



# Corporate diversification and firm value during economic downturns



Nikanor I. Volkov\*, Garrett C. Smith

Department of Finance, College of Business, Florida Atlantic University, Boca Raton, FL 33431, United States

## ARTICLE INFO

### Article history:

Received 13 September 2013

Received in revised form 17 April 2014

Accepted 19 August 2014

Available online 3 September 2014

### JEL classification:

G01

G30

G32

L25

### Keywords:

Corporate diversification

Recessions

Relative firm value

## ABSTRACT

This paper examines the effect of corporate diversification on firm value during periods of economic downturns. Analysis of diversified firms' valuation during recessionary periods reveals a significant increase in relative value of diversified firms. The observed improvement in the relative valuation is only a temporary phenomenon, which disappears in the four quarters following the trough of the recession. We do not find support to the hypothesis that the improvement in relative valuation of diversified firms during economic downturns is attributed to the ability of diversified firms to utilize broader external capital markets. We demonstrate that the improvement in relative valuation is largely driven by diversified firms that are financially constrained, and, therefore, attribute the observed improvement to more efficient internal capital allocation during recessions.

© 2014 The Board of Trustees of the University of Illinois. Published by Elsevier B.V. All rights reserved.

## 1. Introduction

The effects of corporate diversification, both global and industrial, on corporate value have been widely researched in the literature in the last several decades. Initially, the dominant view in academic circles was that corporate diversification enhances firm value and thus benefits the firm's shareholders [Lewellen \(1971\)](#). Early empirical research presents results which cast doubt upon the link between diversification and a valuation premium. Specifically, [Berger and Ofek \(1995\)](#), [Lang and Stulz, 1994](#), [Servaes \(1996\)](#) and [Denis, Denis, and Yost \(2002\)](#), DDY hereafter, all report the existence of a significant discount associated with diversified firms as compared to pure play domestic one-segment firms. Other studies, which use different methodologies, document no discount, or even a modest premium associated with diversification (see for example [Kuppuswamy & Villalonga, 2010](#), KV hereafter, and [Campa & Kedia, 2002](#)).

In this study, we focus on analyzing the relative valuation of globally and industrially diversified firms during economic downturns as compared to the single segment domestic firms. Specifically, we examine periods of recessions, as defined by

National Bureau of Economic Research (NBER), and the periods of one year following the recessions to identify the change in the relative value of diversified firms. We test the hypothesis that the relative value of diversified firms increases during recessionary periods. We propose that the improvement in relative value is attributed to the ability of diversified firms to access broader capital markets and to an improvement in the efficiency of internal capital allocation.<sup>1</sup> The reasons for the improvement in the relative firm value of diversified firms may vary across the types (scope) of diversification the firm engages in. Unlike industrially diversified firms, globally and both globally and industrially diversified firms have broader access to international capital markets, which they often utilize for operational reasons (see for example [Bartram, Brown & Minton, 2010](#)). Globally diversified firms may utilize their access to foreign capital markets during periods of constrained domestic credit conditions and cross-subsidize their segments utilizing capital obtained in less constrained capital markets. Furthermore, from the operational perspective, the effect of a domestic recession is likely homogeneous for single segment firms and domestic segments of diversified firms. Firms that operate outside of the domestic market have an option to allocate funds to projects in less affected geographical regions.

\* Corresponding author. Tel.: +1 561 297 4046.

E-mail addresses: [nvolkov@fau.edu](mailto:nvolkov@fau.edu) (N.I. Volkov), [gsmith78@fau.edu](mailto:gsmith78@fau.edu) (G.C. Smith).

<sup>1</sup> See [Scharfstein and Stein \(2000\)](#) and [Hovakimian \(2011\)](#).

Using a sample of quarterly data from 1999 to 2011, we document a significant increase in the relative firm value during recessions for diversified firms that engage in global and both global and industrial types of diversification. The improvement in the relative value is both statistically and economically significant with the relative value of a global firm increasing by almost 6% and firms that engage in both global and industrial diversification by 8.8% on average. Furthermore, we demonstrate that the improvement in the relative firm value is only a temporary phenomenon. In the four quarters following the trough of the recession, the relative value of diversified firms reverts to the pre-recession equilibrium.<sup>2</sup>

We demonstrate that, during economic downturns, diversified firms do not increase their leverage relative to single segment firms, implying that they do not utilize their superior ability to access broader capital markets to cross-subsidize their segments during recessions. On the contrary, we show that, on average, the relative leverage of diversified firms drops during recessionary periods. This finding is consistent with the proposition that during recessions the operational risks of companies increases and, therefore, to reduce the overall risk diversified firms may decrease their leverage utilization. Interestingly, it is observed that diversified firms increased their relative leverage following the 2001 recession, but the increase in leverage is associated with a drop in the relative valuation of diversified firms. Although consistent with the proposition that diversified firms do enjoy access to broader capital markets, these findings allow us to dismiss the hypothesis that the improvement in relative valuation is attributed to better external capital utilization by diversified firms during recessions.

We demonstrate that the improvement in relative firm value is in large part attributed to firms that are financially constrained at the onset of the crises. While examining a sample of firms during the Global Financial Crisis (GFC), [Hovakimian \(2011\)](#) demonstrates that efficiency of internal capital markets improves significantly for firms that experienced financial constraints at the onset of the crisis. Our findings suggest that the improvement in the relative valuation is, at least in part, attributed to the improvement in the efficiency of internal capital allocation during periods of economic downturns.<sup>3</sup>

The current study contributes to the existing research on the topic of firm diversification in a number of ways. First, we document that relative firm valuation, for two of three firm diversification types, improves significantly during periods of recessions. Second, we document that the improved valuation is not sustained in the post-recessionary period, converging back to its pre-recession equilibrium in the four quarters following the trough of the recession. Third, we show that access to broader capital markets does not contribute to the improvement in the relative valuation of diversified firms. Finally, we demonstrate that the relative valuation improvement is largely attributed to firms that are under financial constraint at the onset of the economic downturn, a finding that lends support to a proposition that improvement in internal capital allocation is one of the key drivers of the observed reduction in diversification discount during recessions.

The remainder of the paper is organized in the following way: Section 2 reviews the existing literature, Section 3 covers the main hypotheses, Section 4 explains the data collection process and

methodology of the study, Section 5 discusses the results, and Section 6 concludes.

## 2. Literature review

Under an assumption of perfect capital markets, diversification does not increase shareholder wealth. Therefore, diversification is irrelevant to the firm (see [Modigliani & Miller, 1958](#)). Under perfect capital markets, investors are able to diversify their own portfolio. Rational investors operating under certainty in perfect capital markets should neither reward nor punish firms for choosing to diversify.

The empirical findings on the topic of relative valuation of diversified firms are mixed. Early literature (see for example [Berger & Ofek, 1995](#); [Lang & Stulz, 1994](#), and [DDY](#)) demonstrates that conglomerates are valued at a significant discount to single segment domestic firms. More recent literature, such as [Creal, Robinson, Rogers, and Zechman \(2012\)](#), focus on the comparison of the value of multinational corporations to firms operating in the home country of a given segment and document a small relative valuation premium for such firms.

### 2.1. Theoretical diversification literature

Several theories that explain the difference in valuation of diversified and non-diversified firms are prevailing in the extant literature. First, [Lewellen \(1971\)](#) suggests that due to the unique ability of diversified firms to cross-subsidize their segments, diversified firms should be valued at a premium to single segment firms. Firms may choose to take advantage of the economies of scale from operating in various countries and industries (see [Teece, 1980](#)). Value of diversification could also be greater if the firm possesses unique intangible assets. Multinational firms can take advantage of tax code differentials between different countries by shifting profits to countries with lower tax burdens (see [Desai, Foley, & Hines, 2004](#)). Alternatively, the value maximization model, suggests that firms start diversifying when they become relatively unproductive in their core business, therefore suggesting a discount associated with diversification (see [Gomes & Livdan, 2004](#)). Similarly, corporate refocusing theory assumes that diversified firms trade at a discount to what the individual value of a segment would be (see [Krishnaswami & Subramaniam, 1999](#); [Schlingemann, Stulz, & Walking, 2002](#)). The above theories apply to both industrial and global diversification, but may have varying effects on the value of the firm. For instance, the debt co-insurance effect, discussed in [Lewellen \(1971\)](#) will likely be more pronounced for firms involved in global diversification, as such firms have better access to global financial markets, and, therefore, can cross-subsidize their segments using external capital obtained in foreign capital markets. [Hann, Ogneva, and Ozbas \(2013\)](#) find that diversified firms enjoy significantly lower cost of capital, which suggests that during times of financial distress they may also have relatively easier access to capital and therefore exhibit a premium to their normal relative valuation to non-diversified firms.

The agency theory, which claims that managers have a vested interest in diversifying their firms to increase their own power, enrich themselves, reduce their own employment risk, is one of the explanations offered for the existence of a difference in the value of diversified firms relative to single-segment firms.<sup>4</sup> Under agency theory it is expected that diversification has a negative effect on

<sup>2</sup> The results are robust to the use of annual data and are consistent across both recessions covered in the sample.

<sup>3</sup> We recognize that observed improvement in the relative valuation may be driven by either the conglomerate or the single segment firm side. First, the value of the diversified firm during crisis may improve. Second, the value of pure play firms may be reduced more dramatically during recessions. For this reason, we refer to the observed phenomenon as a change in the relative valuation of diversified firms throughout this paper.

<sup>4</sup> [Aggarwal and Samwick \(2003\)](#), [Amihud and Lev \(1981\)](#), [Denis, Denis, and Sarin \(1997\)](#), [Jensen and Murphy \(1990\)](#), [Jensen \(1986\)](#), and [Shleifer and Vishny \(1989\)](#) present empire building, managerial hubris, managerial overconfidence, and

Download English Version:

<https://daneshyari.com/en/article/982159>

Download Persian Version:

<https://daneshyari.com/article/982159>

[Daneshyari.com](https://daneshyari.com)