SINGAPORE EXCHANGE

Managing investment risk IN TIMES OF VOLATILITY

Growing Asian stock exchanges, such as the Singapore Exchange, create economic value for businesses and investors, while helping to reduce volatility by offering a diversified basket of investment choices and equity derivative products.

By Geoff Howie

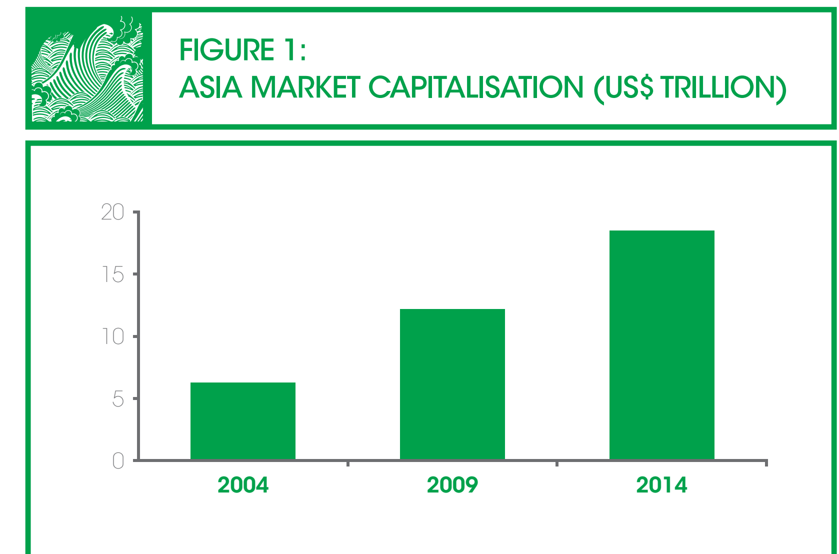
The wide milieu of participants, prices and scenarios making up present day equity markets all originate from simple, common socio-economic needs. They existed before merchant banks and before Shakespeare's Merchant of Venice engaged the public with a comedic take on their uncomplicated practicalities. Then and now, markets still make economic sense and create economic value.

Since the production of the most basic food staples, someone has had a sustainable business idea that required the help of another person. That help–economically termed as a capital input–could be in the form of labour, fixed assets or money, to which an entitlement would be received in return. These foundations remain much the same today. The exchange of some ownership of the business for funding is a modern day part of capital formation and stock exchanges are the institutions through which such efficient allocations take place.

Growing from 3,000 to 12,000 stocks

Let us take the example of a privately owned business considering listing on the stock market. The business might have an exciting plan that is yet to achieve fruition because, quite simply, the plan needs more capital. The business owners could go to the bank or issue a bond or sell some equity in the business, or do all three.

FIGURE 1: ASIA MARKET CAPITALISATION (US$ TRILLION)



Source: Bloomberg, SGX My Gateway

Unlike a bank loan or debt issuance, creating new equity will directly relinquish some ownership in the business. Moreover, equity enables the potentially new capital backers to be more aligned with the opportunities and challenges of the business. Equity builds stakeholders and can bring both institutional and individual investors into the plans and purpose of the business. For young companies, a successful Initial Public Offering (IPO) is a validation of the business by the markets.

In Asia, businesses are continuing to list, exchanging equity for capital. Alongside physical trade and direct investment, some significant milestones in the number of listings in Asia have brought about greater economic integration with the world. Twenty years ago, there were about 3,000 stocks listed across the current exchanges of Emerging Asia. [i] This has grown four-fold to the present, with over 12,000 primary listings, significantly outstripping the growth rate of the number of new primary listed stocks in North America and Western Europe, as well as the developed parts of Asia Pacific.

This has also helped shape the face of Asia's international financial centres (IFCs). As illustrated in Figure 1, Asia's major economies have seen their combined market capitalisation almost triple over the past decade. The total current market capitalisation of 14 Asian economies, including China, Hong Kong, India, Indonesia, Japan, Malaysia, Pakistan, the Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand and Vietnam, is

worth US$18.5 trillion. Their combined gross domestic product (GDP) stood at US$20.6 trillion at the end of 2013.

All these Asian economies, with the exception of Japan, saw their market capitalisation growth well outpace that of the United States. The economies that saw the greatest increase in their stock market capitalisation, compared to ten years ago, were China, India, Indonesia, the Philippines and Thailand.

For the ASEAN region, Bloomberg data indicates that the combined market capitalisation of the region has grown from US$430 billion in 1994 to US$510 billion in 2004 to US$2.4 trillion in 2014. This is based on data for eight countries with the exception of Myanmar and Brunei.

Despite the expansion of capitalisation in recent years, there is still scope and scale for more. This is particularly evident for listed businesses involved in infrastructure construction. Asia has an enormous pipeline of projects comprising road, rail, as well as electricity and water requirements. Yet currently, the Financial Times and the London Stock Exchange (FTSE) Emerging Infrastructure Opportunities Index is only one-sixth the size of the net market capitalisation of the FTSE Developed Infrastructure Opportunities Index.

The higher or wider the economic goals of the developing economy, the higher the potential for swings in sentiment.

Facilitating efficient equity

The potential return to equity owners is largely in the form of income and asset appreciation. Equity owners have a share in the income of the business, generally through dividends. They also own a ticket in the asset value of the business, generally reflected in the price of a share in the business.

Exchanges help to facilitate the trading of equity in listed companies and provide ongoing listing requirements that establish the trust of the businesses and their investors. This sets the stage for a fair, efficient, competitive, transparent and orderly mechanism to determine the share price of the business.

A public listing does not mean that businesses and investors are immune to failure, volatility or speculation in share prices. Microeconomics has historically shown that some businesses can succeed and others will still fail. As such, the challenges to the exchanges are firstly, to ensure the business investors are well informed on the risks, and secondly, to provide an adequate means of protecting these investments.

In Asia, exchanges and regulators have made significant progress along the experience curve in bringing together investors and businesses to facilitate efficient capital formation, predominantly through prescribing ongoing listing and trading requirements. Enabling secondary fund raising by businesses has also been instrumental in creating value for the businesses and investors. When the global stock markets were at record lows amidst high volatility five years ago, the Singapore Exchange (SGX) also saw a record set in the amount of secondary fund raisings by its listed businesses.

The establishment of investable stock indices has also helped investors manage their exposures over time—while stocks can join or leave a benchmark index, it is the index and its representation that becomes the investment.

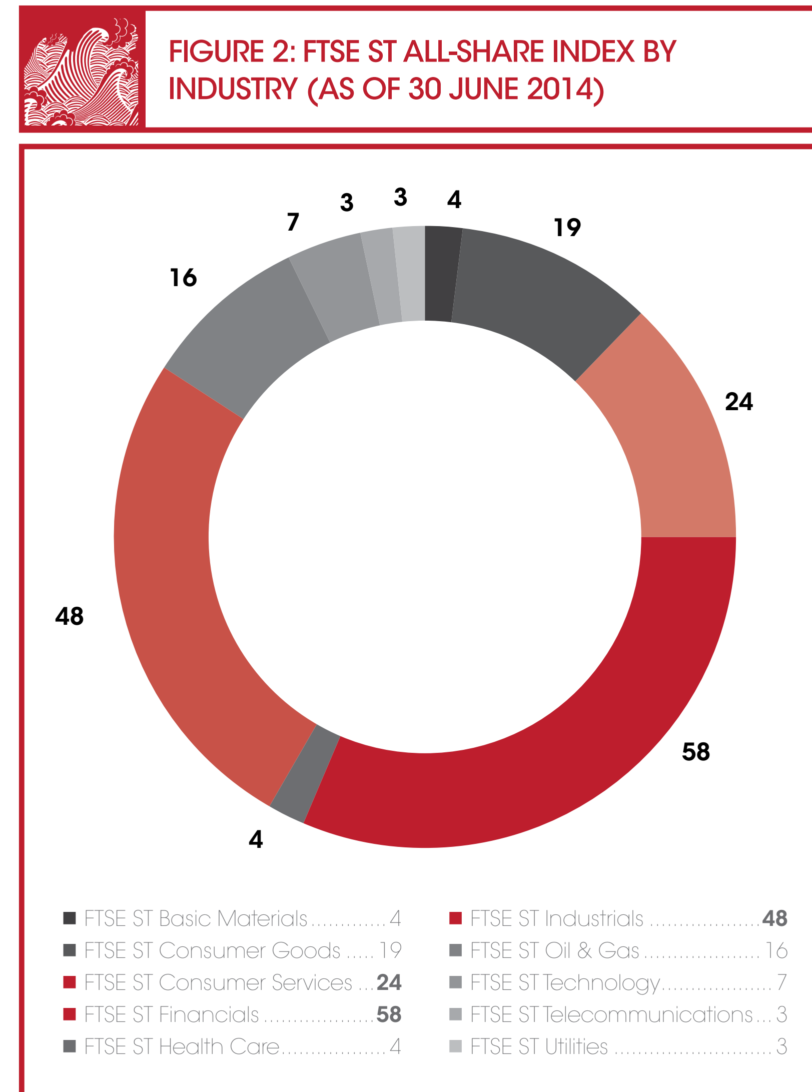
Stability in the sum of the parts

Unlike businesses listed on exchanges in the developed world, those in the heart of Emerging Asia can be more prone to volatility. These emerging economies are on a developmental curve that, if led by exports, can provide added sensitivity to global conditions, or if led by domestic demand, can add to political stress. These conditions can affect revenue and operational outlooks, and the smaller the business, the potentially more volatile the share price.

This was exemplified in the five years ending June 2014, where the annualised volatility based on US dollar monthly log returns of the FTSE Emerging Asia Pacific Small Cap Index amounted to 19.5 percent compared to 14.7 percent for the FTSE Developed Asia Pacific Small Cap Index. Nevertheless, by bundling the businesses of Emerging Asia together, investors experienced a smoother ride than would have been experienced with the FTSE China 'A' Small Cap Index and its comparative annualised volatility of 27.6 percent, or with the FTSE India Small Cap Index and its comparative annualised volatility of 23.8 percent.

In a similar vein, SGX provides investors with a highly diversified range of listed businesses whose operations and sales are spread throughout the Asia-Pacific region. This unique attribute of SGX enables portfolio managers to diffuse portfolio volatility by embracing this differentiation with stocks based on geography and industry. The Straits Times Index (STI) is made up of 30 businesses with approximately half of the combined revenue generated outside of Singapore and almost every second business representing a different business sector. The result of these two levels of diversification means that the comparative annualised volatility of the STI was 13.2% over the five years.

FIGURE 2: FTSE ST ALL-SHARE INDEX BY INDUSTRY (AS OF 30 JUNE 2014)



Source: FTSE Group

While the sum of different parts means the benchmark has a recent history of stability, Singapore has also served investors with business segments that were comparatively more volatile. Sector indices such as utilities, basic materials, oil and gas, and maritime that have focused on Emerging Asia have generated a five-year annualised volatility that are significantly higher than the STI. In multiple cases these sectors have also generated some of the most active plays in terms of turnover velocity.

The combination of having volatile plays and enough differentiation in the market to diffuse the volatility at a broad or benchmark level has helped to serve both retail and tactical institutional investors. This has also helped shape the development of investment products. Figure 2 illustrates an industry breakdown of the stocks of Singapore's broader benchmark, the FTSE ST All-Share Index.

Continuing to augment capital formation

In its continuing efforts to grow capital formation beyond the primary and secondary stock markets, SGX has also brought to the marketplace numerous start-up businesses through the Catalist board. These businesses would have otherwise been most likely funded through private equity had they not been brought to list on the market through a sponsor.

Catalist caters to the needs of fast-growing enterprises and 2014 represents its sixth year of operation. Companies seeking a primary listing on the Catalist must be brought to list by approved sponsors via an initial public offering. There are no quantitative entry criteria required by SGX. Instead, the sponsors decide if the listing applicant is suitable to be listed using their house criteria. The quotation, trading and settlement of a stock listed on Catalist works the same way as a stock listed on the SGX Mainboard.

Moreover, retail and institutional

investors alike are able to invest in the potential high growth stage of a start-up company. Although these boards come with more risks to investors, they do provide accessibility in the capital formation process for new businesses. There are now more than 140 businesses listed on the Catalist board.

It is clear that Emerging Asia has also become an important part of the IFCs—from providing commercial opportunities for the world's biggest listed companies to using those IFCs to raise capital.

As a result of SGX establishing its bourse with stocks that have revenue reach throughout both Emerging and Developed Asia, Singapore's share in global market capitalisation of US$66 trillion exceeds its share in global GDP of US$74 trillion. Over the past 20 years, investors have been exchanging their capital for the potential return and risks of these business ventures in Emerging Asia. They will continue to do so in the years to come.

At the same time, SGX has expanded the number of equity derivative products, particularly in those emerging countries where the higher volatility was seen, to enable investors to better manage their investments and risk exposures. Investors and portfolio managers are consequently better poised to hedge and manage market risks. Meanwhile, as savings rates remained low in banks in recent years, products such as Exchange Traded Funds and Regular Shares Saving Plans have enabled retail investors to turn savings into investments that track the STI benchmark.

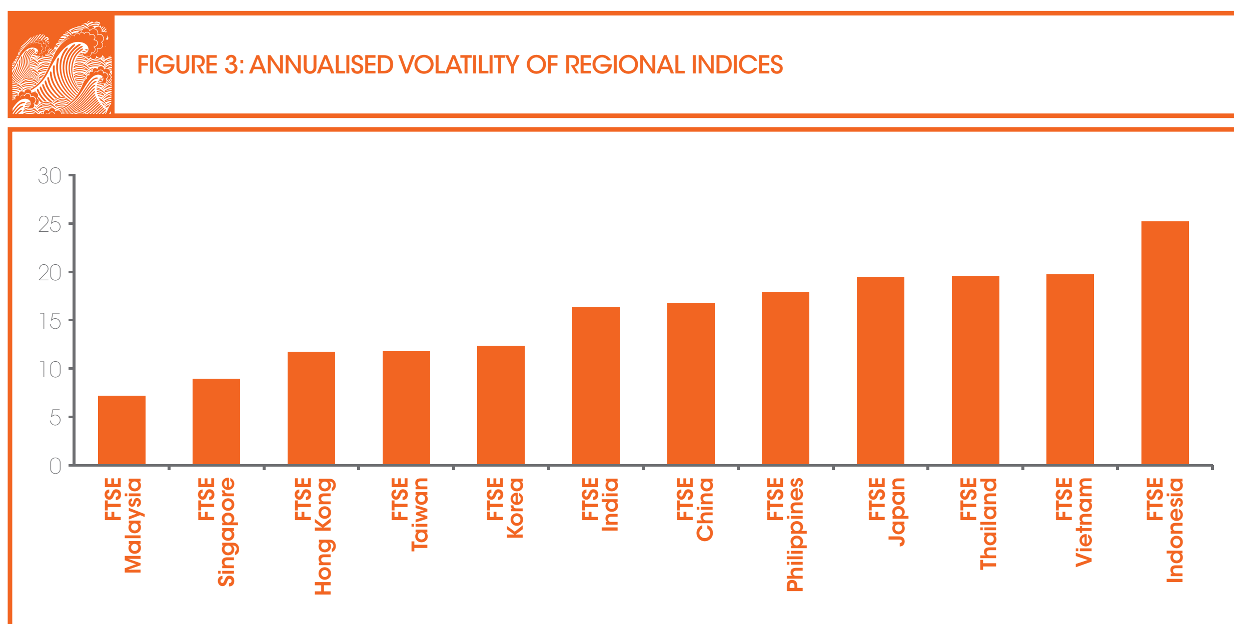
Regional risk management

The creation of primary markets in debt or equities for small start-ups on the growth board or large mature businesses on the SGX Mainboard is just one end of an exchange's capital formation spectrum. On the other end, exchanges can list derivatives, which are more sophisticated portfolio management products that construct their value from pre-existing securities.

As discussed above, the more negatively correlated segments exist within a stock market index, the potentially less volatile the index. As emerging stock market indices are part of emerging economies, they are less likely to possess constituents with a wide range of geographical revenue reach, or less likely to possess constituents that have reached a level of maturity in the lifecycle. Hence these emerging stock markets can be more sensitive or volatile to changes in sentiment.

It is natural that economic development should see more stabilising mechanisms to an economy and its broad stock market. However, the higher or wider the economic goals of the developing economy, the higher the potential for swings in sentiment. This will have an effect on the volatility of the stock market of the emerging economy, with the volatility becoming an efficient function of sentiment in the capital market.

This means that emerging stock market indices can be more volatile than those that represent advanced economies. As illustrated in Figure 3 below, with the exception of Malaysia and Japan, over the 12-month period from June 2013, the annualised daily log returns of stock market indices of Emerging Asia were higher than those of Developed Asia. In many instances for Emerging Asia, this 12-month period coincided with a mix of at-home events in addition to global inferences from the Federal Reserve agenda in exiting unconventional monetary policy.



Source: FTSE Group – 12 months to end of June 2014 – volatility based on annualised daily log returns

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Of the seven most volatile stock markets across Asia over the 12-month period ending June 2014, SGX provides six futures contracts that are based on similar indices to the FTSE series. The use of these contracts saw a number of records in turnover and open interest in the futures contracts based on FTSE China A50 Index, the S&P CNX Nifty Index and the MSCI Indonesia Index.

Over the period, futures contracts on the MSCI Thailand Index and the MSCI Philippines Index were introduced. The ability to short and maintain a leveraged position with a futures contract makes it relevant to investors who wish to hedge against volatility or returns from market swings. Assuming there is little home-bias of investors to these contracts, simple dissections of participation trends can provide an insight into investor attitude towards risk within Asia.

By offering a pan-Asian suite of equity index derivatives, an exchange can cumulate investments into the region, enabling market participants to break down and make objective assessments of regional investor sentiment.

A pan-Asian suite of investment products is also a key to enriched risk management. Macro market development in line with the region's economies brings more diversified choices to investors, less participation in proxy products and thus a more efficient investment proposition.

Historically, globally diversified portfolios have dominated domestic-only ones on the efficiency frontier. As long as there is no perfect positive correlation, a global portfolios should earn a higher return for the same level of risk and take less risk for the same level of return. Studies show investors have, in the past, received benefits of global diversification by devoting 20 to 40 percent of their portfolio to equities listed outside the United States.

Executives presiding over a business that has either direct or indirect revenue exposure to the region can seek to protect the capital funding of the establishment. There are hundreds of companies listed on SGX and tens of thousands across the world with similar operational circumstances.

Exchanges are creating economic value by connecting businesses with investors while continuing to roll out products and procedures to help investors alleviate risks associated with their investment. Yet they must offer some degree of volatility to ensure that capital markets clear efficiently. Hence the ultimate axiom of investing: a potentially new return will always be accompanied by risk.

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Reference

[1] Bloomberg defines Emerging Asia as Bangladesh, Cambodia, China, Fiji, India, Indonesia, Kazakhstan, Kyrgyzstan, Laos, Malaysia, Mongolia, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Thailand and Vietnam. Note the list does not include South Korea or Taiwan.