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Internationalization and the evolution of corporate valuation ☆

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Abstract

By documenting the evolution of Tobin's q before, during, and after firms internationalize, this paper provides evidence on the bonding, segmentation, and market-timing theories of internationalization. We find that Tobin's q does not rise after internationalization, even relative to domestic firms. Instead, q rises significantly before and during the internationalization year, but then falls sharply in the following year, quickly relinquishing the increases of the previous years. In decomposing these dynamics, we find that market capitalization rises before internationalization and remains high, while corporate assets increase during internationalization. The evidence supports the theory that financial internationalization facilitates corporate expansion, but challenges the theory that internationalization produces an enduring effect on q by bonding firms to a better corporate governance system.
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1. Introduction

Between 1989 and 2000, almost 2,300 firms with a market capitalization of over eight trillion U.S. dollars "internationalized" by cross-listing, issuing depositary receipts, or raising equity capital in major financial centers. These "international firms" account for more than 40% of the market capitalization of their home

markets and, in many countries, value traded abroad exceeds domestic market activity. Yet, there are sharp disagreements over the causes and effects of internationalization.

To distinguish among theories of internationalization, we provide the first documentation of the evolution of Tobin's q and its components—corporate assets, market capitalization, and debt—before, during, and after firms internationalize. We also examine the time-series patterns of international firms relative to those of "domestic firms" (firms that do not internationalize) and thus abstract from country-specific factors influencing all firms within a country. To conduct the analysis, we compile a new database of over 9,000 international and domestic firms across 74 countries over the period 1989–2000, comprising almost 67,000 firm-year observations.

The major findings are as follows. First, on average, firms that internationalize at some point in the sample have higher qs than firms that never internationalize, but this difference exists years before firms actually access international equity markets. Second, when comparing the average value of q in the years before firms internationalize with the average value of q in the years after they internationalize, we find that q does not change after internationalization, nor does it change relative to that of domestic firms. Thus, internationalization is not associated with an enduring change in q. Third, when tracing out the dynamics in more detail, we find that q peaks in the internationalization year, rising significantly before firms access international equity markets and then falling sharply afterwards. Indeed, one year after internationalization, the q of international firms is lower than one year before internationalization. Moreover, the temporary increase in q vanishes by the second year after internationalization. Fourth, while q does not change permanently after internationalization, its components do. Market capitalization rises before internationalization and remains high thereafter, while corporate assets and debt expand after internationalization. Thus, internationalization is associated with firm growth, with international firms expanding relative to domestic ones.

The findings provide information on three views of internationalization. First, segmentation theories argue that firms internationalize to circumvent regulations, poor accounting systems, taxes, and illiquid domestic markets that discourage investors from purchasing their shares.[1] Thus, internationalization can lower firms' cost of capital and facilitate corporate expansion relative to firms that do not internationalize. These models do not predict, however, that internationalization produces an enduring increase in q. The reduction in the cost of capital increases the market value of corporate assets, which boosts q, but then firms increase their capital stock until the replacement cost of assets equals their market value, which reduces q (Tobin and Brainard, 1977).[2] If the market anticipates that the firm will lower its capital costs by internationalizing, then q rises before the firm actually internationalizes, and then falls after internationalizing as the firm uses cheaper capital to expand. Although segmentation theories allow for a rise and fall in q, the drop in the cost of capital alone does not imply that internationalization induces a lasting increase in q.

Our results are consistent with three key predictions from segmentation theories: (i) firms expand after they internationalize and grow relative to domestic firms that have not lowered their capital costs; (ii) q rises before internationalization and then quickly falls; and (iii) the qs of firms that internationalize do not increase relative those of domestic firms. Thus, segmentation models account for our main time-series and cross-sectional findings.

Second, this paper also provides empirical evidence on "bonding" theories, which argue that firms internationalize to bond themselves to a better corporate governance framework. Improved governance both (i) lowers firms' cost of capital, which facilitates firm expansion and (ii) reduces expropriation of corporate resources by firm insiders, which fosters an enduring increase in q. Like segmentation theories, bonding theories predict that internationalization lowers capital costs, causing q to rise and then fall as firms expand.

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[1]On segmentation theories, see, for example, Black (1974), Errunza and Losq (1985), Alexander, Eun, and Janakiramanan (1987), Pagano, Röell, and Zechner (2002), and the review by Stulz (1999).

[2]Segmentation theories predict that the value of marginal q returns to its original level after the internationalization process. Given that marginal q is not observable, we follow the literature and use average q in our empirical study. Hayashi (1982) shows that when the production function is homogeneous and the firm is a price taker, average q and marginal q are equivalent. In this case, the segmentation hypothesis predicts that average q should return to its original level after internationalization. In the more general case, the segmentation hypothesis predicts that average q increases with internationalization as the cost of capital goes down, and falls afterwards when the capital stock increases, but does not need to return to exactly its pre-internationalization level.