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Should you globally diversify or let the globally diversified firm do it for you?

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ABSTRACT

This paper examines whether investor-made international diversification outperforms corporate international diversification. Our results indicate that internationally diversified firms yield higher returns relative to investor-made internationally diversified portfolios. Our results partially offer an explanation for the 'home bias puzzle', which argues that international asset holdings in individual portfolios remain significantly lower than forecasted by analysts despite the integration of global capital markets. However, as firms increase the number of geographic segments, the excess returns are lower. Additionally, firms that belong to durables, energy, manufacturing, shops and telecommunication industries have higher excess returns relative to other industries. Overall, our results suggest that investors will earn higher returns by investing in globally diversified MNCs rather than by attempting to build mimicking internationally diversified portfolios.

1. Introduction

Integrated global capital markets allow investors the flexibility of allocating funds internationally to reap benefits of diversification. In recent decades, there has been an evident rise in global financial integration that increasingly allows small investors to devote a portion of their portfolio to foreign assets. Denis, Denis, and Yost (2002) explain that global integration of capital markets has reduced the cost of international portfolio diversification for investors which has led to increased holdings of foreign assets by domestic investors. However, foreign asset holdings remain significantly lower than forecasted by many analysts. This phenomenon is known as the home bias puzzle, which argues that international asset holdings in individual portfolios remain significantly lower than forecasted despite the integration of global capital markets (Berrill & Kearney, 2010). According to Berrill and Kearney (2010), some plausible explanations for this puzzle include currency and political risk, information asymmetries, transaction costs, taxes, legal restrictions, among other controls (Berrill & Kearney, 2010).

Research on the benefits of global diversification debates whether there is a benefit to diversifying internationally. Some researchers argue that international diversification benefits for U.S. investors are limited (Driessen & Laeven, 2007) while others argue that, in the long-run, international diversification benefits the U.S. investors despite constraints such as the inability to short-sale (Chiou, Lee, & Chang, 2009). This paper examines whether investors should follow a strategy of diversifying their portfolios internationally or if they are better off investing in domestic firms that are operationally diversified into international markets.

Several studies analyze the effects of internationalization on firm value by comparing diversified firms to non-diversified firms. Overall, results suggest that international diversification destroys shareholder wealth, and diversified firms sell at an average discount of 15% (e.g. Berger & Ofek, 1995; Denis et al., 2002; Lins & Servaes, 1999). However, there is no strict consensus on how firm value is measured. For instance, Denis et al. (2002) measure firm excess value as the difference between firm market value and the imputed value of its industrial segments. Denis et al. (2002) calculate the imputed value by taking the product of the median ratio of total capital to sales and the level of sales for the segment, for single-segment, purely domestic firms in the same industry and year.

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The purpose of this paper is to analyze whether an investor that builds a portfolio mimicking the international diversification of domestic Multinational Corporations (MNCs) can earn higher returns than globally diversified firms. That is, should the investor globally diversify or let the globally diversified firm do it for them? We follow an approach similar to Denis et al. (2002) to calculate firm excess value. We focus on internationally diversified U.S. firms and examine firm excess return as the difference between the diversified firm's return and the return to a replicated investor-constructed portfolio. We hypothesize that despite the reduced cost of diversification to the retail investor due to the global market integration; globally diversified firms will still outperform a comparable globally diversified portfolio because of firm specific advantages such as tax benefits, economies of scale and scope, specialized human capital, among others. We perform a cross-sectional analysis using a fixed-effect panel generalized linear model (GLM) to determine firm specific characteristics that explain the positive or negative excess returns. Results from the cross-sectional analysis provide investors with characteristics that can help in their wealth allocation decisions.

By analyzing internationally diversified firms during the period 1998–2012, we find that corporate international diversification yields significantly higher returns than investor-made international diversification. These positive excess returns can be attributed to substantial intangible assets, production skills, marketing skill, management skills, and differences in tax and institutional laws of different countries, all of which have been identified by previous studies as possible advantages. Results from the cross-sectional analysis reveal that the industrial diversification and leverage are significantly positive related to excess returns. However, the relationship of excess returns with intangible assets and firm size is negative. Moreover, firm size has a non-linear relationship with excess return. Results also indicate that as firms increase the number of geographic segments, the excess returns are lower. Additionally, firms that belong to durables, energy, manufacturing, shops and telecommunication industries have higher excess returns relative to other industries.

Our findings provide partial explanation to the 'home bias puzzle', retail investors can reap the benefits of international diversification by investing in internationally diversified firms rather than bearing the risk and the cost of added analysis related to investing in foreign securities.

The remainder of this paper is organized as follows. Section 2 discusses the previous literature regarding costs and benefits of global diversification. Section 3 describes data and the sample selection. Section 4 discusses the empirical framework of the paper. Section 5 discusses the results, and Section 6 concludes.

2. Literature review

Prior literature documents a positive relationship between the extent of firm internationalization and profitability (Allen & Pantzalis, 1996; Brouthers, Werner, & Matulich, 2000; Douglas & Craig, 1983; Grant, 1987; Lecraw, 1983). Several studies hypothesize that firm specific assets and expertise provide globally diversified firms with competitive advantages that enhance shareholder value. According to the theory of synergy (Caves, 1971), global diversification enhances shareholder value when firms possess substantial intangible assets, production skills, marketing skills, and management skills that are significantly superior to its competitors'. Due to the nature of intangible assets, which are difficult to sell, it is most advantageous to create internal markets for these assets that can be achieved through diversification. These specific advantages cannot be replicated through investor-made diversification (Denis et al., 2002).

Globally diversified firms can also take advantage of tax codes and other institutional differences among countries and regions, which provides them with more flexibility to respond to changing prices and exchange rate fluctuations. MNCs benefit from debt shifting and profit shifting when there are differences in local tax rates of foreign subsidiaries and the parent company (Huizinga, Laeven, & Nicodeme, 2008). Foreign subsidiaries with high levels of leverage can be a reflection of debt shifting if local taxes are relatively high, because MNCs will shift debt to their foreign subsidiaries with the highest local tax rates in order to take advantage of the tax benefits. On the other hand, foreign subsidiaries with high levels of profits are an indication of profit shifting if local taxes are relatively low, since MNCs prefer to shift their profits to a country with lowest level of local taxes rates. Similarly, diversified firms have the benefits of raising capital in countries in which cost of capital is the cheapest. These firms can also take advantage of institutional differences by shifting operations and production to countries that offer the lowest cost and shift sales to countries with the highest demands. However, it is difficult for the retail investor to take advantage of the discrepancies in international business laws and market conditions. Another source of firm diversification benefits arises from investors' cost to diversify. Since firms can internationally diversify at a lower cost than individuals, investors are willing to pay a premium for globally diversified firms in order to free ride on part of the costs and risks that come with internationalization.

Even though global diversification has benefits, it comes with a cost. Take, for example, the cost of information asymmetry between divisions (Harris, Kriebel, & Raviv, 1982), the cost of monitoring management (Bodnar, Tang, & Weintrop, 1999), and the cost of coordination between headquarters and multiple divisions (Denis et al., 2002). One of the main reasons we might observe value destruction subsequent to global diversification is if the diversification is driven by agency problems in the first place. Managers undertake value-reducing diversification at the cost of shareholder wealth to reap the benefits for themselves. Through diversification, managers can gain power and prestige (Jensen, 1986; Stulz, 1990), receive increased compensation since compensation is typically positively correlated with size (Jensen & Murphy, 1990), and lastly they are interested in diversifying their own personal portfolio (Amihud & Baruch, 1981). If the agency problem is not managed through equity-based compensation or other means, then diversification can lead to value destruction (Nam, Tang, Thornton, & Wynne, 2006). Gao, Ng, and Wang (2008) find that when several anti-takeover provisions are in place (which indicates a possible agency problem), geographic diversification diminishes firm value, while firms with fewer anti-takeover provision do not experience a decline in firm value. Also if a firm internationalizes through its core activities, it will create value; however, internationalization through non-core activities will lead to value destruction (Doukas & Lang, 2003).

Although there is ample evidence on the benefits and detrimental effects of international diversification, extant literature does not explicitly test if international firm diversification can be replicated by the individual investor and if the retail investor can outperform returns generated by MNCs. We focus in examining some possible firm characteristics that may explain why internationally diversified firms are more successful at generating excess returns with respect to investor-made international portfolios.

Martin and Sayrak (2003) outline empirical literature that examines the valuation effects of global diversification. They classify the studies into three groups: corporate international diversification destroys shareholder value, does not destroy shareholder value, and creates shareholder value. The first group finds that corporate international diversification destroys shareholder