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### Economic growth and financial innovations in Asia: the practical implications

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Over the past decade, Asian economies have been introducing innovations and best practices into their financial markets and in the process have achieved significant gains in market efficiency and service quality. In conjunction with the greater efficiency and cost effectiveness arising from the establishment of compatible or shared trading platforms, there has been renewed interest from institutional and individual investors in identifying businesses and financial opportunities offered by these dynamic Asian markets. Yet complex challenges such as the need for modifications of laws, inadequate infrastructure, underdeveloped market practices, and poor corporate governance and law-enforcement mechanisms must be overcome to support the continued development of the Asian markets and ensure ongoing collaboration between financial markets in the region. This article examines policy recommendations to strengthen equity market operations and provides a platform from which to identify effective program designs. These recommendations draw heavily on the most recent findings in academia, combined with the practical experience of industry experts.

#### State of Asian equity markets

#### Recommendation 1: enhance market liquidity

The ongoing efforts of Asian exchanges to upgrade their market structures and trading systems over the past decade, coupled with robust economic growth, have resulted in increased sizes of stock exchanges, higher trading volumes, lengthened trading hours, and lower trading costs in most countries. But most stock markets are still characterised by high market concentration with moderate liquidity. Empirical studies show that an emerging market with chronic illiquidity and asymmetrical structure might be more susceptible than others to long-run deviations of stock prices from their fundamental values, rapidly deteriorating liquidity in a declining market, and prolonged delays in market recovery. As market liquidity is important for economic growth, liberalisation policies and market integration, one major challenge in developing the securities markets throughout the region is to enhance their liquidity and efficiency. Policymakers will need to address factors that affect market efficiency and liquidity, which in turn are affected by the size and heterogeneity of the investor base, by the explicit and implicit transaction costs, and by the availability of information with which to price securities accurately.

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#### Recommendation 2: create more favourable conditions to attract foreign listings

Although listing decisions might be influenced by geographical and cultural proximity, alternative trading venues, political and financial stability, pro-business policies, tax-friendly frameworks, a strong legal system, market transparency, and product-market considerations, some researchers suggest that fundraising activities typically take place on an exchange that offers a full range of top-quality services, better liquidity and lower trading costs. In addition, an exchange that imposes tougher governance and disclosure standards can improve the quality of corporate governance and information dissemination. Higher minimum standards for market capitalisation, the number of shareholders, and so on, will also have a positive effect on liquidity.

#### Challenges to financial innovations

#### i) Equity derivatives

Recommendation 3: design and implement appropriate market rules and prudential policies based on coherent principles for deeper and more sophisticated derivativesmarket developments. Derivatives markets provide two primary benefits: risk shifting and price discovery. The effectiveness of derivatives markets in accomplishing these purposes depends critically on high trading volumes in deep and wide cash markets. But emerging derivatives markets with chronic illiquidity problems in cash markets, inadequate legal and regulatory frameworks, shortcomings in trading infrastructure such as the lack of efficient settlement mechanisms, coupled with a limited understanding of risk-management techniques, pose significant challenges to financial stability and the expansion of equity derivatives markets across the region. Since derivatives positions create hidden leverage and increase risk taking, a balanced mix of speculative trading and genuine long-term institutional hedging should be seen as an essential component of sound market structure and long-term growth of equity derivatives markets. A sound trading environment of derivatives products can be augmented with transparency, centralised clearing and settlement, appropriate margin requirements and position limits, circuit breakers, supervisory oversight through monitoring systems, and other risk-management measures. Given the growing interdependence of financial markets, concerted policy efforts across the region to improve market rules, trading standards and riskmanagement practices are indispensable prerequisites for the attainment of sustainable equity derivatives trading in Asia.

#### ii) Equity repo markets

Recommendation 4: explore ways to open up collateral and repo markets. Repo markets—where loans are secured against securities-are among the least developed in the money markets across the Asia Pacific region. Impediments to their development include the lack of an appropriate legal framework or a master agreement that would provide certainty about which counterparty owns the collateral in the event of a default, the lack of arrangements that would allow the use of a wider spectrum of securities as collateral, and restrictions on short selling of securities. Thus, policymakers must undertake measures to open up collateral and repo markets to benefit from the advantages of cross-border collateral trade. It is equally important to strengthen corporate governance and risk-management capacity of the institutional stock lenders and borrowers before they invest a greater proportion of their assets in the securities markets. The expansion of the various facets of their asset base needs to be complemented by measures that facilitate cross-border investments and financial integration. Also, a high level of cross-border information is essential for an integrated international inter-bank market to exist. Some researchers caution that if stock lenders and borrowers are under different supervisory jurisdictions, the need to develop a set of comprehensive and coherent regulations applicable to different categories of stock lenders and borrowers in terms of their legal risks, counterparty risk exposures, and collateral management processes poses a grave challenge to be overcome. Moreover, the wider range of complex financial products being used as collateral, coupled with the fact that the secured nature of the repo reduces banks' incentives for peer monitoring, means that it is increasingly difficult to assess the probability of default when accepting and trading these complicated instruments.

#### iii) Short selling

Recommendation 5: allow more flexibility in short-selling rules. As short-selling activities might grow alongside the continued development of the stock and derivatives markets, and a necessary element for efficient short selling to take place is a robust securities lending system to be formally established and efficiently operated, wide participation by stock lenders such as stockbrokers, securities depositories, custodial banks, individuals, and institutions can encourage easier access to stock borrowing and provide liquidity for the efficient functioning of financial markets.

Empirical studies of the US and Asian markets indicate that eliminating short-sales restrictions helps improve the

efficiency of price discovery; also there is no empirical support for the assertion that short sellers exacerbate downward momentum. To the contrary, when short selling is possible, aggregate stock returns are less volatile, and there is greater liquidity in the shorting market. In addition, short sales speed up the price adjustment-not only to private/public firm-specific information but also to market-wide information. Therefore, an effective short-selling regulatory regime is one that should not restrict legitimate short-selling activities such as hedging, market making and arbitrage activities, so that these market activities can be carried out with more efficiency and at lower cost. Pertinent features of short selling within reasonable bounds of safety and soundness should, however, be put in place to curtail abusive short sales. Besides, timely disclosure of short-sales information can be used to help detect any potential abusive trading practices, as well as to alert market authorities of the build-up of large, open short positions that could pose systemic risk.

#### iv) International cross-listing

Recommendation 6: promote better information environments amid the rapidly changing and increasingly complex world of cross-listing. Although cross-listing can be thought of as a channel for companies to achieve integration with global capital markets, cross-listings within the Asian region by and large remain modest, with the exception of the China-Hong Kong SAR link. Some researchers posit that the quality of information linkages influences the liquidity impact of cross-listing. When the information linkages between the local and American Depository Receipt markets are of good quality because of open financial markets or close commercial ties, listing abroad generates an inter-market competition effect that benefits the liquidity of cross-listed firms, and this liquidity advantage is positively related to firm size. When the quality of information linkages is low, however, order flow migration effects dominate, and cross-listed firms do not present a liquidity advantage. In fact, for cross-listed stocks in non-linked economies, trading during common hours can result in less efficient trading if adverse selection is a problem.

Some findings suggest that greater analyst coverage or stricter disclosure associated with US exchange rules can foster the production of market-wide information rather than firm-specific information, thus crowding out private information collection for emerging-market firms. To improve the information environment, regulators must complement disclosure standards with other policy initiatives to encourage investment in the production

of private information and to minimise crowding-out effects. More recently, researchers have explored the efficiency issues and found that international crosslistings enhance home-market stock pricing efficiency, as the newly discovered information feeds back into home-market prices, making the home-market returngenerating processes more efficient. Moreover, the benefit of efficiency enhancement applies equally well regardless of home-market development status or the cross-listing location in the United States. Yet others argue that if domestic investors would, on average, be better off investing in cross-listed firms at the expense of non-cross-listed firms then cross-listing might not be the best way to achieve improvements in domestic markets. This is because efficiency gains from financialmarket liberalisation might not come from developing the breadth and depth of domestic stocks traded exclusively in domestic markets. Thus, more exploration of the efficiency impacts of international cross-listing should be worthwhile. Several Asian countries have corporate governance systems that expose minority shareholders to expropriation by controlling shareholders, and entry into the US markets forces the firms to comply with a stricter regime of corporate governance. But companies with higher private benefits of control and weaker home-country legal protections for investors tend to cross-list less frequently in countries with stronger legal protections, while those that do are rewarded with significant valuation premiums. Other studies find that US securities laws and regulations improve the corporate governance of cross-listed firms, thus substantiating the notion that the functional convergence of legal systems to a higher global standard is possible.

#### v) Financial integration

Recommendation 7: rethink the implications of financial integration and formulate a coherent regional strategy to promote the stability and efficiency of financial intermediation across Asian countries. The preponderance of empirical evidence suggests that even after market integration has taken place, emerging markets are still relatively less informationally efficient than developed markets. Other researchers maintain that the impact of global financial integration has been surprisingly limited, that financial-market integration is not accompanied by financial efficiency, and that international financial integration per se does not seem to stimulate economic growth. There are several caveats to bear in mind: 1) market integration alone cannot assure the lowest possible prices and the expected dynamic economic growth effects as market imperfections—in particular informational imperfections-prevail; 2)

even if there is strong political will to achieve financial integration, it will take years to remove the obstacles; and 3) an adequate legal environment by itself might not be sufficient for financial-market integration. Another strand of research suggests that intra-regional financial integration appears to lag behind the strong intra-regional economic links, and that such asymmetrical development in economic and financial integration can affect the region's financial stability. Specifically, while some countries welcome foreign investors as a means to improve the quantity and quality of financial intermediation, critics have pointed to the risks of a more unstable credit supply, particularly in times of financial turmoil and economic downturn, as foreign banks are reported to react somewhat more pro-cyclically than domestic banks to changing local economic conditions. Others acknowledge that foreign capital flows can have negative effects on economic growth for some countries, and that financial integration does not always contribute to an increase in economic growth, particularly in developing countries.

#### Conclusion

The key challenge for most Asian countries lies in the implementation and enforcement of the regulations that are already in place and in reforms of the legal system. At the same time, significant discrepancies-such as in market infrastructure, corporate governance, accounting and auditing, and some aspects of banking supervision and regulation-must be resolved in order to establish efficient financial markets that accord with international standards and practices. Since financial innovations have an important role to play in promoting efficiency in the financial intermediation process, and thereby to support economic growth, policymakers need to strike a balance between financial regulation and innovation. In other words, the challenge ahead is to make rules to protect and promote financial stability without stifling productive financial innovations. While leverage facilitates the efficient operation of financial markets, rigorous risk management is also important in maintaining these risks at prudent levels. Joyce Hsieh is an Assistant Professor of Finance.

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