

Financial Integration between Mainland China and Hong Kong SAR: Determinants and Impact on Stock Price Convergence

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Introduction

One of the most important issues in international macroeconomics literature is financial integration and its implications for economic and financial stability. The potential instability that comes with integration, in particular through shifts in volatile capital flows which can result in sharp changes in interest and exchange rates, can have negative consequences for the real economy and expose financial institutions, investors and borrowers to unanticipated new risks. These risks as well as the benefits have been extensively discussed. For example, Cowen (2006) shows that increasing financial integration carries serious risks, including greater volatility of capital flows and contagion risks. Such risks need to be anticipated and managed. Thus, a better understanding of financial integration is regarded as a key element for countries to reap the benefits and avoid financial stress. Research shows that, for instance, a sound and broad financial sector, sound macroeconomic policies, strong institutions, and open trade systems can help a country benefit from global integration and prevent a financial crisis (IMF, 2006). Mendoza, Quadrini and Ríos-Rull (2007) also point out that financial globalization hurts the poor in countries with less developed financial markets.

The ongoing financial integration between Hong Kong SAR (which is a very open economy) and mainland China (which is in the process of opening up), together with its impacts on transmission channels, is worth exploring for two reasons. First, with China's remarkable structural and policy changes, the financial integration between China and Hong Kong has accelerated over the past two decades, thereby enhancing their importance as financial centers, as well as enlarging the impacts on regional financial stability. Second, the evolving nature of Hong Kong SAR's integration with the Mainland (and within the region) will change the nature and transmission of external shocks, including through financial channels, e.g., convergence of stock prices. Research has shown that the Hong Kong economy would be affected by Mainland shocks through re-exports and changing monetary and financial conditions (Dong He, 2006). In this context, tracking the determinants of financial integration and its impact on transmission channels is of great interest to both mainland China and Hong Kong SAR.

Focusing on a specific channel, such as convergence of stock prices, is particularly important when considering the impacts of financial integration. First, the stock markets in the Mainland and Hong Kong are both subject to similar factors. For instance, if further appreciation of the renminbi is expected, the Hong Kong dollar will also echo this appreciation expectation because of its position as a proxy in the absence of full convertibility of the renminbi. Second, the resulting capital inflows and liquidity can help hold down interest rates and push up asset prices. Third, both investors and policy authorities are much concerned about the stock price convergence and its implications for capital flows.

This paper therefore examines recent developments pertaining to the financial integration of mainland China and Hong Kong, investigates the driving factors, studies the cross-border transmission of risk exposures (especially through the Hang Seng and Shanghai stock markets), and explores the policy challenges.

Specifically, the paper shows that the acceleration in financial integration over the past two decades has been supported by expanding trade and growing financial flows between mainland China and Hong Kong. The paper also finds that trade was the dominant channel of capital flows before the early 1990s, but financial channels, such as fund raising and loan issuance in Hong Kong's financial market, since the late 1990s, have become increasingly important. Moreover, further policies to promote the Mainland's capital account liberalization (e.g., 'through train') will speed up the process of financial integration. The paper argues that the financial vulnerabilities have increased with greater stock market co-movement. Finally, the paper suggests that macroeconomic policies, financial market infrastructure and institutional qualities should be strengthened to promote further bilateral financial integration.

Two econometric models are established.

- *Driving forces model:* This model identifies the driving forces of financial integration between the Mainland and Hong Kong SAR. With financial integration (proxied by the ratio of external assets and liabilities to GDP in the Mainland and Hong Kong SAR) being the dependent variable, a set of independent variables (global factors, such as the extent of global imbalance; regional factors, such as exchange rate appreciation, trade openness, financial depth, stock market capitalization, investor protection) will be tested to find the driving forces of financial integration.
- *Convergence of stock prices model.* The second model considers the impact of financial integration on the convergence of stock prices. Based on a cointegration analysis of the Hang Seng and Shanghai stock market prices, the model tries to find the (potential) factors driving the convergence of stock market prices.

The paper is structured as follows. Section II gives a brief literature survey, highlighting the determinants and economic and financial risks brought by financial integration. Section III discusses and chooses appropriate indicators measuring financial integration between Hong Kong SAR and Mainland China. Section IV sets up the driving forces model to identify the driving forces of financial integration, including domestic and global ones. Section V establishes the convergence of stock prices model to delve into the impact of financial integration on the stock price convergence (if any) between the Hong Kong and Shanghai stock markets. Section VI concludes with policy implications.