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Conglomerates on the rise again? A cross-regional study on the impact of the 2008–2009 financial crisis on the diversification discount

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ABSTRACT

This paper investigates how the 2008–2009 financial crisis affected the value of diversification in different regions of the world, thereby emphasizing the role of the institutional context. We show that the effect of the credit crunch upon the diversification discount varied with the regions' level of capital market maturity and legal environment. In developed Asia Pacific, the British Isles, and North America, we find that the discount on conglomerates fell significantly during the crisis years; however, in Continental Europe – the region possessing the least developed capital markets and lowest legal investor protection in our sample – the impact of the financial meltdown upon the relative value of diversified firms was insignificant. Our study provides additional evidence on factors influencing the relative costs and benefits of diversified firms and highlights in particular the importance of accounting for different institutional settings.

1. Introduction

In 2008–2009, the world experienced a financial crisis of historic proportions. Induced by the burst of the U.S. housing bubble in 2007, a vicious circle of asset price deflation, margin calls, fire sales, and deleveraging resulted in a worldwide systemic banking failure. While dramatic and unfortunate, the recent global financial meltdown serves as a natural experiment for researchers to study the impact of a credit-constrained environment on firm performance.

As such, it provides the opportunity to shed additional light on factors influencing conglomerate valuation. The question of whether corporate diversification harms or creates shareholder wealth, thus whether conglomerates trade at a discount or premium compared to standalones, has intensely been discussed over the last four decades. Various researchers analyze this question by relating the relative costs and benefits of conglomerates' internal capital markets to external capital markets (e.g. Ahn and Denis, 2004; Rajan et al., 2000; Shin and Stulz, 1998). The significant drop in available external funding caused by the financial crisis, hence, allows for a re-examination of potential strengths and weaknesses of diversified firms.

This paper addresses the question how the late-2000s financial breakdown affected the value of diversification in different regions of the world, placing emphasis on the role of their institutional context. Our sample comprises 68,330 firm–year observations from developed Asia Pacific, the British Isles, Continental Europe, and North America, covering the period 1998 to

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2009. So far, Kuppuswamy and Villalonga (2010) provide the only work relating the crisis to the literature on the conglomerate discount.[1] Using quarterly U.S. data from Q1 2005 to Q4 2009, they show that the discount on diversified firms decreased significantly during the crisis, suggesting that the change was caused by two effects: the "more money" effect arising from the debt coinsurance feature of conglomerates, and the "smarter money" effect stemming from increased internal capital market efficiency. However, transferability of these U.S.-based findings may be limited. We hypothesize that the effect on the discount caused by the financial crisis varies across regions and that these differences can be explained by the degree of capital market development and legal investor protection. Fauver et al. (2003) provide evidence for a negative relation between the value of diversification and capital market maturity: significant conglomerate discounts are found among countries with well-developed markets, whereas no discount exists in countries with less developed markets. They further show that the value of diversification also depends upon a country's legal context: countries with an English legal system (as opposed to the French, German, or Scandinavian system) provide investors with the strongest legal protection; the higher the protection of investors, the better the access to low-cost external capital and the lower the value of an internal capital market. Consequently, we argue that in countries with less mature capital markets and fewer investor rights, i.e. where raising external capital is more costly and difficult even during non-recession periods, firms should not be as strongly affected by the credit crunch as in countries with better developed capital markets and advanced investor protection. Hence, during a recession, the availability of a financing alternative in the form of an internal capital market should be less value-increasing in these countries as well.

We use four indicators to capture the regions' level of capital market maturity: GNI per capita (in US$), market capitalization of listed companies as % of GDP, total value of stocks traded as % of GDP, and listed domestic companies to population. Countries' legal systems provide an indication on the degree of investor protection among regions. We show that in Continental Europe capital markets are least developed and investor rights are least pronounced. According to our hypothesis, the positive impact of the financial crisis upon the value of diversification should thus be smallest in Continental Europe.

Performing fixed effects panel regressions, we document statistically significant conglomerate discounts for Asia Pacific (−0.059 to −0.079), the British Isles (−0.094 to −0.124), and North America (−0.053 to −0.173) prior to the recession; for Continental Europe, the diversification dummy is not significantly different from zero. During the financial crisis, the discount decreases for Asia Pacific by 8.7 to 10.9 percentage points, the British Isles by 5.8 to 9.0 percentage points, and North America by 3.4 to 4.7 percentage points. In the case of the Asian Pacific region, the crisis even seems to turn the conglomerate discount into a premium. For Continental Europe, however, the interaction between diversification dummy and crisis indicator is close to zero and insignificant. Our results are robust to self-selection biases, different time frames, and other excess value definitions. Thus, we conclude that our findings support our hypothesis.

We contribute to the literature in several ways. First, our paper is the first to globally investigate the impact of the 2008–2009 financial crisis on the value of corporate diversification. Hence, we provide additional evidence on factors influencing the relative costs and benefits of diversified firms in different world geographic regions. Second, we provide an explanation for the divergence of our regional results, emphasizing the role of capital market development and legal investor protection. In this context, the paper highlights the importance of accounting for the institutional environment in corporate diversification studies. Third, our analysis is based on a more accurate estimation of the excess value measure, relying on an enterprise value base and geometric mean aggregated industry multipliers.

The paper is organized as follows. In Section 2, we describe the sample selection process and discuss key sample characteristics. We develop our research hypothesis in Section 3. Section 4 introduces our research methodology and examines the impact of the 2008–2009 financial crisis on conglomerate discounts across different geographical regions. Section 5 concludes.

2. Sample selection and description

We gather a sample of publicly traded firms from four different regions, namely developed Asia Pacific, the British Isles, Continental Europe, and North America, over the 12-year period from 1998 to 2009. Capital market and economic data are collected from Datastream and balance sheet items from Worldscope databases. Our analyses focus on regions rather than countries, as (in most cases) the number of firm–years on the national level is rather low, thus not allowing for reliable regression results. Following previous studies, we exclude firms with segments in the financial services sector (SIC 6000–6999) and non-classifiable segments (SIC 9999) from the sample. We further remove firm–years with insufficient financial information, including all observations with missing data on market capitalization, total debt, minority interest, total sales, and segment sales. In a next step, faulty sales figures are eliminated; this includes all observations with negative total sales or segment sales, total sales of zero, and where the sum of segment sales is less than 99% or greater than 101% of total sales. We base our analyses exclusively on sales, as data on segment assets and profitability are very sparse across all regions. To avoid distorted valuation multipliers, only firms with total sales of at least 20 million US$ are considered; small firms usually trade at a discount for low liquidity (see Loderer and Roth (2005)). The screening procedure leaves us with an international sample of 68,330 firm–year

[1] To the best of our knowledge, no other paper analyzes the real effects of the 2008–2009 financial crisis on the corporate sector, directly differentiating between conglomerates and standalone firms. Various studies document the effects on stock price development, external borrowing, investment behavior, and cash holdings (e.g. Almeida et al., 2009; Campello et al., 2010; Duchin et al., 2010; Ivashina and Scharfstein, 2010). However, they all focus on firms in general. Hovakimian (2011) and Yan et al. (2010) analyze, amongst others, whether internal capital market efficiency changes during recession periods. Both find that conglomerates improve the efficiency of internal resource allocation in times of tightened external capital markets. However, they do not draw inferences about the diversification discount and do not include the 2008–2009 financial crisis.