II. Macro environmental factors potentially affecting financial sector

2.1 International economic and financial conditions

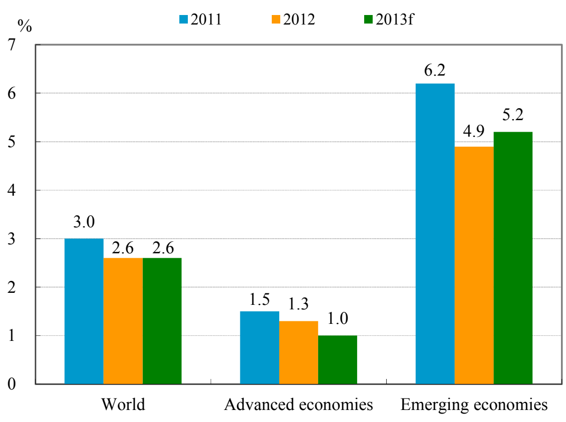
International economic conditions

Global recovery proceeded at a milder pace

The ongoing European sovereign debt crisis in 2012 was mainly reflected in the fact that a deflated property bubble put the Spanish banking industry in financial jeopardy and the road to a Greek bailout remained bumpy. This, coupled with sluggish recovery in the US labor market and fiscal cliff controversy denting market confidence, resulted in subdued global economic performance in the first three quarters of the year. Subsequently, buttressed by a series of policy measures taken by the national governments of major countries, global financial markets showed signs of improving and the global economy also witnessed a gradual upturn. These policy measures included: (1) the FED launching the third round of expanding asset purchases; (2) the ECB adopting OMT to restore market confidence; and (3) Japanese Prime Minister Abe deploying a more aggressive economic renaissance plan.

In 2013, prospects for the US housing market have improved but fiscal retrenchment could dampen economic growth. This, together with a prolonged recession likely facing the euro area, presaged a slow-paced recovery for the global economy. Global Insight predicted world real GDP growth to reach 2.6% in 2013, approximating that achieved in 2012.[11] Real GDP in advanced economies is forecast to drop to 1.0% in 2013, lower than the 1.3% recorded a year earlier, pointing to a very modest recovery. Output in emerging economies is forecast to nudge up to 5.2% from 4.9% in 2012 due to advancing

Chart 2.1 Global economic growth rates



Note: Figures for 2013 are Global Insight estimates.
Source: Global Insight (2013/4/15).

[11] See Note 1.

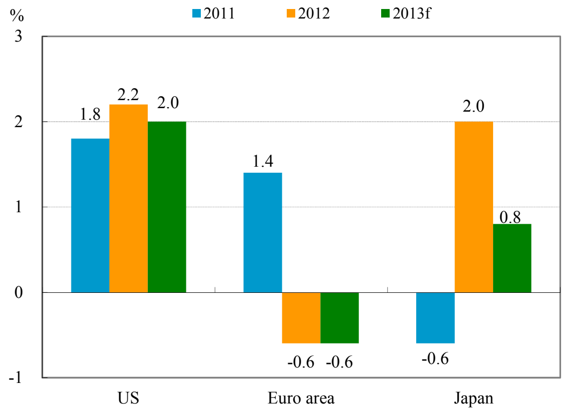
momentum in growth (Chart 2.1).

Problems involving lackluster economic circumstances, high unemployment and strict fiscal conditions posed challenges for advanced economies

The US economy grew moderately alongside an improving labor market

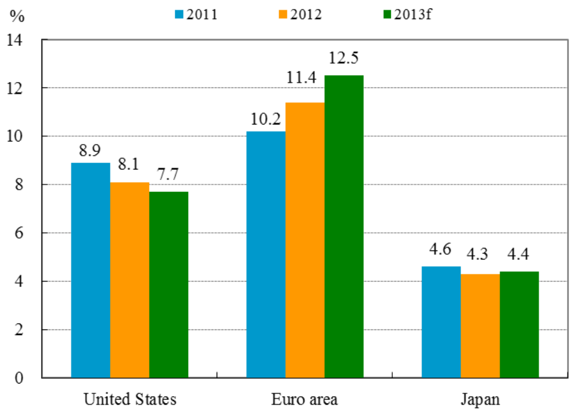
On the back of accelerating growth in private investment and decelerating reductions in government expenditure, US economic growth rebounded from 1.8% a year before to 2.2% in 2012. Despite an improvement in the housing and labor markets in the beginning of 2013, the impacts of automatic spending cuts, which were launched in March, broadly affected employment, private consumption and national defense expenditure. In turn, they will likely jeopardize economic growth for the whole of the year. Global Insight estimated US economic growth to stand at 2.0% in 2013, falling slightly compared to the previous year (Chart 2.2).

Chart 2.2 Economic growth rates in US, Euro area and Japan



Note: Figures for 2013 are Global Insight estimates.
Sources: Official websites of the selected economies and Global Insight (2013/4/15).

Chart 2.3 Unemployment rates in US, Euro area and Japan

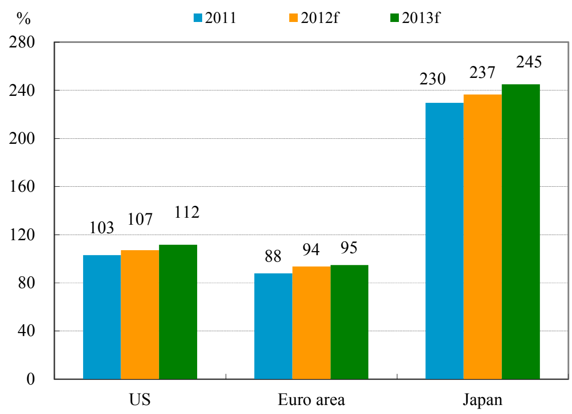


Note: Figures for 2013 are Global Insight estimates.
Sources: Official websites of the selected economies and Global Insight (2013/4/15).

The US unemployment rate dropped to 8.1% in 2012 from 8.9% a year earlier. The rate further descended to a four-year low of 7.6% in March 2013 under the backdrop of a rallying housing market and vigorous development in the energy sector. However, the main reason behind this mainly came from a decline in the labor force participation rate. Global Insight anticipated the US unemployment rate to continue reducing to an annual rate 7.7% in 2013 (Chart 2.3).

Outstanding US government debt relative to annual GDP increased year by year. According to the International Monetary Fund (IMF), the ratio will keep rising to an estimated 112% in 2013 (Chart 2.4). Furthermore, the impact of the fiscal cliff, a combination of expiring tax cuts and automatic spending cuts, has alleviated thanks to the passage of the American Taxpayer Relief Act of 2012 on 2 January 2013. Nevertheless, with the automatic spending cuts going into effect in March, it will not only fuel uncertainty over US economic growth but also cloud the global economic outlook.

Chart 2.4 Government debt-to-GDP ratios in US, Euro area and Japan



Source: IMF (2012), *Fiscal Monitor*, October.

Euro Area GIIPS countries will move to the peak period of repayment on public debt in 2013

In the euro area, economic growth posted a rate of -0.6% in 2012 amid the European sovereign debt crisis. Corporate spending and private consumption remained feeble owing to the implementation of fiscal austerity by national governments. Global Insight estimated that the euro area would remain mired in recession with GDP again down by 0.6% in 2013 (Chart 2.2).

The euro area unemployment rate spiked to a new high of 11.4% in 2012. Among the segments of the population, youth aged 15 to 24, who suffered an unemployment rate of more than 50% in Spain and Greece, had the most serious problem. Global Insight forecast the unemployment rate to keep advancing to 12.5% in 2013 (Chart 2.3).

In the euro area, the ratio of outstanding government debt-to-GDP was soaring but is expected to grow at only 1 percentage point in 2013 against the backdrop of the implementation of harsh fiscal austerity measures, according to IMF projections (Chart 2.4). Nonetheless, GIIPS will progressively enter the peak period of repayment of public debt in 2013 and 2014.

The Abe cabinet proposed the "three-arrows" strategy for realizing economic revitalization

Bolstered by needs for earthquake reconstruction and the resumption of private consumption, Japanese economic growth registered 2.0% throughout 2012. The government debt-to-GDP ratio further uplifted to 237% during the year as the government issued Reconstruction Bonds in response to funding requirements for earthquake recovery (Chart 2.4). At the end of 2012, the new Japanese Prime Minister Abe proposed the "three-arrows" strategy, comprising:

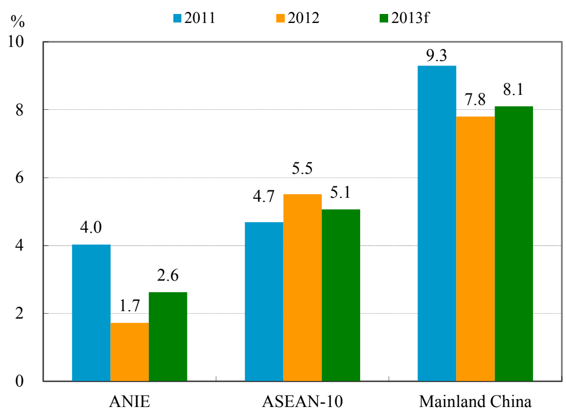
"aggressive monetary policy," "flexible fiscal policy" and "the growth strategy that promotes private investment," with the aim of curbing deflation and promoting economic growth. In this context, it is likely to induce a further deterioration in government debt. According to Global Insight, Japanese economic growth is expected to drop to 0.8% in 2013 (Chart 2.2), while the unemployment rate is forecast to climb to 4.4%, somewhat higher than the figure recorded in 2012 (Chart 2.3).

The recovery of Asian emerging economies is expected to accelerate, while unemployment rates in the ASEAN-10 countries showed improvements

Hit by contracting foreign demand, GDP growth in the major Asian emerging economies experienced a slowdown in 2012, and output growth in Mainland China over the same period also decreased to 7.8% from 9.3% in 2011. Moreover, Thailand and the Philippines both saw a marked surge in their economic growth rates in 2012. The former was underpinned by post-flood construction requirements, while the latter was driven by foreign workers' remittances backstopping private consumption, alongside an expansion in public expenditure. Against this backdrop, output in the 10 member countries of the Association of South East Asian Nations (ASEAN-10) grew by 5.5% in 2012 from 4.7% a year before (Chart 2.5).

Spurred by an expected moderate pick-up in the global economy, Global Insight anticipated that the economic growth rate in the Asian newly industrialized economies would mount to 2.6% in 2013 from 1.7% in 2012. Meanwhile, the ASEAN-10 countries would see steady growth but register a growth rate of 5.1% in 2013, slightly lower than 5.5% a year earlier (Chart 2.5). The unempolyment rate in the Asian newly industrialized economies is projected to stand at 3.6%, higher than 3.4% in 2012, while the figure would continue to drop to 4.5% in the ASEAN-10 countries (Chart 2.6).

Chart 2.5 Economic growth rates in emerging Asian economies

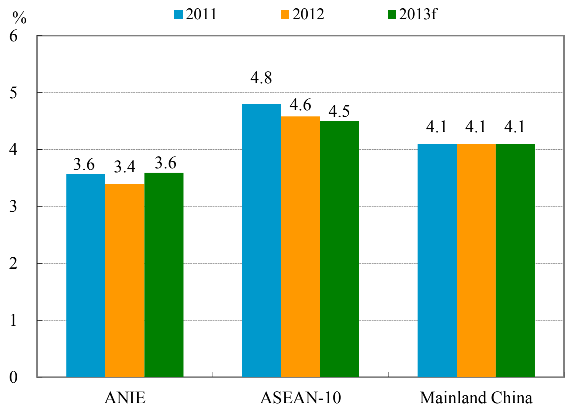


Notes: 1. Figures for 2013 are Global Insight projections. Estimates for ANIE are based on 22 February 2013 data, while for ASEAN-10 are 15 April 2013 data.
2. ANIE refers to Asian Newly Industrialized Economies, including Taiwan, Hong Kong, Singapore and South Korea.
3. ASEAN-10 refers to 10 member countries for the Association of South East Asian Nations, including Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

Sources: Official websites of the selected economies and Global Insight (2013/4/15).

Recently, international hot money flowed into the Asia-Pacific region, emanating from the emerging negative effects of quantitative easing adopted by advanced economies. It not only exerts appreciation pressure on Asian currencies but also fuels the build-up of asset and credit bubbles. Standard and Poor's (S&P) also indicated that rapid movements of hot money are likely to impact Asian economies.[12]

Chart 2.6 Unemployment rates in emerging Asian economies



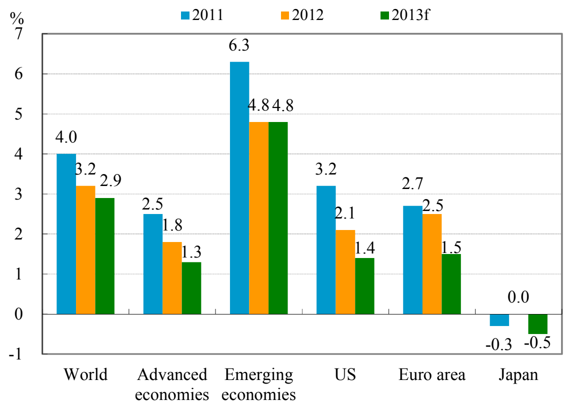
Notes: 1. Figures for 2013 are Global Insight projections. Estimates for ANIE are based on 22 February 2013 data, while for ASEAN-10 are 15 April 2013 data.
2. For ANIE and ASEAN-10, see Notes 2 & 3 in Chart 2.5.

Sources: Official websites of the selected economies and Global Insight.

Global inflationary pressures kept subsiding

Global prices of food and crude oil dramatically surged amid climate and geopolitical uncertainty in the third quarter of 2012. However, with increasing production of cereals due to improvement in the climate in cereal producing regions, alongside a still-sluggish global economy, commodity prices resumed stability. Reflecting this, global inflation moderated in 2012 compared to the previous year, with the CPI inflation rate registering 3.2%, down from 4% in 2011. CPI inflation rates in both advanced and emerging economies were lower than the figures recorded a year earlier (Chart 2.7).

Chart 2.7 Global headline inflation indices



Note: Figures for 2013 are Global Insight estimates.

Sources: Official websites of the selected economies and Global Insight (2013/4/15).

Global crude oil prices trended upward in the beginning of 2013 but turned to decline as a consequence of Mainland China's weak economic performance in the first quarter and a deepening recession in the euro area. In addition, international cereal prices also regained stability due to climate improvement. Reflecting this, global energy prices only showed a modest level of growth. Global Insight predicted the global CPI inflation rate would continue to reduce to 2.9% in 2013 (Chart 2.7).

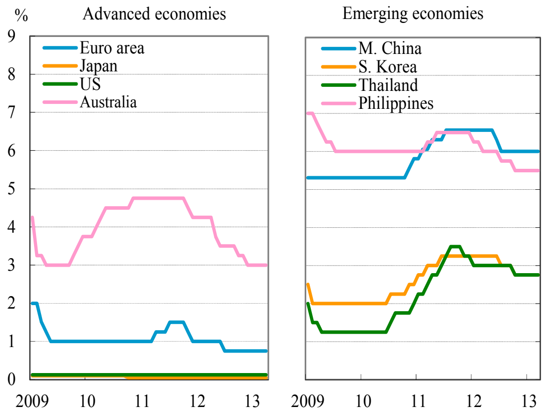
[12] Standard & Poor's (2013), *Economic Research: Global Credit Conditions Underpin Economic Growth Outlook in Asia Pacific*, 13 March.

Monetary policy kept easing in advanced economies along with an expansion in the size of asset purchases

With regard to monetary policy, there is confined room for cutting rates given the already low interest rates in major advanced economies. In the face of the weakening global economy, the ECB cut its policy rate in July 2012,[13] while the Reserve Bank of Australia also lowered their policy rate four times during the year. By contrast, the FED and the Bank of Japan (BOJ) both kept their low-interest-rate policies unchanged (Chart 2.8), and sequentially stepped up the size of asset purchases (Table 2.1).

Emerging Asian economies continued adopting easier monetary stances in response to the impact of the still-moderate underlying pace of global output growth on their domestic economies. Most economies kept reducing policy rates from 2012 onwards (Table 2.1).

Chart 2.8 Policy rates in selected economies



Notes: 1. Figures are as of end-April 2013.
2. Figure for the Euro area is based on the main refinancing operations fixed rate; for Japan, uncollateralized overnight call rate; for US, federal funds rate target; for Australia, cash rate target; for Mainland China, financial institution one-year lending base rate; for South Korea, base rate; for Thailand, 1-day repurchase rate; and for the Philippines, repurchase rate.

Sources: Central banks' websites.

Table 2.1 Recent measures of monetary easing in selected advanced and emerging economies

Economy	Dates	Measures
US	2012/9	The Federal Open Market Committee (FOMC) decided to purchase additional agency mortgage-backed securities at a pace of US$40 billion per month until prospects of the labor market notably improved.
	2012/12	The FOMC decided to take the following measures to sustain monetary easing: 1. Continue purchasing additional agency mortgage-backed securities at a pace of US$40 billion per month. 2. Purchase longer-term Treasury securities after the program to extend the average maturity of the FOMC's holdings of Treasury securities is completed at the end of 2012, initially at a pace of US$45 billion per month.

[13] See Note 2.

		3. Maintain the existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities until prospects of the labor market improved. 4. Keep the target range for the federal funds rate at 0 to 0.25% and maintain this low range for the federal funds rate given that the unemployment rate remains above 6.5%, inflation between one and two years ahead is projected to be no more than 2.5%, and longer-term inflation expectations continue to be well anchored.
Euro area	2012/7	The ECB cut the main refinancing operations fixed rate by 25 basis points to 0.75%.
Japan	2012/2, 4, 9, 10, 12	The BOJ successively expanded the size of its Asset Purchase Program on five occasions during 2012, bringing its total value up to 101 trillion yen.
	2013/1	The BOJ decided to take monetary measures as follows: 1. Raise the price stability target from 1% to 2%. 2. Pledge to purchase financial assets at a rate of 13 trillion yen per month from 2014 onwards without setting any termination date. 3. Keep the target range for the uncollateralized overnight call-loan rate unchanged at 0 to 0.1%.
	2013/4	The BOJ adopted "quantitative and qualitative monetary easing" by means of the following steps: 1. Change the main operating target for money market operations from the uncollateralized overnight call rate to the monetary base. 2. Double the monetary base and the amounts outstanding of Japanese government bonds as well as exchange-traded funds (ETFs) to 270 trillion yen, 190 trillion yen and 3.5 trillion yen, respectively, in two years. 3. Increase the amounts outstanding of Japan real estate investment trusts (J-REITs) by 60 billion yen to 0.17 trillion yen.
Australia	2012/5, 6, 10, 12	The Reserve Bank of Australia lowered the cash rate target four times to 3.0%.
Mainland China	2012/6, 7	The PBC sequentially cut the financial institution one year lending and deposit base rate twice to 6.0% and 3.0%, respectively.
South Korea	2012/7, 10	The Bank of Korea reduced the base rate target twice to 2.75%.
Thailand	2012/1, 10	The Bank of Thailand lowered the 1-day repurchase rates twice to 2.75%.
Indonesia	2012/2	Bank Indonesia cut the Bank Indonesia rate by 25 basis points to 5.75%.
Philippines	2012/1, 3, 7, 10	The Central Bank of the Philippines lowered the repurchase rate four times to 5.50%.

Sources: National official websites.

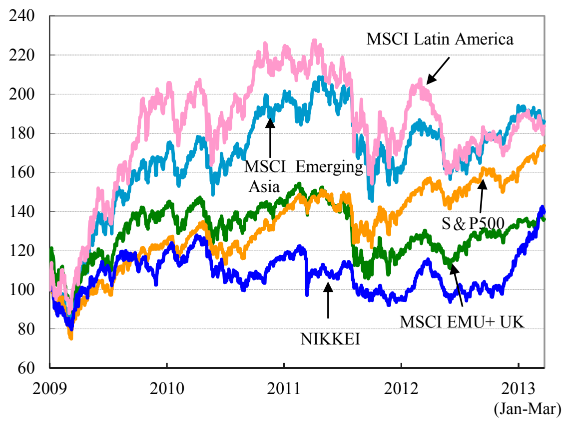
International financial conditions

Improvements in international financial markets

As the European sovereign debt crisis continued to flare up on occasion affecting global financial markets, the ECB launched the three-year LTRO in two phases providing the banking system with a total amount of one trillion euros in low rate loans in December 2011 and February 2012, respectively. This not only contributed to alleviating pressures on funding constraints in markets in the first quarter of 2012, but also promoted asset markets to temporarily stabilize. In turn, major stock markets around the world mostly rebounded amid buoyant sentiment (Chart 2.9).

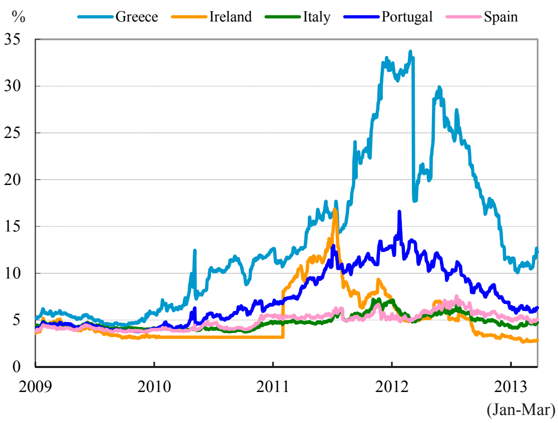
However, the political unrest surrounding the Greek parliamentary election outcome in the beginning of May 2012, coupled with renewed concern over the flagging economy and the health of banks in euro area GIIPS,[14] hit investor confidence. As a consequence, those economies saw capital outflows and experienced a backlash in government bond yields, with Greece especially registering the highest increases (Chart 2.10). Although the three-year LTRO introduced by the ECB has helped to resume the demand for government bonds issued by those economies, its positive effect has receded. Accordingly, risk aversion suffered a sharp upswing alongside capital flight to safe assets, bringing about a precipitous drop in government bond yields in the US, Germany and Switzerland. The safe-haven flows to Japan resulted in Japanese government bond yields hitting historical lows and persistent appreciation in the Japanese yen (Chart 2.11). Investors' confidence towards emerging markets

Chart 2.9 Performance of key international equity indices



Note: 1 January 2009 = 100.
Source: Bloomberg.

Chart 2.10 Government bond yields in euro area GIIPS

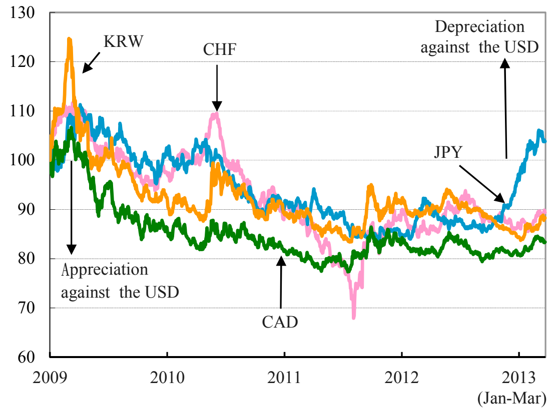


Note: All figures are based on 10-year government bond yields except for Ireland's data which are on a 5-year basis.
Source: Bloomberg.

[14] See Note 3.

declined due to elevated risk aversion. Against this backdrop, markets have seen mounting concerns about whether emerging markets are capable of weathering waning domestic economic conditions, especially in the face of shrinking leeway for monetary policy and an opaque global economic outlook.

Chart 2.11 Movements of various currencies against the US dollar



Note: 1 January 2009 = 100.
Source: Bloomberg.

From the third quarter onwards, affected by the protracted Greek sovereign debt crisis, deteriorating fiscal conditions in local governments and a soaring bad debt ratio in the banking industry in Spain, downside risks remained high. In response, the ECB cut the main refinancing operations fixed rate to a record low of 0.75% in July from 1% and reduced the overnight deposit rate from 0.25% to 0% in an attempt to encourage interbank lending. Subsequently, the OMT program announced by the ECB in September pledged unlimited and fully sterilized purchases of euro area government-issued bonds that mature in one to three years in the secondary market[15] aimed at curtailing the risk of a deteriorating European financial crisis. Moreover, in October, thanks to the introduction of the ESM, a permanent bailout mechanism in the euro area, the GIIPS experiencing deep financial distress saw a plunge in their public bond yields (Chart 2.10).

Furthermore, the US faced faltering employment growth and a persistently high unemployment rate in the third quarter of 2012, despite moderate economic growth. In this context, the FOMC decided to maintain the target range for the federal funds rate at 0 to 0.25% in September 2012 and to keep the rate at this exceptionally low level at least through the middle of 2015. In addition, the FOMC announced the additional purchase of agency mortgage-backed securities at a pace of US$40 billion per month (also known as the third round of quantitative easing or QE3) and continued its program to extend the average maturity of its holdings of Treasury securities through the end of 2012.

To prevent Japan from a renewed recession and to overcome deflation, the BOJ successively

[15] All purchases under the OMT are limited to the sovereign bonds issued by the economies that ask for support under the EFSF/ESM, agree on conditionality to adhere to its fiscal austerity and implement the relevant reforms. Meanwhile, the ECB waived its preferred creditor status to reduce the funding costs for the economies that were jeopardized by financial distress.

expanded the size of its Asset Purchases Program[16] on five occasions during 2012, bringing its total value up to 101 trillion yen in the hope of causing longer-term interest rates and credit risk premiums to decrease. In January 2013, the Japanese government and the BOJ announced the launch of an inflation targeting system, raising the inflation target[17] to 2% from 1% with a view to further reinforcing monetary easing policies. As a result, the Japanese yen experienced a radical depreciation, while the stock market soared markedly (Chart 2.11 and Chart 2.9). To some extent, it would impact on exchange rate stability in Asian countries (Box 1).

The major European economies, the US and Japan conducted substantial injections of liquidity into financial markets by means of their unprecedented low rate policies and unconventional measures including asset purchases. Consequently, international financial conditions improved notably alongside rising asset prices and there were strong rebounds in major stock markets around the world in the first quarter of 2013 (Chart 2.9). Nevertheless, some banks in the euro area periphery economies, in which government debt-to-GDP ratios stayed high, still faced significant challenges emanating from elevated funding costs, worsening asset quality and meager profits.

The adoption of monetary easing policies by national governments leading to run-ups of asset prices grew concerns of bubbles forming. Meanwhile, protracted low interest rates over a long period of time have increased financial sector vulnerabilities and sensitivities in the advent of an unexpected rise in interest rates. Central banks should maneuver their exiting mechanisms and take adequate responsive measures as they exit their easy monetary policies so as to minimize the impacts on markets. In addition, the spillover of monetary easing policies taken by advanced economies spurred a rise in the volatility risk of asset prices in emerging economies, putting financial stability at risk. The World Bank suggested that the central banks in East Asia should closely monitor the movement of capital inflows and consider developing capital controls that could play a role in dampening excessive inflows in the short term.[18]

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[16] The BOJ first announced the introduction of the Asset Purchase Program amounting to 35 trillion yen in October 2010 and, in turn, successively increased the size of the program on eight occasions, bringing the total value up to about 101 trillion yen. The program is composed of the asset-purchase fund used for a securities line of 76 trillion yen and for a credit lending line of 25 trillion yen. The scope of asset purchases includes Japanese government bonds, treasury bills, commercial paper, corporate bonds, exchange-traded funds (EFTs) and J-REITs.

[17] It refers to the CPI inflation rate.

[18] See Note 4.

Progress has been made in international financial reforms, but there is still a need for ongoing impetus and effective implementation

The unfolding global financial crisis of 2008 and the subsequent European sovereign debt crisis had significant impacts on financial systems and financial markets around the world. In response, national financial authorities and international organizations successively launched a series of financial supervisory reforms in an attempt to heighten the transparency of financial markets and financial institutions and to lessen the complication of financial instruments and activities, as well as to deleverage balance sheets. These measures aimed at eventually lowering risks in financial institutions and enhancing their resilience, so as to reinforce the safety of the financial system.

These international financial reforms mainly focused on: (1) raising regulatory capital levels and liquidity buffers to strengthen the ability of financial institutions to cope with distress; (2) restricting deposit-taking institutions from proprietary trading and investment activities to insulate them from a flare-up of the underlying causes of the subprime crisis; (3) ring-fencing retail banks from investment banking activities and requiring higher capital charges for retail banks; and (4) improving the supervision on shadow banking and OTC derivatives, and averting further risks derived from non-bank financial institutions and OTC markets that may undermine financial stability.

Considerable progress has been made in the regulatory reform agenda at both the national and global levels. Nevertheless, according to an IMF survey,[19] problems with regard to overly complex financial systems, excessive concentration in banking assets, strong domestic interbank linkages and too-important-to-fail issues still lie ahead. With a view to underpinning future financial stability and the development of financial markets, ongoing impetus and effective implementation of reform agendas are necessary for national financial authorities and international organizations.

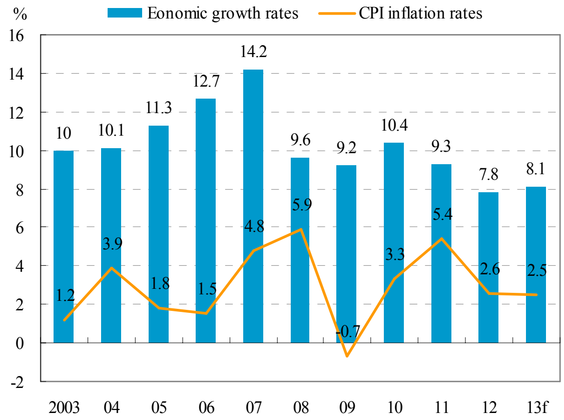
[19] IMF (2012), Global Financial Stability Report-Restoring Confidence and Progressing on Reforms, October.

Mainland China's economic and financial conditions

Economic growth slowly rebounded

After seven consecutive quarters of economic slowdown, Mainland China's economic growth touched a three-year low of 7.4% in 2012 Q3, owing to weak external demand and contracted internal demand driven by a cooling local housing market. In Q4, thanks to policy actions taken by the PBC through lowering benchmark interest rates and reserve requirement ratios, economic growth rebounded to 7.9% and registered 7.8% for the whole year. Though a thirteen-year low, the recorded growth rate was still above the 7.5% official target. However, growth dropped to 7.7% in 2013 Q1, reflecting uncertainty in their economic recovery. Currently, Mainland China is aggressively transforming its growth policies. In the future, it will rely more on expansion of domestic demand and urbanization strategies to support economic growth. Global Insight projected Mainland China's economic growth through 2013 to rebound to 8.1% (Chart 2.12).

Chart 2.12 Economic growth rates and CPI inflation rates of Mainland China

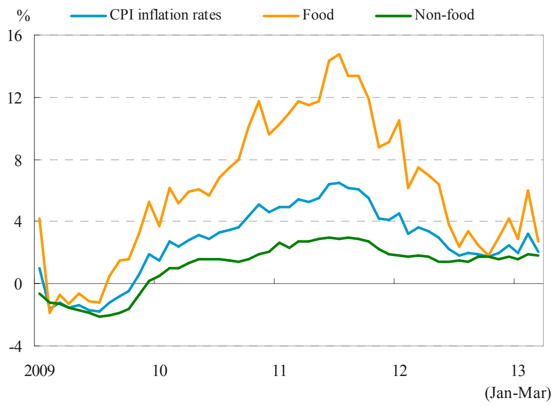


Note: Figures for 2013 are Global Insight projections.
Sources: National Bureau of Statistics of China and Global Insight (2013/4/15).

Softened food prices alleviated inflationary pressure

Regarding consumer prices, thanks to stable international raw materials prices, slowing domestic food price increases and stable domestic non-food prices, the CPI inflation rate decreased from 5.4% in 2011 to 2.6% in 2012. In February 2013, affected by Lunar New Year holidays and a low 2012 base, the CPI inflation rate rose to 3.2%. However, it fell back to 2.1% in March (Chart 2.13). Global Insight projected Mainland China's inflation rate for the whole of 2013 to decrease further to 2.5% (Chart 2.12).

Chart 2.13 Food and non-food CPI inflation rates of Mainland China



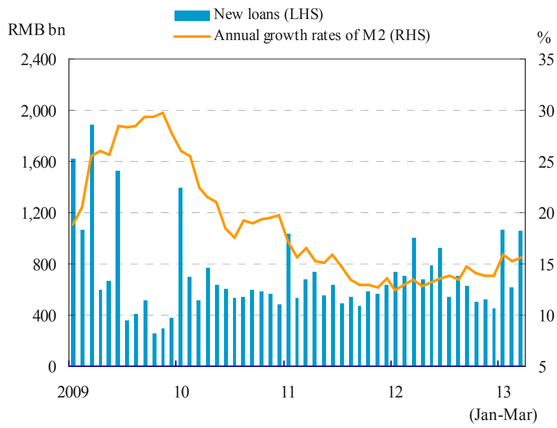
Source: National Bureau of Statistics of China.

Accelerated bank credit expansion led to cautious monetary policy

In response to economic slowdown and eased inflationary pressure, starting from February 2012, the PBC lowered the reserve requirement ratio for depository financial institutions by a total of one percentage point. Furthermore, the rates for 1-year renminbi benchmark deposits and loans of financial institutions were cut twice to 3.0% and 6.0%, respectively. Moreover, after lowering interest rates in July, the PBC shifted to reverse repo operations in order to increase the money supply. The trends of M2 annual growth rates and new renminbi loans remained stable in 2012. In January 2013, the annual growth rate of M2 increased from 13.8% as of the end of 2012 to 15.9%, and total new loans also reached a three-year high of RMB 1.07 trillion, due to ample market liquidity and clear signs of economic recovery.

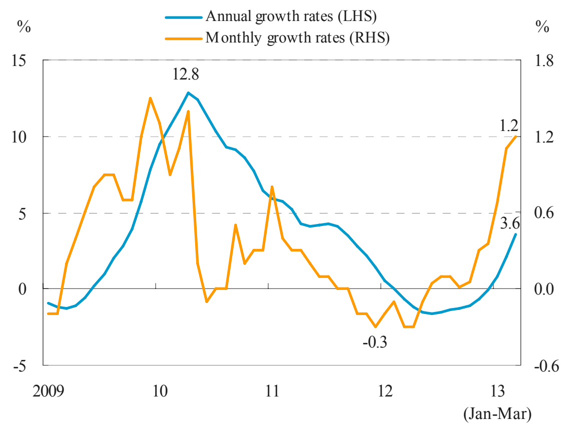
On 19 February 2013, the PBC conducted repo operations for the first time to tighten the money supply. The annual growth rates of M2 and new renminbi loans both decreased in February but rebounded in March. The annual growth rates of M2 for February and March were 15.2% and 15.7%, respectively, both higher than the 2013 target of 13% (Chart 2.14).

Chart 2.14 New loans and annual growth rates of M2 of Mainland China



Source: PBC.

Chart 2.15 Average growth rates of building sales prices in 70 medium-large cities of Mainland China



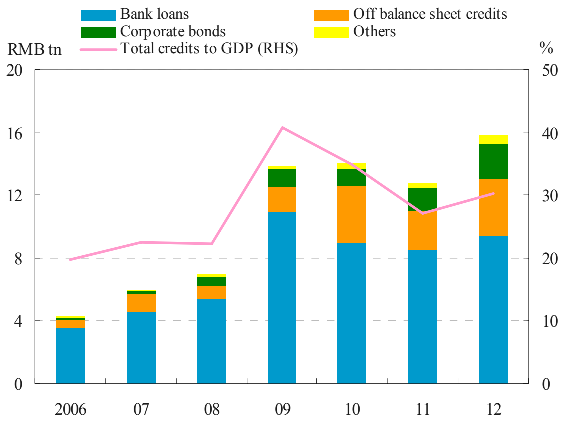
Note: Figures for 2011 onwards are estimated by Thomson Reuters, based on statistics published by the National Bureau of Statistics of China.

Sources: National Bureau of Statistics of China and Thomson Reuters.

Housing market warmed up and shadow banking system surged

In January 2013, the annual growth rate of building sales prices in 70 medium-large cities was 0.8%, turning positive for the first time in ten months, while monthly growth rates stayed positive for seven consecutive months. In response to the inflating housing market, starting from February 2013, Mainland China successively implemented measures to curb housing price rises, including levying 20% individual income tax on residential property sales as well as raising the down payment ratio and interest rate for second house loans. However, such measures only had limited effects in a short time period as the annual growth rate of building sales prices in 70 medium-large cities in February and March continued increasing to 2.1% and 3.6%, respectively (Chart 2.15).

Chart 2.16 Aggregate financing to the real economy of Mainland China



Source: PBC.

Meanwhile, Mainland China has imposed interest rate controls as well as credit rationing for a long time, and its credit markets were oligopolized by large commercial banks. As a result, the financial intermediation function of the banking system has proven to be insufficient, which has given rise to various types of shadow banking.[20] As a proportion of aggregate financing to the real economy, off-balance sheet credits have gradually increased in recent years (Chart 2.16), indicating active shadow banking activities. The Wenzhou private lending crisis bursting in 2011 demonstrated how severe the problem was. The biggest risk posed by shadow banking is excessive leverage. Without a sound supervisory mechanism, such risk will severely jeopardize the financial system once the economy fluctuations occur.

[20] Shadow banking in Mainland China includes: (1) non-bank institutions, such as pawnshops, credit guarantee companies and micro-finance companies; (2) private equity; (3) wealth management products, such as entrusted loans and trust loans; (4) financial innovation products, such as asset securitization and derivatives. This definition draws from IMF (2011), *People's Republic of China: Financial System Stability Assessment*, Country Report No. 11/321, November, and other relevant papers.

Box 1
Depreciation of the Japanese yen and its impacts on Taiwan's economy

Since Shinzo Abe resumed the position as Prime Minister of Japan on 26 December 2012, his administration has actively adopted loose fiscal and monetary policies geared toward jolting the country out of its decades-long deflationary malaise. With the step by step implementation of various revival policies, the value of the Japanese yen dropped. This box will explore the major causes that led to the latest depreciation of the Japanese yen and its economic and financial impacts in Asia and Taiwan.

1. Abe's economic policies and changing domestic and international environments pushed the yen down

After taking office, Prime Minister Abe vigorously advanced new economic policies. Prompted by these policies and other concurrent factors, such as the gradually stabilizing economies of the US and the euro area, lasting merchandise trade deficits in Japan, and massive yen sell-off by international investors, the yen began to weaken.

1.1 Abe's assertion of economic policies is conducive to yen depreciation

Abe's administration launched a three-pronged economic plan, namely an accommodative monetary policy, an expansionary fiscal policy, and a growth strategy that encourages private sector investment, which are collectively dubbed "Abenomics." Major policy measures under implementation are as follows:

1.1.1 Expanding public expenditure

The administration put forth a hefty package of Emergency Economic Stimulus Measures worth 20.2 trillion yen (US$227 billion), of which 10.3 trillion yen will be put in broad categories of government spending with a focus on infrastructure.

1.1.2 Easing monetary policy

The newly appointed BOJ Governor Haruhiko Kuroda, who has been in office since 4 April 2013, announced at his first monetary policy meeting that, in order to achieve the 2% inflation target as early as possible within a two-year timeframe, the BOJ would conduct a quantitative and qualitative monetary easing policy, changing the target of open market operations from the uncollateralized overnight call rate to the monetary base. Within two years the monetary base and holding of long-term Japanese government bonds (JGBs) and ETFs will double from their original amounts to 270 trillion yen, 190 trillion yen and 3.5 trillion yen, respectively. Additionally, the outstanding balance of Japan Real Estate Investment Trust (J-REITs) holdings will increase by the amount of 60 billion yen to 0.17 trillion yen.

Expansionary quantitative easing (QE) pushed down long-term rates and the yield on ten-year JGB hit a new record low of approximately 0.32% on 4 April 2013. International investors successively shorted the yen and, meanwhile, carry trades (i.e. borrowing the yen at a low interest rate in order to invest in another currency that is likely to provide a higher return) resurged, triggering the yen's further depreciation.

1.2 Gradually stabilizing economies of the US and the euro area precipitated the yen's slide against the US dollar

Positive signs of economic recovery in the US began to appear from September 2012. Many leading indicators, such as property prices and the unemployment rate, continued meliorating. Economic and financial conditions in the euro area also stabilized progressively after the European Central Bank's announcement of the Outright Monetary Transactions (OMT) policy. These factors caused an upsurge in financial markets as investors bought back the US dollar and the euro as investment positions.

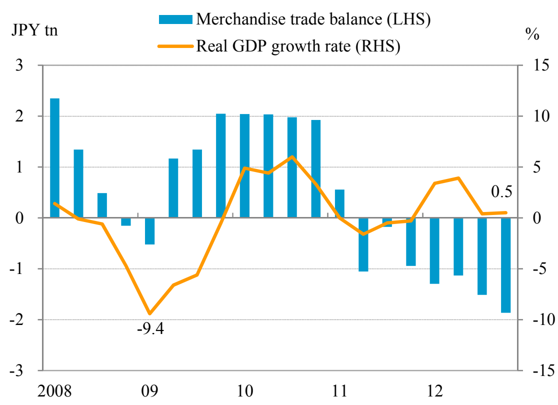
1.3 Expanding merchandise trade deficit in Japan exacerbated the yen's depreciation

Japan has posted seven consecutive quarters of merchandise trade deficits since 2011 Q2 (Chart B1.1), representing the longest period since 1985. Combined with its lackluster economic growth, the situation intensified the trend of yen depreciation. The major factors causing the expansion of Japanese trade deficits are as follows:

(i) Short-term factors: global economic slowdown and huge fuel imports due to the shut-down of nuclear power plants after the devastating earthquake and tsunami in Fukushima in March 2011.

(ii) Long-term factors: Corporates' offshore production and sliding competitiveness in niche products, such as motor and engineering

Chart B1.1 Merchandise trade balances and real GDP growth rates in Japan



Source: Ministry of Finance and Cabinet Office, Japan.

industries, as well as the structural shift stemming from reducing demand for nuclear power.

2. Yen depreciation would benefit Japanese export competitiveness but could destabilize the exchange rates of emerging Asian economies

2.1 Yen depreciation would be conducive to Japanese export competitiveness

The yen's real effective exchange rate dropped 17.6% between October 2012 and March 2013 (Chart B1.2), which helped raise the relative advantage in its export prices and hence benefited export competitiveness. Owing to its increase in the exportation of organic compounds and motor components, the annual growth rate of overall exports reached 6.4% in January 2013, the first positive growth seen in the most recent consecutive eight months. However, it subsequently decreased to 1.1% in March 2013 as exports to Mainland China and the European Union (EU) slipped.

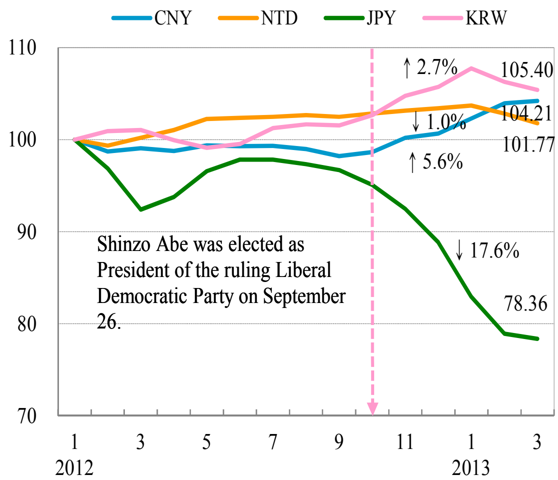
2.2 Yen depreciation could impact the South Korean economy because of their export structure similarities

Among major economies in Asia, Japan and South Korea are most similar in the type of exports. Therefore, South Korea's exports are most likely to be hurt most by the yen's depreciation, particularly in the shipping, steel and motor industries. Thus, competition between Japan and South Korea will be stiffer. After the latest G20 meeting, the Bank of Korea expressed its hope for Japan not to weaken the yen intentionally and that it would keep a close watch on the impacts of Japan's stimulus measures on the South Korean economy.

2.3 Yen depreciation could destabilize the exchange rates of Asian economies

Due to the yen's depreciation, Southeast Asian countries can perhaps benefit from increasing demand for their raw materials and intermediate goods or products driven by the expansion of Japanese

Chart B1.2 The change in real effective exchange rates in Asia



Notes: 1. January 2012 = 100.
2. ↑ and ↓ represent appreciation and depreciation, respectively. % refers to the rate change between October 2012 and March 2013.

Source: BIS effective exchange rate, broad indices.

exports. Among these countries, Thailand's economic outlook, which may benefit from being part of the production supply chain of the Japanese motor industry, could be optimistic. However, Asian countries, taking into account their high degree of export competitiveness, might be prompted to adopt responsive measures to stabilize their exchange rates in the case of excessive fluctuations in the yen-dollar rate.

3. Impacts on the economy and finance in Taiwan

3.1 Massive international hot money flowed in and out of the local foreign exchange market, affecting the stability of the NT dollar exchange rate

With international hot money veering into Asia, the net inflow of foreign capital increased in 2012 Q4, exerting appreciating pressure on the NT dollar.

3.2 Yen depreciation can help decrease Taiwan's trade deficits with Japan and reduce production costs

As Japan is the number one source of imports and the fourth-largest export destination for Taiwan, a huge bilateral trade deficit with Japan has persisted for a long time. In 2012, Taiwan's imports from Japan (about US$47.6 billion) were much higher than its exports to Japan (about US$18.9 billion.) At the same time, the weight of yen-denominated imports was also larger than that of exports. Thus, when the yen's value falls versus the US dollar, the decreased value of imports, converted into US dollars, will be larger than that of exports in the short run. Under this situation, Taiwan's trade deficit with Japan is expected to narrow temporarily. Chemicals and machinery, two major imports from Japan that constitute a hefty portion of Taiwan's trade deficits, will benefit more from the yen's depreciation.

3.3 The purchasing power of Japanese visitors to Taiwan will decrease while that of Taiwanese to Japan will increase

The yen's depreciation will lessen the incentives and consumption ability of Japanese visitors to Taiwan. On the contrary, the number of Taiwanese tourists to Japan will rise because of the increase of their purchasing power.

3.4 Yen depreciation could dampen the investment intentions of Japanese corporations in Taiwan, but will be helpful for Taiwanese enterprises hoping to buy Japanese technology

Japanese corporations, in order to reduce costs and diversify risks, have been actively investing in Taiwan. Coupled with the close network between the two countries in terms of industrial clusters development and the improved cross-strait relationship, Japanese investment in Taiwan rose steadily in recent years. Although the latest yen depreciation could affect their intentions to invest in Taiwan, corporations' long-term investments generally focus on future returns, and the appreciation or depreciation of currencies is not the only reference indicator. Furthermore, the yen's depreciation can raise the relative purchasing power of the NT dollar, which is beneficial for Taiwan's enterprises to engage in direct investment in or purchase technology from Japan.

3.5 The costs of imports from Japan are expected to decline but the impact on consumer prices will be minimal

Even though the yen's depreciation can help reduce the costs of imports, the merchandise imported from Japan largely arises from derived export demand, including key components and capital equipment. Therefore, the impact of the yen's depreciation on domestic consumer prices will be limited. Moreover, price rigidity normally exists in the adjustment process of commodity prices. Following the yen's depreciation, the level of price reduction for consumer goods in the short term probably won't be noticeable. However, in the case where the yen continues depreciating, domestic enterprises would face rising pressures to lower their commodity prices.