First of all I would like to thank Dr. Panas for his kind welcome address. I would also like to congratulate Dr. Hagiwara on his assumption of the new chairmanship of ASAF. Kuhn Panas was very kind to say that we are very brave to continue holding this conference despite September 11. It was not courage at all. As the Financial Secretary said, we need your tourist dollars!

Conferences like these are extremely important for all of us in Asia, considering these difficult times, because first of all, we need to get to know each other better. The ASAF plays a very important role to stimulate discussions over future trends in Asia and what is happening with capital markets.

I remember very well that I attended the conference of ASAF in 1997 in Bangkok in the midst of the Asian crisis. I thought it was extremely good that it was very well attended like this, when everyone struggled to understand what was happening and what we can expect during these changing times.

My theme this morning is exactly to try to paint for you what I see as the factors affecting the development of the third financial time zone in Asia. I have taken my hat off as a regulator to give you today my personal views.

Trends and the Third Financial Time Zone

Why do we need a Third Zone? Very clearly we are the third time zone to the US and European times zones. Currently, the American time zone contains the largest and most important economic and capital market force in the world. New York has a market cap of US$12.8 trillion and accounts for more than 50% of global market cap. It increasingly attracts the liquidity not just of North American markets, but also Latin American listed companies. The top shares in all the Latin American capital markets trade more liquidly in New York than in their home markets.

In Europe, with the emergence of the Euro as the second largest currency, European financial markets are beginning to consolidate with great speed. For example, Euronext recently successfully bid for LIFFE. There is continuous talk of mergers and consolidation amongst European exchanges and clearing houses.

On the other hand, where is the consolidation in Asia? We have tremendous savings but unfortunately, still no common currency and very fragmented markets.

The first thing for me to stress is that global markets - which is the theme of this ASAF Conference - is all about globalisation and technology.

One of the easiest ways to understand financial markets is to appreciate that financial markets are networks. Very simply speaking, traditionally, we have separate banking networks, securities networks, insurance networks, and even commercial networks. But these are now all converging. The world has become a local network, trading seven-times-24 hours, but it is a patchwork of global networks.
Securities networks are now linked with payment systems, so that central bankers have become more concerned about the stability of the payment systems and the clearinghouse of the securities markets.

Banks are now busy merging with insurance companies, buying up asset managers and becoming large, complex financial giants. Consolidation is going on globally and there will be more and more larger and larger players around the world. Some experts think that in ten years’ time, there may be somewhere between ten to twenty large global players servicing global services, while smaller players will service local markets.

The rationale for this is very simple. In pure technology terms, Metcalfe’s Law says that the value of a network goes up as the square of the number of users. The more the number of users, the more valuable the network. That is why networks are converging, consolidating, merging or making alliances. Basically liquidity begets liquidity.

Where does Asia fit into all this? In broad number terms, Asia accounts for half of global population, one-third of global GDP, one-quarter of world exports, but only 16% of market cap (Table 1). If we exclude Japan, it is only 7% of global market cap. That is very small relative to our economic and trade powerhouse. Why is that?

We have the largest and deepest savings in the world. Countries in Asia save anywhere between 25% to 50% of their national income. We have in Asia the largest concentration of foreign exchange reserves in the world - exceeding one trillion US dollars. But we are still importing capital.

Asia at the present moment imports probably three quarters of global FDI, and we account for 25% of FX trading. Even the United States, the largest economy in the world, only accounts for 19% of global FX trading, while EU accounts for 53%. Of course, after EU completely merges into one currency rather than different currencies such as Deutsche Mark, this turnover share will decline.

Is it not remarkable that, even though we have within our midst two of the largest economies in the world in terms of population, the second largest economy in terms of GDP, Asia is not yet able to be a global engine of growth? We are surprisingly still dependent upon growth from the US and Europe.
And in many ways, even given the huge amount of Asian savings, our markets are still fundamentally retail-driven. Other than the Japanese market, institutional savings, in terms of mutual funds, insurance companies, pension funds, and asset management, are still very much dominated by European and American firms. There is no reason why it cannot be otherwise. But it’s a bit curious history of institutional development that we have become an economic powerhouse but a relatively small player in terms of capital markets.

The above numbers show very clearly that even in terms of MSCI weighting, instead of the 16% of global market cap, Asia's share is only 13%. In the recent re-balancing of the MSCI, the share of Asian weighting in fact went down. This was mainly because the free float and the liquidity in Asia have been shrinking relative to America and Europe.

Arisings from Metcalfe's Law, markets are consolidating through technology. They are consolidating because there is a supply side economies of scale. It costs a lot just to develop the latest trading platform, the clearing platform, the payments platform, and the distribution engine. Because of the supply side economies of scale, banks, insurers, asset management, and derivatives service providers are merging: they are getting bigger and bigger.

There is also a demand side economies of scale. The larger the market, the more you determine standards. It is very simple. Are you going to use a VCD standard or are you going to use DVD standard? If you are already using DVD, and the market and the consumer are shifting towards DVD, then you become a market leader. When you are a market leader, you determine the standards and enjoy demand economies of scale.

Which bank will not immediately switch to a standard when the largest asset manager in the world, who shall remain nameless, with US$1 trillion of assets, says tomorrow that it is switching to the FIX standard? Immediately all their service providers will begin to switch to FIX. The bigger the market share, the more powerful you become to determine market standards. The larger the market, the larger the market power.

So in top ten markets today, US$33 trillion dollars of funds are converging in standards towards international accounting standards, bank identification codes, ISO15022, FIX and other standards. Increasingly, these standards are becoming more and more global. Those who have less market power and are on different standards may suffer negative feedback effects. Their market share may decline as investors shift to larger and more liquid markets with more user-friendly standards.

For example, Singapore has recently announced that they would abandon the need for Singapore accounting standards and go straight to International Accounting Standards (IAS). What is to be gained from having a local standard, when people will immediately ask how different is it from IAS? There will be additional cost in translating local standards to IAS, so it would be cheaper to go straight to use IAS.

Consequently, there is a huge pressure towards convergence of global standards. At the same time, competing standards are beginning to evolve. But my main message is that unless we are large enough, we can't even have a say in the evolution of such standards. So it is very important to unify for strength. The more we co-operate, the greater market power we have, the more we have a say in how these standards are evolved and how they affect us.

The other major trend that has occurred is that with the global information networks such as Reuters, Bloomberg, Bridge News and all the others, the retail investor today has ready access to real time information. That was not available even to a professional analyst five years ago.

For example, if you were to go into the HKelIRC web site (Hong Kong Electronic Investors Resources Centre), it is hyperlinked through one web site to five hundred and fifty other web sites of stock exchanges, securities institutes, stockbrokers, and asset managers around the world. Through one web site, you can obtain any information on any securities laws, rules and regulations, market trends in real time. This was unthinkable five years ago.

With the massive change of technology, therefore, even a small retail investor can become a day trader, and if he does it very well, he can even become a hedge fund manager.

Today, the emergence of on-line trading has become a very major driving force in securities markets. Technology is increasingly important because of the need to drive down cost. The drive for on-line trading forces the pace for straight-through processing and scripless transactions. We established in Hong Kong the Steering Committee on Enhancement of Financial Infrastructure (SCEFI), in order to ensure that we will provide straight-through processing and scripless trading within the next 24 months.

Through technology, electronic communication networks (ECNs) and automated trading networks (ATNs) are emerging by the day. They already account for one-quarter of NASDAQ trading, and electronic trading already accounts for 55% to 60% of trading in the Korean Stock Exchange. These are phenomenal growth by any standards. On-line brokerages are projected to grow from 28% to 80% in developed markets and from 1.5% to 15% in emerging markets. In the Mainland China today, I believe on-line trading already accounts for around 7% of total trading and is growing fast.

At the same time, transaction costs are being driven down by global competition. Brokerage margins are expected to fall. Through competition they have already fallen by roughly half in industrial economies and roughly one-third in emerging markets.

In other words, all these supply side and demand side economies of scale are forcing consolidation both vertically and horizontally. Vertically because exchanges are merging, demutualising, and cooperating. For example, Hong Kong, Australia, Singapore stock markets have all demutualised and listed. In the case of Hong Kong, we merged the futures and the cash markets as well as the clearinghouses. In Europe, clearinghouses and exchanges are merging using different formats.

The vertical consolidation is to enjoy the supply side economies of scale: it costs a lot simply to develop the technology. But there are also demand side economies: you need bigger market share. How do you do this? Once you provide the services across the whole range of capital markets, you need geographical reach, and that is why horizontal consolidation is on going. For example, Euronext successfully bought LIFFE. There is GEM, the global equity market alliance, which is a co-operative arrangement between 10 of the largest markets in the American time zone, the Asian time zone, and the European time zone. All exchanges need to reach out in both geographical and products range.

Accenture has recently done a study which showed that the merger of trading, clearing and settlement in Europe will reduce clearing settlement cost by an estimated US$1 billion annually.5

The easiest model to see this consolidation is in America, where there is one central counterparty (CCP) in terms of the DTCC, the Depository Trust and Clearing Corporation, where all bond and securities clearing are done through DTCC, while payments are settled through FedWire.

In Europe, there are at least 15 different national securities clearing centres, and two cross-border clearing entities, that is CEDEL, now called Clearstream, and Euroclear. All these cross-border trading and transactions in Europe are quite expensive and the big players are now pushing towards greater consolidation. Some people argue for a single European CCP.

The other major trend that is affecting securities markets is demographics. As the population in Asia begins to age, more and more savings are being placed in retirement and asset management funds. If through ageing, the number of spenders are going down, we should not be surprised that consumption has gone down, while savings have gone up.

### Functions of Financial Markets

Having painted you the big picture of what is happening globally in the three time zones and the technology and demographic trends, how does Asia measure up? The quick answer is that we have some way to go.

The four major functions of financial markets are: resource allocation, price discovery, risk management and corporate governance. Let’s measure Asian capital markets against these four measures.

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**Table 2 - Asia Still Dependent on Bank Financing (% of GDP)**

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Sources: FIBV, CEIC, Blommberg, various central banks and government web sites

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First, the resource allocation in Asia is currently skewed. We are still very much a bank-dominated financial system as Table 2 shows. Banking systems usually account for more than 70% to 80% of the financial system in Asia in terms of assets. The ability of a banking system to compete with the European and American counterparts can be simply measured by the scale of their non-performing loans. In Europe and America, the non-performing loans on the whole would be normally less than 5% of total loans. In Asia, it can range anywhere between 7% to 8% to as high as 50% as the Asian financial crisis has discovered.

The first big challenge facing Asian financial markets is how to perform the role of resource allocation more efficiently. Are we going to pour more and more good resources into non-performing loans? This is one major issue to address.

Secondly, let’s examine price discovery. Have all the risks been fully priced in Asia? If you look at domestic banks’ spreads in Asia, it is roughly 1.5% to 2.5%, but the ratio of non-performing loans is ranging anywhere between 15% and 50%. How can such narrow spreads cover the provisioning for non-performing loans of the banks? Are the credit risks being priced correctly?

Currently, even Asian bond market price spreads are as low as that just before the Asian crisis. What that tells you is that there is too much savings in Asia chasing too few high quality bonds, and the bond market is not well developed. Similarly, P/E ratios in Asia have tended to be high. They have been high because equity markets have tended to be more speculative and retail-driven rather than reflecting long term returns on equity per se.

Thirdly, how well have we developed our risk management systems? The answer is that based on the Asian crisis, a lot of Asian enterprises borrowed short, invested long, borrowed foreign currency and invested in domestic assets. The derivative markets throughout Asia are relatively shallow, and therefore limit our ability to manage the risks.

Asset managers know that today the long only strategy is not necessarily a long-term viable strategy. The right strategy is both long and short: you both need to buy, you need to sell, you need to hold, and you need to hedge. Just concentrating all your assets in one basket is concentrating your risks.

In other words, we need much more sophisticated risk management systems in Asia, and we need them fast because globally risks are rising and markets are becoming more volatile. Markets are becoming more volatile because of new technology, market consolidations, increasing competition, and also geopolitical changes.

And finally, corporate governance. You can only be good if your governance structures have both transparency and accountability. In Asia, we all admit that in order for our companies to compete globally, corporate governance need to be improved, should be improved and can be improved.
Now, how have our markets behaved recently? If we have not measured up to all these four measures of financial markets, it is not surprising that all our markets are having red ink since 1997 in US$ terms (Table 3). We all witnessed very large declines in market cap since last year. We have also large declines in market turnover.

In contrast, the UK and the US market turnover have declined less. For example, even though the US market turnover declined 24% in 2001, New York Stock Exchange turnover did not decline at all. It was mainly the decline in NASDAQ turnover that accounted for the overall decline. This goes to show if you have good liquidity, liquidity begets liquidity.

In sum, the issue that we need to understand is that in terms of risk management, Asia has huge savings but relatively few products for investments and risk diversification. Too much money is concentrated in Asian banking systems. We are asking our banking system to absorb too much risk. It is important to diversify this towards deep capital markets.

One historical reason for this state of affairs is because we have what I call a "fish-trap" mentality in Asia. We love money coming in, but we don't like money going out. The trapping of internal liquidity created periodic bubbles in our asset markets, and we are all suffering the costs of these asset bubbles.

What we really need is more balanced growth. Historically, Asia has developed along an imbalanced
growth model: strong export manufacturing supported by protected service sectors, especially financial markets. Basically, Asia needs more balanced growth between bank credit, bond, equity, currency, and derivative markets. And we also need more institutional investors to raise the standards of disclosure and risk management.

Last but not least, we also need to have national risk management strategies. Very often, we never realize that managing a whole economy is no different from corporate balance sheet management. The result is we do not have national balance sheets. Sometimes the left hand does not know what the right hand is doing, and there could be conflicting policies that achieve conflicting results. Once we have a national risk management strategy, we understand that putting all the eggs in one basket in a domestic economy actually is intensifying risk rather than diversifying it.

So what are the key Asian financial sector issues? First of all, we need to speed up bank restructuring. This is not preaching, this is just a fact. Non-performing loans (NPLs) still remain a major drag on growth in Asia. How we manage this is up to each individual economy.

Secondly, we need to raise corporate governance standards with more focus on market discipline. Corporate governance is all about three disciplines: self-discipline, regulatory discipline, and market discipline. In Asia we have always focused on the former two. Because of protection in certain domestic financial markets, the market discipline is not working as well as it should. Self-discipline is not sufficient to strengthen corporate governance, even if aided by regulatory discipline. As recent opening of Asian markets show, many Asian financial institutions were not prepared for international competition. If you open up too fast, and you have weak financial institutions, you get the Asian crisis. Corporate governance can be strengthened through greater market discipline. You cannot achieve this overnight, but you need to focus very clearly on how you sequence your financial liberalisation policies.

Thirdly, we need higher standards of transparency and information disclosure. How can you make good decisions with bad information or non-timely information?

Fourthly, the pricing of the spreads has to reflect the risks. We need more financial instruments for better risk management, and we need better clearing and settlement platforms. Most of our clearing, settlement and payment platforms had been built in the 80s for paper-based systems. Technology has changed all that. It is no longer efficient to be only paper-based.

Fifthly, we need to have better connectivity, higher standards, and we do need regional settlement and payment systems.

Last but not least, we need most of all more people: we need greater knowledge, we need greater investment banking, asset management and risk management skills. And we need not develop this all domestically. We can import skills today. Knowledge is now global, knowledge can be shared, can be bought, can be learned.

**Market Discipline, Capital Markets and Governance**

What is the relationship between market discipline, capital markets and governance? In one simple phrase, the quality of our market depends upon the
quality of our listed companies. If we don’t have high quality listed companies, the liquidity will go elsewhere.

It is not just foreigners not buying our high quality companies or our companies. It is a fact that our domestic investors are beginning to buy shares in better companies outside our markets. In other words, if we are to preserve our liquidity, we have the biggest vested interest in developing the quality of our listed companies. As I said earlier, corporate governance is about three disciplines: self discipline which is about ethics and fairness, regulatory discipline which is about maintaining high transparency and a level playing field, and market discipline which is about competition and accountability.

All these come to the conclusion that Asian capital market development has to have high priority because it enhances market discipline and corporate governance.

Let me now comment on information and markets.

The lesson in the Asian crisis is very clear: that real time reliable information is a market fundamental. If you don’t have good information, you make mistakes. We need good information because markets are now becoming more volatile and risks are increasing. But what does high quality information require? It requires good accounting standards, preferably IAS and International Auditing Standards. It needs reliable and timely statistical and reporting processes. It needs the capacity to process, analyse, and evaluate market data.

To repeat what I said in Bangkok in 1997: bad accounts equals bad information, equals poor decision-making, equals bad risk management, equals Asian Financial Crisis. We cannot build strong markets on bad information. It’s as simple as that.

Coming back to the question of liquidity, the negative feedback mechanism suggests that Asia is currently fragmented into small local markets. We lack highly liquid markets because some of us feel that it is better to keep liquidity domestically and we don’t want to share it. But as we have seen from free trade, the more you trade with your partners, the more it is a win-win situation. The bigger the market the bigger the growth, the more to share; the smaller the pie and less to share, the greater the losses.

There are four dimensions of liquidity. We need market tightness: there is no great discontinuity in prices and the market should not have high volatility. There should be market depth: when you go in to buy or sell, the consequent market movement should not be very marked. Why are some of the largest asset managers now avoiding the small markets in Asia? The reason is that even though they may put in a very small amount of money, say, 0.01% of a trillion dollars of assets in a small market, that small drop of funds is going to become an elephant in the pond. Large international players often unwittingly create large volatility in small markets. Consequently, unless we have bigger liquidity, we would continue to have high volatility.

We need market resilience. We need the markets to reflect fundamentals of the economy, and the fundamentals of the company very fast. We also need immediacy: people can come into the market to execute with minimum risk and take their money out with minimal costs.

Liquidity is also all about how well you can use your capital today - how well are you turning over your collateral, how well are you developing your
stock borrowing and lending, and can you readily buy and sell short at the same time?

Such liquid markets would attract the issuers, the investors and the intermediaries in a virtuous circle that benefits everybody. If you don’t have good liquidity, then you can get into a negative feedback that worsens market liquidity.

**Conditions for Creating a Third Zone**

Allow me to ask the question on what are the conditions for the creation of a Third Zone? I am just asking the questions, I don’t have the answers.

Firstly, we need common products. In order to have common products, we need to cross-list. Are Asian exchanges willing to cross-list? And if you are willing to cross-list, are you willing to allow the same terms and conditions as domestic listing and the same cost?

I looked at some statistics on the major markets in Asia. Surprisingly, the amount of Asian cross-listings after the Asian crisis has in fact declined, not increased. There are more cross listing with America or with Europe than within Asia.

Secondly, we also need to have inter-operability. Are we all willing to share technology and standards? We do have high technology in Asia. For example, the Hong Kong Exchanges, for surveillance purposes, use an Australian software. A lot of our software is also developed domestically by borrowing the experience from other markets.

Thirdly, are we willing to have common trading and clearing rules? It is not that difficult. If we don’t have common Asian rules, we are going to adopt London rules or New York rules.

Fourthly, are we going to have low transaction costs through common networks and through common infrastructure? Why are we duplicating all these high cost of technology throughout Asia? Can’t we share and enjoy the benefit of lower infrastructure investments? Are we going to allow inter-connectivity? Are we willing to allow common custodians, common participants, and common intermediaries? Are we going to allow free flow of capital by residents and non-residents?

Of course, these are sovereign decisions by each market. I cannot make any recommendations one way or the other on how we will arrive at an Asian consensus. All I can say is that if we are willing to begin this process of discussion, we will be able to build a larger pool of Asian capital.

One way of building this is through AsiaClear. The concept of AsiaClear was in fact first suggested by Mr Hayakawa, the former Treasurer of the ADB. He highlighted this in 1992, but it was not accepted because everybody felt that AsiaClear was going to have a central hub, and everyone wanted to be the hub. Technology has taught us that the networks are no longer about hubs. In a network everyone can be a hub. If we have the supply side economies of scale, then a robust, efficient and inter-operable financial infrastructure is key to Asian market development. In other words, AsiaClear is not a single hub, but a common network with common global standards.

If we do not develop common standards in Asia, we will all be connecting towards America or Europe, and transactions will come back and forth. This is not necessarily a bad thing. But is this the most efficient? For example, are you surprised that before the cross-Asian Internet backbone was put in place, all our Internet messages are very likely to go to somewhere in North America and come back again across the Pacific? It may be currently cost efficient,
but if there is a break in that connection somewhere in the Pacific, what is going to happen to intra-Asian traffic?

I am not one of those who argue solely for regional development. I am for global development, but global standards also depend upon local standards. Therefore, it is quite important for Asia to begin to talk about common standards.

In sum, common standards and shared technology will reduce excessive fixed investments, reduce risks and promote efficient functioning of markets. To come back to the network analogy, the global network is today a patchwork of networks, like a quilt. It is different local networks linked very inefficiently to form the global network. As we all know for those of us who listen to hi-fi, the quality of the sound that is coming out from your hi-fi system depends upon the quality of its weakest link. If you have a very bad audio receiver or very poor wiring, you are going to get bad sound, even though you have paid a lot of money for a very good amplifier.

Consequently, the global financial network depends upon the strength of the local network. The local network is now, whether we like it or not, receiving both the benefits and the shocks of global transactions.

Conclusion

Let me conclude. Fragmented Asian liquidity is now under threat. If we do not try and consolidate Asian liquidity, more and more of our liquidity will drift to other markets. It is not unknown for some Asia-Pacific companies to transfer their headquarters to outside the region. Just as some South African companies have transferred their primary listings to New York. This may not be a bad thing, but should we not try to do more to improve Asian liquidity?

I for one believe strongly that greater co-operation can create win-win outcomes. But, unfortunately, I have to admit that realistically, there is no proper institutional forum for us to discuss Asian time zone issues. Forums such as ASAF is a very good forum for us to have a dialogue, but we do not have institutions such as the European Common Market bureaucracy, the BIS which is located in Basle, or the European Central Bank where we can begin the process of dialogue at both the private and official levels.

Asian institutions are still very inward looking and there isn’t enough consensus on how we can work together to pool together our liquidity.

All I can say at this moment is there is a window of opportunity. There are, of course, risks and costs, but if we do not begin this process of dialogue early, it may even delay our domestic market reforms. We have much to learn from each other. We all have made mistakes, but we are looking for a very bright future.

55% of mankind is in the Asian time zone. The biggest growth story of the 21st century is not about technology. It is about the fact that two of the largest economies in the world, China and India, are growing in excess of 5% per year, year after year steadily. It is about the rest of Asia being more than one-third under the age of 21. If Asia is not the growth story, what is the real growth story? Clearly we have much to do. We have much to learn and we need to co-operate at all levels: between Asian corporations, regulators, financial analysts, and financial policy makers.

Thank you very much indeed.