Financial integration and asset returns

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Abstract

The paper investigates the impact of financial integration on asset return, risk diversification and breadth of financial markets. We analyse a three-country macroeconomic model in which: (i) the number of financial assets is endogenous; (ii) assets are imperfect substitutes; (iii) cross-border asset trade entails some transaction costs; (iv) the investment technology is indivisible. In such an environment, lower transaction costs between two financial markets translate into higher demand for assets issued on those markets, higher asset price and greater diversification. For the country left outside the integrated area, the welfare impact is ambiguous: it enjoys better risk diversification but faces an adverse movement in its financial terms of trade. When we endogenise financial market location, we find that financial integration benefits the largest economy of the integrated area. Only when transaction costs become very small does financial integration lead to relocation of markets to the smallest economy. © 2000 Elsevier Science B.V. All rights reserved.

1. Introduction

Trade in goods and goods market integration have been extensively studied. Asset flows and the impact of financial integration on the cost of capital and the

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breadth of financial markets have been comparatively far less researched.[1] What are the implications of being part of a large and financially integrated area for risk sharing and asset returns? In this paper, we show that when: (i) the number of financial assets is endogenous; (ii) assets are imperfect substitutes; (iii) cross-border asset trade entails some transaction costs; (iv) the investment technology is indivisible; then size and integration of financial markets are powerful determinants of the cost of capital.

In particular, a decrease in transaction costs between two financial markets – the way we model financial integration – increases asset prices in the area, induces agents to develop more risky projects, increases the number of assets and pushes owners of projects to sell more of their project on the stock markets, so that diversification increases.[2] This happens because a decline in transaction costs increases demand for assets in the area, so that the effective size of the market is enlarged.[3] The presence of transaction costs and of imperfect substitutability translates this size effect into a price effect.[4] Because the number of assets is endogenous in our model, changes in the structure of financial markets also have an impact on the degree of incompleteness of financial markets and on aggregate risk.

What is the impact of regional financial integration on the rest of the world? We show that when two countries form a financial bloc, the welfare impact for the rest of the world is ambiguous: on the one hand there is a positive impact, because the increase in the total number of assets enables agents to diversify risk better as markets become less incomplete. On the other hand, the financial terms of trade of the country left outside the financial bloc deteriorate because the price of assets in the integrated area increases.

These results are corroborated by recent empirical studies on the cost of capital. Evidence surveyed in Stulz (1999) shows that financial integration decreases the cost of capital. Among others, Henry (1998) provides an event study of 12 liberalisations and finds abnormal returns of 4.6% per month on the average in the 4 months before and the 3 months after the liberalisation date (with a total cumulative average return of 36.8%). Bekaert and Harvey (2000) estimate that liberalisation decreases the dividend yield by 5–90 basis points.

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[1] For a discussion on the importance of these issues in the context of EMU, see Portes and Rey (1998).

[2] Pagano (1993) also relates market size and breadth. For models where asset prices and liquidity (depth of a market, as opposed to breadth) are endogenised, see Pagano (1989a,b).

[3] These demand effects have been documented in the literature. Shleifer (1986) and Harris and Gurel (1986) showed that when a stock joins the S&P 500 index, there is an immediate additional demand which raises the price of the stock by 3–4%.

[4] In Martin and Rey (1999), we analyse in detail the size effect on asset prices as well as welfare. We also introduce a richer structure of transaction costs. Lombardo and Pagano (1999) find similar effects of financial integration on asset returns.