Mr. Sheng looks at asset prices, capital flows and risk management Address given by the Deputy Chief Executive of the Hong Kong Monetary Authority, Mr. Andrew Sheng, at the Asian Securities Analysts Federation Conference in Bangkok, on 17/11/97 (slightly abridged).

1. I am very honoured to be invited today to address this distinguished Conference. The title of my paper is "Asset Prices, Capital Flows and Risk Management". All these factors have been the main players in the recent market turbulence in the region. I will therefore focus my discussion today on the lessons from the recent Asian market turmoil and also the impact on Hong Kong.

The Surge in Capital Flows

2. In the past decade, capital flows surged within the Asian region and globally. According to IMF statistics, average annual net capital inflows to developing countries exceeded US$150 billion in 1990-96, and more than 40% of which actually came to Asia. In the last two years we saw even more capital inflows to the region, recording a net total of US$107 billion in 1996 and a similar growth rate in the first half of 1997. In some Asian economies, net inflows have averaged 5-8% of GDP over long periods, with over half of such capital flows in the form of foreign direct investment.

3. The growth in international capital flows is the result of greater financial liberalization and sophistication in markets around the world, the rise of institutional investors such as mutual and pension funds, and growing financial innovation and intermediation, especially in derivative products. We all know that capital movements help growth through a more global efficient allocation of resources and bring new knowledge and technology to emerging economies.

4. On the other hand, international capital flows can be very volatile in nature, with the tendency of reversing direction when there is the slightest hint of risk, whether it is in the conduct of macroeconomic policies or concerns over the fragility of the financial sector. Capital flows now drive the balance of payments more than trade flows. Portfolio shifts operate on the basis of market expectations of risk, return and liquidity. A high level of arbitraging, such as the borrowing of funds from one market to invest in another market, leads to contagion effects. Losses in one market therefore result in sales in another. This is a risk that should be addressed not only by those who are now under the process of capital liberalization, but also by the whole international community. Global markets mean global contagion. This is no longer a uniquely Asian problem.

5. Let us now consider the recent Asian market turbulence in the global context. Until recently, Asia enjoyed the benefits of the high global liquidity, and recorded admirable levels of capital inflows, as driven by the high global liquidity in G-3 economies. Indeed, high global liquidity is also the consequence of strong productivity growth, low inflation and improved government savings, especially in the United States, which has resulted in the strongest growth in world trade in decades.

6. With well-behaved inflation, the ample international liquidity has resulted in a global stock market boom in the 1990s, in both Europe and the US, as well as emerging markets in Latin America and Eastern Europe. But this has also caused a global compression of interest rate spreads and record levels of new issuance in both domestic and international bond markets. Such narrowing of spreads did not reflect the potential credit and market risks associated with the emerging markets. So when investors finally realize that the emerging markets are carrying more risks than they have assumed, the risk premium as measured by the yield spreads will widen sharply to reflect this.

7. This scenario was complicated by the fact that the flood of global liquidity has been largely channelled to the bond, equity and property markets of East Asia. Buoyed by optimism about the Asian miracle growth of the last decade, both domestic and foreign investors committed the classic "fallacy of composition". Initially, each individual may perceive a high return and increase their investments in assets, leading in aggregate to excess demand and a market overshoot. A reversal of perception leads to a sharp market correction, which is exactly what is happening not only in Asia, but globally. As Chairman Greenspan said recently, "in retrospect, it is clear that more investment monies flowed into these economies than could be profitably employed at modest risk".

8. The strong Asian growth would have continued but for the fact that global competition in external trade has emerged with newly industrialized and export-oriented economies with cheap labour, such as China, India, Latin American and Eastern Europe. The failure of central planning has brought at least three billion new workers and consumers into the global market. These new markets began to benefit from the growing trade liberalization and inflows of foreign investments, thus putting greater pressure on the markets of the earlier "tigers" of East Asia, leading to a widening of their current account deficits as they continued their investments in infrastructure and real estate.

Issues in Asia

9. If we look more closely at the situation in Asia, the economic fundamentals remain intact. Asia has been the fastest-growing region in the world, recording growth rates of around 5%-9%. Asian economies have low inflation rates and exchange rates were stable until recently. Current account for the region as a whole is broadly in balance, while the fiscal account, excluding Japan, is in surplus. Asia has exceptionally high savings rates of above 30% of GDP. Official savings, in terms of foreign currency reserves, were even higher. In Asia, 70% of the inflows contributed to reserve accumulation. As a result, Asian central banks are now holding about 40% of the world's foreign exchange reserves. Five of the top six foreign exchange holders in the world are now Asians.

10. The strong fundamentals -- a young, educated, flexible workforce, stable government, good natural resources and communications infrastructure, openness to trade and innovation, and high savings and investment rates -- these have not basically changed. Asia is still outward-looking, with open markets and openness to technology and innovation. The aspirations of Asia are also real: an entrepreneurial approach to innovation, competition and better standards of living for the rising urban population. Where Asians have perhaps kept their eyes off the ball is the need to develop the services sector in complementary step with the manufacturing or export sectors. Delays in opening the financial sectors to global competition make them vulnerable to real sector excesses or imbalances, such as the overconcentration of risks in certain areas, including the asset markets.

11. The momentum of growth depends critically on continued vigorous trade reform, fiscal prudence and improvements in finance, health and education policies. Increasingly, exports are changing from labour-intensive industrial production, and more toward higher value-added industries and services. This poses the challenge of sustaining productivity growth.

12. The Asian turmoil being a financial turmoil on the surface, let me focus on the interesting way Asia recycles its surplus savings. As my colleague Joseph Yam has consistently pointed out, a large portion of Asian foreign exchange reserves is invested in assets of the OECD countries, which provides safe and liquid instruments. These funds return to the region in the form of foreign direct investment and foreign portfolio investment. This global recycling also exposes Asian economies to volatile portfolio adjustments due to policy mistakes or shifts in the international economic environment. Currently, there are no deep, liquid and mature debt markets in Asia for the

intermediation process to function more efficiently. The process has begun in the last few years, and with the building of better financial infrastructure, this round of turmoil should add greater impetus to greater cooperation in building better regional financial intermediation.

13. As we all can see in hindsight, the risks involved in international capital flows are exacerbated when short-term capital flows are all attracted to the asset markets. This has led to asset bubbles, with all the painful consequences of asset price deflation.

14. But what is much more evident in Asia is that the process of hedging, arbitrage and "carry trade", whereby arbitrageurs borrow in one market and invest in another market that offers higher interest rates, has created both regional and global contagion. Portfolio shifts mean that when asset prices change (and in this I would include: consumer prices, interest rates, exchange rates, debt and equity prices and property prices) funds will flow in and out to follow the "law of one price". This suggests that open economies must adjust to global prices. The speed of such adjustments is only determined by the degree of openness of the domestic economy and financial markets. In other words, whether we like it or not, we are being priced globally by the market.

15. Many of us have not fully appreciated the full logic of this. The financial turmoil suggests that while the real sector causes of the stress is global competition, the financial effect is stress on domestic banking systems, as the banks intermediate the global portfolio adjustments. In an open economy, capital inflows will increase the deposit base of domestic banks which may be channelled through credit mistakes into fuelling domestic asset price bubbles. There are two implications. First, asset price inflation eventually feeds into domestic inflation and erodes external competitiveness. Second, excessive lending concentration into less productive assets, either real estate or over-investment in infrastructure and production capacity, exposes the financial institutions to huge risks.

16. From the viewpoint of financial intermediation, there are three major risks in Asia that underlie the shocks there:

- First, maturity mismatch -- Asian markets made the mistake of borrowing short-term capital flows to finance illiquid non-tradables, such as property, thus exposing themselves to huge liquidity needs when capital flows reversed.

- Second, currency mismatch -- corporations who borrowed foreign currency funds to finance investments that do not generate sufficient foreign exchange to repay the debt run a currency mismatch.

- Third, credit risk -- lending or investments ultimately must be against sound profits that generate long-term returns higher than the borrowing rate or prospective dividends. Undue exuberance on the part of investors, when price-earning ratios grow beyond fundamentals, or on the part of bankers who failed to assess the impact of high interest rates on collateral or cash flows, would expose both the investor and the lender to asset losses.

17. Specifically, banks in Asia, having easier access to funds as a result of high global liquidity, were able to expand lending much more quickly and, thereby, incurred higher risks in their portfolios that they need to manage more soundly. Ironically, domestic banks may have been induced to move into more risky lending due to increased competition in the form of new entrants and financial intermediation. There is no question that they need to manage these new risks better.

18. There is also one distinguishing feature of the Asian turmoil. The debt problems have not been those of the public sector. On the contrary, the fiscal positions of Asian governments have by and large been quite sound. East Asia, excluding Japan, ran a fiscal surplus of US$5.4 billion

or 0.1% of GDP in 1996. The debt burden, in fact, has been largely one of private sector overborrowing. The resolution of the debt of the private sector makes the Asian problems quite different from the experience of the sovereign debt issues of the 1980s.

19. In essence, the Asian problem is the age-old question of efficient resource allocation. Asia has no shortage of funds, only that its high level of savings are invested in less liquid long-term investments. Thus, one of the more pressing issues in Asia is to build a more competitive, stable financial system and a robust infrastructure to facilitate efficient financial intermediation. The better risk management of the financial system would also assist both corporations and investors to manage also their risks better. Ultimately, a balanced and flexible economy with sound risk management will then be in a better position to withstand global shocks and avoid crisis.

The need for national risk management

20. We are all aware of the complexities of risks in financial markets. Aside from credit risks, market risks such as interest rate, exchange rate, legal risks, operational risks and systemic risks all have to be managed, both at the micro level and at the macro level. All markets suffer from the "fallacy of composition". Mistakes at the corporate or bank level will add up to national mistakes, which now may add up to regional or international crisis through contagion. Traditional risk management at corporate or sectoral level simply shift risks from one sector to another. Risks still remain in the economy as a whole. Thus, increasingly in the 1980s, there emerged the awareness that financial sector regulation was all about national risk management.

21. National risk management covers six major aspects:

- Credible policies, with monetary and fiscal policies consistent with each other, and applied consistently.

- Capital account liberalization should be phased appropriately.

- Sound fundamentals include a high domestic savings rate, sustainable fiscal and balance of payments positions, high foreign exchange reserves and prudent debt management.

- Good supervision involves the maintenance of solid capital adequacy and liquidity requirements for the financial sector, as well as regular examination and monitoring of financial institutions and markets. The banking system must have the capacity to avoid excessive credit concentrations and risks, and to manage market risks well.

- A robust financial infrastructure would encompass an efficient payments and settlements system for domestic and international transactions. In essence, the world is moving towards Real Time Gross Settlement (RTGS) system, which support Delivery vs. Payment (DvP) and Payment vs. Payment (PvP). RTGS reduces payment risks and allows central banks to monitor flows in domestic currency as well as exposure of banks on a real time basis.

- A non-distortive incentive structure, such as taxation or regulatory restrictions that would not encourage risk concentrations or excessive leverage in any economic sectors.

22. Put simply, managing national risks is equivalent to achieving three objectives. First, lower national gearing, because leveraging adds risks, especially if this is leveraged from external borrowing. The more you borrow abroad, the more you become vulnerable to external shocks. Second, the higher the level of domestic savings, which should be reflected in higher bank capital, lower credit/GDP ratio, and higher fiscal surpluses, the greater the resilience to the pain of adjustment to external or internal shocks. Third, irrespective of the exchange rate regime, there must

be a commitment to a stable currency, and this means strong external reserves, low inflation and a sound banking system.

Asset prices and the exchange rate regime

23. The Asian market turmoil also raises the question as to whether the exchange rate regime matters. I believe the debate about whether the nominal exchange rate should be floating or fixed misses the point in Asia. The real issue is the real effective exchange rate of the economy, namely, its underlying productivity and global competitiveness.

24. For example, there is a mistaken perception that fixed exchange rates give rise to asset bubbles. But if you look at the recent evidence of asset price bubbles in advanced economies, asset price bubbles also occurred in the 1980s in countries with flexible exchange rates, such as Japan, Scandinavia and the United Kingdom. Asset price appreciation cannot be tackled alone by interest rates, since there are multiple reasons for such appreciation

25. In Asia, we can perhaps identify four main reasons:

- First, the Asian household has always looked upon house ownership not only as a social necessity, but also as the best hedge against inflation.

- Second, Asia is a young market, experiencing a high rate of urbanization. The strong demand for housing arising from demographics alone will fairly quickly eliminate excess capacity in many economies.

- Third, housing supply constraints also gave rise to high housing costs. Examples are inadequate supply of land, excessive tax burden on housing and construction, and inefficient urban planning and approval procedures that delay market responses to the rising demand for housing. Over-rapid liberalization of supply constraints were also one reason for the emergence of excess supply.

- Fourth, the high global liquidity that appeared has improved access to funds, which resulted in excessive exuberance on asset price inflation.

The Impact on Hong Kong

26. Amidst the recent attacks to the regional currency markets, no economy in Asia has been totally immune, not least Hong Kong, despite the strong fundamentals.

27. If we identify the real issues in Asia as one of structural competitiveness in the global economy, caused by shifts in global resources and rising productivity outside the region, then structural adjustment must come through changes in either the internal price or the external price. With a fixed exchange rate regime and therefore a fixed external price, such as in Hong Kong, the adjustment comes through changes in the internal prices, especially the asset markets. In those economies with floating exchange rates, there may be adjustment in both the internal and external prices. This is exactly what is happening right now. Using the US dollar still as the benchmark currency, it is very interesting to see that since the beginning of the year, the Hang Seng Index has declined by 26% as of last Friday, Singapore Strait Times Index by 32%, the Nikkei 225 by 28% and the other ASEAN indices by between 50-60%. Thus, markets adjust irrespective of the exchange rate regime and the unit of account.

28. Is there any easy way of avoiding the pain of adjustment in Asia due to rising global competition? The answer is clearly no. As a general rule, the faster we adjust, the less the pain.

There have been different approaches to this issue. There are some who think that a floating exchange rate regime would cushion the pain, but many forget that Hong Kong has tried the floating exchange rate regime before, in 1974-83. During that period, growth was more volatile and inflation much higher than what we are experiencing now. As an open economy with trade accounting for 285% of GDP, any inflation would be immediately imported under exchange rate volatility. The recent experience in Asia actually shows that contrary to the theory, floating exchange rates requires even higher interest rates, because of the higher risks associated with exchange rate volatility.

29. Here I would like to correct the common image that the Hong Kong's exchange rate regime is a peg. The Hong Kong dollar is a fixed exchange rate, not a peg which can be adjusted from time to time. The linked exchange rate system in Hong Kong operates as a currency board system whereby the issue of Hong Kong dollar notes is fully backed by the US dollar at the fixed rate of US$1 to HK$7.80. Such a note-issuing mechanism ensures that currency issued is fully backed by foreign exchange. With the sustained budget surplus and accumulated surplus on the Exchange Fund and Land Fund assets, the actual amount of foreign reserves in Hong Kong amounted to US$88.1 billion at the end of September, the third largest in the world. This is more than seven times Hong Kong dollar cash in circulation or over three times HK$ M1.

30. The currency board system has an automatic adjustment mechanism to maintain exchange rate stability. When there are outflows of funds from the Hong Kong dollar, the Hong Kong Monetary Authority (HKMA) will sell US dollars to banks for Hong Kong dollar. On settlement day, the HKMA will debit the clearing accounts of the banks for the necessary amounts of Hong Kong dollars in return for the US dollar that will be credited to the New York accounts of the same banks. Since banks may have sold more Hong Kong dollars than they have in their clearing accounts with the HKMA, they can only obtain Hong Kong dollars by borrowing from other banks, by bidding up the interbank rates, or selling back the US dollars to the HKMA, that is, by reversing their short position. In fact, the banks do not hold excess Hong Kong dollars because they are generally long in foreign currency. The latest data at the end of July shows that the Hong Kong banking system is short roughly HK$33 billion or US$4 billion.

31. In addition to the robust currency board mechanism, the linked exchange rate system is underpinned by some of the strongest fundamentals in Asia, if not the world:

- Growth is strong, at 5.5%.
- Fiscal position has been consistently strong, with an average fiscal surplus averaging 2% of GDP for the past decade. Fiscal surplus in 1997 so far is 4.4% of GDP and is expected to exceed 5% of GDP.
- The government has no external debt.
- Exchange Fund and Land Fund together have more than US$100 billion in assets.
- Corporate debt ratios are amongst the lowest in Asia.
- The external account is broadly in balance.

32. The free markets and strong fundamentals mean that the nature of the shock is absorbable. Hong Kong does have a strong competitive edge, since we are a service economy with 83% in the services sector. As a major investor and integrator of production in the region, with manufacturing concerns in China and Southeast Asia, Hong Kong companies could adjust production to areas which have the greatest export competitiveness. In addition, the mainland Chinese economy is still growing at 8-9% per annum, with low inflation, a balanced external account and strong

commitment to reforms in the enterprise and financial sectors. All these auger well for Hong Kong as the main gateway to the Chinese market.

33. The current higher interest rates reflect somewhat a slightly higher risk premium in Asia due to the currency turmoil. We do admit that the higher interest rates affected the stock market and property market. But we should also remember that high interest rates are necessary to cool the overheating in the asset markets that prevailed until recently. Given the excess demand situation in Hong Kong as the economy grew by 6.4% in the second quarter, a correction was expected. A moderation in property prices will help bring houses to more affordable levels to homebuyers.

34. Higher interest rates will also bring down inflation, by encouraging savings. Once inflation and the asset markets correct under the free market regime, Hong Kong will become much more competitive. In real effective exchange rate terms, the competitive effect of neighbouring depreciation will be offset somewhat by a rise in domestic inflation. Higher interest rates will also bring the external account more in line with the fundamentals and improve the trade balance. Hong Kong, as a free market economy, is adjusting exactly according to the textbook.

35. Moreover, our banking sector is very robust and strongly capitalized to withstand any shocks. Operating profits of the local banks grew by about 18% in the first half of 1997 and the bad debt charged fell in the first half of 1997 as the level of classified loans was 2.08%, down from 2.91% a year earlier. The capital adequacy ratios of local banks as a whole exceeds 17%. The average loan-to-value ratio is 70%, with the actual measured loan-to-value ratio being 53.3%, according to our survey at end September 1994. Therefore, HKMA's efforts to build a strong banking sector, including the distribution of maturity risks through the mortgage corporation and the creation of an efficient RTGS payment system are all necessary efforts to prevent an external shock from affecting the banking system. In particular, the RTGS system allows the HKMA to monitor closely banks' settlement transactions on a real time basis. Banks would also have to fund their settlements and provide ample liquidity on a more prudent basis. All these are in line with our objective of making the markets more efficient to enable the free market to clear aggregate supply and demand at an equilibrium price quickly.

36. But we should always remember that there is no free lunch. The fixed exchange rate regime implies a flexible economy to adjust to the exchange rate. Hong Kong has high flexibility, attributable to a high savings rate, entrepreneurial spirit and high labour productivity. A fixed exchange rate is a discipline on both the private and public sectors: the economy adjusts to the exchange rate, not the other way around. We do not pretend to say that a fixed exchange rate is the perfect system, because even the IMF admits that there is no perfect system. But it is the best system for Hong Kong. The linked exchange rate system is here to stay.

Conclusion

37. As one of the contributors to the World Bank study on the Asian Miracle, I have never considered the Asian growth story as a miracle. Paul Krugman called it perspiration, not inspiration. Yes, it was the result of hard work, high savings, stable governments and good aspirations. But no one can deny that Asian corporations rank amongst some of the most productive and efficient in the world. Perhaps we were victims of our own success. Global capital inflows were the most sincere form of flattery, and those of us who succumbed to the easy money have now wakened to new challenges and risks.

38. Asia is now in a new growth league, with greater global competition. The adjustments will not be easy, especially building stronger and more robust financial systems to handle the new risks of globalization. There is a new realism in Asia, that however painful the adjustment,

we have to make the necessary changes. As competition intensifies at all levels, there can be no reversal to the globalization, and we simply have to recognize that we live in one globe and we share the same growing pains. I am confident that Asia's basic strength of flexibility, realism and pragmatic policies will see the region through, with a little bit of help from the IMF. In the words of Mr. Michel Camdessus, IMF Managing Director, what has happened is a blessing in disguise. Asia will emerge stronger and more resilient, and it will continue to be a pillar of growth in the new global economy.