expropriation. I believe that I adequately measure these constructs, as well using the time-series data made publically available through the World Governance Indicators.

As previously noted, the creditor rights index data ends after 2003 (Djankov et al. 2007). My results are based on the assumption that creditor rights scores remain constant throughout the remaining years of my sample. In this section, I re-test selected regressions after dropping observations post-2003 to ensure that my conclusions are consistent. I selected tests to re-perform based on results that were statistically significant when aggregating globalization based on all three country-level dimensions: H1, H2, H4, and H5.

First, I investigate the conclusions surrounding H1, that as firms increase globalization in countries with high (low) income level, creditor rights, and property rights interest rate spreads will decrease (increase). The only multiple country-level dimension test of H1 that provided evidence for the expected conclusion measured globalization as the number of foreign segments. This result was shown in Table 7 Column 4. I find that dropping all observations after 2003 does not change my conclusion related to H1, as shown in Table 30 Column 1.

Then, I investigate the results of H2. I was able to suggest that as firms increase globalization, measured by the foreign assets ratio, in countries with high (low) income level, creditor rights, and property rights the likelihood of a loan being secured increased (decreased).

The support for this conclusion is shown in Table 10 Column 12. As shown in Table 30 Column 2, after dropping all observations after 2003 I find that the results are quantitatively similar.

Next, I test the findings surrounding H4 that an increase in globalization, still measured as the foreign assets ratio, in countries with high (low) income levels, creditor rights, and property rights will lead to a decrease (increase) in the number of lenders participating in the loan syndicate. The support for this conclusion is shown in Table 12 Column 4. After keeping only observations pre-2004, I come to the same conclusion; shown in Table 30 Column 3.

Finally, I re-investigate H5, which hypothesizes that an increase in globalization, measured as either the number of foreign segments or the foreign sales ratio, in countries with high (low) income level, creditor rights, and property rights increases (decreases) the amount of loan ownership by U.S. banks. Table 14 Columns 4 and 8 show support for the original conclusions. After dropping the observations after 2003 I no longer find results supporting my hypothesis. The test of H5 was the smallest sample of observations in my test with only 2,261 observations. After dropping post 2003 observations the number of loan package observations totals just 1092. It is possible that the lack of a statistically significant relationship could be due to the small sample size. The results are shown in Table 30 Columns 4 and 5.

## CHAPTER EIGHT

### CONCLUSION & LIMITATIONS

#### 8.1 Conclusion

My analysis suggests that multinational firms provide valuable information regarding the country-level characteristics and size of their foreign operations, as it relates to debt contracting. I find that firms operating in countries with high incomes, strong creditor rights, and strong property rights enforcement receive lower interest rate spreads and are more likely to have secured loans than are firms with segments in countries with low incomes, weak creditor rights, and weak enforcement of property rights. This result is consistent with the theories of moral hazard and adverse selection, which argue that price and collateral requirements act as substitutes. I also find that the length of loan maturity is unaffected by the specific countries in which firms operate. Finally, I find that higher levels of globalization into low income countries, with weak creditor rights, and weak property rights enforcement is associated with more lenders participating in the loan syndicate and less participation by U.S. headquartered lenders. The increase in the number of syndicate members increases the cost of re-negotiation for the borrower while allowing the lender to increase the diversification of their loan portfolio. The decrease in U.S. lender ownership suggests that domestic lenders are more capable of recovering defaulted loans than are foreign (U.S.) lenders.

My results contribute to the literature in the following ways. I add to the literature surrounding the adoption of SFAS 131 by showing that the additional granularity provided from its application is useful in a bank loan setting. I also contribute a disaggregated method of measuring country-specific globalization; this measure is not limited only to bank loan settings, as these country level characteristics have been shown to impact a variety of other factors. Future

studies could investigate the impact that country-specific globalization has on equity or public debt markets. Finally, my results imply that there is an association between country-specific globalization and how banks, as significant providers of external capital, set the terms of loan contracts.

## **8.2 Limitations**

However, my study is not without limitations. While SFAS 131 has increased the granularity of segment disclosures and allows researchers to view information regarding the operations of a firm at a country level when operations in a single country are substantial enough to be considered “material,” there is still a large portion of all globalization measures that cannot be disaggregated due to lack of disclosure. The inability to fully disaggregate globalization increases the risk of measurement error. SFAS 131 also allows for some latitude in management discretion in determining what constitutes a material segment. Douppnik and Seese (2001) find wide-ranging materiality levels used by firms. In their sample of *Fortune* 500 firms they observe firms that set their materiality limits as low as 2 percent and others that set it at levels greater than 10 percent. An additional limitation of SFAS 131 is its permissiveness in deciding what segment level information a company will report. Some firms disclose foreign sales, but not foreign assets, and vice versa, at a country level. So, while I may be able to identify a segment as operating in a specific country, I am not guaranteed to be able to measure the segment’s sales or assets. Similarly, data regarding private bank loans are limited. My sample utilizes the Dealscan database for loan characteristics, a database that is skewed towards large firms obtaining loans from large banks. This limits my ability to generalize to smaller multinational firms.

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**APPENDIX A**  
**Variable Definitions**

<b>Country Level by Year</b>	<b>Definition</b>	<b>Data Source</b>
<i>Income Level</i>	= 1 if country is rated as high income by the World Bank based on gross national income per capita, 0 otherwise.	World Bank @ <a href="http://siteresources.worldbank.org/DATASTATISTICS/Resources/OGHIST.xls">http://siteresources.worldbank.org/DATASTATISTICS/Resources/OGHIST.xls</a> .
<i>Creditor Rights</i>	= 1 if the country gives priority to secured creditors in bankruptcy and allows creditors to seize collateral following an approved petition for reorganization, 0 otherwise.	Obtained from Andrei Shleifer's Harvard website @ <a href="http://scholar.harvard.edu/files/shleifer/files/jfe_2007__dataset_oct08.xls">http://scholar.harvard.edu/files/shleifer/files/jfe_2007__dataset_oct08.xls</a> .
<i>Property Rights</i>	= 1 if the country's property rights percentile ranking (measured using the World Governance Indicators) is not lower than 3 standard deviations below the U.S. sample mean percentile ranking, 0 otherwise. The following 4 governance indicators are used in calculating this variable: Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption.	World Governance Indicators @ <a href="http://info.worldbank.org/governance/wgi/index.aspx#home">http://info.worldbank.org/governance/wgi/index.aspx#home</a> .
<b>Loan Level by Facility</b>	<b>Definition</b>	<b>Data Source</b>
<i>Log(Spread)</i>	The natural log of basis points over the London InteBank Offer Rate.	WRDS - Thomson Reuters LPC Dealscan
<i>Log(Maturity)</i>	The natural log of the maturity in months.	WRDS - Thomson Reuters LPC Dealscan
<i>Security</i>	= 1 if the loan is secured by collateral, 0 otherwise.	WRDS - Thomson Reuters LPC Dealscan
<i>Log(Loan Amount)</i>	The natural log of Loan Amount in millions US\$.	WRDS - Thomson Reuters LPC Dealscan
<i>Log(SynNum)</i>	The natural log of the number of lenders participating in the loan.	WRDS - Thomson Reuters LPC Dealscan
<i>US%</i>	The percentage of the syndicated loan that is owned by U.S. headquartered banks.	WRDS - Thomson Reuters LPC Dealscan
<i>Loan Type</i>	Dummies for 3 primary loan types in my sample (Revolving, Term, 364-day) and other.	WRDS - Thomson Reuters LPC Dealscan
<i>Loan Purpose</i>	Dummies for 8 primary loan purposes (General, Refinancing, Working Capital, Takeover, Aquisition, Commercial Paper, Leveraged Buyout, Project Finance) and other.	WRDS - Thomson Reuters LPC Dealscan

## APPENDIX A (Continued)

<b>Firm Level by Year</b>	<b>Definition</b>	<b>Data Source</b>
<i>Foreign Segments</i>	The number of foreign segments reported.	Compustat Segment
<i>Foreign Sales Ratio</i>	The ratio of foreign sales reported over total sales.	Compustat Segment and Compustat Annual
<i>Foreign Assets Ratio</i>	The ratio of long lived assets over total assets.	Compustat Segment and Compustat Annual
<i>Log(Assets)</i>	The natural log of total assets proxies for firm size.	Compustat Annual
<i>Market-to-book</i>	The market value of equity + book value of liabilities scaled by total assets.	Compustat Annual and CRSP
<i>Leverage</i>	Long term debt divided by total assets.	Compustat Annual
<i>Profitability</i>	Operating income before depreciation divided by total assets.	Compustat Annual
<i>Tangibility</i>	Net property, plant, and equipment divided by total assets.	Compustat Annual
<i>EDF</i>	The annual expected default frequency. This variable is calculated following Bharath and Shumway (2008), using the KMV-Merton distance to default model. This model utilizes total debt from Compustat, shares outstanding and price information from CRSP.	Compustat Annual and CRSP
<i>Return volatility</i>	The standard deviation of monthly stock returns over the prior four years.	CRSP
<i>Year</i>	Year dummies.	Compustat Annual
<i>Industry</i>	One digit SIC code dummies.	Compustat Annual

## APPENDIX B

### Example of Dissagregation of Globalization into Country Specific Groups

Firm Annual Financial Statement Data - From Compustat

Total Net Sales	\$	50
Total Assets	\$	100

Segment Annual Financial Statement Data - From Compustat Historical Segments

Foreign Segment Name	Sales	Long Lived Assets	Country Income Level	Country Creditor Rights	Country Property Rights
Mozambique	\$ 7		Low	Strong	Weak
New Zealand	\$ 15	\$ 10	High	Strong	Strong
Taiwan		\$ 20	High	Weak	Weak
Europe	\$ 10	\$ 30			
Total Foreign Assets/Sales	<u>\$ 32</u>	<u>\$ 60</u>			

Globalization Measure	Overall	Single Dimension					
		Income Level		Creditor Rights		Property Rights	
		High	Low	Strong	Weak	Strong	Weak
Country Specific Segments	3	2	1	2	1	1	2
Non-Country Specific Segments	1						
# of Foreign Segments	<u>4</u>						
Country Specific Foreign Sales Ratio	0.44	0.30	0.14	0.44	0.00	0.30	0.14
Non-Country Specific Foreign Sales Ratio	0.20						
Foreign Sales Ratio	<u>0.64</u>						
Country Specific Foreign Assets Ratio	0.30	0.30	0.00	0.10	0.20	0.10	0.20
Non-Country Specific Foreign Assets Ratio	0.30						
Foreign Assets Ratio	<u>0.60</u>						

**APPENDIX B (Continued)**

Globalization Measure	Two Dimensions									
	Overall	Income Level/Creditor Rights			Income Level/Property Rights			Creditor Rights/Property Rights		
		High/Strong	Low/Weak	Mixed	High/Strong	Low/Weak	Mixed	Strong/Strong	Weak/Weak	Mixed
Country Specific Segments	3	1	0	2	1	1	1	1	1	1
Non-Country Specific Segments	1									
# of Foreign Segments	<u>4</u>									
Country Specific Foreign Sales Ratio	0.44	0.30	0.00	0.14	0.30	0.14	0.00	0.30	0.00	0.14
Non-Country Specific Foreign Sales Ratio	0.20									
Foreign Sales Ratio	<u>0.64</u>									
Country Specific Foreign Assets Ratio	0.30	0.10	0.00	0.20	0.10	0.00	0.20	0.10	0.20	0.00
Non-Country Specific Foreign Assets Ratio	0.30									
Foreign Assets Ratio	<u>0.60</u>									

**APPENDIX B (Continued)**

	Overall	Three Dimensions		
		Income Level/Creditor Rights/Property Rights		
		High/Strong/Strong	Low/Weak/Weak	Mixed
Globalization Measure				
Country Specific Segments	3	1	0	2
Non-Country Specific Segments	1			
# of Foreign Segments	<u>4</u>			
Country Specific Foreign Sales Ratio	0.44	0.30	0.00	0.14
Non-Country Specific Foreign Sales Ratio	<u>0.20</u>			
Foreign Sales Ratio	<u>0.64</u>			
Country Specific Foreign Assets Ratio	0.30	0.10	0.00	0.20
Non-Country Specific Foreign Assets Ratio	<u>0.30</u>			
Foreign Assets Ratio	<u>0.60</u>			

**APPENDIX C**  
**Variable Definitions for Tables 15 - 29**

<u>Country Level by Year</u>	<u>Definition</u>	<u>Data Source</u>
<i>ILMED</i>	= 1 if the country's income level rated by the World Bank based on gross national income per capita is above the sample median, 0 otherwise.	World Bank @ <a href="http://siteresources.worldbank.org/DATASTATISTICS/Resources/OGHIST.xls">http://siteresources.worldbank.org/DATASTATISTICS/Resources/OGHIST.xls</a> .
<i>CRMED</i>	= 1 if the country's creditor rights score is above the sample median, 0 otherwise. The creditor rights score is a aggregate score from 0 - 4 adding 1 if each of the following rights exists: (1) Whether there are restrictions, such as creditor consent, when a debtor files for reorganization; (2) Whether or not their is an asset freeze imposed by the court following a petition for reorganiation; (3) Whether or not if during liquidation secured creditors are paid first; (4) If an administrator rather than management runs the firm during reorganization.	Obtained from Andrei Shleifer's Harvard website @ <a href="http://scholar.harvard.edu/files/shleifer/files/jfe_2007__dataset_oct08.xls">http://scholar.harvard.edu/files/shleifer/files/jfe_2007__dataset_oct08.xls</a> .
<i>PRMED</i>	= 1 if the country's property rights percentile ranking (as measured by the World Governance Indicators) is above the sample median, 0 otherwise. The following 4 governance indicators are used in calculating this variable: Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption.	World Governance Indicators @ <a href="http://info.worldbank.org/governance/wgi/index.aspx#home">http://info.worldbank.org/governance/wgi/index.aspx#home</a> .

**APPENDIX C (Continued)**

<b>Country Level by Year</b>	<b>Definition</b>	<b>Data Source</b>
<i>DEFF</i>	= 1 if the country's debt enforcement efficiency (measured using Djankov et al. 2008) is above the sample median, 0 otherwise.	Obtained from Andrei Shleifer's Harvard website @ <a href="http://scholar.harvard.edu/files/shleifer/files/debt_enforcement_database_jpe.xls">http://scholar.harvard.edu/files/shleifer/files/debt_enforcement_database_jpe.xls</a>
<i>PR6MED</i>	= 1 if the country's property rights percentile ranking (as measured by the World Governance Indicators) is above the sample median, 0 otherwise. The following 6 governance indicators are used in calculating this variable: Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption, Voice and Accountability, and Political Stability and Absence of Violence.	World Governance Indicators @ <a href="http://info.worldbank.org/governance/wgi/index.aspx#home">http://info.worldbank.org/governance/wgi/index.aspx#home</a> .
<i>PR6USA</i>	= 1 if the country's property rights percentile ranking (measured using the World Governance Indicators) is not lower than 3 standard deviations below the U.S. sample mean percentile ranking, 0 otherwise. The following 6 governance indicators are used in calculating this variable: Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption, Voice and Accountability, and Political Stability and Absence of Violence.	World Governance Indicators @ <a href="http://info.worldbank.org/governance/wgi/index.aspx#home">http://info.worldbank.org/governance/wgi/index.aspx#home</a> .



**TABLE 1**  
**Sample Selection and Distribution by Year and Loan Type**

**Panel A: Sample Selection**

	<u>Firms</u>	<u>Loans</u>
Loans in DealScan matched to firms in Compustat from 1999 - 2013	5,458	34,763
Less:		
Observations with sum of segment sales not within +/- 1% of total sales	(190)	(4,680)
Loans to utilities or financial firms	(897)	(7,276)
Observations with total sales less than \$20 million	(351)	(881)
Observations missing necessary control variables	(1,089)	(6,712)
Total Observations	2,931	15,214

**Panel B: # of Loans by Year and Loan Type - Global Firms**

<u>Year</u>	<u>364- Day Facilities</u>	<u>Term Loans</u>	<u>Revolving Loans</u>	<u>Other Loan Types</u>	<u>All Loan Types</u>
1999	167	348	416	57	988
2000	167	199	318	45	729
2001	194	177	332	36	739
2002	192	179	300	27	698
2003	149	164	286	29	628
2004	89	194	373	26	682
2005	35	163	394	13	605
2006	24	162	325	13	524
2007	37	177	351	10	575
2008	45	114	152	12	323
2009	42	77	145	10	274
2010	22	103	233	10	368
2011	16	142	380	11	549
2012	18	148	279	4	449
2013	20	206	284	3	513
Total Observations	1,217	2,553	4,568	306	8,644

**Panel C: # of Loans by Year and Loan Type - Domestic Firms**

<u>Year</u>	<u>364- Day Facilities</u>	<u>Term Loans</u>	<u>Revolving Loans</u>	<u>Other Loan Types</u>	<u>All Facilities</u>
1999	16	43	39	15	113
2000	87	187	304	29	607
2001	85	204	321	37	647
2002	84	171	309	17	581
2003	65	159	283	20	527
2004	38	213	369	26	646
2005	18	205	348	15	586
2006	15	135	320	14	484
2007	11	190	269	9	479
2008	17	90	167	8	282
2009	13	47	149	11	220
2010	8	101	199	5	313
2011	1	116	317	3	437
2012	3	137	203	1	344
2013	3	139	162	0	304
Total Observations	464	2,137	3,759	210	6,570

**TABLE 2**  
**Segment Distribution by Income Level, Creditor Rights, and Property Rights**

**Panel A: One Dimension**

	<u>High (Strong)</u>	<u>Low (Weak)</u>	<u>Total*</u>
Income Level (IL)	6,519	1,849	8,368
Creditor Rights (CR)	2,912	5,400	8,312
Property Rights (PR)	5,210	3,158	8,368

**Panel B: Two Dimensions**

	<u>High/Strong</u>	<u>Low/Weak</u>	<u>Mixed</u>	<u>Total*</u>
IL/CR	2,754	1,668	3,890	8,312
IL/PR	5,201	1,840	1,327	8,368
CR/PR	2,522	2,719	3,071	8,312

**Panel C: Three Dimensions**

	<u>H/S/S</u>	<u>L/W/W</u>	<u>Mixed</u>	<u>Total</u>
IL/CR/PR	2,513	1,668	4,131	8,312

**Panel D: Pearson Pairwise Correlation between IL, CR, and PR by Country**

	<u>IL</u>	<u>CR</u>	<u>PR</u>
IL	1		
CR	0.234 **	1	
PR	0.662 ***	0.241 **	1

This table reports the number of segments reported in each country group and the correlation between country groups. To be included, the segment must be identifiable as operating in a specific country. Segments are rated as high income level if the World Bank classifies the country of operation as a high income economy based on gross national income per capita. All other segments are included in the low group. Segments are rated as strong creditor rights if the country of operation gives priority to secured creditors in the event of a bankruptcy and allows creditors to seize collateral immediately following an approved petition for reorganization. All other segments are rated as weak. Segments are rated as strong property rights if the country of operation's percentile ranking is not more than 3 standard deviations below the sample mean of the U.S. based on the aggregate property rights scores of the following World Governance Indicators (Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption). All other segments are included in the weak group. For the multi-dimensional groupings, the segment is included in the high or low group only if the country of operation is high/strong or low/weak for all applicable dimensions. For segments located in countries with a mix of high/strong and low/weak classifications across dimensions, they are reported in the mixed group.

\*The segment numbers are different as the following countries in my sample do not have data available to measure creditor rights (Aruba, Equatorial Guinea, Iceland, Iraq, Libya, Luxembourg, Marshall Islands, Netherlands Antilles, Qatar, and Trinidad and Tobago).

**TABLE 3**  
**Summary Statistics by Country**

Country	# of Years in Sample	First Year	Last Year	# of Segments	Mean		
					Income Level	Creditor Rights	Property Rights
Algeria	10	1998	2010	15	0.0	0.0	0.0
Angola	4	2008	2012	5	0.0	1.0	0.0
Argentina	13	1999	2012	48	0.0	0.0	0.0
Aruba	2	2011	2012	4	1.0		0.0
Australia	15	1998	2012	309	1.0	1.0	1.0
Austria	12	1999	2012	29	1.0	1.0	1.0
Belgium	13	1999	2012	51	1.0	0.0	1.0
Botswana	1	2000	2000	1	0.0	1.0	0.0
Brazil	15	1998	2012	220	0.0	0.0	0.0
Bulgaria	3	2006	2012	6	0.0	0.0	0.0
Cameroon	1	2001	2001	1	0.0	0.0	0.0
Canada	15	1998	2012	2,053	1.0	0.0	1.0
Chile	6	2003	2012	25	0.2	1.0	0.8
China	14	1999	2012	426	0.0	0.0	0.0
Colombia	11	2001	2012	22	0.0	0.0	0.0
Congo, Dem. Rep.	4	2004	2012	9	0.0	0.0	0.0
Congo, Rep.	1	2012	2012	1	0.0	0.0	0.0
Costa Rica	4	2003	2012	20	0.0	0.0	0.0
Czech Republic	4	2008	2012	22	1.0	1.0	0.0
Denmark	9	2000	2012	17	1.0	1.0	1.0
Dominican Republic	4	2004	2012	9	0.0	1.0	0.0
Ecuador	11	1998	2012	28	0.0	0.0	0.0
Egypt, Arab Rep.	12	2000	2012	20	0.0	0.0	0.0
Equatorial Guinea	2	2004	2011	3	0.5		0.0
Finland	10	1999	2012	30	1.0	0.0	1.0
France	15	1998	2012	351	1.0	0.0	0.5
Germany	15	1998	2012	650	1.0	1.0	1.0
Ghana	2	2010	2011	5	0.0	0.0	0.0
Haiti	1	2009	2009	1	0.0	1.0	0.0
Honduras	1	2012	2012	12	0.0	0.0	0.0
Hong Kong SAR, China	10	1999	2012	39	1.0	1.0	0.9
Hungary	11	2000	2012	28	0.4	0.0	0.0
Iceland	4	2009	2012	4	1.0		1.0
India	12	2000	2012	87	0.0	0.0	0.0
Indonesia	8	1999	2012	17	0.0	0.0	0.0
Iraq	3	2001	2003	9	0.0		0.0
Ireland	13	1999	2012	54	1.0	0.0	1.0
Israel	8	2000	2012	16	1.0	1.0	0.0
Italy	14	1999	2012	205	1.0	0.0	0.0
Jamaica	2	2010	2011	2	0.0	1.0	0.0
Japan	15	1998	2012	568	1.0	0.1	0.1
Jordan	3	2005	2010	4	0.0	0.0	0.0
Kazakhstan	2	2006	2012	3	0.0	0.0	0.0
Korea, Rep.	15	1998	2012	149	0.8	1.0	0.0
Kuwait	2	2002	2003	6	1.0	1.0	0.0

TABLE 3 (Continued)

Country	# of Years in Sample	First Year	Last Year	# of Segments	Mean		
					Income Level	Creditor Rights	Property Rights
Libya	2	2005	2011	2	0.0		0.0
Luxembourg	2	2006	2007	3	1.0		1.0
Malawi	2	2001	2007	2	0.0	0.0	0.0
Malaysia	12	2000	2012	71	0.0	1.0	0.0
Marshall Islands	5	1999	2005	5	0.0		0.0
Mexico	15	1998	2012	481	0.0	0.0	0.0
Morocco	1	2008	2008	1	0.0	0.0	0.0
Mozambique	2	2007	2011	3	0.0	1.0	0.0
Netherlands	15	1998	2012	178	1.0	1.0	1.0
Netherlands Antilles	4	2004	2007	12	1.0		0.0
New Zealand	10	2000	2012	32	1.0	1.0	1.0
Nigeria	5	1999	2012	10	0.0	1.0	0.0
Norway	14	1999	2012	42	1.0	0.0	1.0
Oman	6	2001	2012	10	0.3	0.0	0.0
Pakistan	5	2001	2006	8	0.0	0.0	0.0
Peru	6	2003	2012	15	0.0	0.0	0.0
Philippines	14	1999	2012	63	0.0	0.0	0.0
Poland	10	2000	2012	23	0.4	0.0	0.0
Portugal	6	2003	2011	11	1.0	0.0	0.0
Puerto Rico	3	2000	2012	7	0.7	0.0	0.0
Qatar	4	2001	2005	6	1.0		0.0
Romania	2	2006	2011	3	0.0	1.0	0.0
Russian Federation	12	2001	2012	44	0.1	0.0	0.0
Saudi Arabia	5	2002	2012	8	0.8	1.0	0.0
Singapore	15	1998	2012	110	1.0	1.0	1.0
Slovak Republic	6	2004	2012	10	0.5	1.0	0.0
South Africa	11	2000	2012	34	0.0	0.0	0.0
Spain	14	1999	2012	112	1.0	0.0	0.4
Sweden	10	2000	2012	51	1.0	0.0	1.0
Switzerland	14	1999	2012	94	1.0	0.0	1.0
Taiwan	14	1999	2012	109	1.0	0.0	0.0
Tanzania	1	2001	2001	1	0.0	0.0	0.0
Thailand	11	1999	2012	25	0.0	0.0	0.0
Trinidad and Tobago	6	2001	2012	8	0.3		0.0
Tunisia	2	2006	2010	2	0.0	0.0	0.0
Turkey	3	2003	2011	4	0.0	0.0	0.0
Ukraine	1	2008	2008	1	0.0	0.0	0.0
United Arab Emirates	6	2001	2011	11	1.0	0.0	0.0
United Kingdom	15	1998	2012	1,140	1.0	1.0	1.0
Uzbekistan	1	2001	2001	2	0.0	0.0	0.0
Venezuela, RB	9	1998	2008	17	0.0	1.0	0.0
Vietnam	3	2009	2012	6	0.0	0.0	0.0
Yemen, Rep.	4	2001	2005	6	0.0	0.0	0.0
Zimbabwe	1	2001	2001	1	0.0	1.0	0.0

This table reports descriptive for countries in my sample. The income level, creditor rights, and property rights are measured as defined in table 2 with high/strong receiving a one and low/weak receiving a zero. The sample mean is reported for each of these measures.

**TABLE 4**  
**Summary Statistics**

	<u>All firms</u>			<u>Global firms</u>		<u>Domestic firms</u>		<u>Univariate comparison Global - Domestic</u>
	<u>n</u>	<u>Mean</u>	<u>s.d.</u>	<u>Mean</u>	<u>s.d.</u>	<u>Mean</u>	<u>s.d.</u>	
<b>Panel A: Globalization proxy</b>								
Foreign segments	15,214	1.390	1.974	2.446	2.067			
Country specific foreign segments	15,214	0.550	1.414	0.968	1.764			
Foreign sales ratio	15,214	0.164	0.224	0.289	0.229			
Country specific foreign sales ratio	15,214	0.045	0.117	0.080	0.147			
Foreign assets ratio	15,214	0.027	0.071	0.048	0.089			
Country specific foreign assets ratio	15,214	0.011	0.044	0.019	0.057			
<b>Panel B: Loan facility characteristics</b>								
Spread (bps)	13,548	212.720	147.543	195.778	146.474	234.492	146.059	-38.714*** (-15.281)
Maturity (months)	14,604	46.864	23.412	45.953	23.976	48.061	22.595	-2.108*** (-5.395)
Fraction of secured	15,214	0.508	0.500	0.447	0.497	0.588	0.492	-0.141*** (-17.372)
Amount (\$millions)	15,213	407.373	1,004.276	468.693	1,187.394	326.682	684.935	142.011*** (8.660)
Syndicate participants	15,184	7.790	7.827	8.308	8.117	7.109	7.375	1.199*** (9.375)
<b>Panel C: Firm Characteristics</b>								
Assets (\$millions)	15,214	6,093.34	24,866.38	7,910.56	30,270.70	3,702.46	14,707.52	4,208.1*** (10.4)
Market-to-book	15,214	1.697	1.129	1.768	1.172	1.603	1.061	0.165*** (8.953)
Leverage	15,214	0.277	0.225	0.249	0.200	0.314	0.249	-0.065*** (-17.798)
Profitability	15,214	0.041	0.172	0.047	0.146	0.032	0.200	0.015*** (5.224)
Tangibility	15,214	0.320	0.242	0.272	0.198	0.384	0.278	-0.112*** (-28.958)
EDF	15,214	0.161	0.261	0.154	0.257	0.170	0.267	-0.016*** (-3.758)
Return volatility	15,184	7.790	7.827	8.308	8.117	7.109	7.375	-0.017*** (-14.060)

This table reports descriptive statistics for all firms, global firms (i.e., firms with at least one foreign segment report), and domestic firms. Foreign segments is the number of foreign located segments reported by the firm. Country specific foreign segments is the number of segments that can be allocated to a specific foreign country. Foreign sales ratio is total foreign sales reported divided by total sales. Country specific foreign sales ratio is the ratio of country specific sales to total assets. Foreign assets ratio is the total reported long lived assets divided by total assets. Country specific foreign assets ratio is the ratio of country specific long lived assets divided by total assets. Spread is the all in drawn interest rate above the London InterBank Offer Rate in basis points. Maturity is the length of the loan in months. Fraction of secured is the percentage of loans that are secured. Amount is the size of the loan facility in millions of dollars. Syndicate participants is the number of lending partners for each facility. Assets is the total assets of the firm in millions of dollars. Market-to-book is the ratio of the market value of assets to the book value of assets. Leverage is the ratio of long term debt to total assets. Profitability is the ratio of operating income before depreciation to total assets. Tangibility is the ratio of net fixed assets to total assets. EDF is the expected default frequency, measured using the KMV-Merton distance to default model. Return volatility is the standard deviation of the monthly stock returns for the four years prior to loan inception. The Univariate comparison column reports the difference between global and domestic firms with the t-test statistics reported in the parentheses. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 5**  
**Pearson Correlation Matrix**

<b>Panel A: Globalization proxy</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	
Foreign segments (1)	1						
Country specific foreign segments (2)	0.85 ***	1					
Foreign sales ratio (3)	0.67 ***	0.44 ***	1				
Country specific foreign sales ratio (4)	0.57 ***	0.67 ***	0.58 ***	1			
Foreign assets ratio (5)	0.34 ***	0.29 ***	0.43 ***	0.31 ***	1		
Country specific foreign assets ratio (6)	0.34 ***	0.42 ***	0.27 ***	0.44 ***	0.72 ***	1	
Spread (bps) (7)	-0.09 ***	-0.03 ***	-0.11 ***	-0.01	-0.10 ***	-0.05 ***	
Maturity (months) (8)	-0.02 **	0.01	-0.04 ***	0.01	-0.01 *	0.01	
Fraction of secured (9)	-0.11 ***	-0.05 ***	-0.16 ***	-0.04 ***	-0.12 ***	-0.05 ***	
Amount (\$millions) (10)	0.07 ***	0.04 ***	0.10 ***	0.02 **	0.08 ***	0.03 ***	
Syndicate participants (11)	0.07 ***	0.03 ***	0.08 ***	0.01	0.07 ***	0.03 ***	
Assets (\$millions) (12)	0.09 ***	0.03 ***	0.11 ***	0.00	0.05 ***	0.02 *	
Market-to-book (13)	0.05 ***	0.01 *	0.06 ***	0.01	0.01 *	0.00	
Leverage (14)	-0.13 ***	-0.07 ***	-0.14 ***	-0.07 ***	-0.05 ***	-0.03 ***	
Profitability (15)	0.02 ***	0.01	0.03 ***	0.00	0.04 ***	0.02 ***	
Tangibility (16)	-0.16 ***	-0.06 ***	-0.18 ***	-0.01 *	-0.01 *	0.02 ***	
EDF (17)	-0.04 ***	-0.03 ***	-0.06 ***	-0.01	-0.06 ***	-0.03 ***	
Return volatility (18)	-0.07 ***	-0.02 **	-0.10 ***	0.01	-0.11 ***	-0.04 ***	
<b>Panel B: Loan facility characteristics</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>	<b>(11)</b>		
Spread (bps) (7)	1						
Maturity (months) (8)	0.07 ***	1					
Fraction of secured (9)	0.39 ***	0.14 ***	1				
Amount (\$millions) (10)	-0.18 ***	-0.05 ***	-0.18 ***	1			
Syndicate participants (11)	-0.26 ***	0.09 ***	-0.14 ***	0.31 ***	1		
Assets (\$millions) (12)	-0.12 ***	-0.08 ***	-0.17 ***	0.43 ***	0.00 ***		
Market-to-book (13)	-0.19 ***	-0.01	-0.11 ***	0.04 ***	0.92		
Leverage (14)	0.20 ***	0.19 ***	0.09 ***	0.00	0.10 ***		
Profitability (15)	-0.32 ***	0.06 ***	-0.20 ***	0.08 ***	0.00		
Tangibility (16)	0.00	0.04 ***	-0.02 ***	0.04 ***	0.38 ***		
EDF (17)	0.42 ***	-0.10 ***	0.22 ***	-0.11 ***	0.00 ***		
Return volatility (18)	0.39 ***	-0.02 ***	0.30 ***	-0.19 ***	0.00 ***		
<b>Panel C: Firm Characteristics</b>	<b>(12)</b>	<b>(13)</b>	<b>(14)</b>	<b>(15)</b>	<b>(16)</b>	<b>(17)</b>	<b>(18)</b>
Assets (\$millions) (12)	1						
Market-to-book (13)	0.00	1					
Leverage (14)	-0.01 *	-0.05 ***	1				
Profitability (15)	0.04 ***	0.21 ***	-0.13 ***	1			
Tangibility (16)	-0.01	-0.07 ***	0.24 ***	-0.02 **	1		
EDF (17)	-0.04 ***	-0.27 ***	0.17 ***	-0.41 ***	0.02 **	1	
Return volatility (18)	-0.16 ***	-0.02 **	0.08 ***	-0.32 ***	-0.03 ***	0.37 ***	1

This table reports the Pearson pairwise correlations for all variables as defined in table 4. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 6**  
**Regressions Relating Foreign Segment Location to Loan Price - Single Dimension**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Number of Foreign Segments**  
**Single Country-Level Dimension**

<b>Variables</b>	(1)	(2)	(3)	(4)
<i>Globalization proxy</i>				
Foreign Segments (FS)	-0.00420* (-1.79)			
High Income FS		-0.0103** (-2.23)		
Low Income FS		0.0271*** (3.15)		
Strong Creditor Rights FS			-0.0239*** (-2.69)	
Weak Creditor Rights FS			0.00759 (1.41)	
Strong Property Rights FS				-0.0126** (-2.14)
Weak Property Rights FS				0.0142** (2.41)
Non-Country Specific FS		-0.0129*** (-2.66)	0.0120 (1.22)	-0.0128*** (-2.64)
<i>Loan facility characteristics</i>				
Log(Maturity)	-0.0215* (-1.92)	-0.0216* (-1.92)	-0.0212* (-1.89)	-0.0214* (-1.90)
Security	0.302*** (30.47)	0.302*** (30.46)	0.302*** (30.47)	0.302*** (30.43)
Log(Loan Amount)	-0.0611*** (-12.04)	-0.0614*** (-12.09)	-0.0609*** (-12.01)	-0.0615*** (-12.11)

**TABLE 6 (Continued)**

<i>Firm characteristics</i>				
Log(Assets)	-0.0848*** (-16.68)	-0.0838*** (-16.38)	-0.0860*** (-17.13)	-0.0839*** (-16.39)
Market-to-book	-0.0683*** (-6.14)	-0.0678*** (-6.13)	-0.0685*** (-6.15)	-0.0683*** (-6.14)
Leverage	0.560*** (24.29)	0.558*** (24.22)	0.564*** (24.49)	0.559*** (24.26)
Profitability	-0.698*** (-8.87)	-0.699*** (-8.88)	-0.699*** (-8.87)	-0.698*** (-8.87)
Tangibility	-0.0287 (-1.48)	-0.0368* (-1.88)	-0.0280 (-1.45)	-0.0368* (-1.87)
EDF	0.320*** (14.41)	0.322*** (14.48)	0.319*** (14.36)	0.321*** (14.44)
Return volatility	1.253*** (15.79)	1.247*** (15.75)	1.252*** (15.81)	1.240*** (15.66)
<i>Constant and Indicators</i>				
Constant	5.331*** (75.18)	5.325*** (75.44)	5.312*** (75.16)	5.321*** (75.14)
Loan Type Indicators	included	included	included	included
Loan Purpose Indicators	included	included	included	included
Year Indicators	included	included	included	included
Industry Indicators	included	included	included	included
<i>High/Strong - Low/Weak</i>		<b>Test of Differences</b>		
High/Strong - Low/Weak (F Statistic)		10.20	6.62	6.80
p value		0.001	0.010	0.009
Number of Observations	13208	13208	13208	13208
Adj. R <sup>2</sup>	0.650	0.650	0.650	0.650

This table reports the OLS regression of the natural log of Spread on foreign segments as defined in table 4. Columns 2, 3, and 4 disaggregate globalization into groups based on definitions in table 2 and shown in appendix B. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.



**TABLE 7**  
**Regressions Relating Foreign Segment Location to Loan Price - Multiple Dimensions**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Number of Foreign Segments**  
**Multiple Country-Level Dimensions**

<b>Variables</b>	(1)	(2)	(3)	(4)
<i>Globalization proxy</i>				
IL & CR - High/Strong FS	-0.0300*** (-3.44)			
IL & CR - Low/Weak FS	0.0187* (1.86)			
IL & CR - Mixed FS	0.0134 (1.61)			
IL & PR - High/Strong FS		-0.0128** (-2.16)		
IL & PR - Low/Weak FS		0.0255*** (2.77)		
IL & PR - Mixed FS		-0.00110 (-0.08)		
CR & PR - Strong/Strong FS			-0.0340*** (-3.72)	
CR & PR - Weak/Weak FS			0.0110 (1.52)	
CR & PR - Mixed FS			0.0200** (1.98)	
IL, CR & PR - High/Strong/Strong FS				-0.0347*** (-3.79)
IL, CR & PR - Low/Weak/Weak FS				0.0170* (1.67)
IL, CR & PR - Mixed FS				0.0138* (1.76)
Non-Country Specific FS	-0.0142*** (-2.94)	-0.0129*** (-2.66)	-0.0144*** (-2.97)	-0.0143*** (-2.96)
<i>Loan facility characteristics</i>				
Log(Maturity)	-0.0215* (-1.91)	-0.0215* (-1.91)	-0.0215* (-1.92)	-0.0214* (-1.91)
Security	0.302*** (30.48)	0.302*** (30.43)	0.302*** (30.46)	0.302*** (30.46)
Log(Loan Amount)	-0.0613*** (-12.08)	-0.0614*** (-12.10)	-0.0613*** (-12.09)	-0.0614*** (-12.11)

**TABLE 7 (Continued)**

<i>Firm characteristics</i>				
Log(Assets)	-0.0835*** (-16.33)	-0.0839*** (-16.38)	-0.0836*** (-16.33)	-0.0836*** (-16.33)
Market-to-book	-0.0679*** (-6.14)	-0.0680*** (-6.11)	-0.0679*** (-6.14)	-0.0680*** (-6.14)
Leverage	0.558*** (24.23)	0.558*** (24.23)	0.559*** (24.27)	0.559*** (24.27)
Profitability	-0.699*** (-8.89)	-0.698*** (-8.89)	-0.700*** (-8.89)	-0.699*** (-8.89)
Tangibility	-0.0384** (-1.97)	-0.0372* (-1.90)	-0.0385** (-1.97)	-0.0389** (-1.99)
EDF	0.320*** (14.42)	0.321*** (14.45)	0.319*** (14.39)	0.320*** (14.39)
Return volatility	1.251*** (15.80)	1.244*** (15.72)	1.246*** (15.74)	1.245*** (15.73)
<i>Constant and Indicators</i>				
Constant	5.320*** (75.34)	5.323*** (75.43)	5.324*** (74.69)	5.321*** (74.84)
Loan Type Indicators	included	included	included	included
Loan Purpose Indicators	included	included	included	included
Year Indicators	included	included	included	included
Industry Indicators	included	included	included	included
<i>High/Strong - Low/Weak</i>				
	<b>Test of Differences</b>			
F Statistic	11.48	10.02	11.75	13.04
p value	0.001	0.002	0.001	0.000
Number of Observations	13208	13208	13208	13208
Adj. R <sup>2</sup>	0.650	0.650	0.651	0.651

This table reports the OLS regression of the natural log of Spread on foreign segments as defined in table 4. Columns 1 - 4 disaggregate globalization into groups based on definitions in table 2 and as shown in appendix B. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 8**  
**Regressions Relating Foreign Sales Ratio to Loan Price**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single and Multiple Country-Level Dimensions**

Variables	Group Dimensions							
	(1)	Single Dimension			Two Dimensions			Three Dimensions
		IL	CR	PR	IL/CR	IL/PR	CR/PR	IL/CR/PR
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<i>Globalization proxy</i>								
Foreign Sales Ratio (FSR)	-0.0541** (-2.30)							
High/Strong Group FSR	-0.0168 (-0.38)	0.0621 (1.02)	0.0181 (0.38)	0.0387 (0.62)	0.0155 (0.32)	0.0367 (0.58)	0.0303 (0.47)	
Low/Weak Group FSR	0.222*** (2.89)	0.0194 (0.35)	0.0493 (0.78)	0.180** (2.06)	0.224*** (2.87)	0.0467 (0.65)	0.177** (2.02)	
Mixed Group FSR				-0.0395 (-0.60)	-0.133 (-1.22)	0.00469 (0.06)	-0.0103 (-0.16)	
Non-Country Specific FSR	-0.0998*** (-3.44)	-0.0991*** (-3.41)	-0.0993*** (-3.42)	-0.1000*** (-3.44)	-0.0988*** (-3.41)	-0.0995*** (-3.42)	-0.0994*** (-3.42)	
<i>Constant, Controls, and Indicators</i>								
Constant	5.324*** (75.18)	5.323*** (74.96)	5.314*** (75.14)	5.316*** (74.95)	5.321*** (75.02)	5.323*** (75.25)	5.316*** (75.05)	5.320*** (75.05)
Loan Characteristic Controls	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>								
	<b>Test of Differences</b>							
F Statistic	6.65	0.23	0.15	1.62	5.03	0.01	1.73	
p value	0.010	0.629	0.702	0.203	0.025	0.920	0.189	
Number of Observations	13208	13208	13208	13208	13208	13208	13208	13208
Adj. R <sup>2</sup>	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650

This table reports the OLS regression of the natural log of Spread on foreign sales ratio as defined in table 4. Columns 2 - 8 disaggregate globalization into groups based on definitions in table 2 and as shown in appendix B. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 9**  
**Regressions Relating Foreign Assets Ratio to Loan Price**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single and Multiple Country-Level Dimensions**

Variables	Group Dimensions							
	(1)	Single Dimension			Two Dimensions			Three Dimensions
		IL	CR	PR	IL/CR	IL/PR	CR/PR	IL/CR/PR
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<i>Globalization proxy</i>								
Foreign Asset Ratio (FAR)	-0.244*** (-3.55)							
High/Strong Group FAR		-0.335*** (-2.71)	-0.585*** (-4.16)	-0.336** (-2.50)	-0.677*** (-4.59)	-0.342** (-2.55)	-0.678*** (-4.31)	-0.692*** (-4.40)
Low/Weak Group FAR		0.00740 (0.03)	0.104 (0.55)	-0.108 (-0.56)	-0.220 (-0.71)	-0.0125 (-0.05)	-0.138 (-0.53)	-0.239 (-0.78)
Mixed Group FAR					0.226 (1.04)	-0.239 (-0.81)	0.127 (0.61)	0.199 (0.98)
Non-Country Specific FAR		-0.222** (-2.33)	-0.228** (-2.38)	-0.220** (-2.31)	-0.218** (-2.29)	-0.221** (-2.32)	-0.217** (-2.28)	-0.217** (-2.28)
<i>Constant, Controls, and Indicators</i>								
Constant	5.327*** (75.26)	5.327*** (75.47)	5.334*** (75.92)	5.326*** (75.17)	5.339*** (75.94)	5.326*** (75.48)	5.329*** (74.71)	5.330*** (74.56)
Loan Characteristic Controls	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>								
		<b>Test of Differences</b>						
F Statistic		1.19	7.41	0.83	1.67	1.07	2.97	1.62
p value		0.276	0.007	0.362	0.197	0.301	0.085	0.203
Number of Observations	13208	13208	13208	13208	13208	13208	13208	13208
Adj. R <sup>2</sup>	0.650	0.650	0.651	0.650	0.651	0.650	0.651	0.651

This table reports the OLS regression of the natural log of Spread on foreign asset ratio as defined in table 4. Columns 2 - 8 disaggregate globalization into groups based on definitions in table 2 and as shown in appendix B. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 10**  
**Regressions Relating Globalization to the Probability of a Loan being Secured**  
**Dependent Variable - Collateral Requirement or Not**  
**Globalization Measured as The Number of Foreign Segment in Columns 1- 4, Foreign Sales Ratio in Columns 5 - 8, and Foreign Assets Ratio in Columns 9 - 12**  
**Single and Multiple Country-Level Dimensions**

Variables	Globalization Measure											
	Number of Foreign Segments				Foreign Sales Ratio				Foreign Assets Ratio			
					Group Dimensions							
	Single Dimension		Three Dimensions		Single Dimension		Three Dimensions		Single Dimension		Three Dimensions	
IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
<i>Globalization proxy</i>												
High/Strong Group	-0.0168 (-1.31)	-0.0390 (-1.42)	-0.0243 (-1.44)	-0.0176 (-0.66)	-0.250** (-2.08)	0.0835 (0.44)	-0.171 (-1.25)	0.0876 (0.45)	0.0692 (0.23)	0.830** (1.97)	0.410 (1.27)	1.301*** (2.83)
Low/Weak Group	0.0292 (1.11)	-0.0126 (-0.80)	0.0182 (1.01)	0.0278 (0.96)	-0.163 (-0.63)	-0.418*** (-2.76)	-0.327* (-1.82)	-0.0392 (-0.13)	-1.198* (-1.69)	-1.206*** (-2.74)	-1.718*** (-2.94)	-1.346* (-1.71)
Mixed Group				0.0278 (0.96)				-0.533*** (-2.95)				-1.245** (-2.53)
Non-Country Specific	-0.0125 (-0.99)	0.0809** (2.56)	-0.0123 (-0.98)	-0.0133 (-1.06)	-0.373*** (-4.96)	-0.376*** (-5.00)	-0.372*** (-4.93)	-0.376*** (-5.00)	-1.549*** (-5.73)	-1.523*** (-5.63)	-1.545*** (-5.71)	-1.531*** (-5.66)
<i>Constant, Controls, and Indicators</i>												
Constant	0.189 (0.79)	0.157 (0.65)	0.181 (0.75)	0.183 (0.76)	0.189 (0.79)	0.180 (0.76)	0.183 (0.77)	0.194 (0.82)	0.198 (0.82)	0.174 (0.72)	0.216 (0.91)	0.192 (0.80)
Loan Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>												
Chi Squared	1.82	0.53	1.99	1.19	0.08	3.62	0.43	0.13	2.46	9.54	9.27	8.11
p value	0.178	0.467	0.158	0.276	0.771	0.057	0.513	0.723	0.117	0.002	0.002	0.004
Number of Observations	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601
Pseudo R <sup>2</sup>	0.250	0.250	0.250	0.250	0.251	0.251	0.251	0.251	0.251	0.252	0.252	0.252

This table reports the probit estimation of whether a loan is secured or not. The dependent variable takes the value of one if the loan is secured, and zero otherwise. Columns 1 – 4 measure globalization as the number of foreign segments reported. Columns 5 – 8 measure globalization as the foreign sales ratio. Columns 9 – 12 measure globalization as the foreign asset ratio. Globalization is disaggregated as defined in table 2. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 11**  
**Regressions Relating Globalization to the Length of the Loan Maturity**  
**Dependent Variable - Natural Log of the Maturity of the Loan in Months**  
**Globalization Measured as the Number of Foreign Segment in Columns 1- 4, Foreign Sales Ratio in Columns 5 - 8, and Foreign Assets Ratio in Columns 9 - 12**  
**Single and Multiple Country-Level Dimensions**

Variables	Number of Foreign Segments				Globalization Measure Foreign Sales Ratio				Foreign Assets Ratio			
	Single Dimension		Three Dimensions		Single Dimension		Three Dimensions		Single Dimension		Three Dimensions	
	IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Globalization proxy</i>												
High/Strong Group	0.00317 (0.72)	0.0133 (1.59)	0.0106* (1.92)	0.00676 (0.80)	-0.0242 (-0.53)	0.0177 (0.32)	-0.00095 (-0.02)	-0.0219 (-0.35)	0.0390 (0.42)	-0.0940 (-0.78)	0.0475 (0.51)	-0.105 (-0.80)
Low/Weak Group	0.00024 (0.03)	0.00139 (0.28)	-0.0067 (-1.03)	-0.00619 (-0.64)	0.0933 (0.95)	-0.0398 (-0.65)	0.00167 (0.02)	0.0304 (0.27)	0.159 (0.72)	0.213* (1.72)	0.0951 (0.55)	0.0384 (0.16)
Mixed Group				0.00393 (0.53)				-0.00827 (-0.13)				0.225 (1.64)
Non-Country Specific	0.00178 (0.41)	-0.0144 (-1.50)	0.00186 (0.43)	0.00212 (0.49)	0.00611 (0.22)	0.00669 (0.24)	0.00637 (0.23)	0.00626 (0.23)	-0.0649 (-0.66)	-0.0696 (-0.71)	-0.0640 (-0.65)	-0.0648 (-0.66)
<i>Constant, Controls, and Indicators</i>												
Constant	2.329*** (30.95)	2.335*** (31.03)	2.332*** (30.97)	2.331*** (31.03)	2.338*** (30.91)	2.336*** (30.87)	2.335*** (30.93)	2.337*** (30.91)	2.334*** (30.92)	2.337*** (30.88)	2.334*** (30.93)	2.335*** (30.89)
Loan Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included	included	included	included	included
<b>Test of Differences</b>												
<i>High/Strong - Low/Weak</i>												
F Statistic	0.070	1.070	2.640	0.910	1.040	0.440	0.000	0.160	0.230	2.700	0.050	0.270
p value	0.794	0.301	0.104	0.340	0.308	0.508	0.978	0.692	0.635	0.100	0.816	0.604
<i>High/Strong - Mixed</i>												
F Statistic				0.040				0.020				2.300
p value				0.833				0.884				0.098
<i>Mixed - Low/Weak</i>												
F Statistic				0.480				0.080				0.410
p value				0.486				0.782				0.522
Number of Observations	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.507	0.507	0.507	0.507	0.507	0.507	0.507	0.507	0.507	0.507	0.507	0.507

This table reports the OLS regression of the natural log of the maturity of the loan in months. Columns 1 – 4 measure globalization as the number of foreign segments reported. Columns 5 – 8 measure globalization as the foreign sales ratio. Columns 9 – 12 measure globalization as the foreign asset ratio. Globalization is disaggregated as defined in table 2. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 12**  
**Regressions Relating Foreign Asset Ratio to the Size of Loan Syndicate**  
**Dependent Variable - Natural Log of the Number of Banks Participating in the Loan**  
**Globalization Measured as Foreign Assets Ratio**  
**Single and Multiple Country-Level Dimensions**

Variables	Group Dimensions			
	Single Dimension			Three
	IL	CR	PR	Dimensions
	(1)	(2)	(3)	(4)
<i>Globalization proxy</i>				
High/Strong Group FAR	-0.131 (-0.83)	-0.0397 (-0.20)	-0.118 (-0.68)	-0.0953 (-0.42)
Low/Weak Group FAR	0.817** (2.15)	0.166 (0.73)	0.453* (1.69)	0.826* (1.91)
Mixed Group FAR				-0.0521 (-0.23)
Non-Country Specific FAR	-0.200 (-1.37)	-0.194 (-1.33)	-0.195 (-1.35)	-0.203 (-1.40)
<i>Loan facility characteristics</i>				
Log(Maturity)	0.266*** (13.23)	0.266*** (13.23)	0.266*** (13.23)	0.266*** (13.24)
Security	0.0601*** (3.03)	0.0598*** (3.01)	0.0603*** (3.04)	0.0602*** (3.03)
Log(Loan Amount)	0.258*** (26.27)	0.258*** (26.26)	0.258*** (26.27)	0.258*** (26.27)
<i>Firm characteristics</i>				
Log(Assets)	0.123*** (13.96)	0.123*** (13.96)	0.123*** (13.94)	0.123*** (13.96)
Market-to-book	-0.0170** (-2.29)	-0.0168** (-2.26)	-0.0170** (-2.29)	-0.0169** (-2.28)
Leverage	0.194*** (4.31)	0.193*** (4.28)	0.195*** (4.33)	0.193*** (4.27)
Profitability	0.191** (1.99)	0.194** (2.02)	0.189** (1.97)	0.194** (2.02)
Tangibility	-0.147*** (-3.08)	-0.147*** (-3.08)	-0.146*** (-3.07)	-0.147*** (-3.08)
EDF	-0.263*** (-6.14)	-0.262*** (-6.10)	-0.264*** (-6.14)	-0.263*** (-6.13)
Return volatility	-1.259*** (-8.11)	-1.249*** (-8.05)	-1.268*** (-8.15)	-1.256*** (-8.09)
<i>Constant and Indicators</i>				
Constant	-0.934*** (-6.38)	-0.929*** (-6.35)	-0.937*** (-6.43)	-0.938*** (-6.41)
Loan Type Indicators	included	included	included	included
Loan Purpose Indicators	included	included	included	included
Year Indicators	included	included	included	included
Industry Indicators	included	included	included	included
<i>High/Strong - Low/Weak</i>				
	<b>Test of Differences</b>			
F Statistic	4.91	0.41	2.98	3.54
p value	0.027	0.524	0.084	0.060
Number of Observations	8284	8284	8284	8284
Adj. R <sup>2</sup>	0.487	0.486	0.487	0.487

This table reports the OLS regression of the natural log of syndicate participants on foreign asset ratio as defined in table 4 for global firms (i.e., firms reporting at least one foreign segment in my sample). Columns 1 - 4 disaggregate globalization into groups based on definitions in table 2 and as shown in appendix B. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 13**  
**Regressions Relating Globalization to the Size of Loan Syndicate**  
**Dependent Variable - Natural Log of the Number of Banks Participating in the Loan**  
**Globalization Measured as the Number of Foreign Segment Columns 1 - 4 and the Foreign Sales Ratio Columns 5 - 8**  
**Single and Multiple Country-Level Dimensions**

Variables	Globalization Measure							
	Number of Foreign Segments				Foreign Sales Ratio			
	Group Dimensions							
	Single Dimension		Three Dimensions		Single Dimension		Three Dimensions	
IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
<i>Globalization proxy</i>								
High/Strong Group	-0.00169 (-0.24)	-0.00644 (-0.49)	0.0173* (1.94)	0.00606 (0.45)	0.0343 (0.54)	0.00325 (0.04)	0.134* (1.87)	0.0512 (0.54)
Low/Weak Group	-0.00685 (-0.49)	-0.000960 (-0.11)	-0.0249** (-2.49)	-0.000207 (-0.01)	-0.181 (-1.25)	-0.0277 (-0.30)	-0.231** (-2.30)	-0.121 (-0.83)
Mixed Group				-0.0108 (-0.93)				-0.0183 (-0.20)
Non-Country Specific	-0.0173** (-2.23)	-0.000447 (-0.03)	-0.0154** (-1.96)	-0.0162** (-2.08)	-0.138*** (-3.03)	-0.139*** (-3.05)	-0.132*** (-2.89)	-0.140*** (-3.08)
<i>Constant, Controls, and Indicators</i>								
Constant	-0.909*** (-6.13)	-0.929*** (-6.24)	-0.900*** (-6.06)	-0.910*** (-6.11)	-0.948*** (-6.43)	-0.936*** (-6.38)	-0.954*** (-6.42)	-0.942*** (-6.39)
Loan Characteristic Controls	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>								
	<b>Test of Differences</b>							
F Statistic	0.08	0.09	7.06	0.08	1.77	0.06	8.40	0.95
p value	0.773	0.761	0.008	0.772	0.183	0.806	0.004	0.331
Number of Observations	8284	8284	8284	8284	8284	8284	8284	8284
Adjusted R <sup>2</sup>	0.487	0.486	0.487	0.487	0.487	0.487	0.487	0.487

This table reports the OLS regression of the natural log of syndicate participants on the number of foreign segment and the foreign sales ratio as defined in table 4 for global firms (i.e., firms reporting at least one foreign segment in my sample). Columns 1 - 8 disaggregate globalization into groups based on definitions in table 2. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.



**TABLE 14**  
**Regressions Relating Globalization to Loan Ownership**  
**Dependent Variable - Percentage of Loan Owned by U.S. Banks**  
**Globalization Measured as the Number of Foreign Segments in Columns 1- 4, Foreign Sales Ratio in Columns 5 - 8, and Foreign Assets Ratio in Columns 9 - 12**  
**Single and Multiple Country-Level Dimensions**

Variables	Globalization Measure											
	Number of Foreign Segments				Foreign Sales Ratio				Foreign Assets Ratio			
					Group Dimensions							
	Single Dimension		Three Dimensions		Single Dimension		Three Dimensions		Single Dimension		Three Dimensions	
IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	IL	CR	PR	IL/CR/PR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
<i>Globalization proxy</i>												
High/Strong Group	-0.207 (-0.57)	-0.320 (-0.40)	-0.0236 (-0.05)	-0.154 (-0.20)	-25.53*** (-6.21)	-35.35*** (-6.15)	-27.98*** (-6.09)	-28.47*** (-3.46)	-23.34** (-1.99)	-16.81 (-0.99)	-19.23 (-1.48)	-16.50 (-0.90)
Low/Weak Group	-2.231*** (-2.81)	-1.578*** (-3.01)	-1.609*** (-2.69)	-2.442*** (-2.70)	-52.31*** (-5.28)	-21.90*** (-2.68)	-35.82*** (-4.89)	-53.71*** (-4.54)	-9.438 (-0.71)	-26.04* (-1.84)	-22.10** (-2.04)	-6.096 (-0.42)
Mixed Group				-0.184 (-0.25)				-22.55*** (-3.80)				-36.24** (-2.04)
Non-Country Specific	-1.466*** (-3.09)	1.689** (2.48)	-1.469*** (-3.10)	-1.520*** (-3.24)	-27.80*** (-10.16)	-27.95*** (-10.25)	-27.78*** (-10.13)	-27.57*** (-10.12)	-33.32*** (-4.09)	-32.86*** (-4.05)	-32.96*** (-4.06)	-33.57*** (-4.12)
<i>Constant, Controls, and Indicators</i>												
Constant	142.5*** (15.54)	139.7*** (14.82)	141.9*** (15.37)	142.9*** (15.56)	137.7*** (13.26)	138.6*** (13.66)	138.3*** (13.24)	137.5*** (13.05)	137.0*** (13.83)	137.3*** (14.01)	137.2*** (13.96)	136.8*** (13.87)
Loan Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>												
F Statistic	4.090	1.180	3.060	3.780	6.140	1.460	0.790	3.300	0.530	0.140	0.030	0.180
p value	0.043	0.277	0.080	0.052	0.013	0.227	0.374	0.070	0.469	0.712	0.871	0.671
Number of Observations	2261	2261	2261	2261	2261	2261	2261	2261	2261	2261	2261	2261
Adjusted R <sup>2</sup>	0.376	0.373	0.375	0.376	0.422	0.418	0.420	0.419	0.377	0.378	0.377	0.378

This table reports the OLS regression of the percentage of the loan owned by U.S. banks. Columns 1 – 4 measure globalization as the number of foreign segments reported. Columns 5 – 8 measure globalization as the foreign sales ratio. Columns 9 – 12 measure globalization as the foreign asset ratio. Globalization is disaggregated as defined in table 2. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 15**  
**Regressions Relating Foreign Segment Location to Loan Price - Additional Tests**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Number of Foreign Segments**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.0103** (-2.23)	-0.00420 (-0.80)	-0.0191*** (-2.59)	-0.0171* (-1.65)	-0.00702 (-0.95)	-0.0120** (-2.28)
Low/Weak Group	0.0271*** (3.15)	0.00830 (1.05)	0.0128*** (2.60)	0.00692 (1.60)	0.00503 (0.97)	0.0194*** (2.86)
Non-Country Specific	-0.0129*** (-2.66)	-0.0132*** (-2.73)	-0.0123** (-2.55)	-0.0120** (-2.51)	-0.0124** (-2.57)	-0.0127*** (-2.62)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	10.200	1.140	8.760	3.430	1.190	8.870
p value	0.001	0.285	0.003	0.064	0.275	0.003
Number of Observations	13208	13208	13208	13208	13208	13208
Adjusted R <sup>2</sup>	0.650	0.650	0.650	0.650	0.650	0.650

This table reports the OLS regression of the natural log of *Spread* on foreign segments as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 16**  
**Regressions Relating Foreign Sales Ratio to Loan Price - Additional Tests**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.0168 (-0.38)	0.0601 (1.23)	0.0135 (0.25)	-0.0569 (-0.78)	0.0133 (0.22)	0.0000720 (0.00)
Low/Weak Group	0.222*** (2.89)	-0.00594 (-0.09)	0.0457 (0.84)	0.0825* (1.75)	0.0407 (0.75)	0.111 (1.52)
Non-Country Specific	-0.0998*** (-3.44)	-0.100*** (-3.45)	-0.0995*** (-3.42)	-0.100*** (-3.46)	-0.0992*** (-3.42)	-0.0994*** (-3.42)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	6.650	0.560	0.160	2.300	0.100	1.500
p value	0.010	0.455	0.691	0.129	0.751	0.220
Number of Observations	13208	13208	13208	13208	13208	13208
Adjusted R <sup>2</sup>	0.650	0.650	0.650	0.650	0.650	0.650

This table reports the OLS regression of the natural log of *Spread* on the foreign sales ratio as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 17**  
**Regressions Relating Foreign Assets Ratio to Loan Price - Additional Tests**  
**Dependent Variable - Log(Spread)**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single Country-Level Dimensions**

Variables	Country - Level Dimension					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.335*** (-2.71)	-0.479*** (-3.62)	-0.274* (-1.77)	0.0756 (0.29)	-0.309** (-2.11)	-0.341*** (-2.65)
Low/Weak Group	0.00740 (0.03)	0.127 (0.57)	-0.274* (-1.79)	-0.415*** (-3.28)	-0.212 (-1.27)	-0.0356 (-0.15)
Non-Country Specific	-0.222** (-2.33)	-0.221** (-2.31)	-0.216** (-2.27)	-0.213** (-2.23)	-0.217** (-2.28)	-0.221** (-2.32)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	Test of Differences					
F Statistic	1.190	4.750	0.000	2.550	0.170	1.100
p value	0.276	0.029	0.999	0.110	0.678	0.293
Number of Observations	13208	13208	13208	13208	13208	13208
Adjusted R <sup>2</sup>	0.650	0.650	0.650	0.650	0.650	0.650

This table reports the OLS regression of the natural log of *Spread* on the foreign assets ratio as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 18**  
**Regressions Relating Foreign Segment Location to the Probability of a Loan being Secured - Additional Tests**  
**Dependent Variable - Collateral Requirement or Not**  
**Globalization Measured as the Number of Foreign Segments**  
**Single Country-Level Dimensions**

Variables	Country - Level Dimension					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.0168 (-1.31)	0.00358 (0.24)	-0.0371* (-1.77)	-0.00212 (-0.08)	-0.00105 (-0.05)	-0.0249* (-1.66)
Low/Weak Group	0.0292 (1.11)	-0.0157 (-0.73)	0.0171 (1.15)	-0.00521 (-0.40)	-0.00558 (-0.36)	0.0282 (1.33)
Non-Country Specific	-0.0125 (-0.99)	-0.0127 (-1.01)	-0.0115 (-0.92)	-0.0107 (-0.86)	-0.0125 (-0.99)	-0.0122 (-0.97)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	Test of Differences					
Chi Squared	1.820	0.370	3.050	0.010	0.020	2.850
p value	0.178	0.544	0.081	0.930	0.885	0.091
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.250	0.250	0.250	0.250	0.250	0.250

This table reports the probit estimation of whether a loan is secured or not. The dependent variable takes the value of one if the loan is secured, and zero otherwise. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 19**  
**Regressions Relating Foreign Sales Ratio to the Probability of a Loan being Secured - Additional Tests**  
**Dependent Variable - Collateral Requirement or Not**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single Country-Level Dimensions**

Variables	Country - Level Dimension					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.250** (-2.08)	-0.0615 (-0.45)	-0.269* (-1.70)	-0.373* (-1.78)	0.151 (0.89)	-0.289** (-2.27)
Low/Weak Group	-0.163 (-0.63)	-0.490** (-2.47)	-0.196 (-1.31)	-0.128 (-0.95)	-0.512*** (-3.34)	-0.0901 (-0.40)
Non-Country Specific	-0.373*** (-4.96)	-0.381*** (-5.05)	-0.374*** (-4.96)	-0.375*** (-4.97)	-0.368*** (-4.89)	-0.374*** (-4.96)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	Test of Differences					
Chi Squared	0.080	2.790	0.100	0.850	7.180	0.520
p value	0.771	0.095	0.751	0.356	0.007	0.470
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.251	0.251	0.251	0.251	0.251	0.251

This table reports the probit estimation of whether a loan is secured or not. The dependent variable takes the value of one if the loan is secured, and zero otherwise. . Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 20**  
**Regressions Relating Foreign Assets Ratio to the Probability of a Loan being Secured - Additional Tests**  
**Dependent Variable - Collateral Requirement or Not**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	0.0692 (0.23)	0.448 (1.24)	-0.223 (-0.63)	-1.243** (-2.12)	0.672* (1.92)	0.309 (0.99)
Low/Weak Group	-1.198* (-1.69)	-1.169** (-2.29)	-0.0531 (-0.12)	0.299 (0.90)	-1.689*** (-3.32)	-1.841*** (-2.59)
Non-Country Specific	-1.549*** (-5.73)	-1.537*** (-5.68)	-1.557*** (-5.76)	-1.547*** (-5.72)	-1.544*** (-5.70)	-1.547*** (-5.71)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
Chi Squared	2.460	5.840	0.080	4.870	13.120	6.900
p value	0.117	0.016	0.778	0.027	0.000	0.009
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.252	0.252	0.251	0.252	0.252	0.252

This table reports the probit estimation of whether a loan is secured or not. The dependent variable takes the value of one if the loan is secured, and zero otherwise. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C.

The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \*

Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 21**  
**Regressions Relating Foreign Segment Location to the Length of Loan Maturity - Additional Tests**  
**Dependent Variable - Natural Log of the Maturity of the Loan in Months**  
**Globalization Measured as the Number of Foreign Segments**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	0.00317 (0.72)	-0.00746 (-1.54)	0.00885 (1.26)	-0.0147 (-1.50)	0.00497 (0.73)	0.00798 (1.62)
Low/Weak Group	0.000242 (0.03)	0.0187*** (2.87)	-0.00187 (-0.36)	0.00891** (2.18)	0.000514 (0.10)	-0.00652 (-0.90)
Non-Country Specific	0.00178 (0.41)	0.00145 (0.33)	0.00165 (0.38)	0.00179 (0.41)	0.00178 (0.41)	0.00180 (0.41)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	0.070	7.080	0.990	3.720	0.180	1.820
p value	0.794	0.008	0.319	0.054	0.672	0.177
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.507	0.507	0.507	0.507	0.507	0.507

This table reports the OLS regression of the natural log of the maturity of the loan in months. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.



**TABLE 22**  
**Regressions Relating Foreign Sales Ratio to the Length of Loan Maturity - Additional Tests**  
**Dependent Variable - Natural Log of the Maturity of the Loan in Months**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.0242 (-0.53)	-0.0893* (-1.78)	-0.0485 (-0.87)	-0.145* (-1.96)	-0.0519 (-0.90)	-0.0110 (-0.23)
Low/Weak Group	0.0933 (0.95)	0.159** (2.41)	0.0454 (0.81)	0.0603 (1.26)	0.0394 (0.69)	0.0280 (0.31)
Non-Country Specific	0.00611 (0.22)	0.0115 (0.42)	0.00516 (0.19)	0.00399 (0.15)	0.00567 (0.21)	0.00631 (0.23)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	1.040	8.290	1.350	5.090	1.160	0.130
p value	0.308	0.004	0.245	0.024	0.281	0.722
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.507	0.507	0.507	0.507	0.507	0.507

This table reports the OLS regression of the natural log of the maturity of the loan in months. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 23**  
**Regressions Relating Foreign Assets Ratio to the Length of Loan Maturity - Additional Tests**  
**Dependent Variable - Natural Log of the Maturity of the Loan in Months**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	0.0390 (0.42)	-0.0115 (-0.11)	-0.0307 (-0.29)	0.111 (0.67)	0.00864 (0.08)	0.0238 (0.25)
Low/Weak Group	0.159 (0.72)	0.170 (1.20)	0.195 (1.45)	0.0464 (0.47)	0.154 (1.03)	0.188 (0.96)
Non-Country Specific	-0.0649 (-0.66)	-0.0656 (-0.67)	-0.0656 (-0.67)	-0.0644 (-0.66)	-0.0647 (-0.66)	-0.0651 (-0.66)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	0.230	0.920	1.570	0.100	0.570	0.510
p value	0.635	0.339	0.211	0.749	0.451	0.475
Number of Observations	14601	14601	14601	14601	14601	14601
Adjusted R <sup>2</sup>	0.507	0.507	0.507	0.507	0.507	0.507

This table reports the OLS regression of the natural log of the maturity of the loan in months. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 24**  
**Regressions Relating Foreign Segment Location to the Size of Loan Syndicate - Additional Tests**  
**Dependent Variable - Natural Log of the Number of Banks Participating in the Loan**  
**Globalization Measured as the number of Foreign Segments**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.00169 (-0.24)	-0.0198** (-2.47)	0.0250** (2.25)	-0.00941 (-0.64)	0.0164 (1.53)	0.00525 (0.65)
Low/Weak Group	-0.00685 (-0.49)	0.0259** (2.23)	-0.0209** (-2.49)	-0.000568 (-0.08)	-0.0161* (-1.92)	-0.0162 (-1.39)
Non-Country Specific	-0.0173** (-2.23)	-0.0159** (-2.05)	-0.0159** (-2.04)	-0.0167** (-2.18)	-0.0163** (-2.10)	-0.0167** (-2.14)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	0.080	7.620	7.710	0.220	4.080	1.630
p value	0.773	0.006	0.006	0.639	0.044	0.201
Number of Observations	8284	8284	8284	8284	8284	8284
Adjusted R <sup>2</sup>	0.487	0.487	0.487	0.487	0.487	0.487

This table reports the OLS regression of the natural log of syndicate participants on the number of foreign segments as defined in table 4 for global firms (i.e., firms reporting at least one foreign segment in my sample). Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 25**  
**Regressions Relating Foreign Sales Ratio to the Size of Loan Syndicate - Additional Tests**  
**Dependent Variable - Natural Log of the Number of Banks Participating in the Loan**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	0.0343 (0.54)	-0.135* (-1.90)	0.196** (2.40)	-0.105 (-1.07)	0.168* (1.92)	0.0906 (1.34)
Low/Weak Group	-0.181 (-1.25)	0.275*** (2.83)	-0.190** (-2.30)	0.0339 (0.47)	-0.150* (-1.83)	-0.258** (-2.06)
Non-Country Specific	-0.138*** (-3.03)	-0.120*** (-2.63)	-0.128*** (-2.80)	-0.143*** (-3.14)	-0.131*** (-2.88)	-0.136*** (-2.98)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	1.770	11.380	10.690	1.290	6.550	5.590
p value	0.183	0.001	0.001	0.257	0.011	0.018
Number of Observations	8284	8284	8284	8284	8284	8284
Adjusted R <sup>2</sup>	0.487	0.487	0.487	0.487	0.487	0.487

This table reports the OLS regression of the natural log of syndicate participants on foreign sales ratio as defined in table 4 for global firms (i.e., firms reporting at least one foreign segment in my sample). Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 26**  
**Regressions Relating Foreign Assets Ratio to the Size of Loan Syndicate - Additional Tests**  
**Dependent Variable - Natural Log of the Number of Banks Participating in the Loan**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.131 (-0.83)	-0.0550 (-0.31)	-0.0573 (-0.31)	-0.0550 (-0.18)	-0.129 (-0.70)	-0.162 (-0.99)
Low/Weak Group	0.817** (2.15)	0.260 (0.98)	0.184 (0.75)	0.101 (0.58)	0.345 (1.42)	0.748** (2.28)
Non-Country Specific	-0.200 (-1.37)	-0.193 (-1.33)	-0.192 (-1.32)	-0.191 (-1.31)	-0.194 (-1.33)	-0.198 (-1.36)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	4.910	0.900	0.560	0.190	2.200	5.600
p value	0.027	0.344	0.454	0.667	0.138	0.018
Number of Observations	8284	8284	8284	8284	8284	8284
Adjusted R <sup>2</sup>	0.487	0.486	0.486	0.486	0.487	0.487

This table reports the OLS regression of the natural log of syndicate participants on foreign assets ratio as defined in table 4 for global firms (i.e., firms reporting at least one foreign segment in my sample). Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 27**  
**Regressions Relating Foreign Segment Location to Loan Ownership - Additional Tests**  
**Dependent Variable - Percentage of Loan Owned by U.S. Banks**  
**Globalization Measured as the Number of Foreign Segments**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-0.207 (-0.57)	-0.717 (-1.64)	-0.0573 (-0.09)	-0.433 (-0.46)	0.102 (0.18)	-0.336 (-0.86)
Low/Weak Group	-2.231*** (-2.81)	-0.848 (-1.31)	-1.230** (-2.49)	-0.856** (-2.08)	-1.339*** (-2.70)	-1.475** (-2.32)
Non-Country Specific	-1.466*** (-3.09)	-1.566*** (-3.28)	-1.497*** (-3.14)	-1.506*** (-3.21)	-1.549*** (-3.25)	-1.483*** (-3.12)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	4.090	0.020	1.460	0.120	2.450	1.710
p value	0.043	0.888	0.228	0.725	0.118	0.191
Number of Observations	2261	2261	2261	2261	2261	2261
Adjusted R <sup>2</sup>	0.376	0.375	0.375	0.374	0.375	0.375

This table reports the OLS regression of the percentage of the loan owned by U.S. banks on the number of foreign segments as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 28**  
**Regressions Relating Foreign Sales Ratio to Loan Ownership - Additional Tests**  
**Dependent Variable - Percentage of Loan Owned by U.S. Banks**  
**Globalization Measured as the Foreign Sales Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-25.53*** (-6.21)	-26.90*** (-4.52)	-34.58*** (-6.37)	-19.52*** (-3.18)	-30.14*** (-5.05)	-30.39*** (-7.11)
Low/Weak Group	-52.31*** (-5.28)	-36.96*** (-5.82)	-28.35*** (-4.46)	-36.15*** (-6.01)	-30.39*** (-4.59)	-33.35*** (-3.41)
Non-Country Specific	-27.80*** (-10.16)	-28.09*** (-10.26)	-28.12*** (-10.26)	-27.22*** (-9.99)	-27.72*** (-10.12)	-27.91*** (-10.22)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	6.140	1.120	0.500	2.990	0.000	0.070
p value	0.013	0.291	0.478	0.084	0.979	0.787
Number of Observations	2261	2261	2261	2261	2261	2261
Adjusted R <sup>2</sup>	0.422	0.418	0.420	0.418	0.417	0.419

This table reports the OLS regression of the percentage of the loan owned by U.S. banks on the foreign sales ratio as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**TABLE 29**  
**Regressions Relating Foreign Assets Ratio to Loan Ownership - Additional Tests**  
**Dependent Variable - Percentage of Loan Owned by U.S. Banks**  
**Globalization Measured as the Foreign Assets Ratio**  
**Single Country-Level Dimensions**

<b>Variables</b>	<b>Country - Level Dimension</b>					
	ILMED (1)	CRMED (2)	PRMED (3)	DEFF (4)	PR6MED (5)	PR6USA (6)
<i>Globalization proxy</i>						
High/Strong Group	-23.34** (-1.99)	-21.46 (-1.55)	-22.56 (-1.51)	-42.10* (-1.94)	-27.53** (-1.96)	-22.16* (-1.76)
Low/Weak Group	-9.438 (-0.71)	-21.88 (-1.14)	-17.88* (-1.68)	-13.12 (-1.14)	-10.46 (-0.94)	-15.78 (-1.49)
Non-Country Specific	-33.32*** (-4.09)	-32.89*** (-4.05)	-33.17*** (-4.10)	-33.56*** (-4.14)	-33.30*** (-4.10)	-33.12*** (-4.08)
<i>Controls and Indicators</i>						
Loan Characteristic Controls	included	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included	included
Year Indicators	included	included	included	included	included	included
Industry Indicators	included	included	included	included	included	included
<i>High/Strong - Low/Weak</i>						
	<b>Test of Differences</b>					
F Statistic	0.530	0.000	0.060	1.260	0.860	0.140
p value	0.469	0.988	0.803	0.262	0.354	0.713
Number of Observations	2261	2261	2261	2261	2261	2261
Adjusted R <sup>2</sup>	0.377	0.377	0.377	0.378	0.378	0.377

This table reports the OLS regression of the percentage of the loan owned by U.S. banks on the foreign assets ratio as defined in table 4. Columns 1 - 6 disaggregate globalization into groups as described in Appendix C. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.



**TABLE 30**  
**Regressions Relating Globalization to Loan Contract Features - Pre 2004**  
**Multiple Country-Level Dimensions**

<b>Dependent Variable</b>	Log(Spread)	Security	Log(SynNum)	US%	US%
<b>Globalization Proxy</b>	Foreign Segments	Foreign Assets Ratio	Foreign Assets Ratio	Foreign Segments	Foreign Sales Ratio
<b>Country-Level Dimensions</b>	IL/CR/PR	IL/CR/PR	IL/CR/PR	IL/CR/PR	IL/CR/PR
<b>Original Table Number</b>	Table 7	Table 10	Table 12	Table 14	Table 14
<b>Original Column Number</b>	Column 4	Column 12	Column 4	Column 4	Column 8
<b>Variables</b>	(1)	(2)	(3)	(4)	(5)
<i>Globalization proxy</i>					
High/Strong Group	-0.0405** (-2.45)	1.228 (1.53)	-0.690 (-1.60)	-2.169 (-1.57)	-65.66*** (-4.96)
Low/Weak Group	0.00712 (0.34)	-1.608 (-1.09)	2.227*** (3.34)	-1.22 (-1.22)	-110.3*** (-3.94)
Mixed Group	0.0167 (1.29)	-0.682 (-0.87)	-0.205 (-0.54)	-0.857 (-0.63)	-42.56*** (-5.16)
Non-Country Specific	-0.0232*** (-3.07)	-1.122*** (-2.59)	0.188 (0.72)	-0.801 (-1.17)	-31.59*** (-7.07)
<i>Controls and Indicators</i>					
Loan Characteristic Controls	included	included	included	included	included
Firm Characteristic Controls	included	included	included	included	included
Loan Type Indicators	included	included	included	included	included
Loan Purpose Indicators	included	included	included	included	included
Year Indicators	included	included	included	included	included
Industry Indicators	included	included	included	included	included
<i>High/Strong - Low/Weak</i>					
<b>Test of Differences</b>					
F Statistic or Chi Squared	2.910	2.770	12.430	0.020	2.290
p value	0.088	0.096	0.000	0.901	0.131
Number of Observations	6257	6898	4084	1092	1092
Adjusted R <sup>2</sup> or Psuedo R <sup>2</sup>	0.678	0.291	0.551	0.340	0.420

This table reports the results of re-testing the regressions shown in Table 7 column 4, Table 10 column 12, Table 12 column 4, and Table 14 columns 4 and 8. The t-statistics in parentheses are based on standard errors corrected for heteroscedasticity and firm-level clustering. \* Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.