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The Global Financial Crisis and Asia

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I. Introduction

The global economy is currently facing a crisis which most economists recognize as the most damaging economic crisis since the Great Depression of the 1930s. This crisis is different from recent global financial crises not only in its magnitude, but in its origin. The epicenter of this crisis was not in the developing or emerging economies, but the United States, home of the worlds most sophisticated and developed financial system.

The crisis first hit other wealthy, developed economies: Europe and Japan. But this crisis has sent shock wages around the world, including what the investment world sometimes calls “Asia ex-Japan”, the emerging economies in Asia. Although, as we demonstrate below, the direct impact of the US subprime crisis on Asia’s financial institutions was relatively small, Asia’s financial markets are increasingly integrated with U.S. and other global capital markets, so the reverberations of the crisis were felt in both financial markets and real economy in Asia as well.

In this study, we discuss the origins of current crisis and outline what we see as the main causes. We then discuss the effect of the crisis on financial markets and the real economy, especially in Asia. Finally, we turn to the global policy response, which has been dramatic. In contrast to the other studies in this volume, our focus is not on the role or policy prescriptions of multinational organizations such as the International Monetary Fund, but rather the policy

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responses of sovereign nations affected by the crisis. However, like the other studies in this volume, we examine these policy responses through the lens of previous crises, highlighting how policy prescriptions have changed in the light of the unique features of this current crisis.

The rest of this study is organized as follows. In section II, we discuss the origin of the crisis in the advanced economies, the events that defined the crisis, and its main causes. Section III discusses the impacts of the current crisis in financial markets and the real economy, focusing on the impact in the emerging economies of Asia. Section IV catalogues the policy responses in Asia and the scope for further policy implementation, organizing the discussion around policies to strengthen financial institutions, monetary policy to provide liquidity and support financial markets and fiscal policy to stimulate demand. Section V summarizes our arguments, in particular a call for more coordination in the region as further policy measures become necessary.

II. Origins of the Crisis

The current crisis started in the worlds largest, most innovative, and until, recently, most profitable financial institutions in the world: U.S. investment banks. Table 1 shows the main balance sheet data for the top investment banks by asset size in the last fiscal year. As is now well known, financial innovation and excess liquidity led the investment banks to become overleveraged. The U.S. banks all have leverage ratios of capital to assets of at least 30%, and in some cases as high as 110%. In retrospect, these are clearly dangerous levels and would not be allowed in standard commercial banks. As indicated in Table 2, which gives the same balance sheet information for the top U.S. commercial banks, even many of the now-troubled commercial banks that have received government bailouts had leverage ratios of about 1/3 that of the investment banks.

Strains on the investment banking model first cracked with the essential failure of Bear Stearns, which cost the Federal Deposit Insurance Corporation (FDIC) US$30 billion to cover its losses in order to arrange an acquisition by JP Morgan Chase on March 16, 2008. But the dam really broke about six months later, when Fannie Mae and Freddie Mac, originally government owned private mortgage companies, were bailed out with over US$5 trillion in debt on September 7, 2008. Just one week later, Merrill Lynch, the biggest investment bank in the world measured in terms of assets, was sold to Bank of America and effectively merged into a commercial bank. Perhaps the biggest shock to financial markets came the next day, when Lehman Brothers, also in the top 10 investment banks worldwide, filed for bankruptcy protection. And one week after that, the two remaining U.S. investment banks[(1)], Goldman Sachs and Morgan Stanley, filed to become bank holding companies so that they could have access to the Federal Reserve's discount window and other tools for providing liquidity.

What went wrong in the investment banking model? The fundamental cause is widely recognized as inadequate supervision and regulation, especially of the U.S. "originate and distribute" banking model, but excess liquidity caused by loose monetary policy and the global savings imbalance was an important catalyst. We discuss both causes below.

Regulation and Supervision

Financial globalization and innovation without adequate financial supervision and regulation at the national and global levels is perhaps the key cause of the current global financial crisis. One of most important cases is the lack of suitable supervision in the "originate and distribute" model of US lending. The originate and distribute model of lending, where the originator of a loan (the bank that originally makes the loan to an individual or business) sells it to various third parties, has become a popular vehicle for credit and liquidity management in recent years. Often associated with mortgages and other collateralized loans, under the originate and distribute model of lending, banks bundled up mortgages and sold them off to third parties, often investment

(1) Note that Citi and JP Morgan were already bank holding companies.

banks[2]. Investment banks, the new trustees of the sold-off loans or mortgages, are much less regulated than traditional commercial banks since they are not allowed to accept federally insured deposits. As trustees, the investment banks would often securitize the loans, issuing asset (mortgage) backed stocks or “mortgage bonds”. Trading in these asset derivatives was often over the counter and so not subject to regulation by either commercial bank regulators or securities exchange regulators. Investors were happy because these asset backed securities paid higher yields than treasury bonds and other debt instruments and were theoretically low risk since the original loans were collateralized and the loans have been bundled into packages to reduce idiosyncratic default risk. The banks benefitted from the boost to capital and improved liquidity risk management they got by getting the heavier risk-weighted assets off their balance sheets in exchange for cash, or at least lower risk-weighted debt instruments. The investment banks made high returns off very little capital.

The benefits of these types of financial innovations and the expertise of the U.S. investment banks in sophisticated financial instruments was admired and emulated elsewhere, but now the costs of this lending model have been sharply demonstrated. As banking shifted from traditional loan contracts to the originate-and-distribute model, the originating banks’ fundamental role as financial intermediaries, to screen and monitor borrowers to minimize the problems of adverse selection and moral hazard, began to break down. By separating the originator of a loan from the bearer of its ultimate default-risk, the originate and distribute model removed incentives to avoid excessively risky loans. In addition, by distancing the borrowers from the ultimate bearer of default risk, the originate and distribute model weakened the incentive for the banks to monitor borrowers or to intervene when problems became apparent. These incentive problems are usually more severe the less capitalized (more leveraged) the bank, and the less the bank needs to rely on demand deposits. Although bundling the

(2) With the repeal of the 1933 Glass Steagall Act separating investment and commercial banks (the 1999 Gramm-Leach-Bliley Act), these investment banks may have been under the same umbrella bank holding company as the originating commercial bank.

loans reduced idiosyncratic risk, it didn't alter systemic risk, so when the subprime mortgage market went into systemic failure, the model collapsed.

Since few investors really understood the sophisticated financial instruments they were trading, and which were backed by the problematic subprime loans, it took just a small amount of delinquent loans[(3)] to trigger a massive global crisis.

Excess Liquidity

Exacerbating the issue of inadequate regulation and supervision we describe above were the loose credit conditions globally. Some pundits have termed this crisis the "Greenspan Crisis", not only because of the former Federal Reserve Board chair's opposition to regulating derivatives markets, but also because they lay blame on excessively loose US monetary policy under Greenspan's tenure. Indeed, both quantity and price indicators point to excess liquidity conditions in the major economies. Figure 1 shows the ratio of M2 to GDP for the U.S., Euro Area and Japan on a steadily upward trend since 1999. At the same time, short-term interest rates have been at historically low levels, most notably in Japan, where the zero interest rate policy (ZIRP) was in place since the fourth quarter of 1995, but also the US and Euro Area, where rates began to fall in the late 2000.

Others, also recognizing the role of excessively liquid credit markets, put the blame not on monetary policy, but the global savings imbalance, the causes of which are less obvious. The U.S. current account deficit and its twin financial account surplus are well known empirical facts. Some economists argue that the widening U.S. current account deficit also partly reflects monetary policy (Bems, Dedola and Smets, 2007), but the traditional argument has been that aggregate saving, both private (American consumers) and government (the huge U.S.

(3) Schoenbaum (2009) points out subprime loans represent only 12 percent of outstanding home mortgage loans in the U.S. and that only 20 percent of these are delinquent, yet that was sufficient to trigger a crisis because "no one really knew the extent to which subprime loans were implicated in particular bundles of securitizations or derivatives".

government deficit), in the U.S. has been too low, driving huge current account deficits. Using the same basic framework, current Federal Reserve chair Ben Bernanke turned that thinking on its head with his argument that the causality runs the other way around: the great investment options in the United States serve as a magnet for the excess savings in the rest of the world, particularly Asia. It is not low U.S. savings, but the "Global Savings Glut" (Bernanke, 2005) in the rest of the world that drives the US financial account into surplus, and hence its current account into deficit.

III. Impacts of the Crisis in Asia

This combination of inadequate regulation and supervision with excess liquidity globally set the stage for the series of events described above: the arranged merger of Bear Stearns and Merrill Lynch, the government bailout of Fannie Mae and Freddie Mac, and finally the failure of Lehman Brothers. It was Lehman's collapse that most shocked financial markets: when the news hit toward the end of September 2008, the LIBOR[4] rate spiked to a historic high of 6.8% as banks, wondering who would be the next victim, grew wary of lending to each other. In the autumn of 2008, as policy makers debated on the best response and struggled to gain public or congressional support for their proposed measures, the world continued to witness a series of historic events in financial markets. The Dow Jones average posted its worst annual decline since the Great Depression, the London Stock Exchange hit its lowest level in more than 25 years, and the Nikkei fell by nearly 50% to the lowest level in 26 years, making 2008 the worst on record. In the fourth quarter of 2008 the crisis officially hit the "real" economy: the United States, Japan and the Euro Area all declared their economies had officially entered recession. The advanced economies experienced an unprecedented 71/2 percent decline in the fourth quarter of 2008.

(4) The LIBOR, or London InterBank Offered Rate is the rate that banks charge each other for loans ranging between one month to one year. The rate is published by the British Bankers Association based on a panel of banks representing countries in each currency and is used as a benchmark for bank rates all over the world.

Financial Institutions

Asia's financial institutions had relatively little direct exposure to U.S. subprime-related securitized products such as mortgage backed securities and collateralized debt obligations. Even Japanese banks, which had the largest exposure, were still solid enough to come to the rescue of some of the West's failed financial institutions in the critical period in the fall of 2008. At the height of the crisis in the fall of 2008, write downs and other credit losses reported by Asian financial institutions was only about 3% of the estimated $577 billion in losses of the worlds 100 largest banks and securities firms. This compares favorably with that of the U.S. (55%) and Europe (40%). More significant than Asia's overall burden in the crisis is how those losses compare to the capital and asset position of Asia's financial institutions. Our estimates in Table 3 indicate that subprime losses as a percentage of bank capital in Asia are about half that of the United States, and for the "plus 3" countries of Japan, Korea and China, the ratio is below 3%(5).

Capital Markets

Equity markets in Asia are a different story. Capital market liberalization in emerging economies in Asia and the rest of the world means that equity markets in emerging economies are increasingly integrated with the U.S.(6) The hits to U.S. equity markets in the aftermath of the crisis severely affected Asia. Although losses in the Dow perhaps made bigger headlines, Figure 2 below shows that the collapse in Asia's emerging markets was even more severe. Figure 3 illustrates that currencies in the region, with the exception of the Japanese yen, which appreciated as carry trades were unwound, and Chinese renminbi, which like

(5) Although direct losses from subprime loans are relatively small, Asian economies hold an enormous amount of U.S. financial assets, the value of which will likely be affected in the aftermath of the crisis. In addition, bank liquidity in the region would be damaged were foreign liabilities, which have risen sharply in the early 2000s, were to be called home.

(6) Kawai, Lamberte and Yang (2009) show evidence of increasing and high correlations between US and Asian government bond yields.

other currencies pegged to the dollar has appreciated slightly in real effective terms, have depreciated. This is despite use of international reserves for support.

The Real Economy

Despite negative impacts to Asia's financial sector, as the crisis unfolded the world looked to the region a source of growth since direct losses to financial institutions were relatively small, as explained above. This, combined with solid macroeconomic fundamentals and healthy bank balance sheets was expected to cushion Asia from the some of damage seen elsewhere.

But trade, the engine of Asia's phenomenal development, collapsed in late 2008 as credit – in particular sources of trade credit – dried up and global demand dwindled. Thus, the toll of the crisis on Asia's real economy has been heavier than first expected. Trade in consumer durable goods such as automobiles and electronics, the foundation of much of Asia's vertically integrated trade structure, was the most severely affected by the drop off in global demand.

The most developed economies in the region have suffered the most. Japan's economy contracted 12% in the fourth quarter of 2008 and the newly industrialized economies of Hong Kong, Korea, Singapore and Taiwan showed similarly high rates of decline: between 10-25%. The Association of Southeast Asian Nations (ASEAN) economies have also been hurt by the drop off in global demand, but the composition of their exports is less concentrated in the sectors most affected by the global downturn. The ASEAN-5 (Indonesia, Thailand, Philippines, Malaysia, Vietnam) have not been as severely hit as the advanced countries in Asia, but they have seen annual growth fall from 6.3% in 2007 to just under 5% in 2008 and the IMF, 2009 expects growth to drop off sharply to 0% in 2009. China and India have also certainly been affected by the contraction in global trade, but their economies have continued to grow – albeit at more modest rates of 9.0 and 7.3 percent annually – because trade is a smaller share of their economies and they have had more room for expansionary monetary and fiscal policy measures.

IV. Policy Response

Given the unique origins and causes of this global crisis, the policy response has been markedly different from that of previous crises the world has witnessed. Throughout Asia, the challenge is to reduce economic reliance on exports and rebalance the source of growth toward a more sustainable reliance on domestic consumption while cushioning the economy from the effects of the crisis. Globally, the response can be categorized as a three-pronged approach: restoring the health of the financial sector, boosting liquidity through expansionary monetary policy and stimulating aggregate demand through fiscal policy. Restoring the health of the financial sector has in some cases been politically controversial, but for the most part accepted as economically necessary. But some policy recommendations for monetary or fiscal policy have been sharp departures from previous recommendations from economic advisors. Unlike the Asian crisis of 1997, when interest rates were hiked to try and prop up fixed exchange rates, this time the policy response has largely been expansionary monetary policy through low policy interest rates and other measures to provide liquidity. In stark contrast to some of the debt crises that hit Latin American economies in the 1980s, the call this time has been for expansionary fiscal policy, although economists recognize the need for caution in countries with heavy public debt burdens.

Financial Sector

Restoring the health of the financial sector was the first priority for most policy makers. To help struggling banks, governments have announced plans to purchase bad assets, helped negotiate mergers in the industry, increase and expand existing deposit insurance programs and boost capital ratios.

The policy initiatives in the U.S., where the financial institutions have been the most damaged, has been the most aggressive and innovative. The largest and most hotly debated has been U.S.'s Troubled Asset Relief Program (TARP), which allocates US$700 billion toward the purchase of bad loans on bank books. A substantial chunk of that has also been spent on capital injections into top banks and more are expected: the results of the much-awaited stress test on America's 19 largest banks were revealed last week and the results suggest ten of the group still need to pump up the common-equity component. As pointed out in Montgomery and Shimizutani, 2008, there is much to be learned from the experience of Japan in the 1990s on asset management companies and capital injections, but we leave that analysis for future research.

In Asia as well, there have been plans to boost bank capital announced in India and Japan. Hong Kong and Korea also stand ready to step in if necessary. But since direct subprime loan losses by banks in Asia have so far been limited, policies to strengthen financial institutions in Asia have focused less on shoring up weak banks and more on preventing bank runs and ensuring that financial institutions are able to continue to provide credit to prevent a "credit crunch" from cutting off investment and hampering economic growth.

To prevent potential bank runs, policies have mostly focused on extending deposit guarantees (Hong Kong, Malaysia, Singapore, Thailand) and raising deposit insurance limits (Indonesia and the Philippines). To reduce the risk of a credit crunch, China and Korea have announced credit support for the corporate sector: China, by lifting credit controls, and Korea through the introduction of a US$30 billion package to guarantee short-term foreign bank loans. Finally, to keep declines in asset values such as equity values from crippling the banks, countries such as Japan, the Philippines and Singapore have eased "mark-to-market" accounting rules requiring them to price assets on their books at current market value.

So far, given the limited damage to bank balance sheets in the region, these steps may have been enough. But the full extent of this crisis and its impacts globally may still be unfolding, so policy makers need to ensure tools for public capital injections will be available if necessary.

Monetary Policy

In the first few months of the global financial crisis, most central banks in the region adopted tighter monetary policy to counteract inflation. However, as shown in Table 4, by late 2008 as crisis gained momentum, most countries have loosened monetary policy to ease liquidity conditions and to assuage fears of deflation in the region.

Except for a few countries in South Asia, most notably Bangladesh and Pakistan, where inflation continues to be a concern, nearly all central banks in the region have cut monetary policy interest rates (or their equivalent). Many countries (China, India, Indonesia, Malaysia and Vietnam) have combined cuts in policy rates with lower reserve requirements. Reserve requirements are the amount of cash commercial banks must keep on deposit at the central bank as a provision against deposit withdrawals. In many countries, these deposits do not earn any interest for the banks so they are essentially lost income, or a tax on the banking sector. Lowering those requirements is one way to increase liquidity in the financial sector: without those funds on reserve, banks can use them in their core role as financial intermediaries by lending them out to business and other investors. Even in South Asia, where containing inflation is still on the minds of monetary policy board members, lower policy rates has been combined with lowered reserve requirements to provide liquidity.

Countries in the region still under some form of capital controls or financial repression have eased regulations: China has loosened credit ceilings and India has eased controls on capital inflows.

Looking forward, there may still be room for further monetary policy easing in countries such as China, Korea, Malaysia or especially India, where real rates (the nominal rate minus the rate of inflation) remain relatively high. But Japan, in particular, has cut policy rates to virtually zero, so the scope for conventional monetary policy is limited. Policy makers in Japan have also increased liquidity provisions, broadened the range of eligible collateral and started purchasing commercial paper and bonds to ease corporate funding pressures. Other central banks in the region have also implemented innovative policy responses: Cambodia, Korea, Malaysia, the Philippines, Singapore and Thailand have injected liquidity into strained money markets, India has introduced foreign exchange swaps for banks and Korea has arranged for exchange swaps with the

U.S., Japan and China.

Fiscal Policy

Most economies in Asia have simultaneously implemented expansionary fiscal policy to support domestic aggregate demand. The biggest stimulus packages have been announced by the “plus three” economies: China, Japan and Korea. China’s announcement of a RMB 4 trillion (US$586 billion) stimulus package over two-years grabbed headlines, although is has since become apparent that the national government will provide less than half that figure, leaving local governments and state owned banks and enterprises to come up with the balance. Japan announced a huge stimulus package including a planned 2,000 billion yen (US$21.3 billion) handout to citizens: 12,000 yen per adult and 20,000 for children and pensioners. The Korean government has also announced that its budget for 2009 will include an additional US$11 billion stimulus package.

These fiscal stimulus packages in particular are a step toward the long-called for “rebalancing” of Asian economies. Many economists estimate there is still room for additional fiscal stimulus in the region since with very few exceptions the economies in Asia have small budget deficits, or, in some cases, even budget surpluses. But in a few countries with high levels of public debt such as India, the Philippines, and especially Japan, where net debt is projected to exceed 100% of GDP in 2009, need to temper any further stimulus with a concrete economic plan to secure fiscal sustainability.

V. Conclusions

Although we agree with the majority of economists who feel the current crisis will stop short of becoming a technical “depression” and remain an economic “recession”, it remains an historic event because of the depth and breadth of the economic damage. Although Asia has not had direct damage to its banking sector on the scale of that seen in the U.S. or Europe, the resulting fall off in global demand has crippled trade and therefore economic growth in the export-driven economies of the region.

This crisis has changed the face of global banking: banking around the world has become more concentrated as governments have encouraged mergers of weak or illiquid institutions with healthier ones, and the American model of investment banking has disappeared as one by one all of the top U.S. investment banks have either filed for bankruptcy (Lehman Brothers), merged into commercial banks (Bear Stearns and Merrill Lynch) or converted to bank holding companies in order to become eligible for discount window loans and other government programs (Goldman Sachs and Morgan Stanley[(7)]). The U.S. has become the last to resign itself to a more German (or, since the "Big Bang", Japanese) universal banking model in which bank holding companies serve as umbrellas for commercial banks, securities companies and even insurance companies.

The crisis has also reversed many international financial policy prescriptions. With the U.S. at its epicenter, the crisis has led to calls for tighter supervision of even sophisticated financial markets by global watchdogs such as the International Monetary Fund. Although still not on a scale to deal with the size of the problem in the United States, the IMF has seen its resources triple from $250 billion to $750 billion. In Asia, national policy prescriptions have taken a u-turn from previous crises. Countries now struggle to delicately balance the need to stabilize falling currencies, which would normally call for higher interest rates, with frozen asset markets, which call for loose monetary policy to restore liquidity. Governments that were once advised or cajoled into reducing the role of the government and various spending programs are now faced with the difficult task of implementing fiscal stimulus programs while also ensuring long-term fiscal sustainability.

On the whole, the policy responses in Asia have been swift and appropriate. The Asian Development Bank forecasts a V-shaped recovery in 2010 (Asian

(7) The remaining two top U.S. investment banks, Citi and JP Morgan, were already under the umbrella of a bank holding company.

Development Bank, 2009). But as the reverberations of this crisis continue to be felt in the rest of the world, more may be needed. Most countries still have room to maneuver, but Japan in particular faces a difficult set of conditions. Like many other countries in the region, we question whether Japan would be prepared in the event of a sudden need for capital boosts in the banking sector. Many countries in Asia still have room to loosen monetary policy, but Japan is again facing the riddle of trying to loosen monetary policy under zero interest rates. And while most of the region has a healthy national balance sheet, Japan already has a deficit of about 10% of GDP and public debt is approaching over 100% of GDP, limiting the scope for future fiscal policy measures.

In ex-Japan Asia there is more room for further policy measures. Looking forward, we encourage countries to recognize that the rising degree of economic interdependence among Asian economies requires a much more coordinated policy response. Working through institutions such as the ASEAN+3 Economic Review and Policy Dialogue process, the Chiang Mai Initiative (CMI) and the Asian Bond Markets Initiative, countries in the region can avoid inefficient outcomes that may result from continued fragmentation of policy responses(8). Trade negotiations toward an Asian free-trade area, or, even more critically, the failed Doha round, are crucial in stemming the rise of protectionism seen in the aftermath of this crisis. But while supporting trade initiatives, Asian economies also need to work toward rebalancing their economies away from US and European demand to regional or even domestic markets. With a more coordinated response, Asia may be able to serve as the source of global growth the world hoped for in the fall of 2008.

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(8) Kawai, Lamberte and Yang (2009) discuss some of these outcomes, in particular the possible flight of deposits in response to uncoordinated bank deposit guarantee programs (as seen in Europe) or spillovers of fiscal policy stimulus with may reduce incentives for countries to implement their own programs.

Tables and Figures

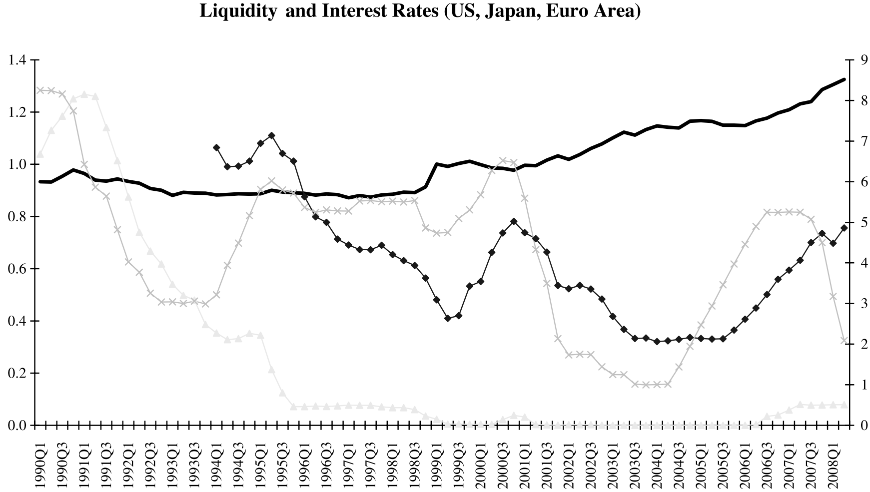
Table 1: Leverage of Top 10 Global Investment Banks

	Assets (Million Dollars)	Liabilities & Equity (Million Dollars)	Liabilities (Million Dollars)	Capital (Million Dollars)	Leverage Ratio
Merrill Lynch	1020050	1020050	988118	31932	31
Goldman Sachs	632858	632859	626611	6248	100
Morgan Stanley	604396	604396	598098	6298	95
UBS Securities	575359	575359	566842	8517	67
Deutsche Bank Securities	519781	519781	508480	11300	45
Lehman Brothers	495426	495426	490980	4446	110
Credit Suisse	425012	425012	395155	29858	13
Bear Stearns	395362	395362	383569	11793	33
Citigroup	363162	363162	354820	8342	43

Table 2: Leverage of U.S. Commercial Banks

Bank Name (Holding Company)	Assets (Million Dollars)	Liabilities and Capital (Million Dollars)	Liabilities (Million Dollars)	Capital (Million Dollars)	Leverage Ratio
Bank of America (NB Holdings)	1312794	1312794	1202530	110264	11
J.P Morgan (JP Morgan Chase & Co)	1318888	1318888	1211274	107614	11
Citibank (Citigroup)	1251715	1251715	1151143	100572	11
Wells Fargo Bank NA	467861	467861	426089	41772	10
Goldman Sachs Bank	19126	19126	17692	1434	12
Morgan Stanley Bank	35066	35066	31922	3144	10
Bank of New York Mellon	115672	115672	106543	9129	12
Wachovia Bank National Association	653269	653269	573062	80207	7
Merrill Lynch Bank USA	78052	78052	72597	5455	13
State Street	134001	134001	122060	11941	10
**Wells Fargo -Wachovia	1121130	1121130	999151	121979	8
**Bank of America -Merril Lynch	1390846	1390846	1275127	115719	11

Figure 1: Evidence of Excess Global Liquidity



Source: International Financial Statistics, IMF

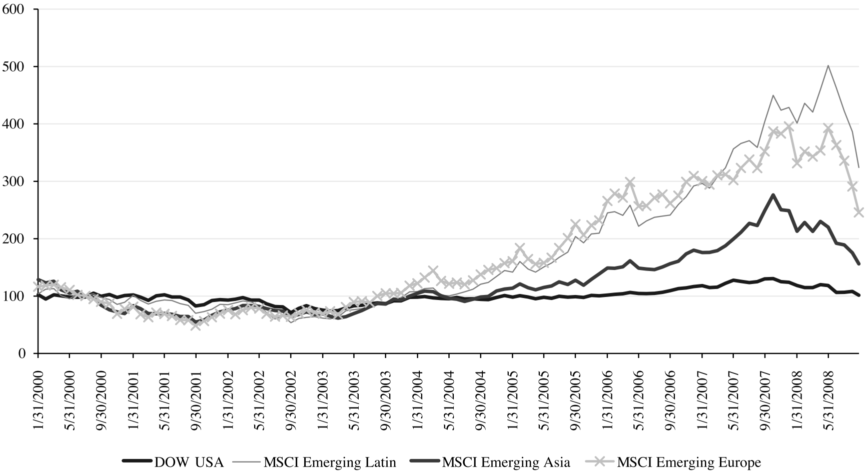
Table 3: Estimated Subprime Losses in U.S., Europe, Japan and Emerging Asia

	USA	Europe	Japan	Korea	China	Other Asia	***Total Asia***
Subprime losses (in billions of USD)	322.5	232.3	12.9	0.4	3.9	5.8	***23***
Total bank assets (in billions of USD)	16122	46143	7446	1233	6800	3010	***18488***
Capital banks (in billions of USD)	1557	2583	434	82	275	56	***846***
Subprime losses as share of capital (in percent)	20.71	8.99	2.97	0.54	1.41	10.38	***2.72***
Subprime losses as share of assets (in percent)	2.00	0.50	0.17	0.04	0.06	0.19	***0.12***

Notes:
Bank losses and writedowns are as of Sep. 2008
Japan - Mizuho Financial Group, Mitsubishi UFJ Financial Group, Sumitomo Financial Group and Nomura Holdings
Korea - Woori Bank
China - Bank of China, Commercial Bank of China, China Construction Bank

Malaysia - 0.3 % of capital base of banks
Singapore - DBS Bank
USA - 19 banks
Europe - 30 banks
Source: Bloomberg; various news media; IMF, International Financial Statistics.

Figure 2: Equity Markets in the U.S., Asia, other Emerging Markets



Source: Bloomberg

Figure 3: Foreign Exchange Movements in Asia

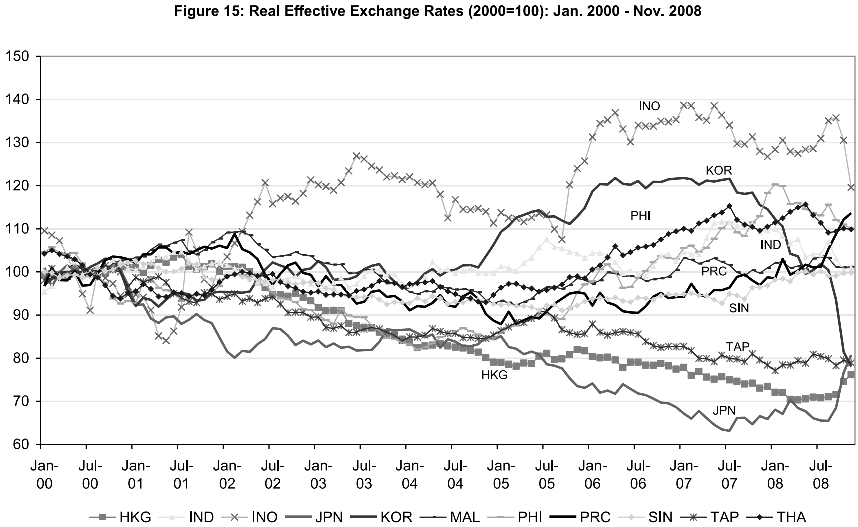


Table 4. Asian Economies' Policy Responses to the Global Financial Crisis

Country	Interest Rate	Reserve Requirement	Lending Facility	Bank Recapitalization Scheme/Funds	Deposit (loan) Guarantee/ Insurance	Fiscal Stimulus	Other Measures
1. Bangladesh	Increase	Decrease	No	No	Yes	No	Yes
2. China, PRC	Decrease	Decrease	No	No	No	Yes	Yes
3. Hong Kong	Decrease	No change	No	Yes	Yes**	No	Yes
4. India	Decrease	Decrease	Yes	Yes	Yes	No	No
5. Indonesia	Decrease	Decrease	Yes	No	Yes	No	Yes
6. Japan	Decrease	No change	Yes	Yes	Yes	Yes.	Yes
7. Korea	Decrease	No change	Yes	Yes	Yes*	Yes	Yes
8. Malaysia	Decrease	Decrease	Yes	No	Yes*	No	No
9. Pakistan	Increase	Decrease	No	No	No	No	Yes
10. Philippines	No change	Decrease	Yes	No	Yes	No	Yes
11. Singapore	Decrease	No change	Yes	No	Yes*	Yes	Yes
12. Sri Lanka	No change	Decrease	Yes	No	No	No	Yes
13. Taiwan	Decrease	No change	No	No	Yes	No	Yes
14. Thailand	Decrease	No change	No	No	Yes	No	Yes
15. Vietnam	Decrease	Decrease	No	No	No	No	Yes

* new scheme introduced, in Korea, a guarantee on short-term foreign loans

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<Summary>

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The global economy is currently facing a crisis which most economists recognize as the most damaging economic crisis since the Great Depression of the 1930s. This crisis is different from recent global financial crises not only in its magnitude, but in its origin. Therefore this crisis requires a new set of policy prescriptions. In this study, we discuss the origins of current global financial crisis and outline what we see as the main causes. We then discuss the effect of the crisis on financial markets and the real economy, especially in Asia. Finally, we turn to the global policy response, which has been dramatic. In contrast to the other studies in this volume, our focus is not on the role or policy prescriptions of multinational organizations such as the International Monetary Fund, but rather the policy responses of sovereign nations affected by the crisis. However, like the other studies in this volume, we examine these policy responses through the lens of previous crises, highlighting how policy prescriptions have changed in the light of the unique features of this current crisis. Although on the whole we find policy responses in the region to have been appropriate, we conclude with a call for more coordination looking forward, particularly in stemming protectionist pressures that have risen up in the aftermath of this crisis.