



A review of the impact of the financial crisis on Asia

April 2009

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Preface

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The global slowdown has negatively affected Asia's trade and capital flows. This has led to a rapid economic slowdown in Asia especially given the importance that trade and investments are to GDP growth in the region. To limit the depth and duration of the slowdown, Asian governments are acting quickly to address the credit gap caused by global deleveraging and the collapse in external demand. What are some of the rescue measures adopted by governments to address these problems and stimulate domestic consumption? How healthy are the domestic banking systems; will they contribute to the slowdown as in the west or be able to provide credit to support growth? What policy levers are available to governments to close the credit gap arising from weakened foreign and domestic lending and lower capital market issuances? What are the major risks for governments and corporations in this environment? In this report, Janamitra Devan, a Senior Fellow with the McKinsey Global Institute and George Nast, a partner in our Shanghai Office provide a review of the impact of the financial crisis on Asia and its implications for governments and corporations in the regions.

Given the unprecedented uncertainty in the global economic environment, this document represents our current, but evolving perspective on the impact of the global crisis on Asia.

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The global financial crisis has impacted Asia severely, and has led to recessions in several key markets as well as downgrades in growth forecasts. Declining external demand and to a lesser extent credit deleveraging have had the greatest impact, and will continue to do so, as the strength of Asia's trade and capital flows are closely tied to the fortunes of the global economy.

Our latest analysis shows that the credit gap¹ caused by global deleveraging can be bridged if Asian governments apply continued expansionary monetary measures and implement timely fiscal stimulus programs. Additionally, the slump in exports can be partly offset by creating demand within Asia.

SLOWER GROWTH FOR ASIA'S ECONOMIES IN 2009

In February 2009, a poll of the McKinsey China Council of Business Economists and several other Asian economists revealed that most expected the real GDP growth rate for a composite of Asian markets to moderate to 2.3 percent, down from the 3.7 percent forecasted when polled at the end of last year. The same group also saw a greater likelihood for a further slowing of Asian economies since we last interviewed them.

As growth has declined, bankruptcies and unemployment rates in almost all countries have naturally increased (Exhibit 1). A UBS report dated January 7, 2009 estimated joblessness in China in 2009 would amount to between 15 and 18 million people.² Further, after fighting high inflation in the first half of 2008, Asia's economies could now face the risk of deflation.

EXPORTS ARE THE KEY DRIVER OF GROWTH DECLINE

The collapse of international trade will be the key driver of the economic slowdown in Asia in 2009. Global Insights estimates that trade accounted for around 33 percent of Asia's real GDP in 2008, but expects this to decline by 13 percent in 2009.

Asia went into a sharp down-turn in the fourth quarter of 2008 and early 2009. Exports across the region began falling at alarming rates in November, caused mainly by rapidly shrinking consumer demand from the US and other western countries. China's export growth dipped by 2.8 percent in December

1 Defined as the difference between the amount of credit required to meet GDP growth targets, and the estimated amount of credit available.

2 The State Council Information Office in China has indicated that 20 million migrant workers returned home jobless in January 2009 for the Chinese New Year holiday as a result of the economic slowdown.

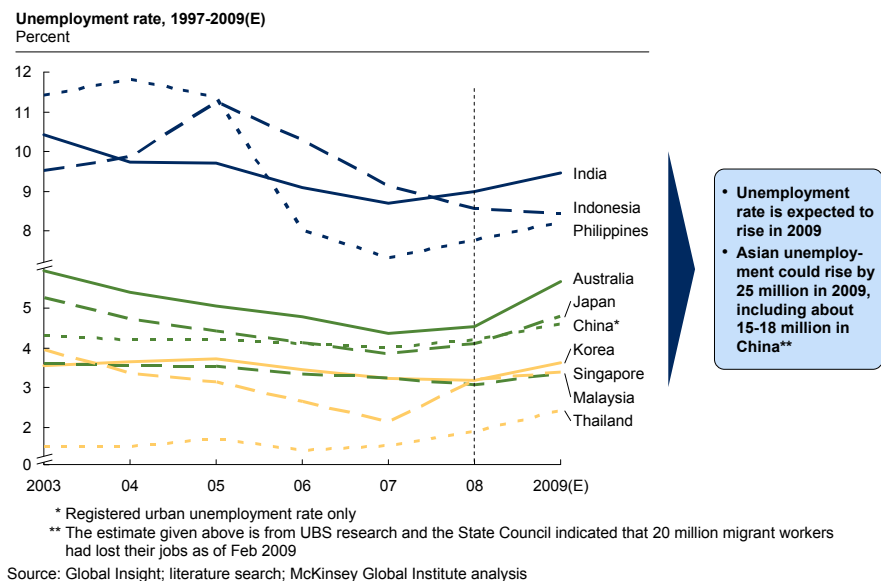
2008, -17.5 percent in January 2009, and by February 2009 had declined by 25.7 percent from the previous year. An equally alarming 23.8 percent import decline in February 2009 clearly indicates that China's manufacturers could expect further contraction in exports for at least the next few months. Other economies across Asia, for example Japan and Taiwan, also reported sharp declines in exports, and for the more trade-exposed and smaller economies of Southeast Asia, the declines became worrying (Exhibit 2).

GOVERNMENT ACTIONS ARE MITIGATING THE IMPACT OF GLOBAL DELEVERAGING ON ASIA

The global credit crunch has also had a substantial influence on the supply of capital in Asia. The total capital outflow from Asia in the third quarter of 2008 amounted to \$33 billion, with Japan, ASEAN and India facing the largest outflows (Exhibit 3). Furthermore³, equity markets in China, Hong Kong, Singapore and Japan declined by more than 50 percent over 2008. By late 2008, corporate bond issuance had also begun to decline, as had domestic bank lending in every market except China and Japan.

Exhibit 1

The unemployment rate is forecasted to increase by 0.2% to 1% in almost all Asian countries in 2009

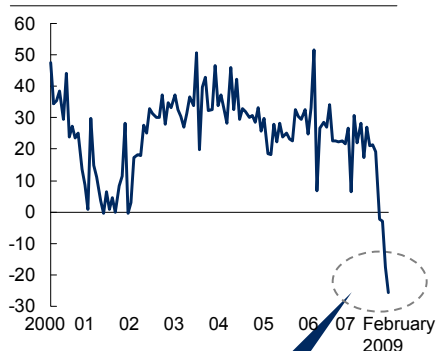


3 At the time of writing, however, the latest quarterly indicators are beginning to show a reversal in net capital outflow.

Exhibit 2

Export growth of major Asian economies continue to tread in the negative range through February 2009

China's monthly export growth rate
YOY, percent



Dramatic -25.7% drop yoy in Feb 09, (-2.8% in Dec 08) is the 4th month of consecutive negative export growth for China; this depressed trend is likely to continue for the next few months

Export growth for other Asian countries continued to decline in January 2009
Monthly growth YOY, percent

	Nov	Dec	Jan	Feb
Japan	-27	-35	-46	-49
Korea	-19	-18	-33	-17
Taiwan	-23	-42	-44	-29
Thailand	-21	-15	-27	-11

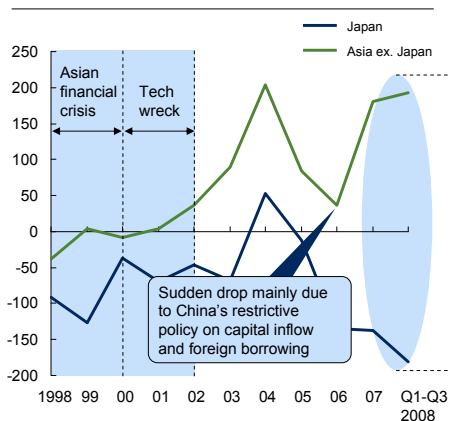
- Drop in exports are due in part to a large portion of exports going to China that are in turn re-exported to the west
- China's imports also dropped dramatically (-23.8% in Feb), indicating rapid manufacturing contraction and de-stocking

Source: CEIC; literature search; UBS EM report; McKinsey Global Institute analysis

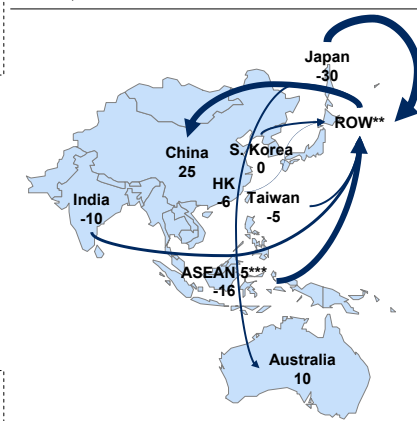
Exhibit 3

There has been a relatively larger capital outflow from Asian economies since Q3 08; China is the largest contributor to capital inflow

Asia annual cross-border net capital flow*
Dollar billion



Asia cross-border net capital flow*, Q3 08
Total = -\$33 billion



* Financial and capital account and net error and omission from balance of payments of each economy

** Includes intra-Asia

*** Net capital flow breakdown is Malaysia (-\$9.8 billion), Singapore (-\$9.1 billion), Indonesia (\$0.5 billion), Philippines (\$0.2 billion) and Thailand (\$1.9 billion)

Source: Global Insight; CEIC; local statistical bureaus or central banks; McKinsey Global Institute analysis

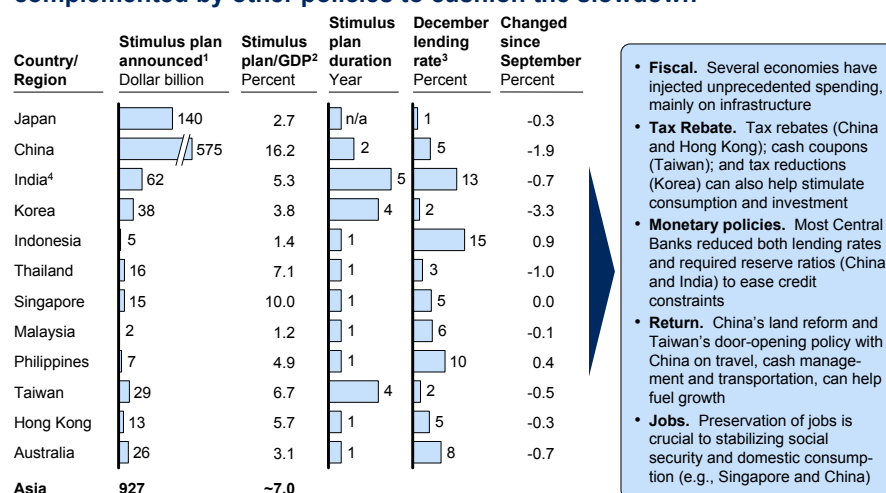
Since September 2008, most countries, with the exception of Japan and China, saw swift depreciation of their currencies concomitant with capital outflows. This was especially the case in South Korea, where the local currency depreciated by about a third against the US dollar.

Unlike the Asian Financial crisis in 1997-98, banking systems across the region remain robust. This means that Asia, in contrast to the West, will not see chronically weak banking systems pulling down its economies. As western institutions deleverage, however, ongoing capital outflows will continue to limit the availability of credit.

Facing rapid economic deterioration, most Asian economies have adopted aggressive rescue policies (Exhibit 4). Besides fiscal stimulus, governments have enacted other expansionary policies. To ease credit constraints, most central banks have reduced both lending rates and required reserve ratios. To stimulate domestic consumption, China announced that a 13 percent rebate would be given to farmers who purchase home appliances, motorbikes or computers. To guard against balance of payment pressures, most Asian countries have set up currency swap arrangements with each other and with the US Federal Reserve. Greater regional cooperation spurred the ASEAN and Northeast Asian economies to increase the total arsenal available under the enhanced Chiang Mai Initiative to \$120 billion.

Exhibit 4

Several Asian economies have aggressively adopted fiscal stimulus plans complemented by other policies to cushion the slowdown



¹ Announcements: Japan (Dec 12, 08); China (Dec 21, 08); India (Jan 2, 08); Korea (Jan 6, 09); Indonesia (Jan 1, 09); Thailand (Jan 20, 09); Singapore (Jan 22, 09); Malaysia (Nov 10, 08); Philippines (Jan 8, 09); Taiwan (Nov 28, 08); HK (Dec 11, 09); Australia (Feb 5, 09)

² Global Insight estimates of GDP, 2009 (Real GDP, 2008 base)

³ One year lending rate. HK, Korea and Australia data as at Feb, 09; Indonesia and Philippines as of Nov 08 and Oct 08

⁴ Most of India's stimulus package will take effect within one year; debt waivers for farmers will last for 5 years

Source: Official government announcements; Global Insight; literature search; McKinsey Global Institute analysis

A POTENTIAL CREDIT SHORTAGE OF \$1.2 TRILLION IS MANAGEABLE, BUT FURTHER CREDIT DETERIORATION COULD EXACERBATE THE DOWNTURN

To understand how the credit environment may evolve, we analyzed Asian financial markets in greater depth.

Total credit extended to the non-government sector in Asia is approximately \$15.8 trillion⁴. This mostly comprises domestic bank lending, but also includes \$1.6 trillion of bond issuance from the capital markets, and \$1.9 trillion of cross-border lending, mostly from western financial institutions. Asia needs increased credit to grow. Drawing on historical correlations of credit and GDP growth, we estimate that Asian markets would need an additional \$2.6 trillion to achieve potential growth rates over the next two years.⁵

In a mild scenario, we calculate that the total credit gap will be \$1.2 trillion, of which \$200 billion will come from reduced foreign bank lending and \$140 billion from lower capital market issuances.⁶ Domestic bank lending will still be positive, but not enough to make up for the shortfall. Hence, in this scenario, Asia's greatest exposure will come from weak global banks and capital markets that reduce the supply of credit.

While most of the economists we interviewed do not expect a worst case scenario, the credit gap under this assumption could soar to over \$3.7 trillion if stresses in domestic banking systems worsen (Exhibit 5). In this regard, three elements could contribute to shortages in domestic banking systems: deteriorating profits; credit losses; and higher capital adequacy ratios driven by cautious banks or regulators. Potential credit losses represent the largest risk. Asian bank capital could be impaired by between \$200 billion and \$400 billion, depriving banks of the potential to lend (Exhibit 6).

The size of the gap is significant, and is in the range of western markets. The potential for further deleveraging in the US ranges from \$1.6 trillion to \$3.7 trillion, and in Europe from \$3 trillion to \$6.3 trillion⁷. Under a mild scenario, credit deleveraging would deprive Asia of about one percent of GDP growth

4 Based on Q2 2008 data from Bank of Japan, The People's Bank of China, Bank of Korea, Hong Kong Monetary Authority, Reserve Bank of Australia, Reserve Bank of India, Central Bank of the Republic of China (Taiwan) and the central banks of ASEAN economies.

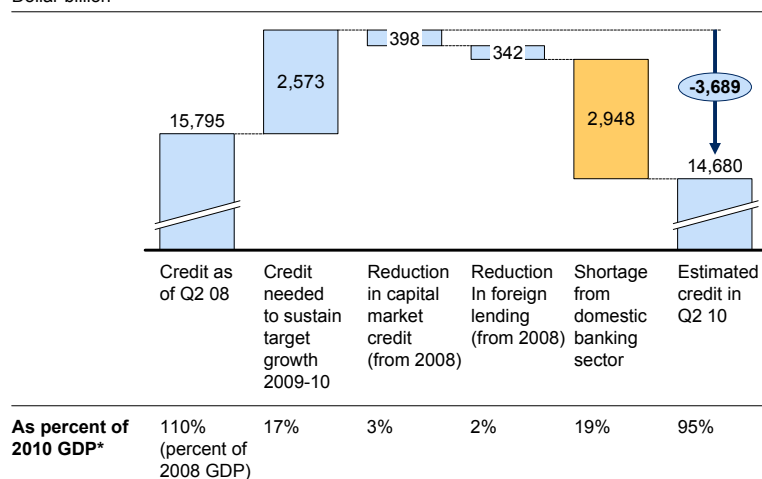
5 Average Asian potential growth is 5.2 percent real GDP, ranging from 2.6 percent in Japan to 8.0 percent in China.

6 In a mild scenario, cross-border lending declines at the rate of expected deleveraging in the US and EU, while capital market issuances drop to their worst level since the Asian financial crisis of the late 1990s. In a severe scenario, cross-border lending declines at the most severe levels experienced in the US and EU, while capital market issuances drop to their worst level since the Asian financial crisis.

7 MGI analysis for the US and EU.

Exhibit 5**The major driver of the credit gap will be deteriorating domestic banking systems**

Worst case scenario, estimated total credit, in 2008 constant terms
Dollar billion



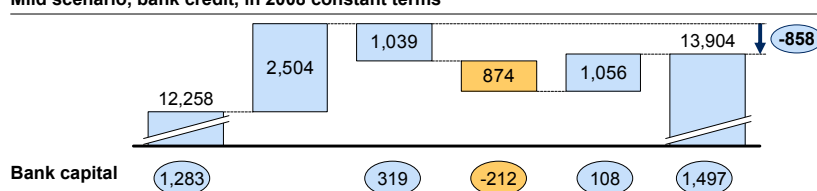
* Targeted GDP

Source: McKinsey Global Institute analysis

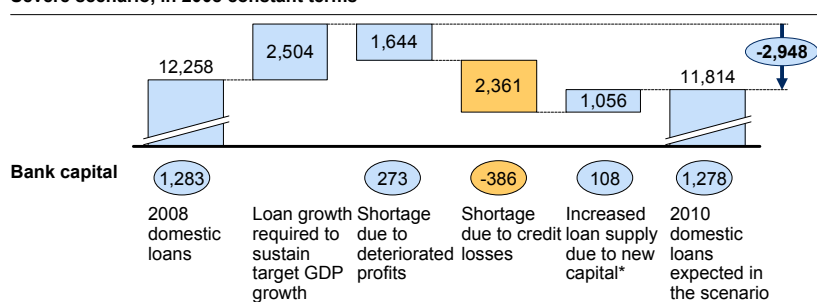
Exhibit 6**Soaring credit losses would have a major impact on domestic banking**

Dollar billion

Mild scenario, bank credit, in 2008 constant terms



Severe scenario, in 2008 constant terms



* Sep 2008-Feb 19, 2009, actual or officially announced

Source: McKinsey Global Institute analysis

versus potential, whereas estimates are already far larger than this, indicating that economists now expect the decline in external demand to have a more negative impact on many Asian economies than a credit shortage.

WAYS TO CLOSE THE CREDIT GAP

If a severe scenario occurs, Asian growth could suffer significantly, resulting in growth rates in GDP that are worse than the low end of current forecasts, and severe recessions in the worst affected countries, such as South Korea.

Governments in the region have tools to mitigate the impact and have sufficient funds from foreign exchange reserves to provide short-term flexibility. This is particularly the case for foreign loans that require US dollars to deal with roll-overs or repayments. Domestically, multiple policy levers, for example currency swap contracts, the use of corporate assets as collateral for monetary related lending, or buying out packaged bad debts through asset management companies, could be used to mitigate credit scarcity. A summary of these levers and the markets in which they would most apply are set out in Exhibit 7.

Exhibit 7

Different countries/regions need to apply different policy levers to mitigate problems caused by credit shortage

Policy levers to mitigate credit shortage	Countries/regions that can benefit most*
Levers to compensate for foreign bank deleveraging <ul style="list-style-type: none"> • Make use of foreign exchange reserves • Strengthen currency swap contracts with other countries • Establish multilateral reserve pooling • Provide credit through dollar sovereign funds • Issue dollar sovereign bonds to raise reserves 	<ul style="list-style-type: none"> • Hong Kong, S. Korea, Taiwan, Singapore • Hong Kong, S. Korea, Taiwan, Singapore • All Asian countries • S. Korea, Taiwan, Singapore • S. Korea, Hong Kong
Levers to compensate for reduction in capital markets <ul style="list-style-type: none"> • Allow corporate bonds to be used as collateral for monetary related lending • Provide credit insurance/guarantee to corporate bond issuance • Have the central bank directly purchase high grade bank and corporate commercial paper 	<ul style="list-style-type: none"> • India, S. Korea, Malaysia, Thailand • India, S. Korea, Malaysia, Thailand • India, S. Korea, Malaysia, Thailand
Levers to spur domestic bank lending <ul style="list-style-type: none"> • Ease liquidity requirements for domestic banks, such as reducing RRR and CAR requirements • Recapitalize banks through capital raising facilities, e.g., equity issuance to government or government sponsored programs • Purchase bad debts through asset management companies, e.g., XinDa and ChangCheng in China, Kamco in S. Korea 	<ul style="list-style-type: none"> • India, Malaysia, Thailand • India, S. Korea, Taiwan, Australia, Singapore, Malaysia, Indonesia, Thailand • S. Korea, China, India, Japan

* Countries that have both the capability and the necessity to use the lever can benefit the most. ("Necessity" means that credit shortage caused by one of the 3 sources as a percentage of credit balance as of Q2 08 is higher than average among Asian countries)

Source: Press releases; McKinsey Global Institute analysis

South Korea, for example, has already established swap facilities and is considering foreign bond issuance to deal with its foreign loan exposures. It has also established credit guarantee programs for bond issuance and a recapitalization fund to enhance bank capital.

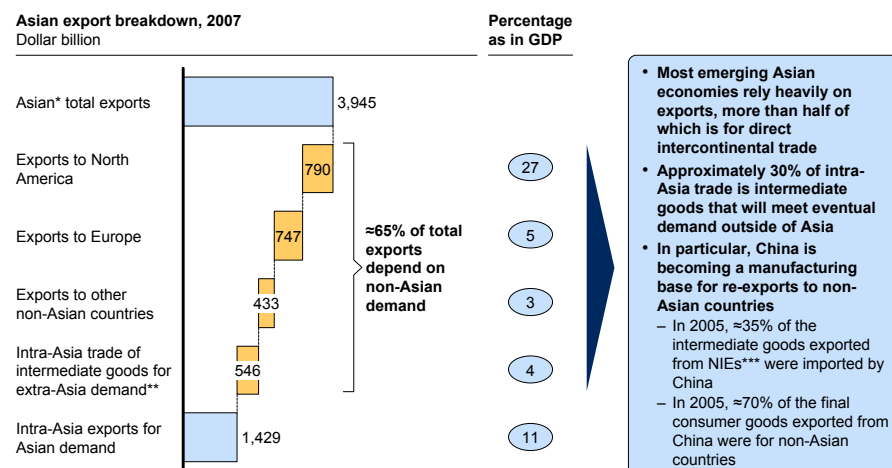
ASIA'S VULNERABILITY

A first glance at export data might suggest that Asia is not that dependent upon external demand, as around 50 percent of total exports are destined for other countries within the region. A 2007 report from the International Monetary Fund (IMF) shows, however, that 65 percent of intra-Asia exports are intermediate goods, with a significant proportion of these destined for non-Asian countries. Combining the findings of this report with data from the Asian Development Bank, we conclude that around 28 percent of total intra-Asia exports are actually intermediate goods that are assembled for final demand outside of Asia. Therefore, of all Asian exports, around 65 percent rely on non-Asian demand. It is no wonder that so many export exposed economies are finding it difficult to manage this slow-down (Exhibit 8).

Exhibit 8

Although intra-Asia trade represents 50% of total exports, a large portion are re-exports

Dependent on non-Asian demand



* Asia refers to Japan, China, India, Korea, Taiwan, Hong Kong, Australia, and ASEAN

** In 2007, the intermediate goods in intra-Asia trade for extra-Asian demand occupies 28% of all intra-Asia exports

*** NIEs (Newly Industrialized Economies) refer to Hong Kong, Korea, Singapore and Taiwan

Source: WTO; IMF; ADB; Regional Economic Outlook Asia and Pacific 2007; McKinsey Global Institute analysis

Take digital cameras as an example: South Korea and Taiwan are both able to provide the key electronic components that are technologically intensive, whereas China has the labor resources necessary for assembly

and manufacturing. In 2005, around 35 percent of the intermediate goods exported from Hong Kong, South Korea, Singapore and Taiwan were imported by China, and approximately 70 percent of the final consumer goods exported from China went to countries outside Asia. Shrinking demand from the US and Europe will therefore have a negative knock-on effect on Asia's export trade.

China is becoming a manufacturing base for re-exports to non-Asian countries, while other Asian economies provide the raw materials or components. Not all things are equal, however. According to a recent UBS study, Asian countries are exposed in different ways. Take China, for example, which is a significant importer of "other Asia" exports. The UBS study indicated that there are two types of economies exposed to China. There is a set of economies such as Australia, Japan and South Korea whose main exports are either commodities or capital goods. These economies are likely to benefit from the huge China fiscal stimulus package. But there is also a set of economies such as Taiwan, South Korea, Malaysia, Indonesia and the Philippines whose main or prominent exports to China are processed components. These economies could expect to face more difficulties as demand for these products from China continues to remain in the doldrums.

Currently, significant de-stocking in the US and Europe is taking place, coinciding with a sharp decline in exports from China. Furthermore, despite international leaders advocating the continuance of free trade at the recent G20 and APEC summits, the fear in Asia of increased protectionism by the US and Europe remains strong. In December 2008, to compensate for alleged subsidies and to support local exporters, the US International Trade Commission applied duties of between 35 percent and 40 percent on certain Chinese steel products. At the same time, the US imposed an anti-dumping tax on uncovered springs imported from Vietnam. In February 2009, as part of a \$787 billion stimulus package, the U.S. House of Representatives included a "Buy American" provision that allows only domestically produced iron and steel to be used in public works projects.

DESPITE RISKS, OPPORTUNITIES REMAIN

Corporations are facing a high refinancing and liquidity risk, especially those that are heavily indebted. Other related concerns include counterparty risk of hedging contracts and liquidity risks faced by suppliers. As the real economies head into recession, plunging consumer demand will lead to over-capacity and greater uncertainty.

Despite this, opportunities remain for those businesses that can capitalize on government stimulus programs. Leveraging savings from mergers and acquisitions, and negotiating with suppliers to obtain better terms, could also help businesses battle the slowdown. Attractive opportunities also exist in the financial services sectors, such as distressed asset investment.

THE IMPORTANCE OF KEY MARKETS FOR OVERALL RECOVERY

Western consumer demand will not see a rally in the near term and while domestic demand will grow, unemployment and low consumer confidence will have a muting effect. As a result, Asia's short-term recovery appears dependent on the success of stimulus programs in minimizing GDP reduction.

The stimulus programs of key markets like China will spur sizeable new demand in basic materials, steel, machinery and equipment, as well as create employment. Such stimulus plans are expected to have positive effects not just in countries where they are introduced, but across Asia. Specifically, the potential requirement of an additional 90 million tons of steel from China's stimulus package and increased machinery orders could benefit Australia, South Korea, and Japan.

We provide snapshots of macroeconomic and credit pressures for key Asian economies at the end of this report.

GOING FORWARD

To understand the depth of the downturn and to identify early signs of recovery, external demand and deleveraging will need to be monitored, as will the effects of the fiscal stimulus packages and the various banking and monetary levers introduced to offset decline (Exhibit 9). Particular attention should be given to trade and the Chinese purchasing manager index, which indicates the movement of trade volumes; international capital flows and bank lending, which will track the degree of deleveraging and initiatives to offset it; and domestic fixed asset investment and government spending, which will measure the impact of government stimulus. In short, selected indicators not only can reflect the dynamics between Asian economies and that of the rest of the world, but also help in determining the scope and duration of this downturn.

Exhibit 9

Key indicators

Focus areas	Leading indicators of key Asian economies
Improvements in industrial activity	<ul style="list-style-type: none"> • Leading index (China, Japan, Korea) • OECD leading index • Business sentiment index (China, Japan, Korea, ASEAN) • Unemployment rate • Bankruptcy ratio
Improvements in external trade	<ul style="list-style-type: none"> • Chinese PMI • Baltic dry index • US/EU retail sales growth • Exchange rate • Trade financing volume growth
Secondary effects from credit deleveraging of the west	<ul style="list-style-type: none"> • Lending rate (especially, India, China, Japan, Singapore, Hong Kong) • Loan to deposit ratio (same as above) • US/EU claims/GDP • Corporate profits (China, Japan, Korea) • CDS spreads (Japan, Korea, Singapore, Hong Kong)
China's role in leading recovery	<ul style="list-style-type: none"> • Chinese domestic demand/GDP • Chinese stimulus spending plan • Chinese FX reserve/FX debt • Chinese imports from rest of Asia

Source: McKinsey Global Institute analysis

Macroeconomic and credit pressures by country

- **China is facing challenges in trade but its 8 percent growth target is achievable with various government stimulus policies.** Deteriorating trade will negatively affect short-term industrial output, given that exports contribute to 30 percent of China's output and 15-20 percent of value-add. The expectation, however, is that China will hold its currency at a stable level vis-a-vis the US dollar. The Chinese government has ample capacity and authority to raise funds and stimulate the economy, and its public debt is relatively low (only 25 percent of GDP compared to 75 percent in the US).
- **In Japan, damage to the financial sector has been limited, but the growth of its real sector could be dampened due to the worsening global economy and strength of the Yen.** Losses and write-downs in banks are limited (\$16.5 billion), but the external environment is deteriorating rapidly, driving foreign capital away. The Yen has also appreciated significantly over the past several months. Corporations reduced capital investments by five percent between the first and third quarters of 2008 due to the economic slowdown. Retail investors, over 80 percent of whom have reported investment losses, are becoming risk averse and have started to reduce consumption. A sizable stimulus package is therefore indispensable for Japan's recovery.
- **Korea is expected to be hit hard by the decline in trade and foreign exchange volatility, and is likely to experience significant slowdown even with government stimulus.** A significant reduction in the growth rate of Korean exports has been observed recently (November 2008, -18.3 percent, December 2008, -17.4 percent, January 2009 -32.8 percent). Its major export engines also showed significant contraction in January 2009 compared to the previous year (Automobile -55 percent; Semiconductor -47 percent; and Electronics -65 percent). Moreover, foreign credit deleveraging and capital flight caused a 34 percent depreciation of the Korean Won in 2008, and recent currency swap deals with Japan, China and the US have not had an impact so far. SMEs and the construction sector are particularly vulnerable to exchange rate risk. While the government has introduced aggressive policy measures to rescue the economy, and the Bank of Korea cut interest rates to a record low of two percent in February 2009, the impact remains to be seen.

- **India's real sector faces declining demand and sharply reduced profitability. Compounded by a capital shortfall, this has led to decelerating growth and negative consequences for SMEs, infrastructure and the banking system.** Textiles, metals and mining, iron and steel, auto, chemicals, cement, real estate, media, transport and trade comprise 33 percent of India's GDP. Shrinking demand and a sharp decline in sales prices have put intense pressure on these key sectors. At the same time, foreign capital inflow that contributed 6.8 percent of capital formation over the last three years is now reversing. The government has taken action to stabilize the economy, for example, the cash reserve ratio was reduced from nine percent to five percent, but its ability to stimulate the economy through large-scale concerted action is limited. If the various fiscal packages announced so far are taken into consideration, the fiscal deficit is expected to balloon from 2.5 percent to between 7.5 percent and 9 percent.
- **Though better positioned than in the 1997 crisis, the ASEAN-5 has been severely affected and is actively seeking greater regional cooperation.** Overall, macroeconomic fundamentals are sound. Foreign exchange reserves are relatively high; 1.9 times short-term external debt versus less than 1 in 1997. Current account surpluses range from 2 percent to 20 percent, compared to -1 percent for developing Asia in 1997. Individual economies, though, have still been severely affected by the crisis in both the real and financial sectors, and fiscal deficits may constrain attempts to stimulate demand through increased government spending. The recent announcement that ASEAN has committed to the establishment of a foreign reserve pool of \$120 billion signals its goal of strengthening regional integration.
- **Australia should prove resilient owing to a relatively stable financial sector and effective government policies, but a decline in consumption continues to be a major risk. Mortgage problems and potential deleveraging are two risks facing the banking system, but these can be mitigated.** Reduced domestic consumption and private investment are bigger threats for the economy. Consumption accounted for 68 percent of GDP growth in the past five years but, in September 2008, due to spiraling food and fuel costs, consumer confidence had dropped to its lowest level in 17 years. Thus, economic recovery depends largely on when consumption can resume its previous growth. Conversely, commodity export revival will depend on China, the largest importer of Australian commodities.

Greater China Office
April 2009
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