Degree of Internationalization: An Analysis of Canadian Banks

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The role of banks as intermediaries in global financial markets continues to evolve in response to regulatory reform, financial product innovation, and advances in information technology. A popular perception of this process is that banks have become more globalized, as witnessed by their ever-expanding operations in foreign jurisdictions. A simple question emerges: Does greater internationalization lead to better performance for Canadian banks?

Sullivan's (1994) seminal study offers a simple framework in which to measure the link between the degree of a bank's internationalization and its performance. His study is based on the premise that, as firms increase their share of operations abroad, and thus their degree of internationalization (DOI), they also experience higher levels of performance. DOI can be measured as the share of total sales, assets, income, or employees located outside a company's home country.[1] Performance can be measured as Tobin's Q, return on investment, return on equity, or profitability.

Objectives

This study has two objectives. First, we argue that the framework suggested by Sullivan must be implemented carefully. Its methodology implicitly assumes that internationalization is the "cause" of the observed value of firm performance—that is, increasing DOI has a direct impact on firm performance. Although it is partly true that causality may move from DOI to performance, this assumption ignores a very important aspect of international business theory: that firms go abroad to exploit firm-specific advantages. That is, firms develop techniques and products that give them some competitive advantage, which then allows the innovating firm to perform well in the domestic market. These firms then move abroad through foreign direct investment (and other methods) to exploit these firm-specific advantages. Since the firms that are doing well domestically are the most likely to move abroad, we expect superior performance before the move is made. Not explicitly accounting for this initial success may result in attributing too much significance to DOI.

The second objective is to formally account for risk in the analysis. Studies that use DOI as a predictor of firm performance implicitly assume that an increase in performance is a good thing for firms. Although this may seem obvious, the risk associated with the firms' foreign operations and how they compare with their domestic operations must also be taken into account. If the movement abroad increases the risk profile of a particular firm's operations, then an increase in performance is the minimum that would be expected by shareholders. The relevant question would relate to whether the increase in performance is sufficient to compensate shareholders for the increased risk. This study addresses that question directly.

Data and Methodology

Using quarterly data on the foreign-asset exposure of Canadian banks over the period 1994 to 2003, we test the link between performance and DOI, focusing on domestic banks operating in Canada, six of which have a significant DOI. The data on foreign-claims exposure are taken from the consolidated quarterly report on banking statistics collected by the Bank of Canada. Every bank operating in Canada provides quarterly statistics of the total asset exposure to each foreign jurisdiction in which it operates, on a fully consolidated basis. This covers all claims,

1. See Contractor, Kundu, and Hsu (2003) for an excellent survey of the DOI literature.

including deposits to other financial institutions; loans to financial institutions and firms; and securities, both government and corporate, made outside and inside Canada. These foreign claims of domestic Canadian banks are adjusted to account for exchange rate revaluation. The data cover the exposures of all Canadian banks to over 150 jurisdictions between 1994 and 2003. Additional bank balance-sheet data are also used, including assets, market capitalization, and other bank-specific characteristics.

We use a rigorous statistical methodology to test whether it is firms that are doing well that increase their DOI, or whether it is the DOI itself that improves their performance.[2]

We also examine whether just the degree of international operations is needed to test the relationship between DOI and performance, or if a breakdown of the level of risk involved is also required. We do this by breaking down the foreign investments; first, by country and, second, by the type of claim. We are thus able to compare the effect on performance of holding the least risky types of foreign claims, such as U.S. government securities, with that of holding the most risky, such as loans to businesses in developing countries. The ability to distinguish between the types of foreign-asset claims is very important, since it introduces one of the most basic principles of finance: that the higher the risk associated with an investment project, the higher should be its expected return. Tests of the relationship between DOI and performance that do not address this issue are averaging these two effects.

Results and Implications

The analysis suggests that there is a significant (but weak) positive relationship between DOI and performance, thus confirming one of the main theoretical predictions of international business. But the composition of foreign claims, in terms of risk, is important. Banks that take on more risk (i.e., more loans rather than greater claims in the form of securities) often have higher returns.

The implications for bank managers and their boards are clear. If internationalization is believed to somehow improve firm performance, then corporate strategists may be led to believe that expanding abroad will cause improvements in firm value. Moreover, to the extent that firm values are high to begin with, because of firm-specific advantages, then corporate strategists will realize that internationalization is a reflection of underlying firm-specific advantages and, hence, of high market values. The results of this study suggest that if firms decide to move abroad to improve performance, and if this decision is based only on the positive relationship between DOI and performance, then such a strategy may not result in improved performance.

This is because the impact on firm performance must take into account the risk profile of the companies' operations. If the expansion of multinational activities does not result in greater risk in the firm's operations, then a positive impact of DOI on performance can be interpreted as a good result. On the other hand, if the movement abroad also increases the risk exposure of the firm, then the increase in performance must be sufficient to compensate for the greater risk.

The implication for regulators is that not only is the degree of internationalization an important determinant of bank performance but so is its composition. Regulators must therefore consider the potential impact of banks' decisions to allocate their portfolios between domestic and foreign claims. This will assist regulators in ensuring safe and efficient financial markets.

2. Two approaches are taken. First, we attempt to control for bank characteristics that may be correlated to the level of DOI and performance; second, we implement generalized method of moments (Arellano and Bond 1991) estimation to control for the endogeneity of the relationship between DOI and performance.

References

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