Eurobank Research

GLOBAL ECONOMIC & MARKET OUTLOOK

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Eurobank EFG

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Main Views and Market Strategy:

- As the credit crisis has escalated, governments have taken decisive action, initiating large-scale banks' rescue plans, commensurate with the scale of the crisis.

- The focus of these plans is threefold: (a) recapitalization of banks with public money, (b) state guarantees for bank debt and (c) enhanced liquidity provided by central banks.

- In our view, these policy measures have a good chance to contain the banking crisis, because they attack directly the two main problems creating financial mess, namely solvency and liquidity issues in the banking sector.

- Looking forward, we expect significant economic deterioration. The historical record on banking crises suggests that we should be prepared for a recession resembling those of the mid-1970s and early 1980s.

- During past banking crises and subsequent recessions, stock prices rebounded well ahead of the real economy and soon after governments intervened in a large-scale systematic way. An inflection point in equity markets will likely occur within the next few months. Once the trough has been formed in equity markets, bank stocks may outperform significantly.

- The output loss of the current recession is expected to reach about 3% in advanced economies. Growth performance in developing economies is due to deteriorate, with real GDP growth decelerating by about 1-2 percentage points.

- The recent decline in international commodity and oil prices, coupled with the global slowdown, will help alleviate global inflationary pressures, allowing central banks to lower interest rates further.

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Macro Forecasts

	2007	2008		2009	
		Eurobank EFG	Consensus	Eurobank EFG	Consensus
Real GDP Growth (y-o-y average)					
US	2.0	1.4	1.6 (0.5 – 2.2)	-0.4	0.6 (-0.5 – 3.2)
EA	2.6	1.1	1.2 (1.0 – 1.5)	0.1	0.6 (-0.4 – 2.0)
Japan	2.1	0.6	0.6 (0.1 – 1.1)	-0.1	0.6 (-1.0 – 1.3)
CPI Inflation (y-o-y average)					
US	2.9	4.5	4.5 (2.1 – 5.2)	2.5	2.6 (0.6 – 5.1)
EA	2.1	3.4	3.5 (3.4 – 3.6)	2.3	2.3 (1.8 – 2.8)
Japan	0.1	1.6	1.6 (1.2 – 1.8)	0.8	0.9 (0.3 – 1.1)
Short Term Interest Rates (end of year)	Current				
US	1.00	0.75	0.50 (0.50 – 1.00)	0.75	1.25 (0.00 – 3.00)
EA	3.25	3.00	2.75 (2.75 – 3.25)	2.50	2.25 (1.75 – 3.25)
Japan	0.30	0.30	0.30 (0.10 – 0.30)	0.30	0.30 (0.10 – 0.75)

Note: Range of forecasts by Bloomberg’s survey in parentheses below point estimates.

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Executive Summary

Dimitris Malliaropulos, Kostas Lambrinoudakis

The escalation of the current credit crisis in September and October has been dramatic, as major financial firms in the US collapsed or were nationalized/taken over in order to avoid collapse. Bank solvency problems have been spreading to Europe as well with governments intervening in the UK, Germany and Belgium-Luxembourg to bail out banks and financial institutions. On the back of the extraordinary shock to the financial system, stock markets plunged at a pace not seen in several decades, money and credit market spreads spiked to unprecedented levels, while certain segments of the money markets were essentially shut down.

Policy makers on both sides of the Atlantic responded to the crisis with large-scale bank rescue plans, aiming at the purchase of troubled assets from financial institutions, recapitalization of banks through acquisition of preference shares by governments and state guarantees of new bank debt issues. At the time of writing, national rescue plans unveiled by European countries amounted to €1.8tr, including guarantees on bank debt, injections of Tier 1 capital and money pledged for acquiring illiquid assets from banks' balance sheets. In addition, the ECB switched to fixed rate auctions for both dollars and euros, in order to provide banks with as much liquidity as they demand (against appropriate collateral), while it relaxed its collateral eligibility regulations.

In our view, the policy measures taken have a good chance to contain the banking crisis, because they attack directly the two main problems creating financial mess, namely solvency and liquidity issues in the banking sector. Specifically, the government guarantees on bank debt, which essentially remove counterparty risk, combined with the recapitalization of banks, which reduces insolvency risk, should help to restore confidence among banks and reignite money markets. In addition, the liquidity that the central banks committed to pump in the system should help to mitigate liquidity problems across banks.

It is also our view that the recapitalization of banks is a necessary measure for containing the crisis. Recapitalization is beneficial for both financial institutions, as it reduces the risk of insolvency, and the state, which has the opportunity to participate in the upside potential by selling its stakes when the banking sector recovers.

Lessons from previous banking crises

The historical record suggests that the economic fallout from systemic banking crises is significant. Our analysis of the four biggest systemic banking crises in developed economies during the post-war period suggests that the average cumulative output loss in terms of real GDP will be somewhere between 2% and 5%. The average loss in the cases most relevant to the present was -3.2%. Also, the duration of recessions related to banking crises, measured as the number of quarters with negative y-o-y real GDP growth, was 5.3, compared to 3 quarters for non-banking related recessions. These figures are closer to those of the 1973-1982 period severe recessions than those of the early 1990's and 2000's mild recessions. Our results are in line with a recent IMF study[1], reporting that banking crises-induced recessions are deeper and more prolonged than those not preceded by banking crises.

However, the initial conditions before the onset of the current banking crisis suggest that the economic fallout in terms of depth and duration will likely approach the lower bound of the range set by the previous episodes. In particular, the macroeconomic impact of a banking crisis is associated with the extent of the asset and credit boom in the period preceding the crisis. Before the beginning of the present crisis, credit ratios, asset prices and bank assets in the major developed economies were not as high as those at the onset of previous episodes. Besides, the rapid monetary policy response, including both interest rate cuts and massive supply of liquidity to the banking system, is also expected to moderate the economic fallout.

As far as equity markets are concerned, the case looks somehow different. Albeit stock prices – especially in the banking sector – experienced massive drops during past banking prices and the subsequent recessionary environment, they rebounded well

[1] IMF, World Economic Outlook, Chapter 4, October 2008.

ahead of the real economy, delivering very strong returns in the year following the stock market trough.

The current fall in equity prices is close to historical averages of previous systemic banking crises and subsequent deep recessions. As measured by the S&P 500 index, US stocks have plunged by 43% from their peak in October 2007, with banking stocks shedding 66% from their previous peak in December 2006.

In order to get an indication of where the equity market inflection point might lie, we use two benchmarks in terms of the road map of a systemic banking crisis. The first one is the onset of the crisis and the second one is the peak of government intervention, namely the time at which governments stop treating problems in the banking sector in an ad-hoc manner and decide to intervene in a large-scale systematic way. The IMF identifies the starting date of a systemic banking crisis as the period, in which the first major financial institution defaults or runs into serious solvency problems. In this context, we regard the takeover of Countrywide Financial – the largest US mortgage lender – by Bank of America in January 2008 as the event that established the onset of the current systemic crisis. In addition, we regard the coordinated plans announced recently as the peak in government intervention. Under these assumptions, bank stock prices in our sample reach their lowest level 10 to 14 months after the onset of a systemic banking crisis. In terms of peak government intervention, stocks rebounded – in three out of four cases – at the month of the intervention or one month later. This applies for the whole equity market as well, as the trough in the banking sector tended to coincide with the total market trough in the crises examined. Hence, if stock prices follow patterns similar to those observed in previous crises, stocks are expected to rebound sometime in the period between November 2008 and March 2009.

Summarizing, historical record suggests that stock prices rebound well ahead of the real economy and soon after governments intervene in a large-scale systematic way. Given that the current drop in equity prices has approached the historical average, we can argue that – if the past is any guide – most part of the decline for this crisis has taken place. Hence, an inflection point will likely occur within the next few months, if not taking place right now, at least for banks. This doesn't mean that the rebound will be immediate. Since it will take a while before markets fully restore confidence for banks irrespective of any policy measures, it is likely that prices will enter a very volatile trade range before establishing an upward trend. Previous experience suggests that banks outperform, once the trough takes place.

II. EFG Macro Model Forecasts

EFG Macro Model Forecasts: US Economy & Markets

	Actual	------------- Forecasts ---------------						
	2008:Q3	2008:Q4	2009:Q1	2009:Q2	2009:Q3	2007	2008f	2009f
GDP q-o-q saar	-0.3	-2.4	-1.6	0.0	1.2	2.3	0.3	0.3
GDP y-o-y	0.8	0.3	-0.4	-1.1	-0.7	2.0	1.4	-0.4
Consumption y-o-y	0.0	-0.8	-1.5	-1.2	0.0	2.8	0.5	-0.7
Corp. Profits after tax y-o-y	-1.5	0.7	2.7	5.1	7.6	-0.6	-1.3	6.3
Labor Market								
Employment y-o-y	-0.7	-0.9	-1.2	-1.1	-1.2	1.0	-0.5	-1.1
ULC y-o-y	2.2	1.7	1.3	1.0	0.7	2.6	1.2	0.8
Inflation								
Headline CPI y-o-y	4.8	3.5	3.3	2.8	2.3	3.0	4.3	2.5
Core CPI y-o-y	2.4	2.5	2.6	2.7	2.5	2.3	2.4	2.5
Core PCE y-o-y	2.3	2.3	2.3	2.3	2.4	2.1	2.3	2.3
Interest Rates (% end of quarter)								
Fed Funds	1.50	1.00	0.75	0.75	0.75			
10-y Treasury yield	3.91	3.86	3.79	3.77	3.84			
Spreads (bps, end of period)								
10y-2y Treasury	220	218	224	232	236			
10y Treasury-Bund	-10	23	31	39	38			
Exchange Rates (end of quarter)								
USD/EUR	1.41	1.27	1.31	1.30	1.22			
Probability of								
Fed Funds Cut	0.27	0.33	0.31	0.32	0.32			
10y-1m Spread to increase	0.94	0.83	0.92	0.81	0.74			
S&P500 to outperform 10-y UST	0.40	0.00	0.28	0.28	0.28			
Bund to outperform 10-y UST	0.82	0.75	0.64	0.66	0.55			

Note: All forecasts are based on the estimates of a quarterly econometric model of the US economy and main financial markets. Point forecasts and probability estimates are subject to risks and should be only indicative of medium-term trends of the economy and financial markets.

Probabilities in the bottom part of the table are based on probit model estimates. They range between zero and one. A probability of more than 0.5 suggests that we regard this event as more likely to happen. All numbers in the table are pure model forecasts. They serve the purpose to provide a consistent view of the US economy and main financial markets based on historical regularities.

EFG Macro Model Forecasts: Euro area economy

	Actual	------------- Forecasts	---------------					
	2008:Q2	2008:Q3	2008:Q4	2009:Q1	2009:Q2	2007	2008f	2009f
GDP q-o-q saar	-0.8	-1.6	0.8	0.4	0.4	2.1	0.0	0.3
GDP y-o-y	1.4	0.5	0.3	0.2	0.5	2.6	1.1	0.1
Consumption y-o-y	0.4	0.3	0.4	0.3	0.4	1.6	0.6	0.4
Labor Market								
Employment y-o-y	1.2	0.7	0.3	-0.3	-0.4	1.8	1.0	-0.2
ULC y-o-y	3.3	3.3	3.1	3.2	2.3	1.6	3.1	2.0
Inflation								
Headline CPI y-o-y	3.9	3.5	2.8	2.6	2.5	2.1	3.4	2.3
Core CPI y-o-y	1.8	1.9	2.0	2.4	2.5	1.9	1.9	2.1

Note: All forecasts are based on the estimates of a quarterly econometric model of the Euro area economy.

III. Global Economic Outlook

1. The US economy

Dimitris Malliaropulos, Olga Kosma

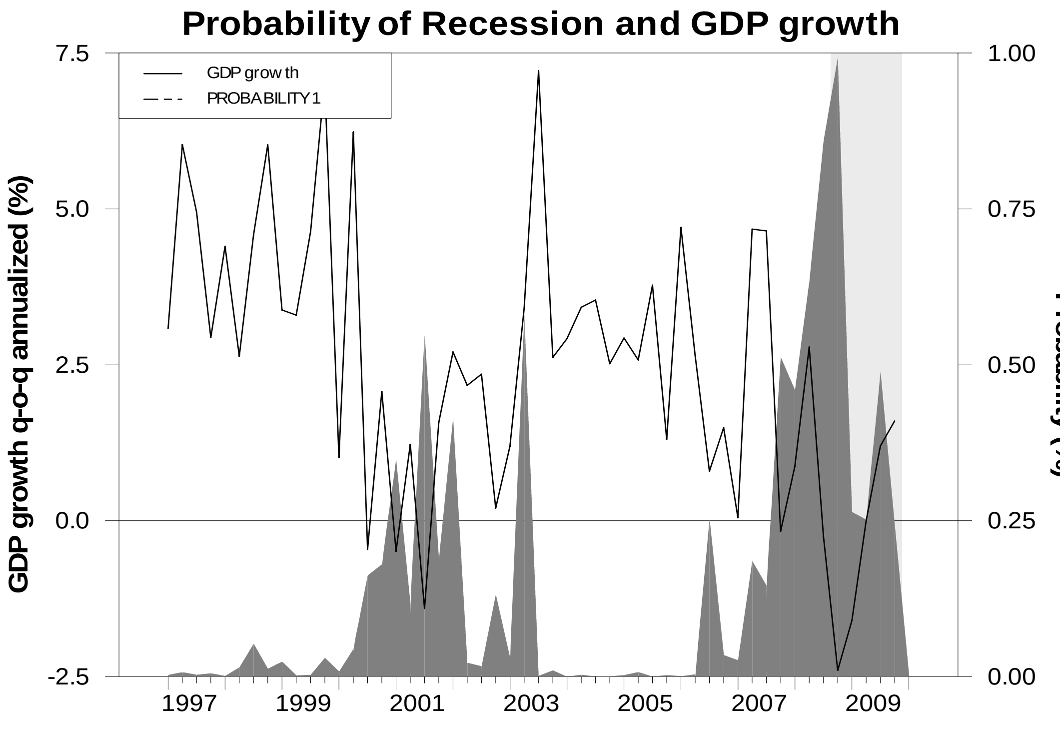
- The Consensus has now converged to our view that the US economy is in a severe recession, which will lead to an outright contraction in GDP in Q4 2008 and Q1 2009.
- The burst of the property market bubble and the tightening of credit conditions will weigh on personal consumption in H2 08 and most of 2009.
- Increasing unemployment will likely offset any support to consumer confidence stemming from lower oil prices, further restraining personal spending.
- Inflationary pressures are due to ease as the result of the combined effect of both the economic slowdown and the price correction in commodity markets.
- However, core CPI inflation is expected to remain above the Fed's comfort zone through 2009, as a result of companies' pass-through of higher energy and material prices into wholesale prices.
- The evolving financial crisis, in combination with an improving inflation outlook, imposes additional rate cuts.

A deep, protracted recession, but no depression

The aggressive Fed easing, combined with the effect of the substantial stimulus package, have provided significant support to the US economy during the first half of the year, helping to avoid a generalized recession. According to our estimates, the fiscal package alone, which has amounted to roughly USD 200 bn, has provided a significant boost to real GDP growth in the second quarter of 2008 by 2.3%, i.e. nearly 85% of the growth performance of the US economy in Q2 (2.8% q-o-q annualized) was most likely due to the fiscal effect. However, available data for the third quarter point to a reversal of the temporary boost from tax rebate checks. Real GDP declined by 0.3% q-o-q saar in Q3 08, posting its second mild contraction in the past year. The decline was mainly attributed to private domestic demand, which actually had the worst performance since the 1990-91 recession.

Being considerably more pessimistic than Consensus, we had already issued a recession call in September 2007. The overall analysts' consensus has recently converged to our long-standing view that the US economy is entering a deep recession (see Global February 2008). Our US GDP probit model, which links the probability of a recession to the quarterly change in real house prices and the ISM manufacturing index, as well as measures of the state of the labor market (non-farm employment, the rate and the median duration of unemployment), currently points to an outright recession in 2008, with the probability of recession approaching 99% in Q4 08. With the labor market weakening sharply in September, it seems that the effect of the monetary and fiscal stimulus has started to fade, suggesting that the worst is still to come over the next two quarters. We expect real GDP to decline further in Q4 08 and Q1 09 and stagnate most of 2009. Our baseline projections include a significant deceleration of real GDP growth to 1.4% y-o-y in 2008 and -0.4% y-o-y in 2009 (Figure 1.1). The decline in real economic activity is expected to push the unemployment rate further up to about 7.5% by the end of 2009, marking a cumulative increase of 3% from the recent trough of 4.4% in March 2007. The resulting trough-to-peak increase in the rate of unemployment is very close to the average increase during postwar recessions.

Figure 1.1



*Source: Eurobank EFG model estimates

Table 1.1 shows that we are close to the bottom of a typical US economic downturn. Consumer confidence from the Conference Board, an important leading indicator for the economic activity, has been already 74 units down from its recent peak of 111.9 units in July 2007. The ISM manufacturing index has lost about 23 units, close to the average loss in the past 10 US recession events. However, as we have already analysed in our previous issue (June 2008), we do expect a deeper and more prolonged economic downturn led by the US consumer. The recessionary outlook, in combination with the financial market downturn, has prompted the Fed to cut aggressively its policy key rate by 425 basis points since August 2007. On top of further monetary easing, additional measures –such as commercial paper credit facility- will be implemented in order to stabilize financial market conditions. Together with the important additional government measures to stabilise banks and the funding markets announced in the last several days, we are more confident that a 1930s-style depression will be averted.

Table 1.1
Indicators of the state of the real economy at past US recessions

NBER US Recessions	Duration (quarters)	Cumulative GDP decline*	GDP deceleration**	Change in ISM Manuf. Index	Change in Consumer Conf	Cumulative increase in rate of unempl.	Cumulative increase in median duration	Fed funds rate cuts (bp)
Q4 48 : Q4 49	5	-1.5%	-7.1%	-21.7	NA	+4.5%	NA	NA
Q2 53 : Q2 54	5	-1.8%	-9.1%	-24.8	NA	+3.6%	NA	NA
Q3 57 : Q2 58	4	-2.3%	-6.0%	-21.6	NA	+3.8%	NA	200
Q2 60 : Q1 61	4	-1.0%	-10.1%	-25.6	NA	+2.3%	+7.2	200
Q4 69 : Q4 70	5	-0.6%	-5.4%	-17.0	-67.1	+2.7%	+2.7	300
Q4 73 : Q1 75	6	-2.2%	-9.7%	-41.4	-64.3	+4.4%	+4.9	435
Q1 80 : Q3 80	3	-1.9%	-8.1%	-31.9	-58.5	+2.1%	+2.9	475
Q3 81 : Q4 82	6	-1.5%	-7.0%	-20.0	-32.6	+3.6%	+5.7	1000
Q3 90 : Q1 91	3	-1.3%	-5.4%	-21.8	-55.5	+2.8%	+4.5	225
Q1 01 : Q4 01	4	+0.2%	-4.5%	-17.3	-59.8	+2.5%	+6.3	350
Average	**4.5**	**-1.4%**	**-7.2%**	**-24.3**	**-56.3**	**+3.2%**	**+4.9**	**400**
2008 recession (changes up to now)		**-0.5%**	**-3.3%**	**-22.5**	**-73.9**	**+2.1%**	**+3.1**	**425**

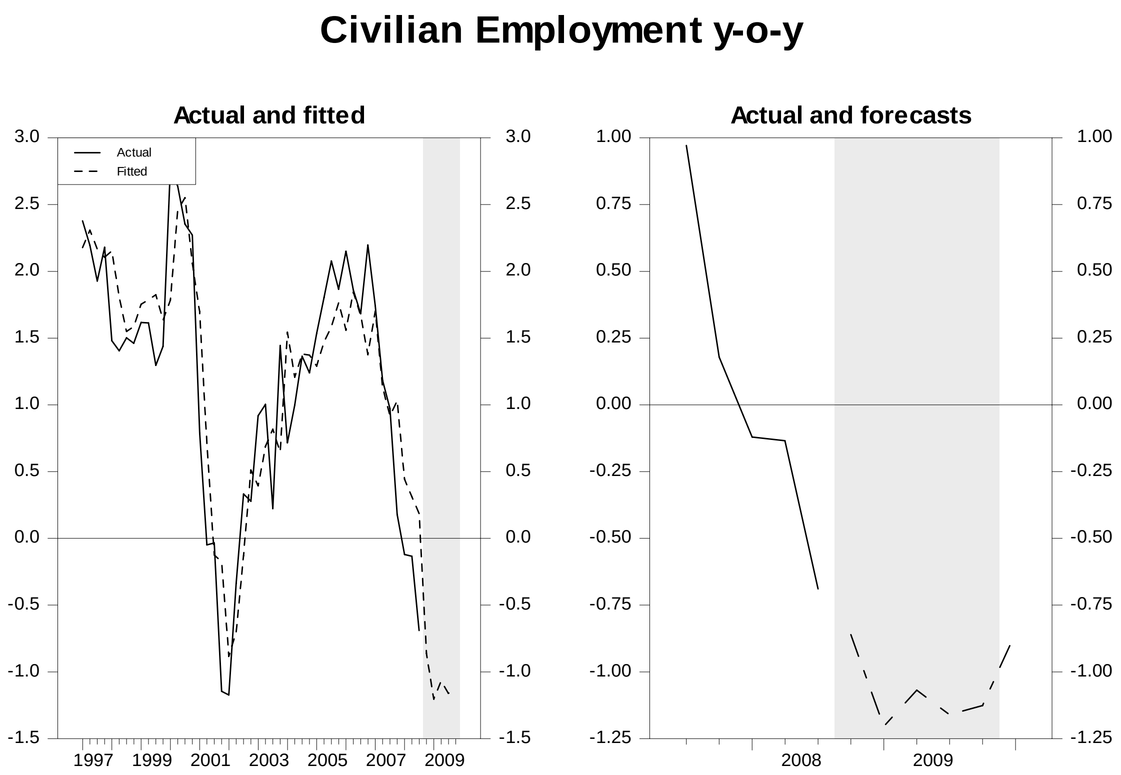
*Sum of q-o-q GDP growth from start to end of recession.
**Deceleration of y-o-y GDP growth from peak to trough of each business cycle.
All changes are from peak to trough of each business cycle.

The sharp deceleration of employment intensifies downside risks for consumer spending

Most of the burden of the US recession is expected to be carried by the US consumer, as a result of the decline in housing wealth, the credit crunch and the increase in unemployment. Although declining oil and commodity prices have provided some cushion to consumer confidence in August and September 2008, the worsening labor market conditions and the tightening credit conditions have resulted in a significant deceleration of consumer spending in H2 2008.

Employment growth, which was one of the main drivers of robust private spending in 2005 and 2006, is now consistent with a significant deceleration in personal consumption growth. Confirming the projections expressed in our June issue, non-farm payrolls have been declining since July 2008, leading to a y-o-y decline of about -0.8% in October. The economy actually shed an average of 260k jobs in September and October, reporting the strongest monthly decline since November 2001. The unemployment rate jumped to a 14-year high of 6.5% in October, while the median duration of unemployment increased to 10.6 weeks. The increase in the unemployment rate was not due to a relatively higher growth in the labor force, but rather a considerable decline in employment in the household survey. Looking forward, our job market model suggests that civilian employment growth will decelerate further in the coming quarters, with the y-o-y change declining to -0.5% in 2008 and -1.1% in 2009 from 1% in 2007 (Figure 1.2). As a result, the rate of unemployment will continue to increase well into 2009, reaching a peak of 7.5% in Q4 09 from 6.5% currently.

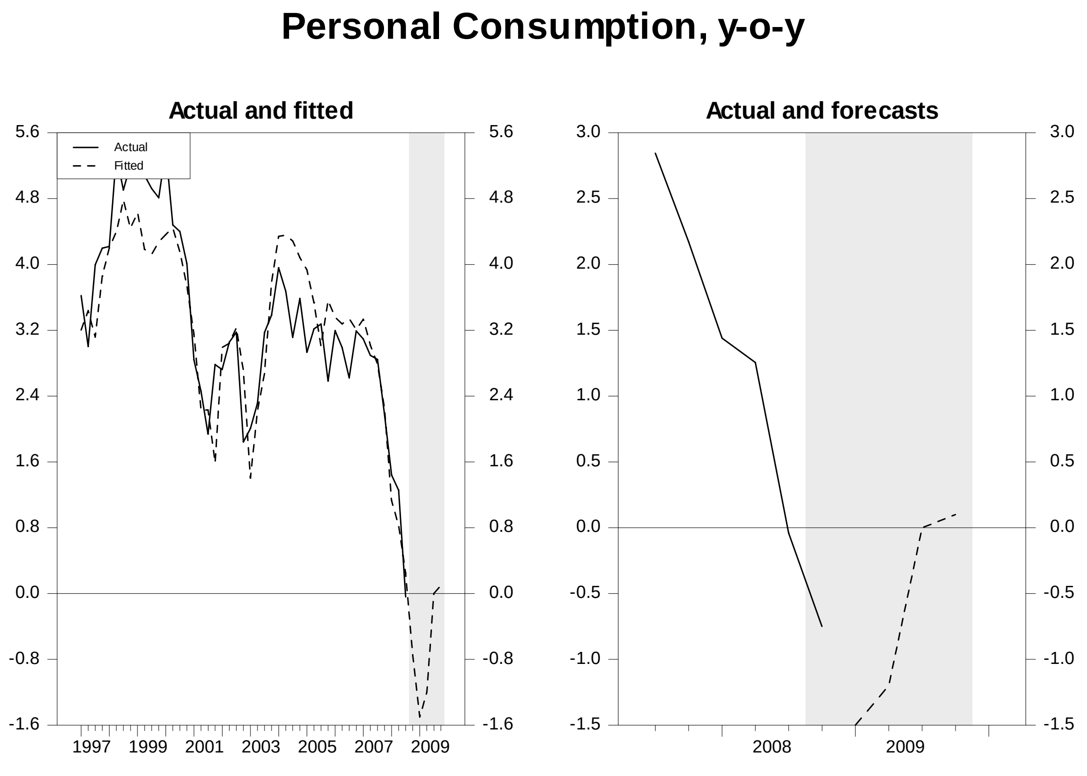
Figure 1.2



*Source: Eurobank EFG model estimates

Adding to these problems, the current financial turmoil has spread into consumer credit, i.e. credit cards and auto loans. Total consumer credit fell -3.75% in August to $2.58 trillion, as banks facing credit crunch tightened their lending standards and raised lending interest rates. Auto sales declined for an 11th month in a row by -27% y-o-y in September, reporting the biggest drop since the 1990-91 recession. The Fed's July Senior Loan Officer Survey confirmed the continued tightening of credit standards for loans for both households and businesses. Such changes in lending conditions, in combination with increasing pressure on banks' balance sheets and risks for further future losses, are expected to result in a consumer credit growth deceleration over the following months.

Figure 1.3



*Source: Eurobank EFG model estimates

Incoming data for the third quarter of the year suggest that households are now diminishing their pace of spending. Real personal consumption declined by 3.2% q-o-q saar in Q3 08, reporting its first quarterly reduction since 1990 and the largest decline in more than 28 years. As the positive effect of the government tax rebate checks fades, consumers have started to cut back on consumption. Michigan's consumer sentiment index collapsed to a 28-year low of 57.5 in October and consumer confidence index of the Conference Board hit rock bottom (38.0 in October from

61.4 in September, the lowest level since the series started in 1967), suggesting that consumer spending will remain under severe pressure for the rest of 2008 and 2009. Real disposable income has been declining since June 2008 by an average of -1.3% m-o-m, resulting in a decline in real personal expenditures by -0.3% m-o-m on average. In addition, retail sales came in extremely weak in September, declining by 1.2% mainly due to weak auto sales. Even after excluding auto sales, retail sales dropped by 0.6%, as spending in all categories except health care and gasoline stations plummeted. According to our estimates, US personal consumption growth is expected to decelerate to -0.8% y-o-y in Q4 08 and -1.5% in Q1 09 from 0.0% in Q3 08, leading to an average growth rate of 0.5% in 2008 and -0.7% in 2009 (Figure 1.3).

The latest data on industrial activity suggest that the pullback in consumer spending has started to affect production. The Industrial Production Index fell sharply by 4.5% y-o-y in September, after a -1.4% decline in August, reporting the largest drop since December 2001. Although this sharp decline was partly due to the hurricanes on the Gulf Coast and a strike at Boeing, the PMI manufacturing index declined further to the recessionary level of 38.9 in October from 43.5 in September, pointing to further weakness ahead. Moreover, the Empire Manufacturing Index fall to -24.6 -the lowest level since the series started in 2001- suggests that the credit crunch is starting to have a negative impact on business activity.

The easing in commodity prices suggests that consumer inflation has probably peaked

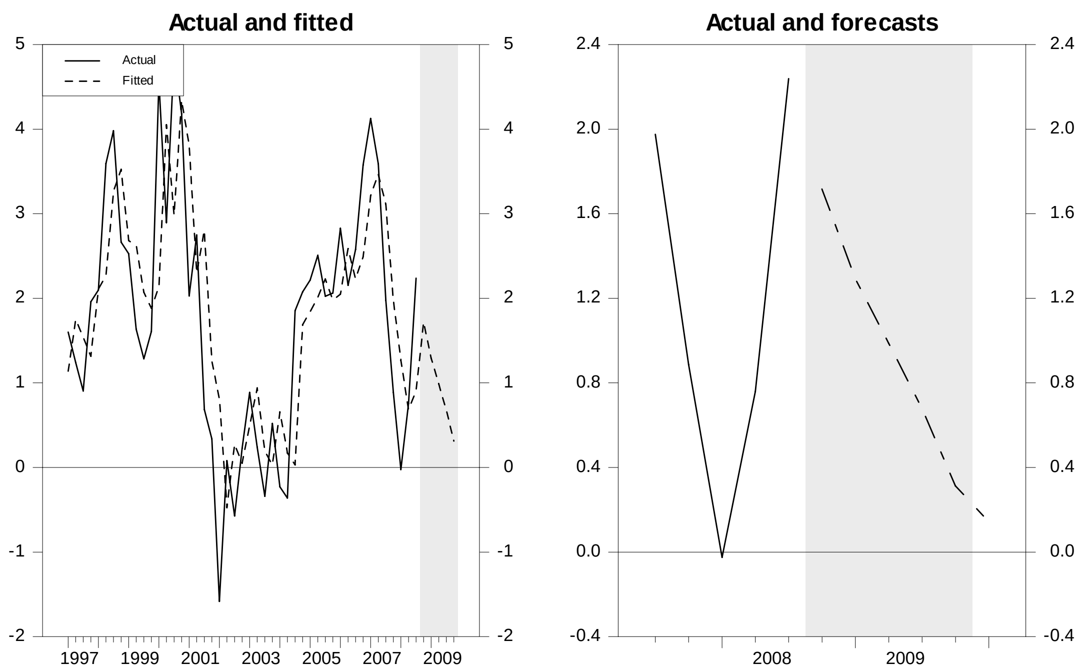
The recent moderation in headline inflation to 5.4% in August and 4.9% y-o-y in September for the first time in the past two years suggests that falling energy prices and slowing economic growth are now having a moderating effect on underlying price pressures. Furthermore, the PPI (Producer Price Index) for finished goods decreased for a second month in a row (0.4% m-o-m in September, following a 0.9% drop in August) after its recent peak of 1.7% in June.

In addition, imported goods inflation also decelerated to 14.5% y-o-y in September after jumping by 21.3% in June, the biggest increase ever reported since 1982. Although the current rate of inflation for imported goods still remains relatively high, it appears to have peaked. Much of the improvement in imported prices –the 3% m-o-m fall in September was actually the largest drop in the last 5 years- can be attributed to recent declines in oil prices. Since peaking in July at $147.27 per barrel, the price of oil has declined significantly to roughly $61 per barrel.

Weakening labor markets should exert further downward pressure on inflation by reducing labor costs. The downward trend in unit labor costs since Q2 07 suggests that no inflationary pressures emerge from the labor market. Even though unit labor cost turned out to be higher than anticipated by the consensus in Q3 08, with the average y-o-y growth rate reaching 2.3% (nonfarm ULC), the weakening in the economy will overrule any rise in labor costs. According to our estimates, unit labor cost growth will ease from 2.6% y-o-y in 2007 to 1.2% in 2008 and 0.8% in 2009, constituting a positive factor for the inflation outlook (Figure 1.4).

Figure 1.4

Unit Labor Costs y-o-y

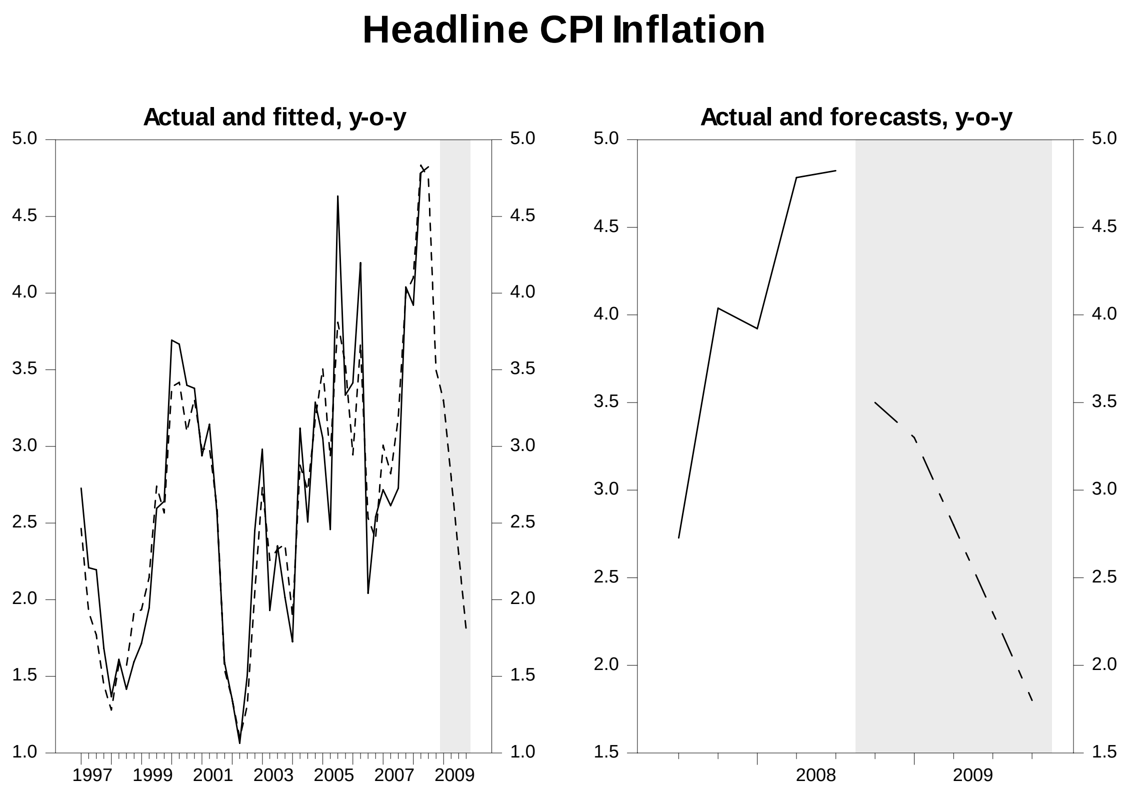


*Source: Eurobank EFG model estimates

Forward-looking indicators for inflation reinforce the view that inflation has probably peaked. Inflation expectations have moderated significantly since May 2008, with the University of Michigan's survey of expected inflation over the next 12 months having eased to 4.3% in September 2008 from its recent peak of 5.2% in May 2008. Long-term inflation expectations -Michigan's inflation expectations over the next 5 years- have also moderated from 3.4% in May (the highest level since April 1995) to 3.0% in September. Lower commodity prices and the general economic downturn have probably eased investors' inflation concerns, so market-based measures of breakeven inflation have come down significantly. Looking forward, the labor market deterioration and the declining trend in commodity prices should put greater downward pressure on inflation. Our estimates suggest that headline inflation will gradually moderate from a y-o-y average of 4.3% in 2008 2.5% in 2009 (Figure 1.5)

However, core consumer price inflation has been stable at about 2.4% during 2008, and it is expected to remain elevated during 2009, due to second round effects from higher oil and commodity prices and a weaker dollar. Businesses seem to be passing on higher input prices to the final consumer, as core PPI increased to 4.1% y-o-y in September, the fastest growth rate since 1989. We expect core inflation to remain elevated well above the Fed's comfort zone at around 2.5% over the course of 2009 (Figure 1.6)

Figure 1.5



*Source: Eurobank EFG model estimates

The sharp tightening of financial conditions imposes additional rate cuts

The combination of an expanding financial crisis, an improving outlook on inflation and a recessionary outlook has prompted policymakers to devote all their attention to restoring market stability and mitigating the downside risks to the real economy. After having aggressively cut interest rates by 325 basis points since last September on the back of the protracted slowdown in economic activity, the Fed has restarted its easing cycle by lowering the fed funds rate by another 100bps to 1.00% in October 2008. On top of further monetary easing, the Fed has established a number of facilities in addition to traditional discount window operations (Term Auction Facility-TAF, Treasury Securities Lending Facility-TSLF) in order to unlock the money and credit markets.

The coordinated action underscores that the central banks will be working together to support global economic activity and fight the current financial turmoil. Our standard policy reaction function suggests that the Fed sets interest rates in response to developments of core PCE inflation and the tightness of the labor market (the inverse of the product of the rate and the median duration of unemployment). Under our central scenario, the unemployment rate increases to 7.5% in late 2009, while the median duration of unemployment rises gradually to 11.8 weeks. The expected trough-to-peak increase of 3% and 4.3 weeks for the unemployment rate and the duration, respectively, is actually in the middle of the range seen in the past 6 US recession episodes (Table 1.2). Should the Fed cut the key policy rate by about 450 bps peak-to-trough, as suggested by past experience, then the current Fed easing cycle will end when the key policy rate falls back to 0.75%. However, given the evolving financial crisis and the worsening state of the real economy, the fair value of the policy neutral rate could be as low as zero (Figure 1.7).

Table 1.2
The US labor market at past recessions

NBER Recessions	Trough-to peak increase in median duration	Trough-to peak increase in rate of unemployment	Fed funds rate cuts (bp)
12/69 -11/70	+2.7	+2.7%	300
11/73 - 03/75	+4.6	+4.4%	435
01/80 - 07/80	+2.9	+2.1%	475
07/81 - 11/82	+5.7	+3.6%	1000
07/90 - 03/91	+5.2	+2.8%	225
03/01 - 11/01	+6.3	+2.5%	350
Average	**+4.5**	**+3.0%**	**465**

Figure 1.6

Core CPI Inflation

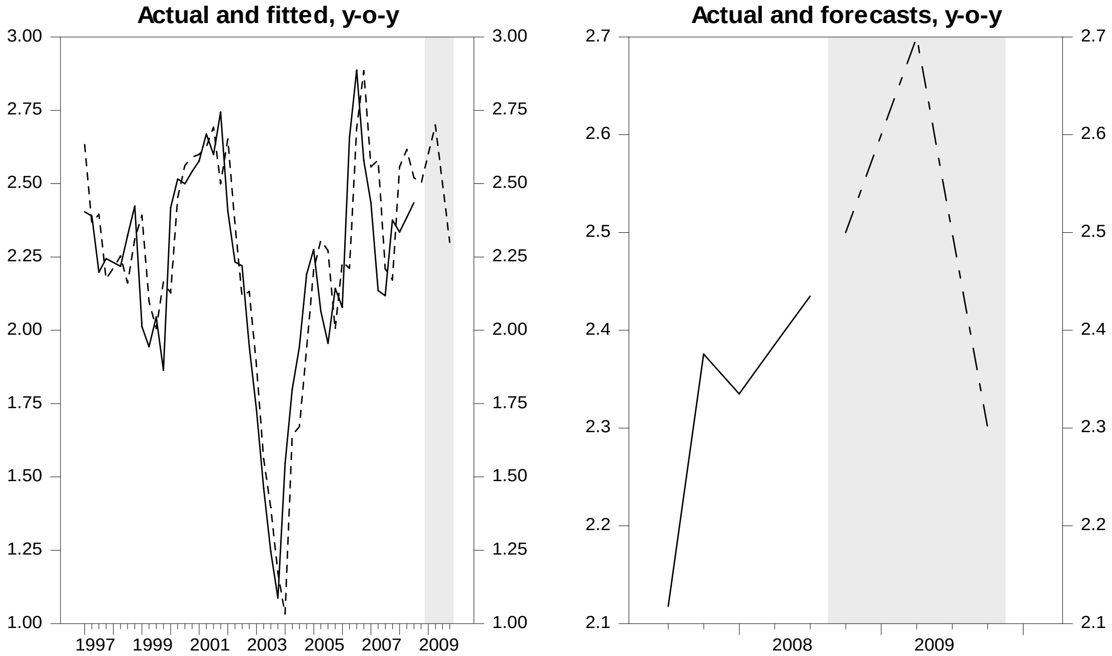
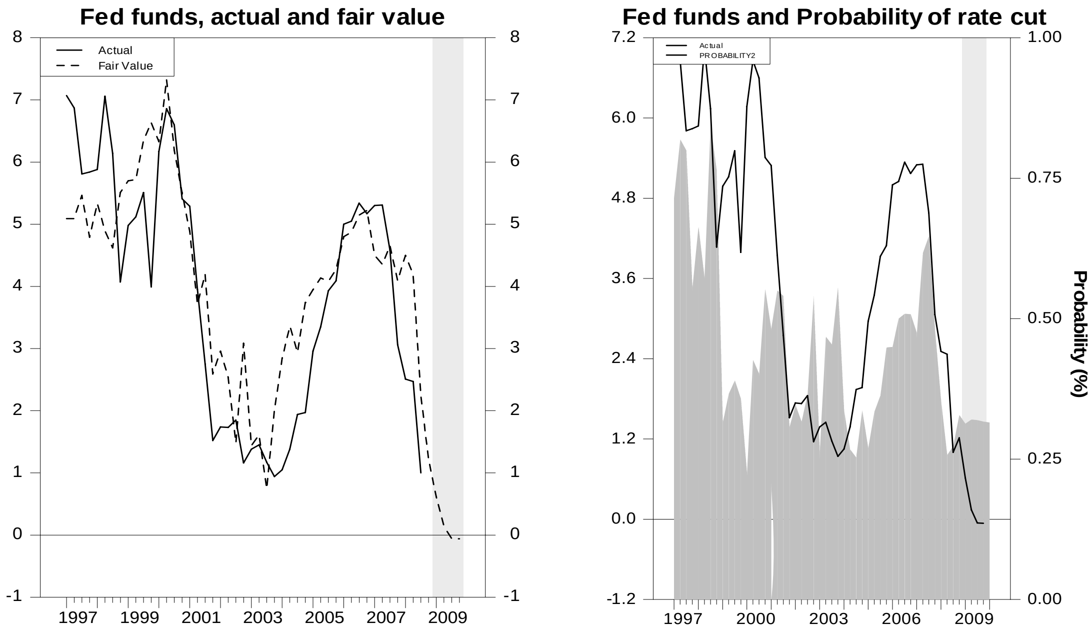


Figure 1.7

Fed funds rate



*Source: Eurobank EFG model estimates

2. The Euro area economy

Dimitris Malliaropulos, Olga Kosma

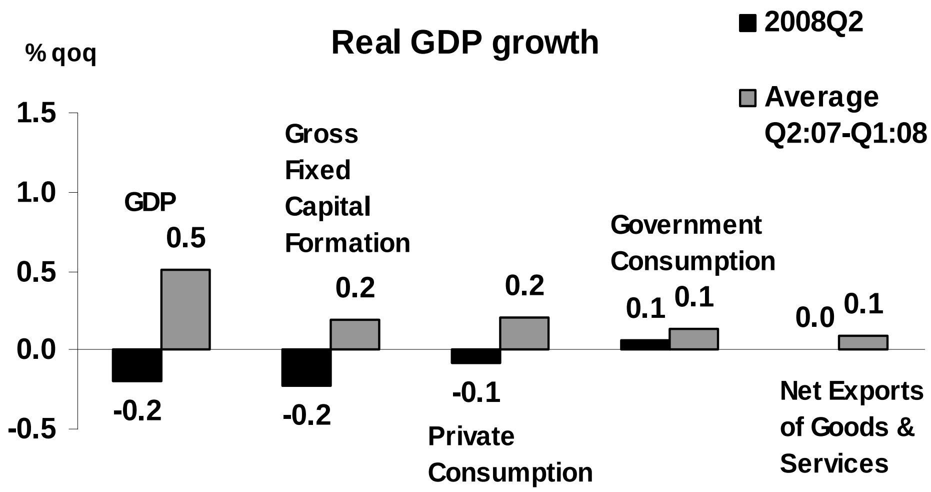
- The weakness in the Euro area economy has become apparent in Q2 08, with real GDP growth contracting for the first time in the last 15 years.
- There are increasing signs of further deterioration in both domestic and external demand, with the probability of a recession reaching 83%.
- Our baseline projections include a significant deceleration of real GDP growth to 1.1% y-o-y in 2008 and 0.1% y-o-y in 2009 from 2.6% y-o-y in 2007.
- Consumer price inflation has probably peaked in July 2008; headline inflation is expected to decelerate gradually over the next quarters, mainly due to falling oil prices and favourable base effects.
- We expect unit labor cost growth to slow significantly, as employment growth levels off and a slack in labor markets moderates wage demands.
- Although there is no evidence of second-round effects, the impact of past increases in commodity prices incorporates upside risks to core inflation.
- The outright deterioration of the state of the real economy should soon urge the ECB to cut policy rates by another 100 basis points, approaching 2.75% by the end of 2009.

Economic activity contracted for the first time since 1993,...

After a remarkable 0.7% q-o-q increase in Q1 08, driven partly by the favourable weather conditions boosting construction investment, Euro area real GDP growth contracted by 0.2% q-o-q in Q2 08. This was actually the first time the aggregate Euro area economic growth has shown a negative sign since the first quarter of 1993. The correction was partly due to the unwinding of the temporary factors observed in Q1 08, as well as an underlying slowdown in activity. The economic weakness was concentrated particularly in the German GDP, which contracted by 0.5% q-o-q in Q2 08. Both France and Italy contracted by 0.3% q-o-q, while real GDP growth in Spain increased by 0.1% q-o-q.

The decline in real GDP in the second quarter of 2008 was basically attributable to the weakening trend in domestic demand. Higher oil prices and accelerating inflation weighed on disposable income and, consequently, hurt consumers' real purchasing power. As a result, private consumption contracted by 0.2% q-o-q for the first time since the 2001 recession. Gross fixed capital formation growth also declined by 1.2% q-o-q, reflecting, apart from the construction setback after the Q1 strong numbers, the weakening momentum in residential construction and the negative effects of higher rates and tighter credit standards. The slowdown of domestic demand is also reflected in imports' deceleration by -0.4% q-o-q. As far as external demand is concerned, exports -a key driver of the last economic cycle- declined by a hefty 0.4% due to the undermining global demand and the past appreciation of the euro. As a result, net trade had a negative contribution to Q2 real GDP growth in the Euro area economies (Figure 2.1).

Figure 2.1



…suggesting that the Euro area economy is hovering on the edge of a recession

On the back of the protracted financial turmoil, which has already entered its second year, the Euro area economy seems to be close to a technical recession. Our Euro area GDP probit model, which links the probability of a recession to the quarterly change in real exports and the Economic Sentiment Indicator (ESI)[2] -a leading indicator for the Euro area economic activity- points to a recession probability of 83% in Q4 2008. Our baseline projections include a significant deceleration of real GDP growth to 1.1% y-o-y in 2008 and 0.1% y-o-y in 2009 from 2.6% y-o-y in 2007 (Figure 2.2).

[2] The Economic Sentiment Indicator (ESI) is a composite indicator made up of the standardised components of the five confidence indicators with the following weights attributed to the sectors: Industrial Confidence (40%), Service Confidence (30%), Consumer Confidence (20%), Construction Confidence (5%) and Retail Confidence (5%). Based on the results of numerous surveys, confidence indicators are designed to forecast the direction of the Euro area economy. Each indicator is the balance of positive and negative responses.

Figure 2.2

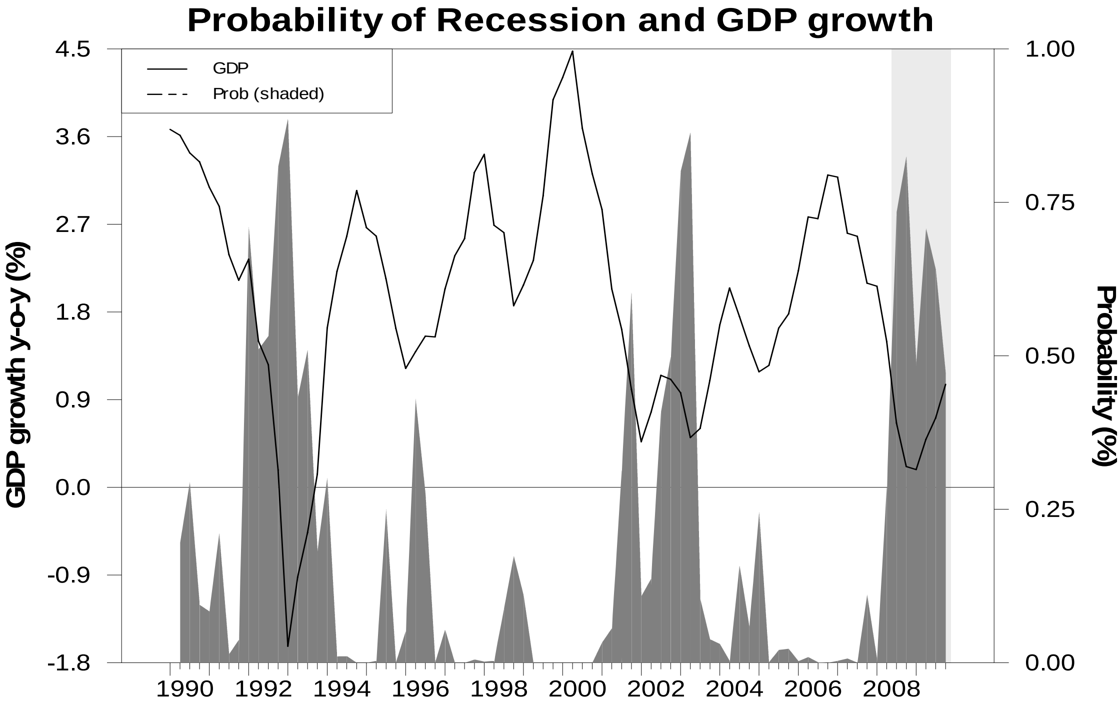
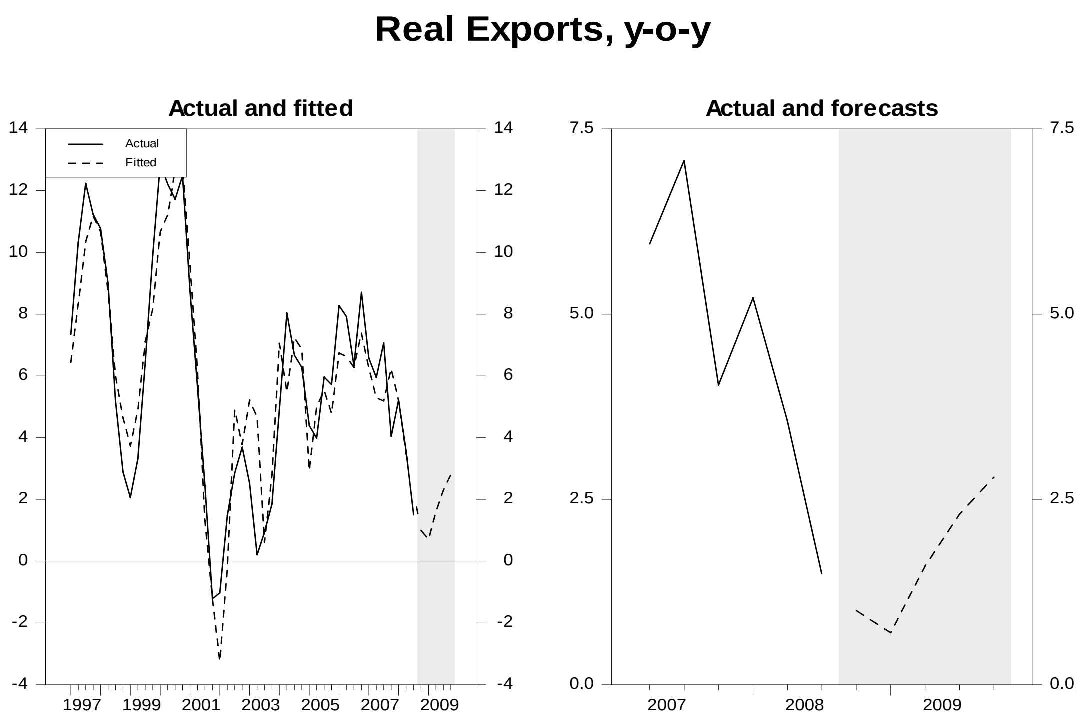


Figure 2.3



*Source: Eurobank EFG model estimates

The main driver of the increase in the likelihood of a recession is weakening external demand. In our central scenario, real exports growth slows from 6% y-o-y in 2007 to 2.7% y-o-y in 2008 and 1.9% y-o-y in 2009 (Figure 2.3), increasing the probability of a recession from 36% in Q3 08 to 83% in Q4 08. The usual lags in the reaction of trade to exchange rate movements imply that the past appreciation of the euro against the dollar will continue diminishing the competitiveness of euro area exports for the remainder of 2008 and 2009. In addition, the financial market turbulence will probably affect the most important trading partners of the Euro area. Slowing external demand from the US and the emerging economies pose a considerable risk for export growth, which was supposed to offset the ongoing deceleration in domestic demand. Survey measures of export orders verify the negative outlook. The PMI manufacturing index for export orders has gradually eased from 53.0 at the beginning of 2008 to 41.1 in October, well below the 50.0 mark that divides growth from contraction. If exports decelerate more sharply than suggested in our central scenario, the probability of a recession increases substantially. Indeed, should export growth decelerate to 2.4% in 2008 and 1.4% in 2009, the probability of recession rises to 91%. On the contrary, if the external demand growth proves to be more resilient (optimistic scenario), the probability holds back to 76% (Table 2.1).

Table 2.1
Recession probability dependence on export growth

	Real export growth % y-o-y in 2008	Real export growth % y-o-y in 2009	Probability of recession
Optimistic scenario	3.4%	2.5%	76%
Central scenario	**2.7%**	**1.9%**	**83%**
Pessimistic scenario	2.4%	1.4%	91%

*Source: Eurobank EFG model estimates

Table 2.2 shows that the average duration of the past four Euro area recessions was almost 3 quarters, with a cumulative GDP decline of about -1.1%. Based on historical standards, the decline in real economic activity is expected to drive real GDP growth from the recent peak of 3.3% y-o-y in Q4 06 to about -1.5% y-o-y in the following quarters.

Table 2.2
GDP decline at past Euro area recessions

Euro area Recessions*	Duration (in quarters)	Cumulative GDP decline**	GDP deceleration***
Q4 74 : Q2 75	3	-1.9%	-7.8%
Q2 80 : Q3 80	2	-0.6%	-4.3%
Q2 82 : Q3 82	2	-0.4%	-1.1%
Q2 92 : Q1 93	4	-1.6%	-6.2%
Average	**2.8**	**-1.1%**	**-4.9%**

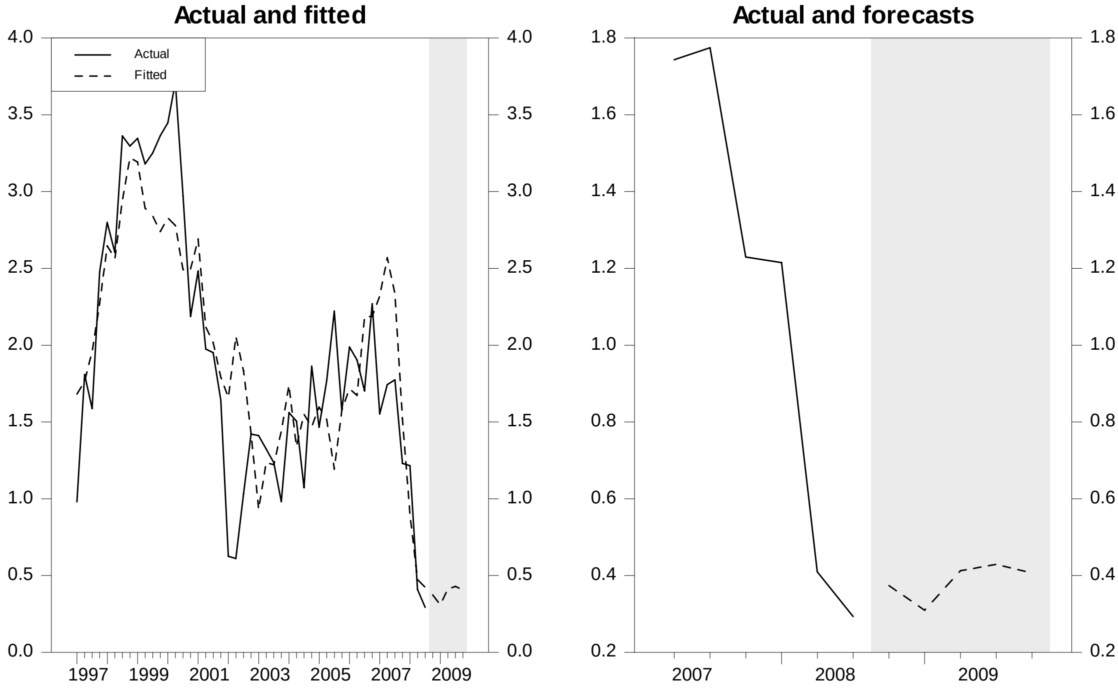
Source: OECD database, Eurobank EFG estimates
*The technical definition of a recession includes at least two consecutive quarters of decline in real GDP.
**Sum of q-o-q GDP growth from start to end of recession.
***Deceleration of y-o-y GDP growth from peak to trough of each business cycle.

Increasing signs of further deterioration in domestic demand

The extent and the duration of the recession in the Euro area will also largely depend on the momentum of the private domestic economy. Tighter monetary conditions and the surge in energy and food prices have taken their toll on private consumption. Household spending contracted in Q2 08, while retail sales continue to decline starting the third quarter of the year, with an average y-o-y growth rate of -1.7% in July and August 2008. According to our estimates, real consumption growth will decelerate significantly from 1.6% in 2007 to 0.6% in 2008 and 0.4% in 2009 (Figure 2.4). The main negative driving forces of consumption expenditures are, in our view, consumer confidence, inflation and labor market conditions. Consumer confidence in the Euro area has deteriorated severely during the summer, implying a worsening economic outlook for personal consumption in the following quarters. The European Commission’s measure of consumer confidence has been hovering around -19 in Q3 08, reporting its lowest level since May 2003. We expect this downward trend to continue during the first half of 2009, since the credit crisis and the slowing global economy will continue weighing on consumer expectations. Furthermore, soaring commodity prices since last autumn have resulted in an acceleration of headline inflation from 1.7% in August 2007 to 4.0% in July 2008. Our model points to an average growth rate of inflation of 3.4% in 2008 and 2.6% in 2009 from 2.1% in 2007, diminishing households’ purchasing power.

Figure 2.4

Personal Consumption, y-o-y

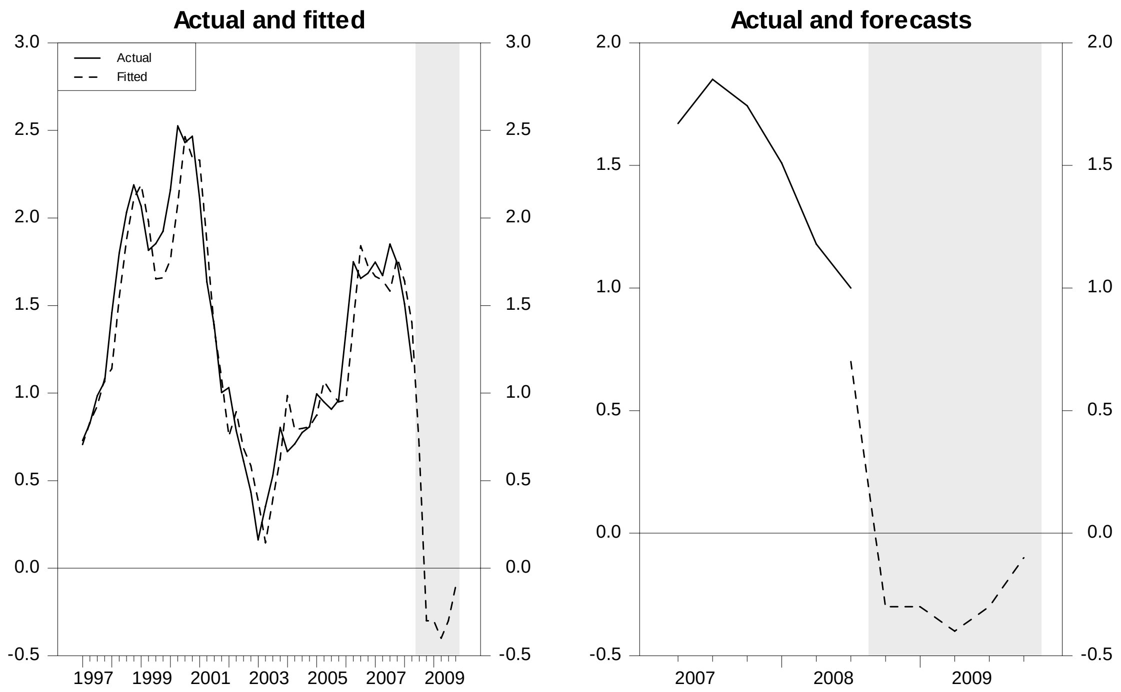


*Source: Eurobank EFG model estimates

In addition, the labor market, which is a vital driving force of household spending, is not sending any encouraging sign. Employment growth has gradually slowed from 1.9% in Q3 07 to 1.2% in Q2 08 and the unemployment rate has edged from 7.4% in July to 7.5% in August 2008. The level of unemployment has been consistently increasing since April 2008 by an average of 94k per month, whereas companies' employment expectations has been deteriorating in the first 9 months of the year, particularly in the manufacturing sector. The employment index of the PMI manufacturing survey fell further by about three points in October to 44.4, well below the threshold of 50.0. Since the labor market usually lags the economic cycle, we expect employment growth to decelerate from 1.8% in 2007 to 1.0% in 2008 and -0.2% in 2009 (Figure 2.5), as firms adjust their industrial production and, consequently, labor demand to the slowing domestic demand.

Figure 2.5

Employment, y-o-y



*Source: Eurobank EFG model estimates

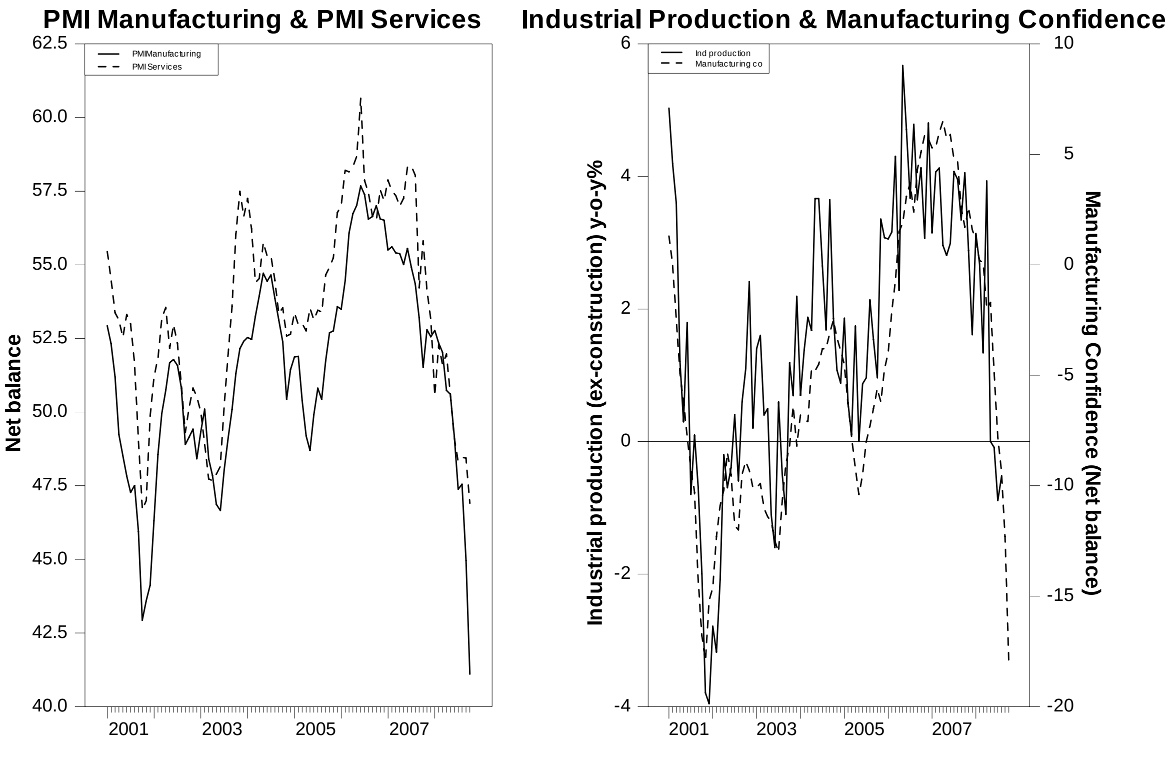
Meanwhile, investment activity shows clear signs of slowing. *Investment in residential construction* will probably decelerate significantly, as housing markets in Spain, Ireland and France are slowing. In particular, real house prices and building permits have been declining in Ireland and Spain, while the majority of banks in the Euro area continue to report a decline in demand for house purchase credit[3]. *Investment in equipment* is also due to slow down; capacity utilization rates of companies have eased –although they remain still above long-term average levels- while orders for capital goods have been declining by 8% y-o-y on average during the past three months. According to the latest ECB's Bank Lending Survey, the number of banks reporting a tightening of their credit standards remains quite high. The increase in the cost of capital, in combination with the reported tightening of banks' credit conditions for companies, will probably result in reduced investment plans.

Confirming expectations of the negative investment outlook, business confidence has been declining markedly since the beginning of 2008. The German IFO fell for a fifth month in a row,

[3] ECB Bank Lending Survey conducted in July 2008.

easing further from 92.9 in September to 90.2 in October. The IFO expectations index actually slipped to its lowest level since the series started in 1991, moving further into recession territory. In addition, the PMI Euro area survey shows confidence plunging in both manufacturing and services. Signalling a severe contraction in the manufacturing sector, the manufacturing PMI index declined far below the 50-point-level to 41.1 in October from 45.0 in September, the lowest level ever reported. The European Commission's industrial confidence indicator fell sharply as well, from -12 in September to a 7-year low of -18 in October. The ongoing manufacturing deterioration has been verified by industrial production numbers. Industrial production (excluding construction) and manufacturing new orders have been on a downward trend since May 2008, with the y-o-y change falling to -0.9% and -0.5% y-o-y in July and August, respectively (Figure 2.6).

Figure 2.6

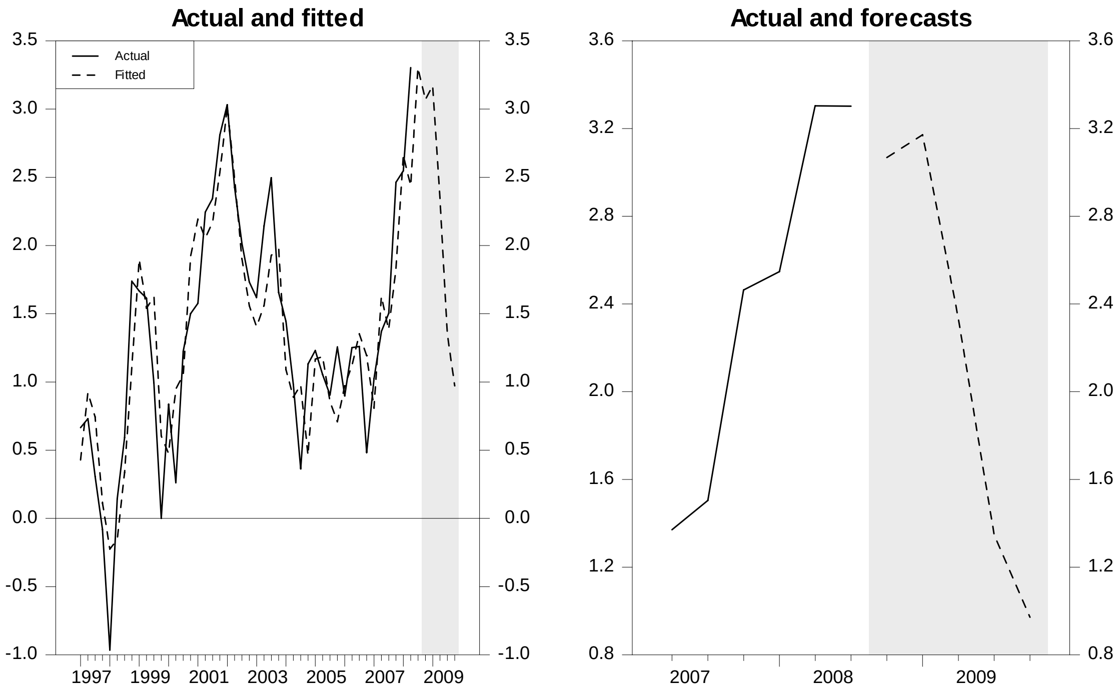


Favorable developments in consumer price inflation...

Consumer price inflation started to accelerate last autumn mainly due to rising food and oil prices, peaking at 4.0% in July 2008. However, it seems that inflation has most likely peaked in July as the outlook for inflation has been encouraging since August; the inflation rate has fallen for three consecutive months for the first time in the last two years, reaching 3.2% in October 2008. Headline inflation is set to slow significantly over the next few months mainly due to falling oil prices and favorable base effects, moving towards 2.8% y-o-y at the turn of the year and around 2.2% by mid-2009 (Figure 2.8). The forecasted moderation in inflation also stems from the expected lower demand, as well as a softening in the labor market. In line with our forecasts, consumers' and producers' inflation expectations have moderated significantly since July 2008, driven by the decline in oil and commodity prices.

Figure 2.7

ULC, y-o-y

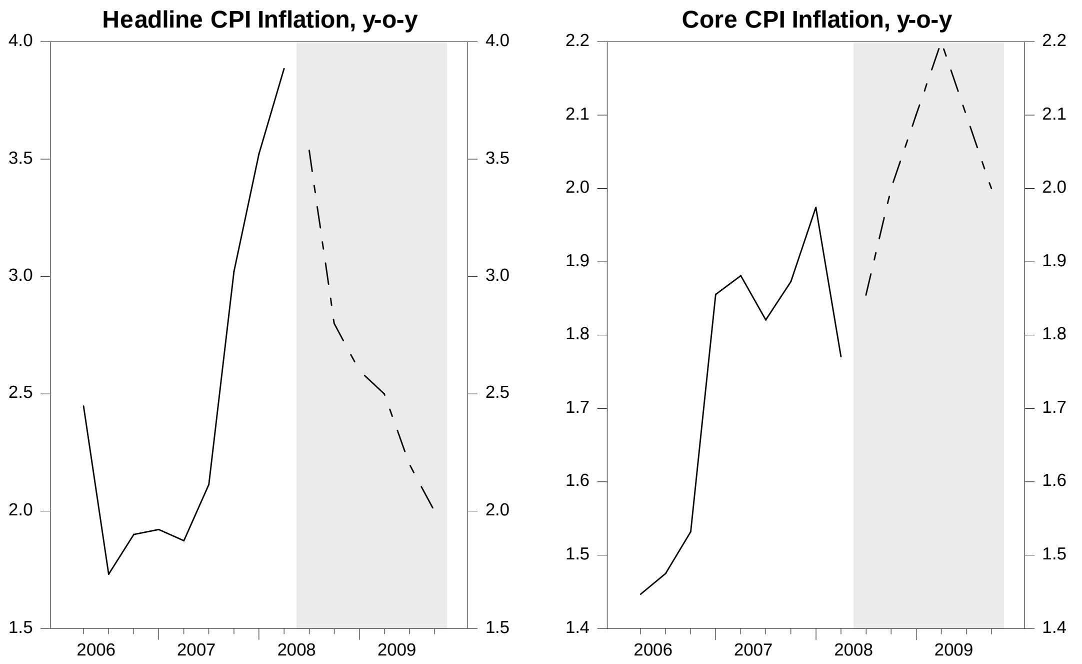


*Source: Eurobank EFG model estimates

So far, there has been no evidence of second-round effects. Core consumer price inflation has been relatively subdued during 2008, with an average of 1.8% y-o-y in H1 08 compared to 1.9% in 2007. As far as wage indicators are concerned, total hourly labor costs grew at an annual rate of 2.7% in Q2 08 from 3.5% in Q1 08, the highest rate since Q3 01. The decline in labor costs was also evident in hourly wages, which moderated considerably from 3.7% in Q1 08 to 2.8% in Q2 08. The surge in labor costs in the first quarter of the year can be partially attributed to the very low levels of wage increases in 2007 (especially in Germany), and does not incorporate high risk of second-round effects. According to our estimates, the deceleration of economic activity in the Euro area will probably lead to a decline in unit labor costs. We expect unit labor cost growth to slow significantly to 1.0% y-o-y in Q4 09 from 3.3% in Q2 08 (Figure 2.7), as employment growth levels off and a slack in labor markets moderates wage demands.

Figure 2.8

Inflation



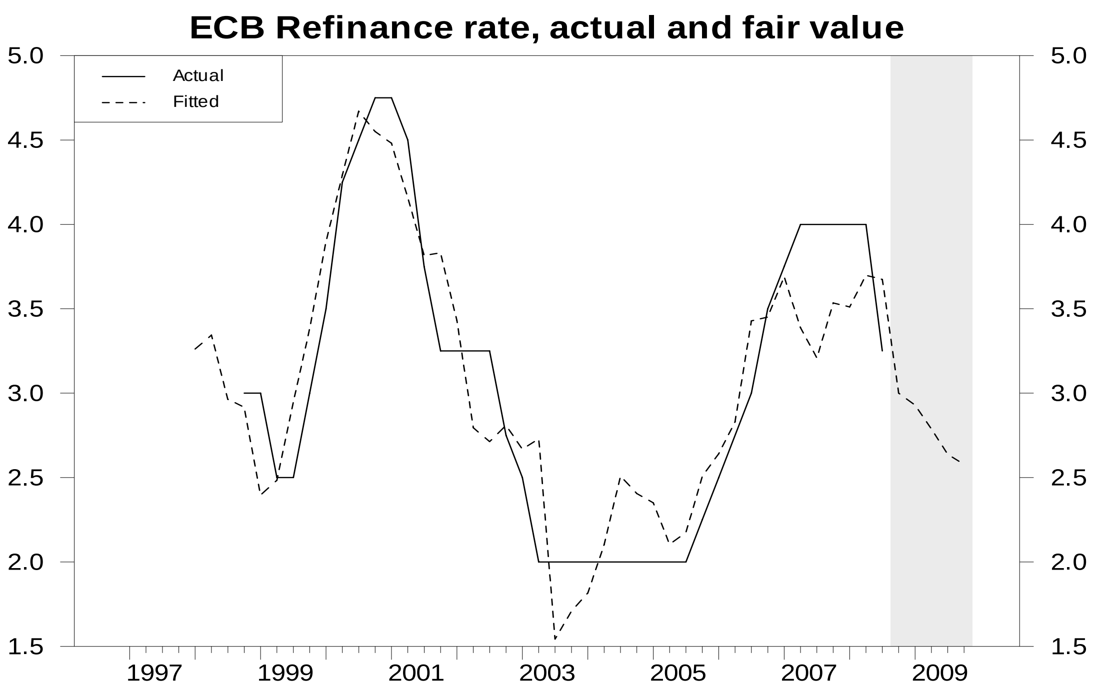
*Source: Eurobank EFG model estimates

However, the impact of past increases in commodity prices incorporates upside risks to core inflation, so we expect core consumer prices to move slightly higher in Q4 08 and 2009. The core measure of inflation has already edged up to 1.9% in September from 1.7% in July. Moreover, producer price inflation, that has a positive correlation with core consumer inflation, has shot up significantly in the first half of 2008. In particular, the average growth of producer prices (consumer goods) has gradually risen from 1.6% in H1 07 to 3.0% in H2 07 and 4.5% in H1 08. Pressures in Producer Price Index (PPI) will soon be transmitted in core CPI. According to our estimates, transmission lags from good prices to service prices average around 12 months. Based on historical correlation, an increase in PPI of consumer goods by 1% leads to an increase of about 0.4% in core CPI. We expect the increase in producer price inflation in H2 07 and H1 08 to filter through to core consumer price inflation in 2009, averaging about 2.1% in 2009 from 1.8% in 2008 (Figure 2.8).

...urging the ECB to cut its key policy rate on the back of the economic slowdown

The weakening state of the economy, coupled with the recent decline in commodity and oil prices, have prompted the ECB to cut interest rates by a total of 100 bps in October and November, from 4.25% to 3.25%. Although tensions in the money market have gradually eased on the back of the massive government interventions all over the world, we do expect that the deterioration of the Euro area economy calls for further monetary easing. Besides, the weakness in the economy will probably help to contain inflation pressures further out. According to our fair value model of short-term interest rates, which links the key policy rate with GDP growth, inflation expectations and the EU corporate bond yield spread over 10-year government bond, the ECB will probably cut policy rates by another 75bps in the following months, approaching 2.50% by the end of 2009 (Figure 2.9). Should consumer and producer inflation expectations ease significantly in the short term, then the ECB refi rate will probably move below the level of 2.50%. Given the risks of an acceleration of core inflation over the next quarters, we do not expect the ECB to cut interest rates aggressively.

Figure 2.9



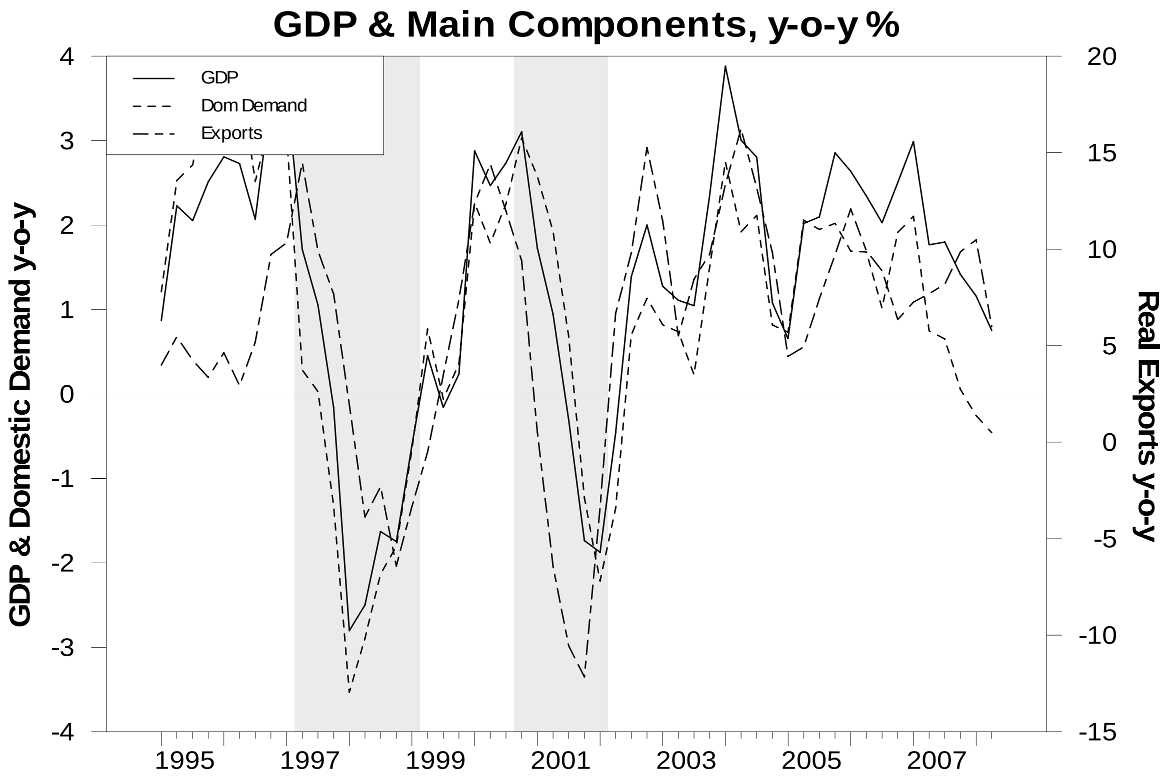
*Source: Eurobank EFG model estimates

3. The Japanese economy

Dimitris Malliaropulos, Olga Kosma

- Recessionary features have become more pronounced in the Japanese economy, with real GDP contracting 0.7% q-o-q in the second quarter of the year.
- The main drag on economic activity has been private consumption -declining by -0.5% q-o-q in Q2 08- due to the recent spike in inflation and the sharp drop in stock prices.
- Labor market conditions continue to deteriorate, reinforcing the ongoing consumer depression in the coming quarters.
- Business expenditure is been exacerbated not only by the corporate profit squeeze amid soaring costs, but also by the weakening export growth.
- On the back of the sharp fall in commodity prices and the recessionary economic conditions, we expect consumer inflation to fall gradually over the coming quarters from this year's peaks.
- Given that the economy is hovering at the brink of recession and that core inflation measures are currently hovering around zero, the BoJ returned to an easing bias and cut its key overnight rate by 20bp to 0.30%. We expect interest rates to remain at current levels until the end of 2009.

Figure 3.1



Note: Shaded areas are ESRI recession periods.

Real GDP contraction reinforces the view that Japan is in recession

The Japanese economy deteriorated sharply in Q2 08, with real GDP contracting 0.7% q-o-q in Q2 08 for the first time since Q3 07. Falling -0.5%, real private consumption made a negative contribution of -0.3% to real economic activity for the first time in seven quarters. This weak consumption number was attributed to the decline in income growth due to the spike in inflation, as well as to the previous quarter's extra day leap-year effect. Even leaving aside the weakness in Q2 due to the leap year seasonal distortions, the overall picture still remains weak. Fixed investment fell sharply by -1.7% q-o-q, reflecting a 3.3% q-o-q decline in private residential investment and broadly flat nonresidential investment. In addition to slumping domestic demand, the contribution from net trade, which was the main driver of growth in the previous years, slipped into negative territory (-0.1%), reflecting the global economic slowdown (Figure 3.1).

Labor market conditions reinforce the gloomy picture for consumption

Leading indicators suggest that the short-term outlook for private consumption, which accounts for a large proportion of domestic demand, is particularly weak. According to the September Economy Watchers Survey, the consumer confidence index slipped to 28.4 in a further deterioration from the preceding month's 28.8. The consumer sentiment index has also continued its downward trend, declining to 32.5 from 32.8 in August. Although the Cabinet Office's Consumer Confidence Survey increased to 31.4 in September from 30.1 in August, the specific survey was conducted in the first half of September, so it does not actually reflect the deepening of the financial crisis in the latter half of the month. Besides, the consumer confidence index has never declined below 32.0 since the series started in 1982 (Figure 3.2). Historically, the consumer confidence index had increased by about 12 units during Japan's recession periods, while at the moment the index has already marked a cumulative decline of about 19 units from its recent peak in 2006 (Table 3.1). The downbeat personal consumption outlook is also confirmed by weak retail sales, which reported a -5.2% decline in August, compared to the previous month's reading.

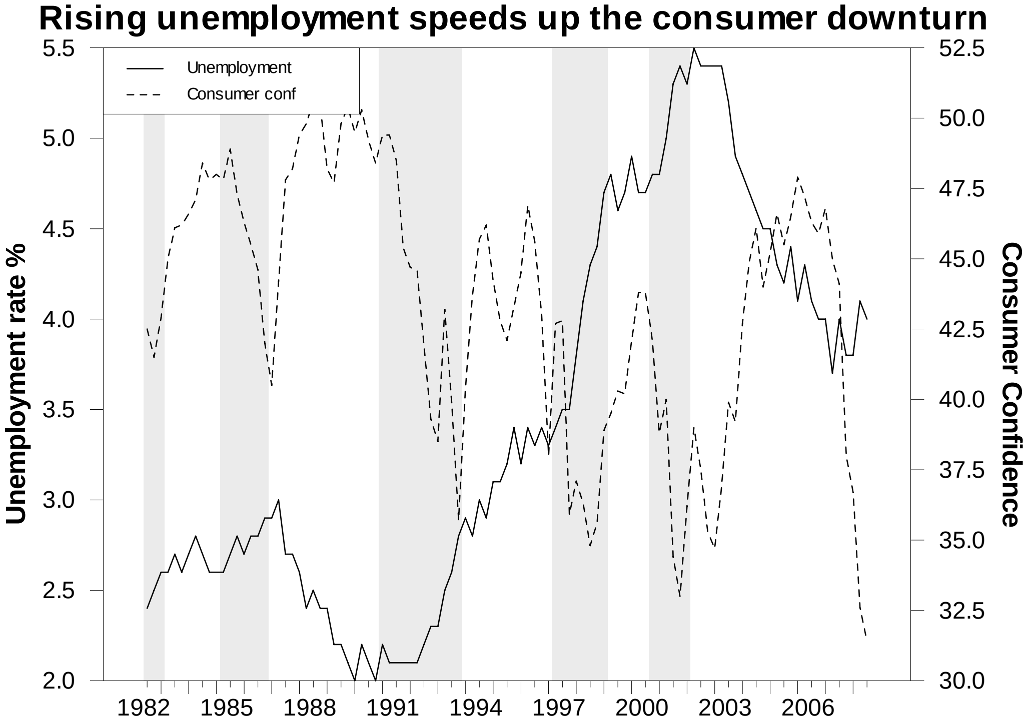
Table 3.1
Business Cycle History in Japan

ESRI Recessions	Duration (in months)	Change in Consumer Confidence	Corporate earnings decline	Cumulative increase in rate of unemployment
Q4:64 - Q4:65	36	NA	-22.3%	+0.5%
Q3:70 - Q4:71	74	NA	-32.7%	+0.5%
Q3:73 – Q1:75	39	NA	-65.7%	+1.0%
Q1:77 - Q4:77	31	NA	-18.5%	+0.6%
Q1:80 – Q1:83	64	NA	-32.4%	+0.9%
Q2:85 - Q4:86	45	-8.4	-23.9%	+0.6%
Q1:91 - Q4:93	83	-14.9	-58.0%	+1.5%
Q2:97 – Q1:99	63	-12.1	-44.7%	+1.7%
Q4:00 – Q1:02	36	-10.8	-45.5%	+1.0%
Average	**52**	**-11.6**	**-38.2%**	+**0.9**%
Current		-18.6	-20.2%	+0.6%

Note: Peaks and troughs are determined by Economic and Social Research Institute (ESRI), Cabinet Office. All changes are from peak to trough of each business cycle
*Source: Cabinet Office, Eurobank estimates.

Given that the minor stimulus package (only 0.4% of GDP) will have no effect on the real economy in the short run, the recent spike in inflation, the sharp recent drop in stock prices and the weaker labor market will intensify the ongoing consumer depression in the coming quarters. Indeed, the unemployment rate rose to 4.2% in August from 4% in July, reporting the highest level since June 2006 (Figure 3.2). The cumulative increase of 0.6% in the rate of unemployment since its recent trough in July 2007 constitutes a strong recessionary sign. As Table 3.1 shows, the unemployment rate has increased by about 0.9% on average during the past 9 Japanese recession events. Although unemployment rate slipped back to 4% in September, employment growth continued to decline by 0.5% y-o-y, reporting a -0.6% y-o-y average decline since June 2006. Further correction in the new openings to applicants' ratio and new job offers -a leading employment indicator- suggests that the deteriorating labor market will continue to pull private consumption in negative direction.

Figure 3.2

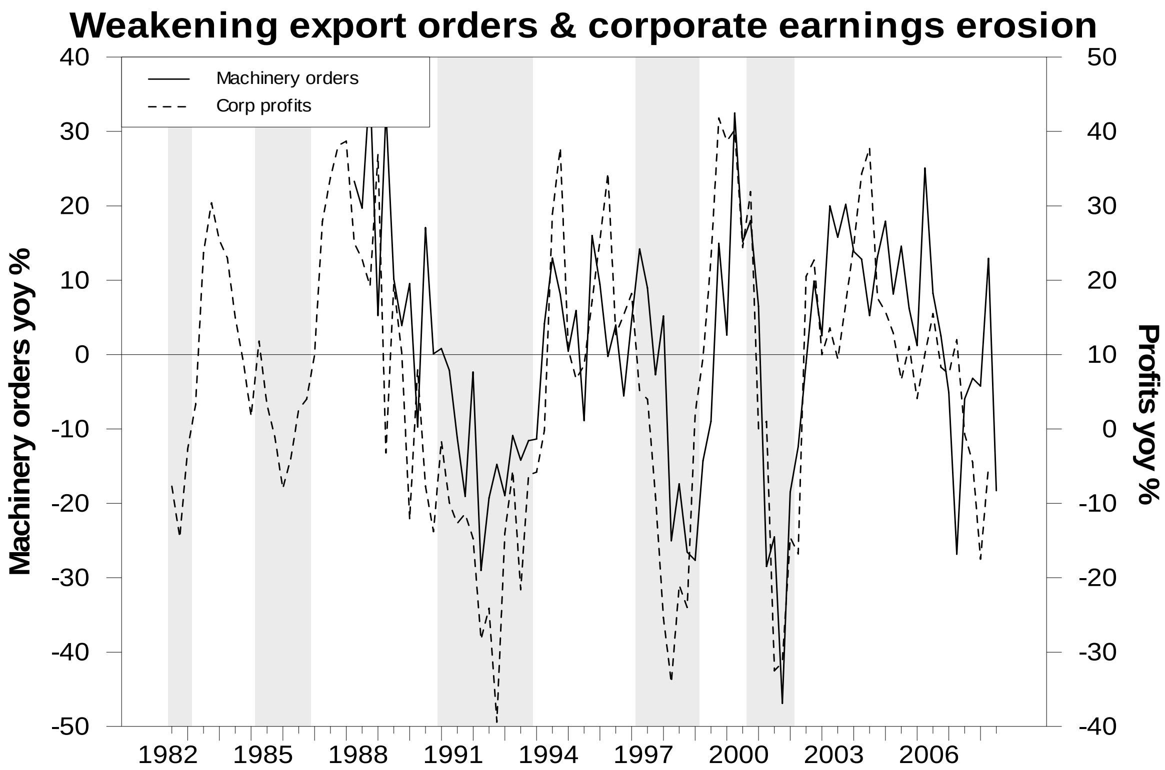


Note: Shaded areas are ESRI recession periods.

Pullback in investment, with weakening export orders and corporate earnings erosion

Residential investment continued its downward trend in Q2 08 which had started since the beginning of 2007, suggesting that the rebound observed in Q1 08 did not reflect a recovery of the housing construction sector (see our Global issue, June 2008). Although housing starts posted a 53.5% y-o-y growth in August 2008, on a m-o-m basis starts actually declined by -13.9% m-o-m saar. Moreover, construction approvals, which lead housing starts by about 2 months, slowed to 7.6% y-o-y growth in August from 55% in July. In addition to residential investment downturn, private capital investment turned out virtually flat due to slumping investment in machinery. New machinery orders, a leading indicator for manufacturing capex (with a lag of 1-2 quarters), fell far short of market expectations in August by 13% y-o-y. Orders have fallen for a third consecutive month by -14.5% m-o-m (the largest decline since June 2006), suggesting further capex weakness in the coming quarters amid corporate earnings erosion (Figure 3.3).

Figure 3.3



Note: Shaded areas are ESRI recession periods.

Corporate activity has shown a strong tone of stagnation not only in terms of orders, but also in terms of production. Industrial production declined by -4.7% y-o-y in August for the first time in the past three years. The PMI manufacturing index declined further from 46.9 in August to 44.3 in September, the lowest level since the 2001 recession, signalling continuing weakness in the manufacturing sector. Furthermore, the Reuters Tankan survey of business conditions conducted in October suffered a sharp fall in manufacturer sentiment, with the diffusion index declining to -25 from -14 in September. Given the heavy pressure on profits from the rise in costs (Figure 3.3) and the slowdown of the global economy, we expect the present correction in private capital investment to continue. Looking back at past Japanese recessions since 1964, the economy started to deteriorate/pick up along with the downturn/recovery of corporate earnings performance. Based on past experience, the bottoming of corporate earnings should signal the recovery of Japan's economy (Table 3.1).

While the main drag on business expenditure has so far been the corporate profit squeeze in the face of soaring costs, a more recent negative factor has been the weakening export growth. Although in 2007 and in Q1 08 exports were the main source of growth, real exports actually declined by 2.5% q-o-q in Q2 08 for the first year since Q1 05. Incoming data point to a continued deteriorating outlook for exports; after picking up to 7.4% y-o-y growth in July, export volumes slowed to -1.8% y-o-y in August. Exports to the US and Europe are on the decline, while exports to Asia -which represent about 50% of total Japanese exports- have slowed significantly, though remaining in positive territory. The PMI subindex of export orders has declined further in September, with export orders close to their all time lows, confirming the worsening export prospects.

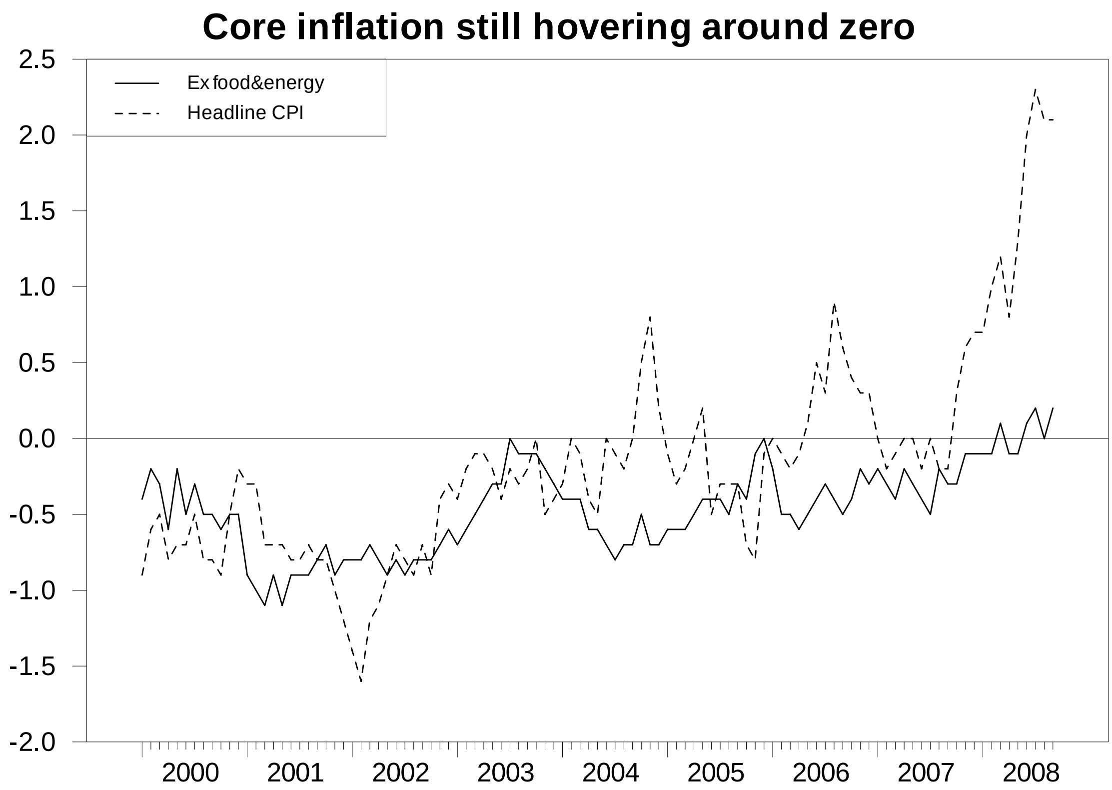
Easing inflationary pressures, combined with the recessionary economic conditions, prompt a renewed easing of monetary policy

CPI inflation declined from 2.3% y-o-y in July to 2.1% y-o-y in August and September, mostly due to lower fresh food prices. Indeed, consumer prices excluding fresh food remained unchanged at 2.4% y-o-y and slightly lower at 2.3% y-o-y in September. Core consumer prices (excluding food and energy) are close to zero levels with an average of 0.1% since June 2008, suggesting that there are still no signs of second round effects on inflation from past energy and food price increases. On the back of the sharp fall in commodity prices and the recessionary economic conditions, we expect inflation to fall gradually over the coming quarters from this year's peaks. Besides, inflation measures excluding food and energy prices, which are currently hovering around zero, suggest that there is a significant risk of deflation in Japan if commodity prices continue to decline (Figure 3.4).

The Bank of Japan (BoJ) left its policy overnight rate unchanged at 0.5% in its meeting in October 7. One day later, the central banks of the US, Europe, Switzerland, Sweden and Canada in a coordinated action cut key policy rates by 50 basis points. The BoJ did not join the coordinated central bank action but rather expressed its support to the move. Given that the economy has been hovering at the brink of recession and that consumer price inflation excluding food and fuel prices is still close to zero levels, the BoJ cut its lending overnight rate by 20 bps to 0.3% at the end of October. In addition, the basic loan rate[4] was cut by 25 bps to 0.5%, while it was decided to start paying a 0.1% interest rate on excess reserves at BoJ. Although a zero interest rate policy cannot be ruled out if inflation moves back into negative territory, we do believe that interest rates will remain at 0.3% until the end of 2009.

[4] The basic loan rate is actually the loan rate at which financial institutions borrow directly from the BoJ.

Figure 3.4


Core inflation still hovering around zero
Ex food&energy
Headline CPI
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
2000
2001
2002
2003
2004
2005
2006
2007
2008

4. Emerging Markets

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- As economic weakness has been spreading quickly across the globe, domestic demand in most industrialized countries weakened, leading to a significant deceleration in EMs' export growth.
- Our BRICs leading indicator, which has started to weaken in October 2007, points to a significant deceleration of export growth for the rest of the year.
- According to our estimates, GDP growth in the BRICs economies is likely to decline by more than 1.0 pp in 2009, owing to the downturn in external demand.
- EMs central banks are forced to turn their attention from fighting inflation to supporting growth, as tighter liquidity conditions and weakening external demand pose significant risks to the growth outlook.

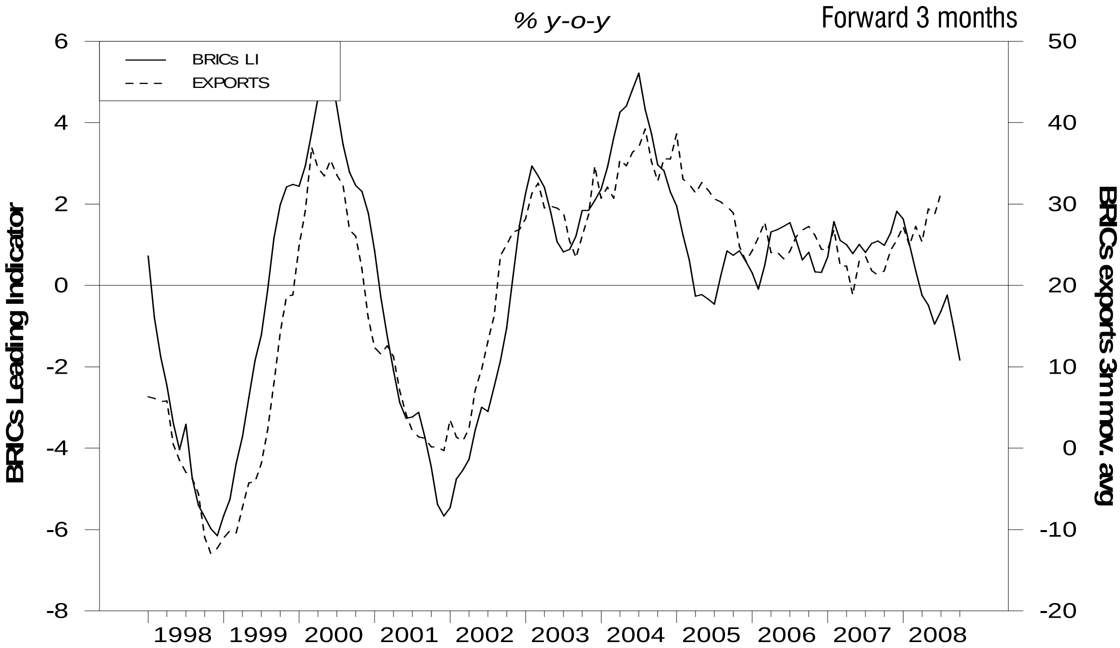
Exports have been for years the major catalyst of economic growth in emerging markets, with the share of total exports in total GDP increasing steadily from 18% in 2001 to 27% in 2007 (Figure 4.2, left). Until recently, the slowdown of global growth has not hurt EMs exports that much. However, as economic weakness that began in the US has been spreading quickly across the globe, domestic demand in most industrialized countries weakened, leading to a significant deceleration in imports growth. Given that developed markets are EMs' main export destination, key emerging economies, such as China, are already feeling the effects. Indeed, the slowdown of exports is well underway as global growth decelerates, adding to concerns for a significant deceleration of economic growth in emerging economies.

With exports accounting for more than one third of China's GDP and the US still a top destination for China's exports, deceleration in the export sector will significantly affect Chinese economic growth. The US trade deficit with China alone accounted for more than one third of the total US trade deficit in 2007. According to our estimates, if the US trade deficit narrows by 1 billion, China's trade surplus will decline by 0.25 billion. For 2007, the annual US trade deficit on goods and services amounted to 5.1% of GDP, down from 5.7% in 2006. Should the trade deficit decrease by another 15% to 4% of GDP over the next years, China's trade balance will decline by about 14%, subtracting about 75 basis points from Chinese real GDP growth.

How will the global slowdown affect BRICs export and growth performance?

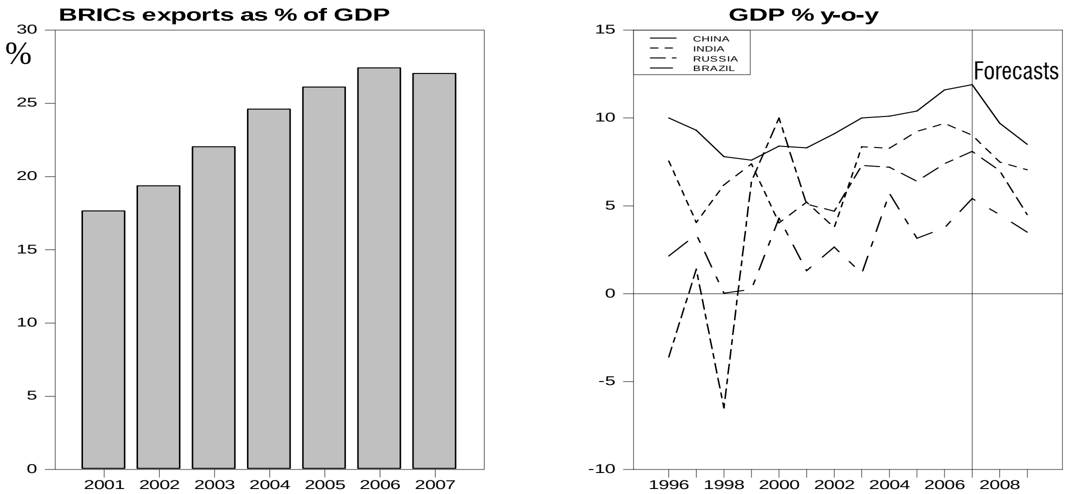
Figure 4.1 displays our BRICs leading indicator, a measure which identify turning points in the growth cycle of economic activity along with BRICs export growth. Our leading indicator decelerated significantly over the past eleven months, suggesting that nominal export growth in the BRICs may drop by about 10% during the rest of the year, bringing the y-o-y growth rate of exports to 15% in 2008, down from 22% in 2007.

Figure 4.1
BRICs leading indicator points to a significant export growth deceleration



Given a weight of BRICs export sector of about 25% in total GDP, the 7% decline of the rate of export growth in 2008 will lower the contribution of export to GDP growth by about 2%. However, relatively solid consumer and infrastructure spending will underpin domestic demand, partially offsetting the diminished contribution of external demand. Under this scenario, and, provided that the pace of imports growth remains at current levels, we expect GDP growth to decline by more than 1.0 pp in each of the four economies in 2008 (Figure 4.2, right).

Figure 4.2



EMs central banks are forced to turn their attention from fighting inflation to supporting growth

As the world economy is slowing and commodity prices correct from their summer peaks, the balance of risks between inflation and growth is changing. So far, rising oil and commodity prices have constrained the ability of central banks to respond to the downside risks to growth. Headline inflation in these countries has increased more sharply reflecting the larger share of food in consumer price baskets. The response across EMs to inflation has varied. China, for instance, relied more on credit controls and liquidity management through open market operations and further increases in the level of reserves requirements, with apparently positive results. Indeed, CPI inflation declined by more than expected in September to 4.6% % y-o-y, marking the fifth consecutive month with a significant drop in CPI from its peak of 8.7% in February 2008. Meanwhile, in other parts of EMs, where there are few instruments to tackle inflation and interest rate policy remain the primary instrument, more interest rate increases took place. In Brazil, in particular, the Selic rate is now at its highest level since September 2006, as Brazil aims to keep a lid on inflation. Now that events in the international markets have drained the liquidity from the system, EMs central banks were forced to turn their attention from fighting inflation to supporting growth, enhancing their provision of liquidity in the financial system. However, second-round effects on inflation remain a serious threat, suggesting that policymakers should continue to monitor carefully inflation trends. In the meantime, as long as worries that the credit crisis will spill over from the financial markets to the real economy grow and concerns over inflationary threats subside amid easing commodity prices, it is most likely that EM central bankers will proceed with further rate cuts over the rest of 2008 and in 2009.

BOX 1.

BRICs LEADING INDICATOR

We compute the BRICs leading indicator as the weighted sum of each country's monthly OECD composite leading indicator. The weights are the corresponding gross domestic product based on purchasing-power-parity (PPP) share of world total. This index has historically turned downward before a slowdown and upward before an expansion. BRIC's leading indicator identifies the signals of changes in the economy almost three months before the actual turning points are found in the economic activity. Overall, it is an economic indicator that changes before the economy has changed.

4.1 China Economic Outlook

- Weaker global demand along with tighter credit conditions has led China's economy to slow down from its record high growth rates in 2007.
- Deteriorating business and consumer confidence indexes suggest further moderation in economic activity.
- Weakening external demand, coupled with the slowdown in industrial activity in the OECD countries and the deteriorating consumer and industrial confidence indicators, as well as the strong CNY against the US dollar, poses considerable risks to China's exports during 2008 and 2009.
- With growth fears mounting and inflationary risks gradually receding, policymakers shifted their focus from inflation to growth.

Overview

China's economy has slowed down for the fifth consecutive quarter in Q3 2008, strongly affected by tighter credit conditions and the deteriorating outlook of China's major export partners, such as EU and US, amid an ongoing global slowdown. Inflationary pressures are beginning to fade since commodity and energy prices have finally started to subside. In the meantime, despite the expected rebound of industrial activity in October due to the end of the Olympic-related restrictions, economic activity is expected to decelerate further in 2008 and 2009, due to a significant slowing in final demand. Moreover, as China continues to rely highly on exports, the risks for economic growth remain significant. In order to ensure a soft landing for the economy, China's policymakers should steer the economy towards domestic demand. Meanwhile, as inflation is falling, weakening growth is becoming the major challenge, lessening the chances of rate hikes and the pace of currency appreciation.

Table 4.1

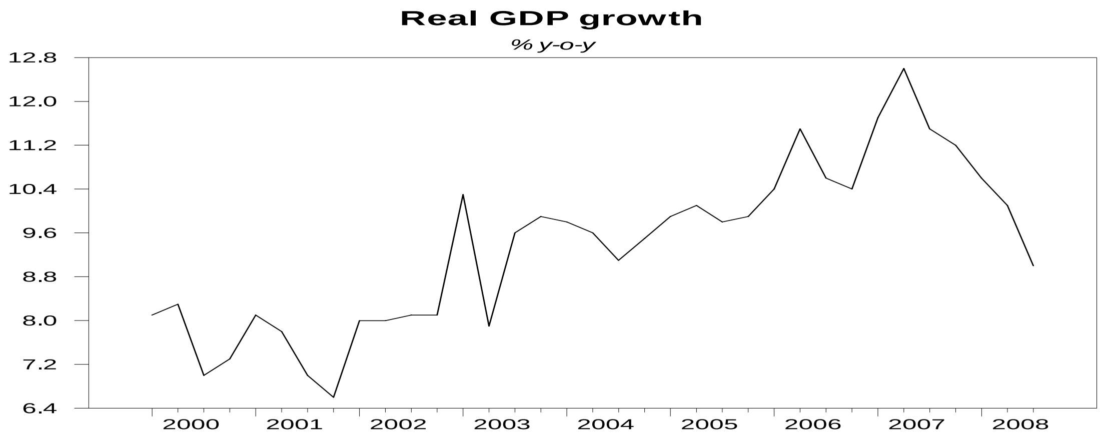
China Main Economic Indicators and Forecasts

	2006	2007	2008e	2009e
Real GDP (% y-o-y)	11.6	11.9	9.7	8.5
Industrial Production (avg, % y-o-y)	16.8	17.5	15.0	12.5
Inflation (avg, % y-o-y)	1.5	4.8	6.5	3.5
Unemployment rate (avg, %)	4.1	4.1	4.2	4.2
External Balance				
Real Exports of Goods & Services (% y-o-y)	22.0	18.0	12.0	9.0
Real Imports of Goods & Services (% y-o-y)	18.0	15.0	11.0	8.0
Trade Balance (% GDP)	8.0	9.8	7.0	6.0
Current Account (% GDP)	9.0	11.0	9.0	8.0
Interest Rates	Dec 2007	Current	Dec 2008	Dec 2009
Lending Interest Rate (%)	7.5	6.7	6.4	6.1
Exchange Rates	Dec 2007	Current	Dec 2008	Dec 2009
Exchange Rate (USD/RMB, eop)	7.3	6.8	6.7	6.5

Slowing growth performance, albeit impressive, …

Although real GDP growth remained fairly impressive, expanding in double digit rates for six subsequent years, the latest data of the composition of GDP point to an economic slowdown. Indeed real GDP growth eased further to 9% y-o-y in Q3 08 from 10.1% in Q2 08 (Figure 4.3). It appears that net trade contributed largely to the slowing of GDP growth since the trade surplus has decreased by about 3% y-o-y in dollar terms during the first nine months of 2008. The diminished contribution of the net trade balance actually was offset by robust levels of domestic demand.

Figure 4.3



…with domestic demand providing much of the growth momentum

Fixed asset investment maintained its momentum in the first three quarters of 2008, rising by 26% y-o-y, despite the government's administrative constraints imposed to moderate investment and rebalance the economy towards private consumption. However, given that these figures are not adjusted for inflation, when we express fixed investment in real terms using the investment price index, this has in fact slowed to around 17.5% y-o-y from 22% a year ago. Meanwhile, taking into account that manufacturing accounts for more than 30% of total fixed asset investment, the expected exports slowdown is likely to affect about one third of China's investment activity. Moreover, real estate investment which accounts for about 25% of total fixed asset investment is expected to worsen due to the tightening in credit conditions and declining property prices. Thus, looking forward, declining exports and the consolidation in local property prices should put greater pressure on investment growth, although a rebound in October after the end of the Olympic-related restrictions cannot be ruled out.

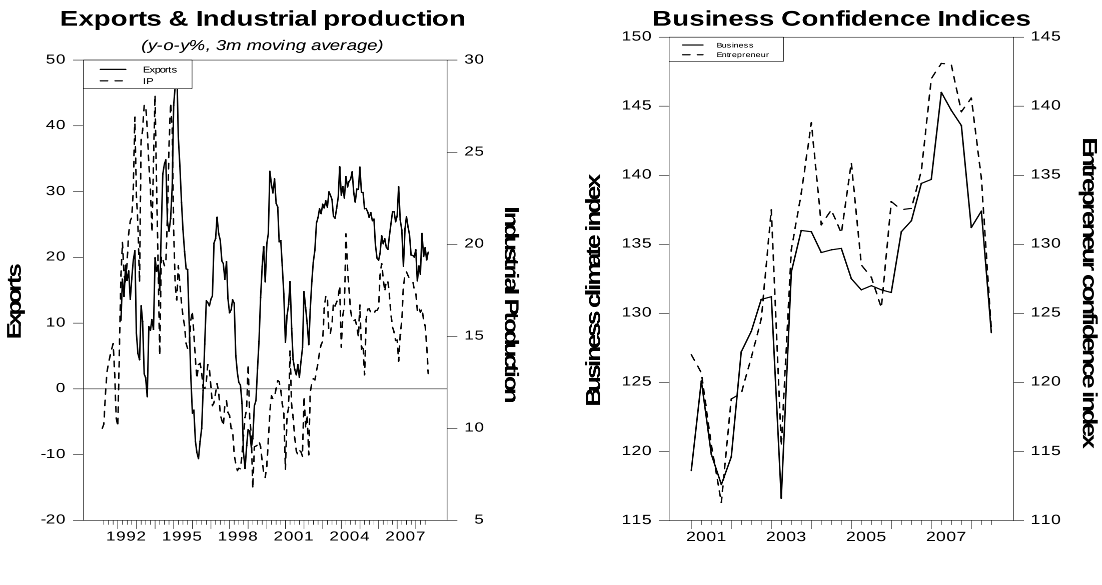
Apart from fixed asset investment, consumer indicators suggest that private consumption has so far remained surprisingly resilient to the decline in stock and property prices, sending retail sales of consumer goods to multi-year highs. Indeed, nominal and real retail sales increased by 23.2% y-o-y and 17%, respectively, in September 2008, likely on the back of strong income growth and greater government spending on social protection which reduced households' savings. However, the NBS index of consumer confidence eased further to an average of 93.8 in Q3 08, its lowest level since early 2006, suggesting that the lagged impact of the recent price acceleration of late 2007-early 2008 and the expected moderation in exports and investment growth will probably undermine real disposable income and, consequently, real personal consumption expenditures.

Despite an expected rebound in October, industrial activity is due to moderate further

The figures from the supply side of the economy point to an upcoming moderation in economic activity. Industrial production growth declined to 11.4% y-o-y in September 2008, from an average of almost 15.5% y-o-y during the first eight months of 2008, mainly on the wake of constrains imposed in production activities to minimize congestion around the Olympics. Hence, in October we expect a modest rebound in industrial production numbers. However, it is likely that this rebound may prove only temporary due to softer external demand. This is supported by business confidence indexes which slumped further from their recent multi-year peaks in the second quarter of 2007 (Figure 4.4).

Figure 4.4

Business confidence deterioration captures industrial production moderation, driven by weaker exports



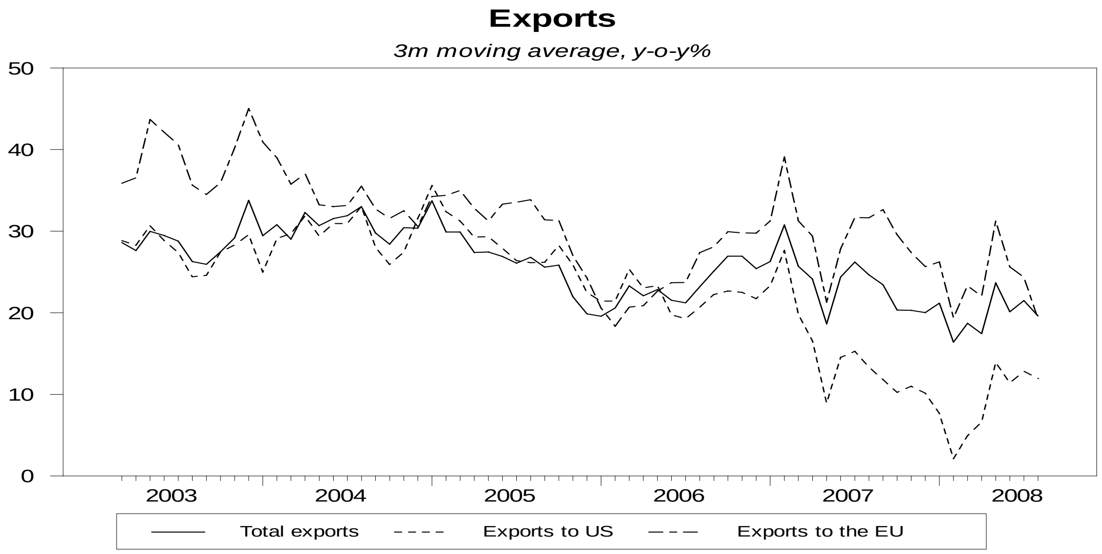
Growth is expected to moderate in both 2008 and 2009, …

On balance, according to our estimates, if the index of consumer confidence declines gradually by another 10 points by the end of 2009, employment growth slows to around 1.5% in 2009 and industrial production growth declines gradually by around 5 percentage points during the rest of 2008 and 2009, from an average growth of 17.5% in 2007, real GDP growth is expected to moderate to 9.7% y-o-y in 2008 and decelerate more sharply in 2009 to 8.5% y-o-y.

…with net exports being the major drag on economic activity

In fact, the trade surplus posted another record in September 2008, since exports continued to expand rapidly by 21.5% y-o-y in September 2008 on the back of the renminbi's strength against the US dollar and import growth has been moderated from its peaks of around 30% y-o-y during the first eight months of the year. However, it seems that the solid performance of trade stemmed from rising international prices. As a result, when we adjust for price increases, we find that real export growth decelerated to about 15% y-o-y in September 2008 from an average of 21% in 2007. Indeed, survey measures of new export orders verify the ongoing deceleration; the PMI new exports orders index eased gradually to 48.8 in September 2008 from its recent peak of 59.1 in March 2008, suggesting increasing risks of a sharp downturn in external demand growth. In fact, this is reasonable if we take into account that EU and US, which account for about 40% of China's exports are most likely already in recession (Figure 4.5). Hence, the weaker demand from US and EU coupled with the slowdown in industrial activity in the OECD countries and the deteriorating consumer and industrial confidence indicators, as well as the strong local currency against the US dollar are likely to reduce real export growth to around 12% in 2008 and 9% in 2009 from 18% in 2007. Meanwhile, the weakening in export growth will undermine the demand for imported components that Chinese manufacturers assemble and, in turn, re-export to the rest of the world. Given that the strong import growth was supported mainly by high commodity and oil prices and the latter have already corrected from their summer peaks, import growth is expected to slow more sharply in the coming months. In particular, weak import growth is in line with the upcoming deterioration of domestic demand and, additionally, is confirmed by the PMI imports index which has dropped by 11.1 points to 46.4 in September 2008 from its highest reading of 57.5 in March 2008.

Figure 4.5



Inflation seems to have peaked, allowing policymakers to shift their focus from inflation to growth

After hitting a 12-year high of 8.7% y-o-y in February 2008, headline CPI inflation narrowed down to 4.6% y-o-y in September 2008, mainly due to the normalisation in food prices (Figure 4.6). Meanwhile, the latest figures for non-food inflation provide evidence that inflationary pressures may have started to subside. Indeed, non-food inflation declined slightly to 2% y-o-y in September 2008 from 2.1% y-o-y in August 2008. Overall producer price inflation has decreased to 9.1% y-o-y in September from 10.1% y-o-y in the previous month and, particularly, producer prices for consumer goods have been declining since March 2008. Although inflationary risks are beginning to fade, there are still some risks of a spill over of still high producer prices into consumer prices. According to our estimates, should food prices ease further, producer price inflation start to trend down and Chinese economy continues to weaken, CPI inflation will decline to an average of 6.5% y-o-y in 2008 and 3.5% in 2009.

With growth fears mounting and inflationary risks gradually receding, PBoC cut interest rates three times since mid-September 2008, signalling that the current tightening cycle has come to an end (Figure 4.7). Looking forward, we expect further cuts in the reserve ratio and the benchmark interest rates to take place in the rest of 2008 and the first half of 2009.

Figure 4.6

Headline CPI and food price inflation on track to fall steadily

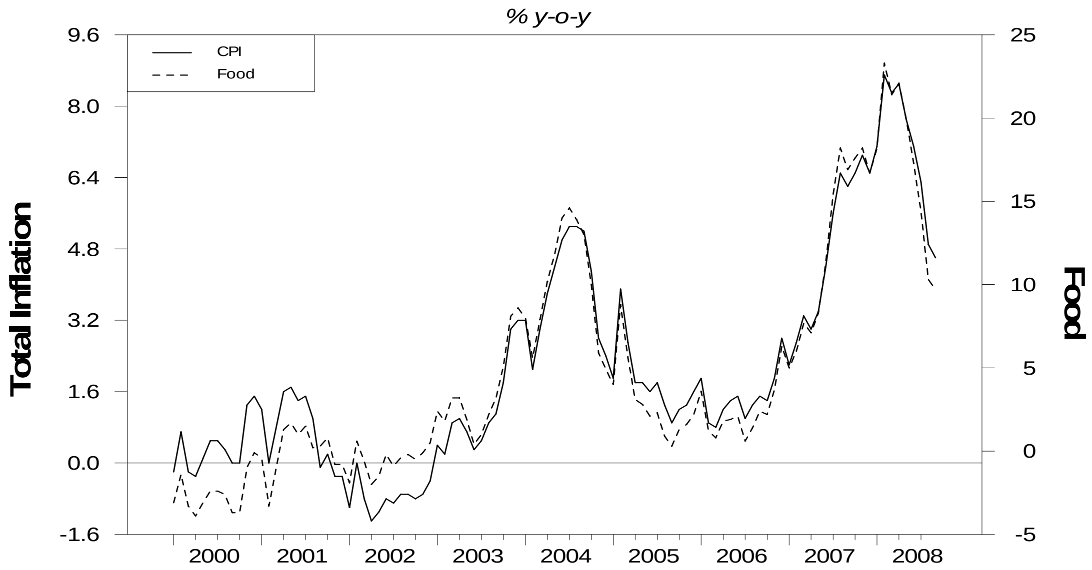
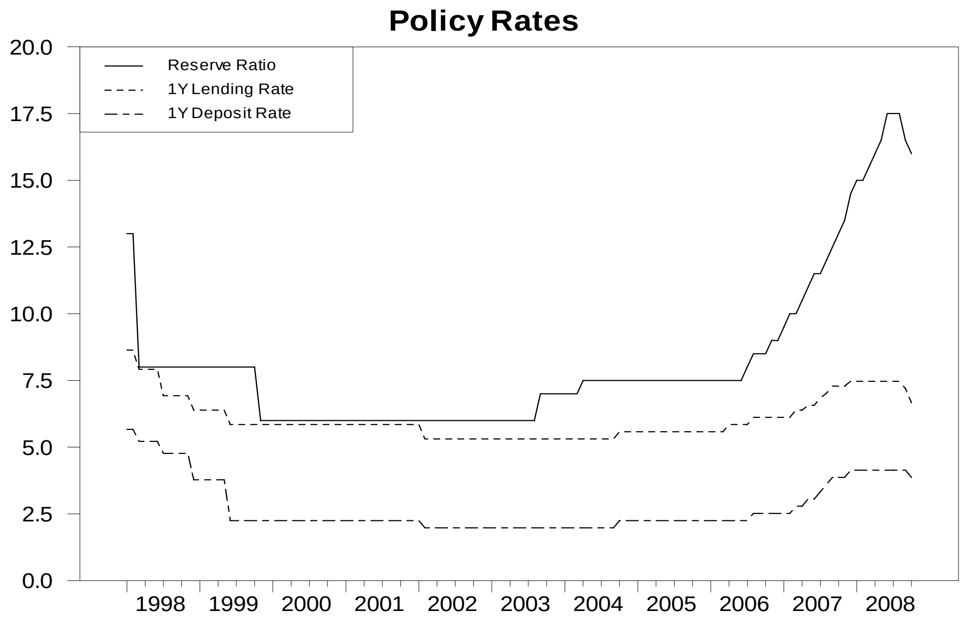


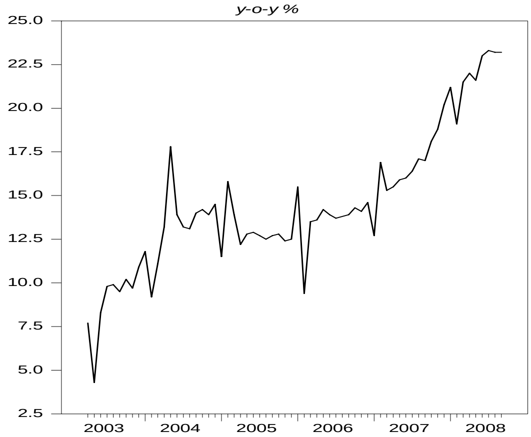
Figure 4.7



CHINA CHARTS

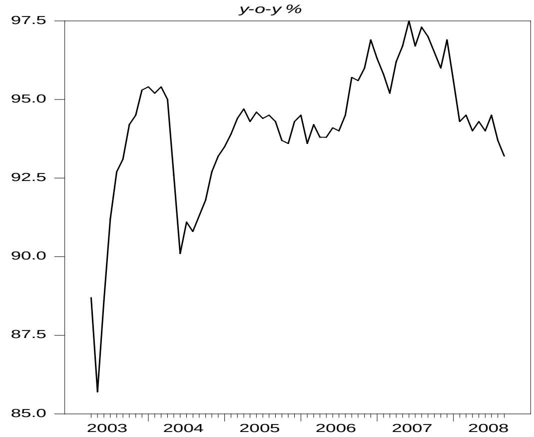
Retail sales

y-o-y %



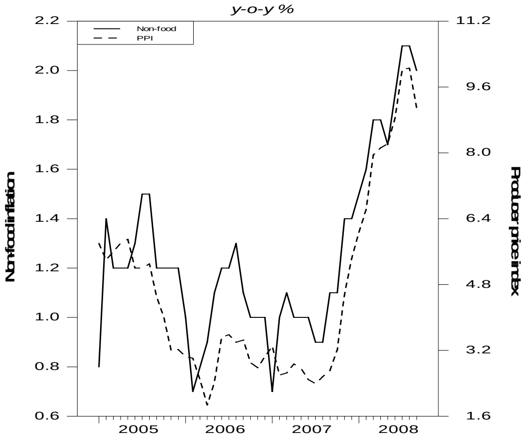
Consumer confidence

y-o-y %



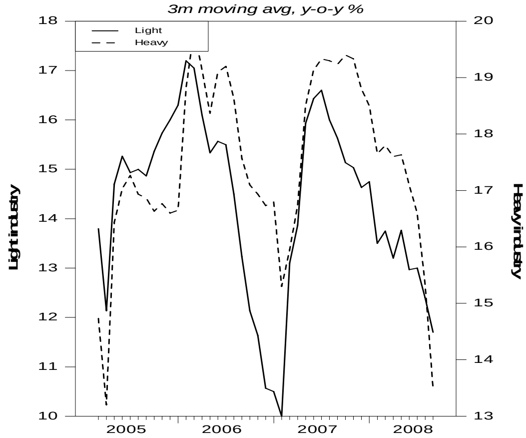
Inflation

y-o-y %

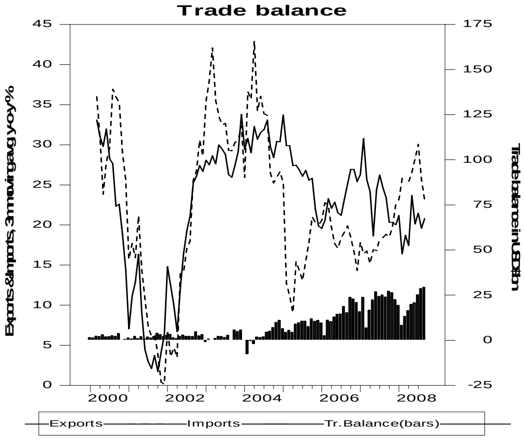


Industrial production

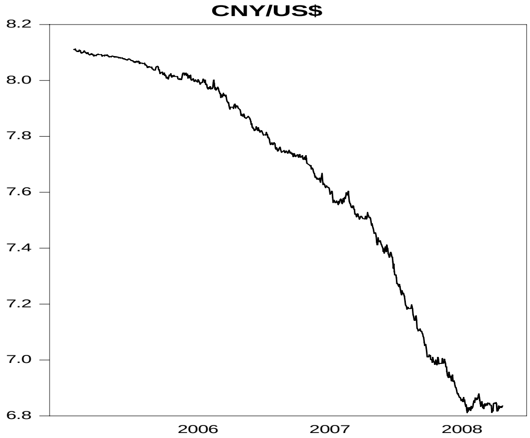
3m moving avg, y-o-y %



Trade balance



CNY/US$



4.2 India Economic Outlook

- India's economy has started to cool down, after five years of impressive economic performance, due to the slowdown of developed economies, tightening monetary policy and elevated global commodity and energy prices. Real GDP growth is expected to moderate to 7-7.5% in 2008-09.
- High fiscal deficits ahead of the general election will undermine economic stability and add to the persistent inflationary pressures.
- Given the continued upward trend in import growth that surpassed export growth, the net effect was a further widening of the trade deficit and current account deficit.
- Inflation is rising at its fastest pace in the past three years, due to high global commodity prices.
- After five years of a tightening bias, the RBI was forced to ease monetary policy, due to increased concerns over domestic liquidity and macroeconomic stability.

Overview

After five years of impressive performance, India's economic growth prospects seem to be undermined by both global financial strains and domestic developments. On the one hand, high commodity prices along with large government spending have triggered steep domestic inflation, forcing the Reserve Bank of India to proceed with further rate hikes. On the other hand, continuing global financial strains deteriorate India's external position, adding to the risks that already threaten the country's economic outlook.

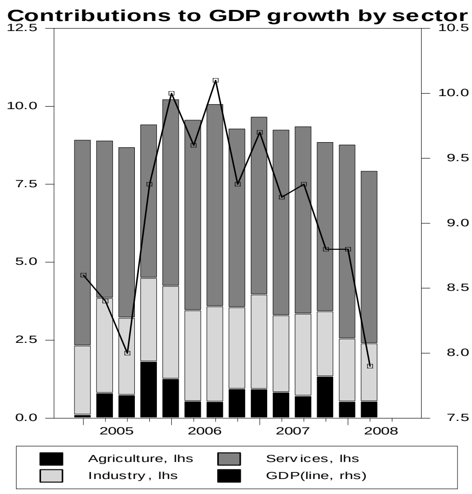
Table 4.2
India Main Economic Indicators and Forecasts

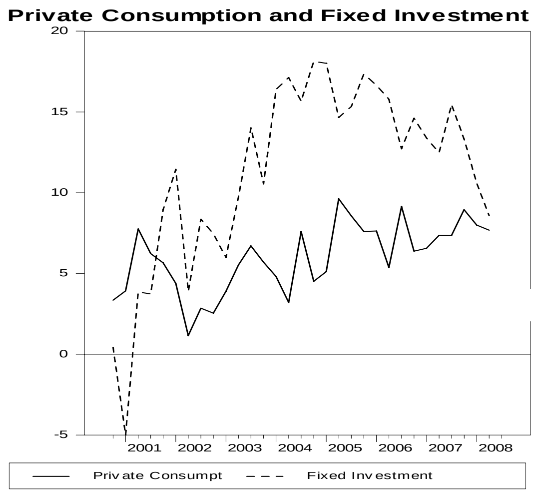
	2006	2007	2008e	2009e
Real GDP (% y-o-y)	9.8	9.3	7.5	7.0
Industrial Production (avg, % y-o-y)	10.6	10.0	6.0	7.0
Inflation (WPI, avg, % y-o-y)	4.9	4.7	9.0	7.0
External Balance				
Real Exports of Goods & Services (% y-o-y)	18.5	8.3	9.5	9.0
Real Imports of Goods & Services (% y-o-y)	30.3	9.2	15.0	12.0
Trade Balance (% GDP)	-5.8	-6.7	-9.0	-7.5
Current Account (% GDP)	-1.1	-1.5	-3.0	-2.5
Interest Rates	Dec 2007	Current	Dec 2008	Dec 2009
Short Term Interest Rate (Repo rate, %)	7.75	7.50	7.00	6.00
Exchange Rates	Dec 2007	Current	Dec 2008	Dec 2009
Exchange Rate (USD/INR, eop)	39.4	49.0	45.0	43.0

India's economy seems to have entered a period of a moderate slowdown, …

India's economy has been growing by 8.5% on average over the past four years, on the back of rising productivity and investment, placing it amongst the fastest-developing economies. After these years of impressive performance, India's economy has started to cool down, reflecting the slowdown of developed economies, the tightening in monetary policy and the elevated global commodity and energy prices. Real GDP growth slowed to 7.9% y-o-y in Q2 08 from 8.8% in Q1 2008, as the record high interest rates discouraged consumer spending and investment. The latter, alongside rising input and borrowing costs, made the deceleration most pronounced in the industrial sector, where the pace of growth slumped to an average of 7.2% y-o-y in the first half of 2008 from an average of 9.6% y-o-y in 2007. The slowdown has also hit the agricultural and services sector, resulting in declining contributions to real GDP growth (Figure 4.8, left).

Figure 4.8
Real GDP Growth

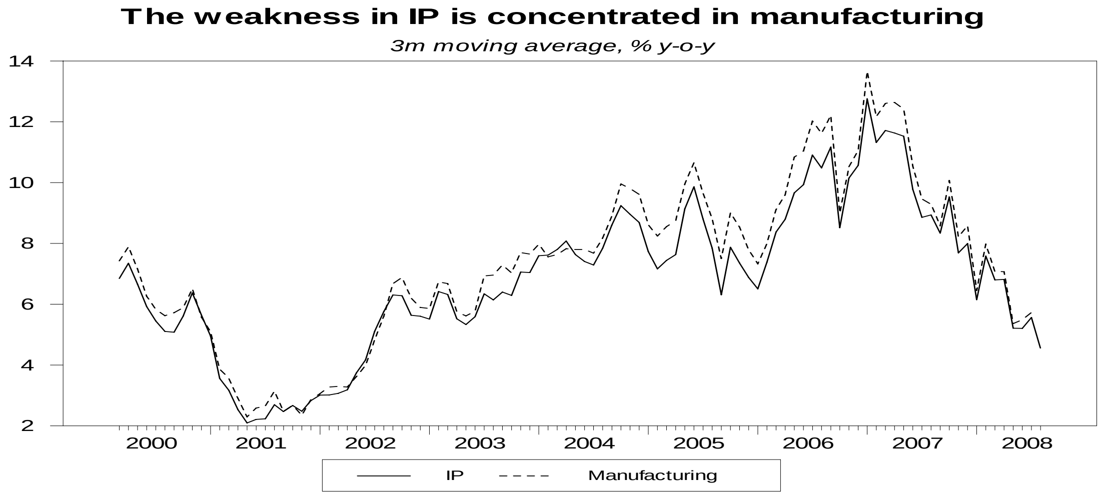




…with consumption and investment growth confirming the unfavorable growth prospects

Although real private consumption holds up relatively well so far, increasing by a robust 8% y-o-y in Q2 2008, the outlook seems rather unfavorable for the rest of the year, as higher interest rates and higher inflation eat into real household income. Moreover, the ongoing moderation of demand from India's major export destinations, such as the US and EU, may falter software exports. In turn, this may weigh on labor market and, consequently, on personal spending, given that India is capitalizing on its workforce to become a major exporter of software services. Meanwhile, real fixed investment -the fastest growing component of domestic demand- seems to have responded to the tighter credit conditions, decelerating to 9% y-o-y in Q2 08 from an average of 14.7% in 2007 (Figure 4.8 right). Confirming expectations of moderating economic activity, the Dun and Bradstreet composite business optimism index declined by 18.4% y-o-y in Q3 08. Moreover, the India PMI manufacturing index has gradually decreased to 57.3 in September 2008 from its recent peak of 61.9 in December 2007, and is actually in line with the downward trend in industrial production numbers. Indeed, industrial production decelerated sharply from its peak of 15.8% y-o-y in November 2006 to 1.3% y-o-y in August 2008, providing further evidence of a downturn in activity (Figure 4.9).

Figure 4.9

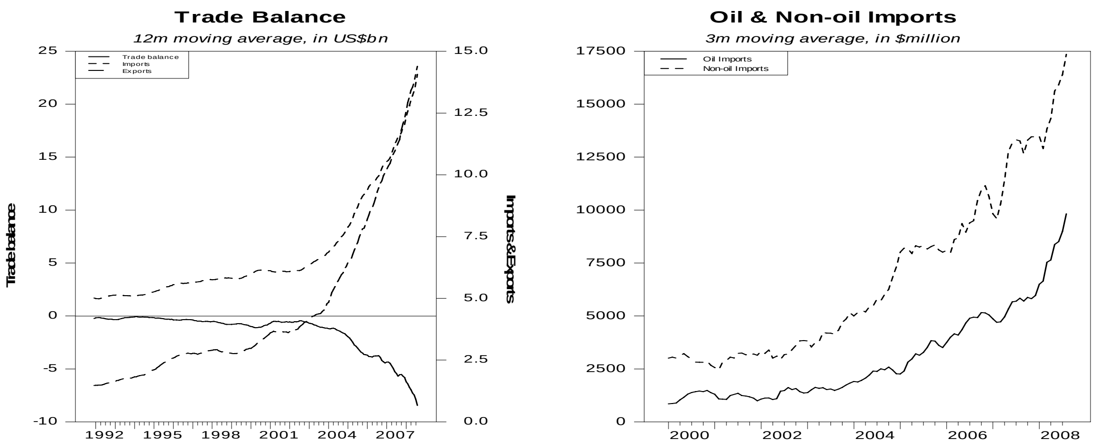


The outlook for exports deteriorates as global economy slows

The so far sustained growth in consumer spending, investment and industrial activity along with rising oil prices contributed positively to the rapid expansion in imports. As a result, the net effect was a near 70% widening of the trade deficit in the first nine months of 2008 from a year earlier Moreover, despite the robust performance of India's exports during the past few years, the prospect of a slowing demand in the developed world is likely to take some steam out of the strong export growth. Given that the continued upward trend in import growth exceeds that of exports, the trade deficit is likely to widen further in 2008 surpassing the record high of 6.7% of GDP in 2007 (Figure 4.10 left). This will likely result in a steady increase of the current account deficit, regardless of the recent fall in oil prices. Taking into account that India imports the largest part of its oil requirements and that oil accounts for more than 30% of total imports (Figure 4.10, right), a moderation in oil prices will take away a key concern for India's economy and improve the picture of the twin deficits.

Figure 4.10

External Trade



Both external and domestic strains are expected to weigh on economic activity until mid 2009

The government's generous spending on higher wages for civil servants, tax cuts, subsidies for food and fertilizers, farm debt waiver, ahead of the general election, which must be held by May 2009, will constrain its efforts to narrow the fiscal deficit to its target of 2.5% of GDP. In this vein, the high fiscal deficit will undermine economic stability and inflationary pressures will likely not be sufficiently relieved, preventing the central bank from responding to the downside risks to growth. As a result, higher lending rates coupled with vulnerabilities to trade and current deficit stemming from the global slowdown will become more pervasive, posing further downside risks to growth. Thus, we believe that real GDP growth is set to slow to 7.5% y-o-y in 2008 and 7% y-o-y in 2009.

The central bank shifted its tightening bias, despite the persistence of high inflation rates

After slowing steadily during 2007, wholesale price inflation (WPI), the current benchmark for inflation in India, recorded a 16-year high of 12.9% y-o-y in August 2008, primarily due to food and energy prices. Consumer price inflation (CPI) for industrial workers also jumped to a record high of 9% y-o-y in August, up from an average of 6.4% y-o-y in 2007 (Figure 4.11). Measures such as one-off declines in import duties, export bans and other price controls were not successful so far in bringing down inflation. Indeed, a surge in food prices influences to a large extent India's inflation outlook, given that food accounts for a big proportion of the inflation indices. Hence, the short term inflation outlook largely depends on the outcome of the harvest. The latter is expected to be normal this year, thus inflation expectations are contained in the near term. At the same time, defying the recent correction in commodity and oil prices from their summer peaks, significant sources of risk for India's long run inflation outlook seems to stem from rising wages, increasing government spending and the threat of increased imported inflation due to the weaker local currency.

Although WPI inflation eased to a 5-month low of 10.7% y-o-y in October 2008, it seems unlikely that WPI inflation will be pushed back within the RBI's new target of 7% by March 2009. However, increased concerns over domestic liquidity and macroeconomic stability have overweighed concerns over persistently high inflation rates, forcing the Reserve Bank of India to change its monetary stance. Indeed, the RBI was forced to ease monetary policy by cutting the repo rate by 150bps in October 2008, after being in a tightening bias since March 2004. Looking forward, as long as worries that the credit crisis will spill over from the financial markets to real economy grow and inflation returns to single digits amid easing commodity prices, it is most likely that the RBI will proceed with further rate cuts over the rest of 2008 and in 2009 (Figure 4.12).

Figure 4.11

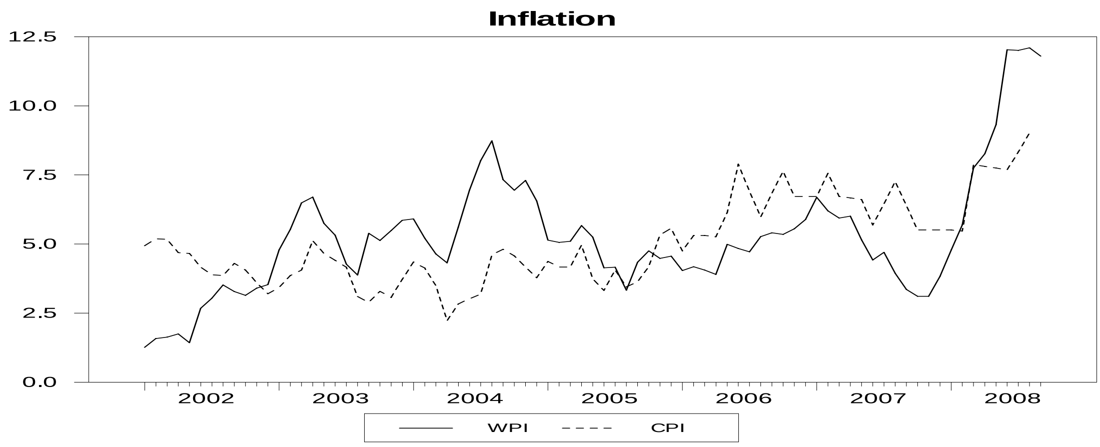
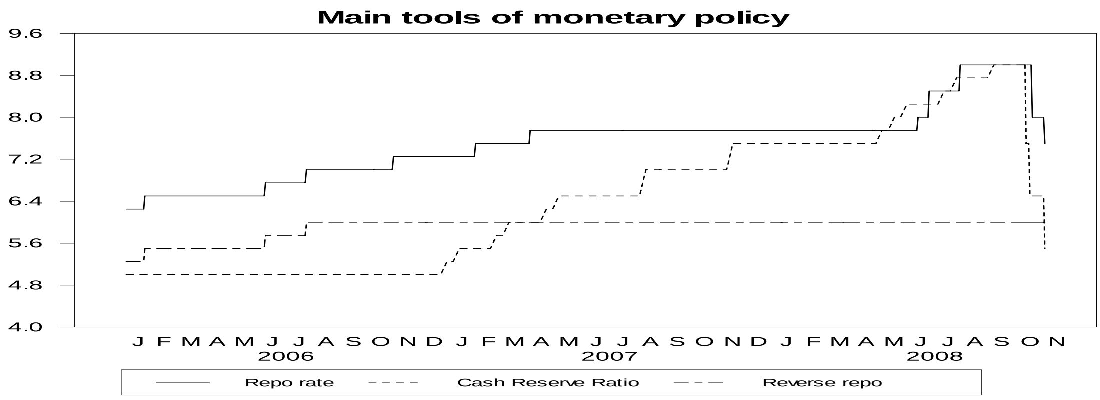
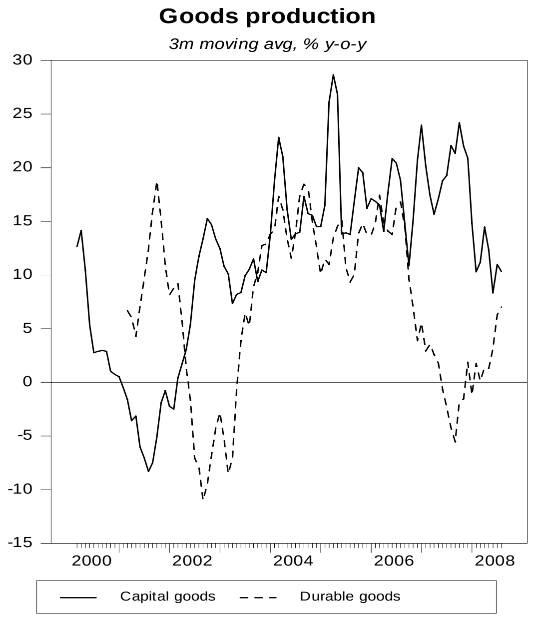
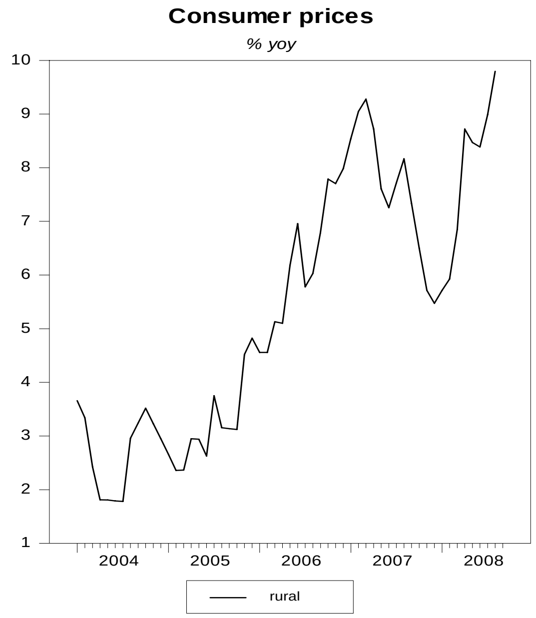


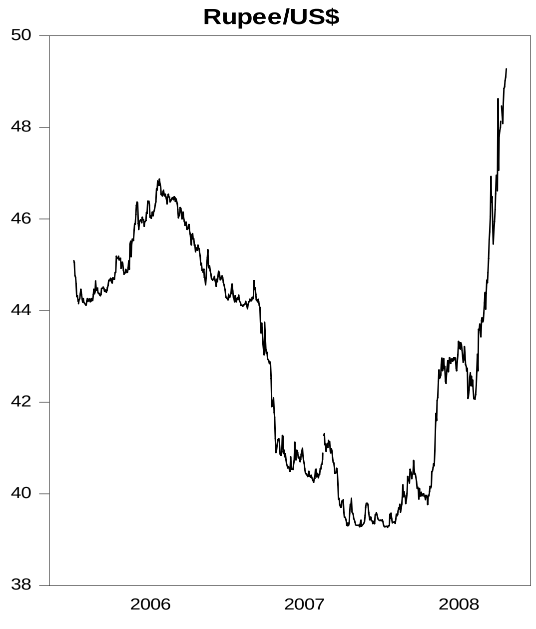
Figure 4.12



INDIA CHARTS







4.3 Russia Economic Outlook

- The economic outlook for Russia is worsening, due to falling oil and energy prices and weak capital flows.
- The most pronounced slide witnessed in domestic demand, owing to a halving in the investment spending.
- The extent to which the current financial crisis will affect Russia's real economy largely depends on the size of the correction in global oil prices.
- Although inflation is due to moderate in 2009, it will likely remain in double digit territory, due to the government's measures to boost domestic liquidity.

Overview

In the context of a sharp adjustment in global oil and energy prices, an ongoing global liquidity squeeze, a sharp decline in European economic activity and persisting inflationary pressures, Russia's business and economic outlook darkens. Large capital outflows resulted in a stock market slump and liquidity shortages on the domestic money market. Hence, policymakers are confronted with the challenge of providing liquidity support to the financial system at the same time when inflation has been running at double digit levels since October 2007. Meanwhile, tighter credit conditions coupled with declining oil prices will likely ease investment and private consumption growth, undermining the pace of economic growth which is expected to decelerate to 4.5% in 2009 from 7% in 2008.

Table 4.3

Russia Main Economic Indicators and Forecasts

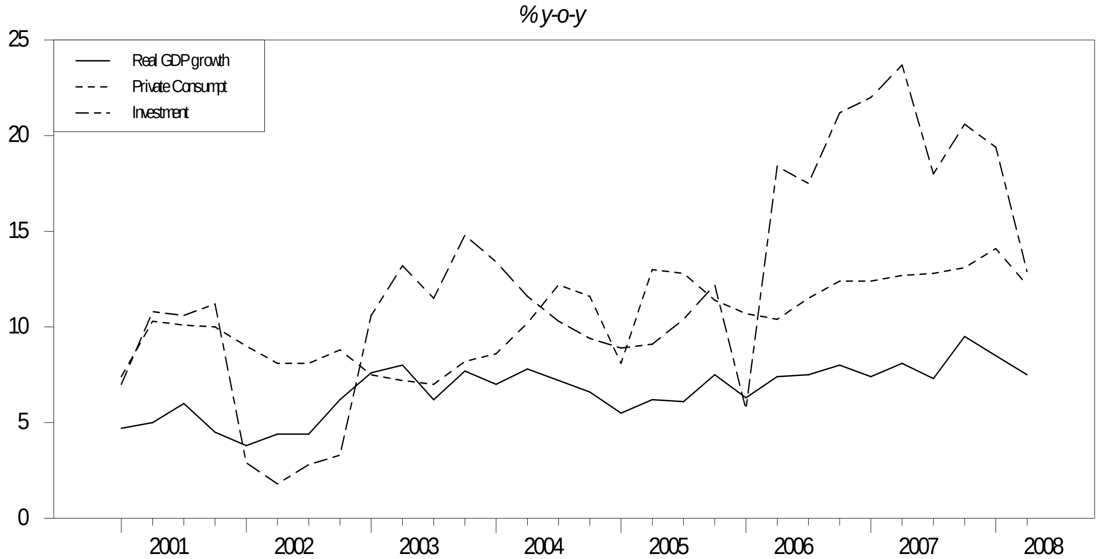
	2006	2007	2008e	2009e
Real GDP (% y-o-y)	7.4	8.1	7.0	4.5
Industrial Production (avg, % y-o-y)	3.9	6.3	4.5	3.0
Inflation (avg, % y-o-y)	9.7	9.0	14.0	12.0
Unemployment rate (avg, %)	7.3	6.2	6.0	6.0
External Balance				
Real Exports of Goods & Services (% y-o-y)	7.1	6.2	5.0	3.0
Real Imports of Goods & Services (% y-o-y)	21.6	28.0	25.0	17.0
Trade Balance (% GDP)	14.0	10.2	8.0	5.0
Current Account (% GDP)	9.5	6.0	6.0	3.0
Interest Rates	Dec 2007	Current	Dec 2008	Dec 2009
Refinancing Rate (%)	10.0	12.0	11.0	9.5
Exchange Rates	Dec 2007	Current	Dec 2008	Dec 2009
Exchange Rate (USD/RUB, eop)	24.6	26.8	27.0	28.0

Real economic growth is slowing amid global financial turmoil

Confirming a weakening economic outlook, real GDP growth slowed to 7.5% y-o-y in Q2 2008, following an 8.5% rise in the first quarter of 2008 (Figure 4.13). In fact, the slowdown is reflected in several economic activity indicators, with the most pronounced slide witnessed in domestic demand where growth has been dragged down by a halving in the investment spending. Indeed, fixed capital investment growth, which is more prone to volatility in an economic downturn, increased by 11.8% y-o-y in September 2008, after decelerating to 7.9% in August –the slowest reading since 2006-, and is probably set to slow further in the wake of higher borrowing costs, tighter domestic liquidity conditions and increased uncertainty surrounding investors. Figures from the labor market indicate that although consumer demand continues unabated so far, it is likely to cool down in the coming months owing to higher interest rates and a slowdown in real wage growth. In particular, retail sales growth eased to 14.3% y-o-y in Q3 08 from an average of 15.5% y-o-y during the first half of 2008, as persistently high inflation weighed on real wage growth, eroding households' purchasing power. In the meantime, while the unemployment rate has remained stable during the third quarter of 2008, employment growth has slowed to an average of 0.9% y-o-y during the first eight months of 2008 from an average growth rate of 2.5% y-o-y in 2007, adding to the pressures already weighing on consumers.

Figure 4.13

The slowdown in economic activity is most pronounced in domestic demand



Despite a temporary recovery in industrial output growth in September, industrial activity is set to decline in the coming months

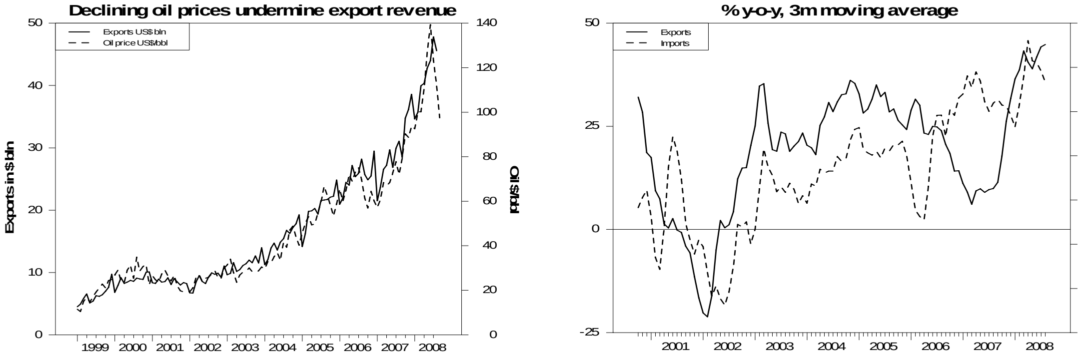
Although industrial production increased by 6.3% y-o-y in September 2008, the fastest growth rate in four months, the unexpected surge in industrial activity may be partially attributed to the extra working-day effect, as figures from the demand side of the economy indicate that industrial production will likely moderate in both 2008 and 2009. Industrial growth seems to benefit mainly from the manufacturing sector which expanded by 8.2% y-o-y, while mining and extraction still lagged growth in the other sectors. Meanwhile, although the NTC Economics PMI manufacturing index increased modestly to 49.8 in September 2008 from 49.4 in August 2008, it is still well below its recent peak of 55.3 in January 2008. Indeed, in August it is the first time since 2004 that the index has fallen below the 50-point-level indicating a contraction of the manufacturing sector.

Net exports growth will probably fade over the coming quarters amid falling oil prices

It seems that net export growth has yet to reflect the negative effects from the slowing external demand and declining commodity prices. In fact, high energy prices during most of the year boosted export revenue inflows, outweighing import expenditures (Figure 4.14). As a result, the trade surplus climbed to US$140 billion during the first eight months of 2008 compared to US$82 billion over the same period of the previous year. However, real export and import growth has actually declined to 5.4% y-o-y and 22.6% y-o-y in Q2 08 from 14.4% y-o-y and 22.6% y-o-y in Q1 08, respectively. Indeed, this is reasonable if we take into account that the robust performance of trade stemmed mainly from rising prices of both export and imports. Hence, given the current environment of weakening external demand, especially from the EU, Russia’s main trading partner, and the ongoing correction of oil and energy prices from their summer peaks, trade activity will loose its momentum during the rest of the year and into 2009.

Figure 4.14

Exports & Imports



Should oil prices decline further in 2009, Russia's economy is likely to slowdown sharply

Recently the Russian government unveiled measures such as tax cuts, allocation of budget funds into the financial system and lower reserve requirements for banks in order to foster domestic market liquidity. But even with liquidity injections, the intensified liquidity problems in the financial sector will have a significant negative impact on the country's macroeconomic outlook. Since Russia is one of the world's major oil producers and exporters, its economic outlook is mainly dependent on the size of the adjustment in global oil and energy prices, as well as the depth and the duration of the ongoing global credit squeeze. Indeed, according to our estimates, a decline in average oil prices for Brent to $80/barrel in 2009 will subtract more than 2 percentage points from real GDP growth. However, according to a more pessimistic scenario, should the global slowdown prove deeper and oil prices fall further to an average of 50$/barrel in 2009, real GDP growth seems likely to slump to 2% in 2009 from 7% in 2008. On the contrary, if global economic conditions prove to be more resilient and oil prices average 100$/barrel in 2009, real GDP growth would decline less, to around 5.5%.

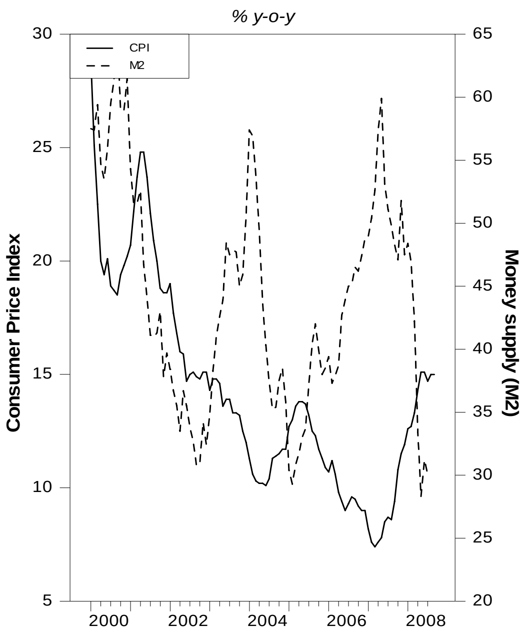
Despite the persistently high inflation rates, policymakers were forced to change their policy from fighting inflation to boosting domestic liquidity

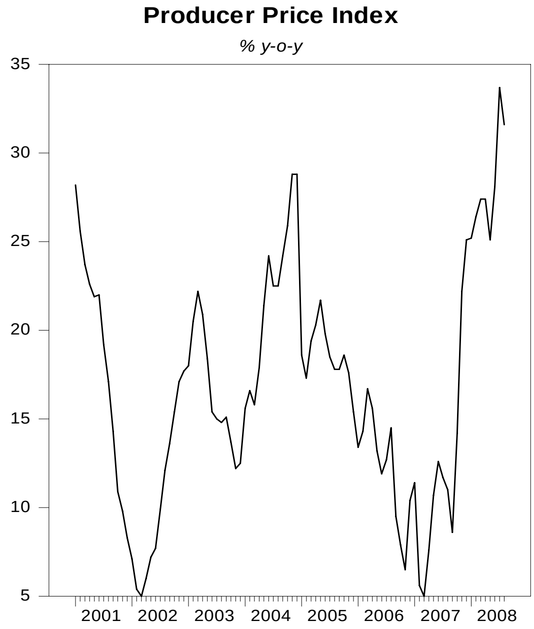
After increasing steadily since March 2007, when it posted a record low of 7.4% y-o-y, consumer price inflation reached a 6-year high of 15.1% in May 2008 (Figure 4.15). Since then inflation has been running at growth rates around 15%. The persistent high inflation rates are mainly attributed to high food and energy prices. Thus, the expected moderation of the latter will reign in high inflation, albeit inflationary pressures will most likely persist due to the government's enhanced provision of liquidity in order to address liquidity problems into the domestic money market. Hence, we expect inflation to remain in double digit territory in 2009. According to our estimates, a decline in average oil prices for Brent to $80/barrel in 2009 will bring inflation down to 12% in 2009 from 14% in 2008. Indeed, producer price inflation, an early gauge of inflationary pressures in the economy, eased to 25.7% y-o-y in September from 31.6% y-o-y in August 2008, indicating that inflation may have peaked.

In this vein, the authorities have to face opposing challenges. On the one hand, the Central Bank of Russia (CBR) should provide sufficient liquidity into the Russian financial system due to tighter global and domestic liquidity conditions. On the other hand, the latter may trigger renewed inflationary pressures, eventually limiting the disinflation impact of lower oil prices. Should the depth and the duration of the ongoing global credit squeeze prove to be larger, we believe that Russia's Central Bank will be forced to address further measures to foster liquidity.

Figure 4.15

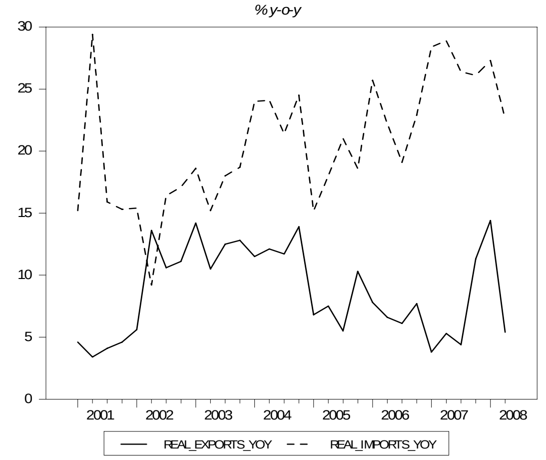
Inflation is still running at double digit rates



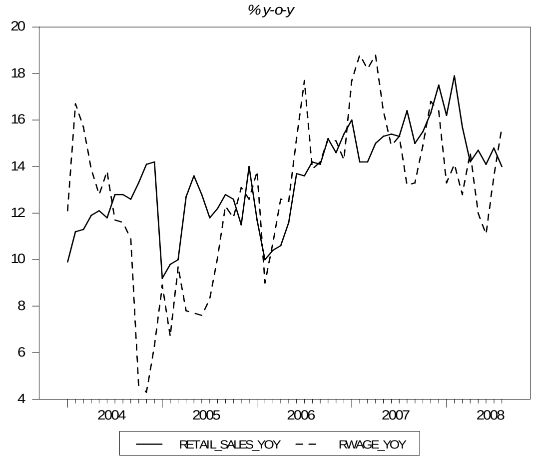


RUSSIA CHARTS

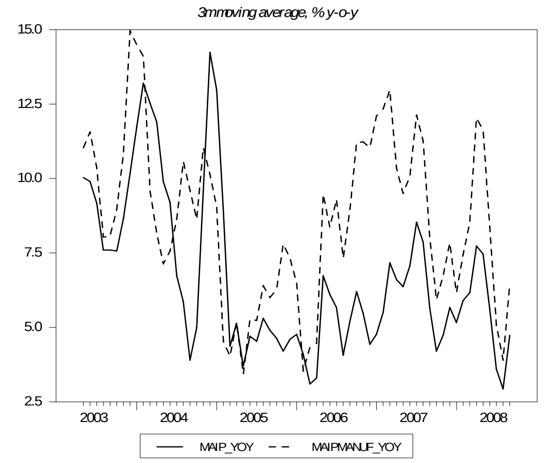
Real exports and imports



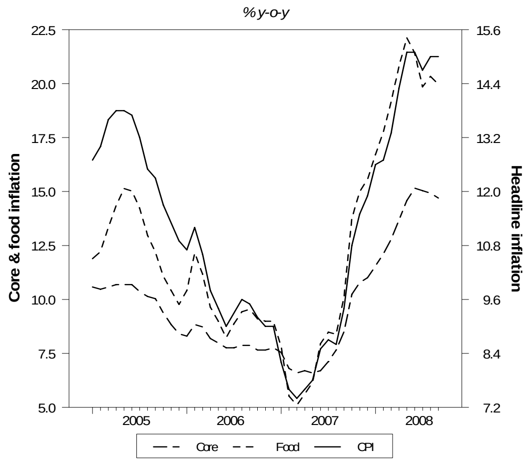
Retail sales and real wages



Industrial and manufacturing production

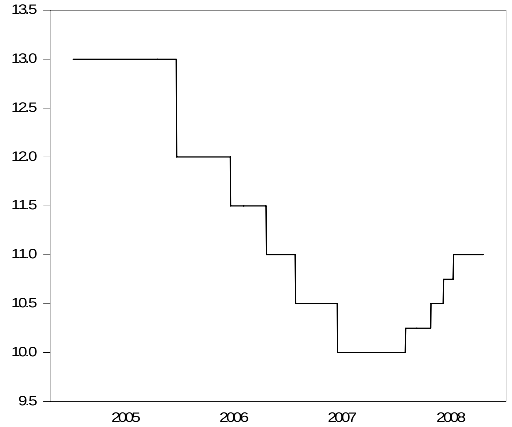


Inflation



Ruble/US$

Refinance rate



4.4 Brazil Economic Outlook

- Brazil's economy seems that it has not yet felt the effects from the monetary tightening cycle and the external slowdown.
- The negative contribution of external demand to real GDP growth, along with the lagged effects from monetary tightening, will start dampening domestic demand during the second half of 2008.
- Despite some temporary positive inflation news, the risks for the inflation outlook are on the upside.
- Unless headline inflation converges to the target of 4.5%, the Brazilian Central Bank will not be prevented from rising key policy rate.

Overview

Brazil's economy continues to grow so far in 2008, despite the headwinds from the global growth deceleration. Authorities acknowledge growing risks stemming from a more generalized global slowdown. However, alleviating inflationary pressures seems to be the main economic policy priority. Although commodity prices have started to ease, the risks of the contagion of initial inflationary pressures from food prices to other items in the consumer price basket have not evaporated. Hence, Central Bank of Brazil is likely to continue its tightening pace for the rest of 2008 at the cost of lower economic growth. Meanwhile, as tighter credit conditions coupled with growing external risks and a reversal in commodity prices weigh on economic growth, the Brazilian Central Bank should pave the way for less aggressive hikes. Thus, after an increase of 250 basis points in the Selic interest rate since April 2008, we believe that the current tightening cycle will end in early 2009.

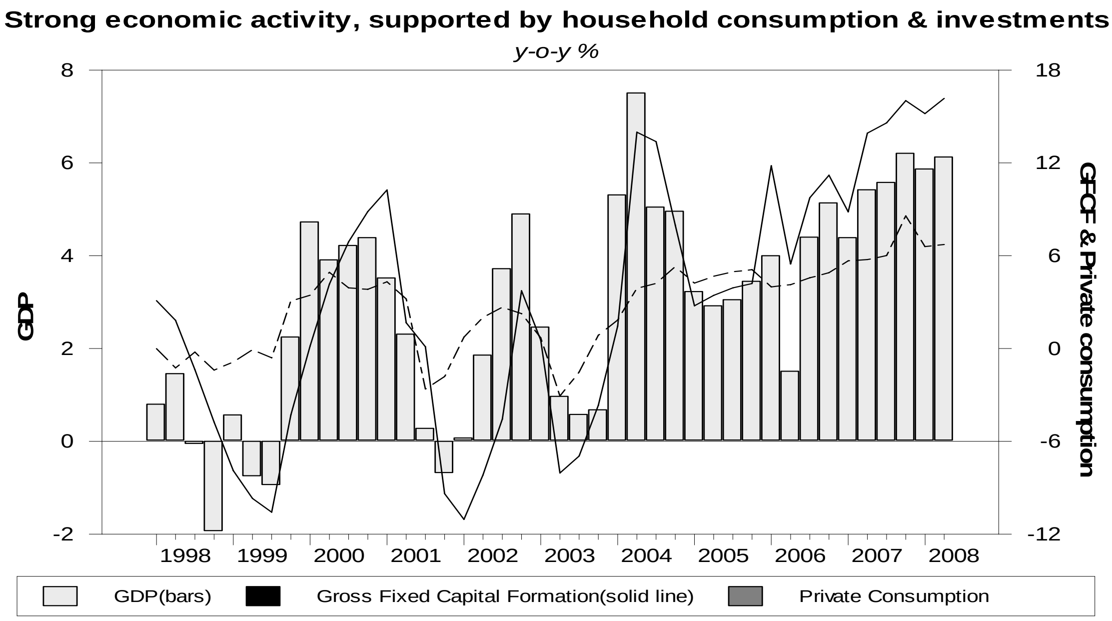
Table 4.4
Brazil Main Economic Indicators and Forecasts

	2006	2007	2008e	2009e
Real GDP (% y-o-y)	3.8	5.4	4.5	3.5
Industrial Production (avg, % y-o-y)	2.8	5.9	5.5	5.0
Inflation (avg, % y-o-y)	4.2	3.6	5.7	5.0
Unemployment rate (avg, %)	10.0	9.3	8.0	8.0
External Balance				
Real Exports of Goods & Services (% y-o-y)	4.7	6.6	3.0	2.0
Real Imports of Goods & Services (% y-o-y)	18.3	20.7	15.0	8.0
Trade Balance (% GDP)	4.4	3.1	1.5	0.6
Current Account (% GDP)	1.3	0.1	-1.5	-2.0
Interest Rates	Dec 2007	Current	Dec 2008	Dec 2009
Short Term Interest Rate (Selic rate, %)	11.25	13.75	14.25	13.25
Exchange Rates	Dec 2007	Current	Dec 2008	Dec 2009
Exchange Rate (USD/BRL, eop)	1.80	2.00	1.70	1.80

Brazil's economic growth continues unabated so far

Successful macroeconomic policies enhanced the resilience of the economy to the global slowdown, maintaining its growth momentum for the first half of the year. Indeed, Brazil's economy has achieved its second fastest expansion in four years in the second quarter of 2008. Real GDP growth accelerated to 6.1% in Q2 08 from 5.9% in Q1 08 in the wake of robust domestic demand. Economic activity gathered remarkable momentum in the second quarter of 2008, when real fixed investment continued to expand at a higher rate than the total economy, bouncing from an average of 13.4% y-o-y in 2007 to 16.2% y-o-y in Q2 08. Improving labor market conditions, rising real labor income and strong consumer credit growth has kept private consumption growth above 6.5% during the first half of 2008 (Figure 4.16).

Figure 4.16



The unemployment rate has been brought steadily down to 7.6% in August 2008 from its recent peak of 10.1% in May 2007, due to improved labor market conditions. Nominal and real wages have been increasing by an average y-o-y growth rate of 8.0% and 2.7%, respectively, for the first half of 2008. Rising labor income, improving consumer confidence and strong credit growth enabled retail sales to remain robust despite rising inflation, confirming the strong personal consumption momentum witnessed during the last few years. Indeed, overall retail sales increased by an average of 10.6% y-o-y so far in 2008 (Figure 4.17). However, the figures from the supply side of the economy indicate that industrial production has started to feel the effects from the monetary tightening cycle and the external slowdown. Indeed, industrial production growth decelerated to 4.7% y-o-y in August 2008 from a robust 7.5% y-o-y growth rate in July 2008, which was mainly boosted by solid domestic demand growth. The latter continues to be notably underpinned by robust corporate and household credit growth, despite rising interest rates. In fact, the value of industry and commercial loans in Brazil has increased every month since 2004 owing to buoyant corporate profitability. Both industry and commercial loans increased by more than 30% during the first eight months of 2008 (Figure 4.18).

Figure 4.17

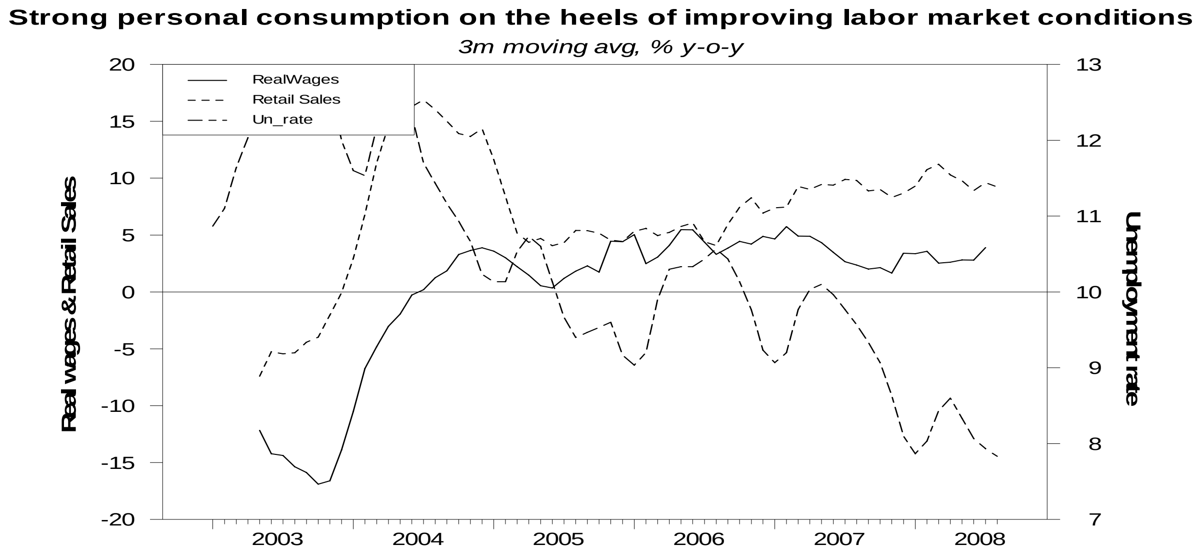
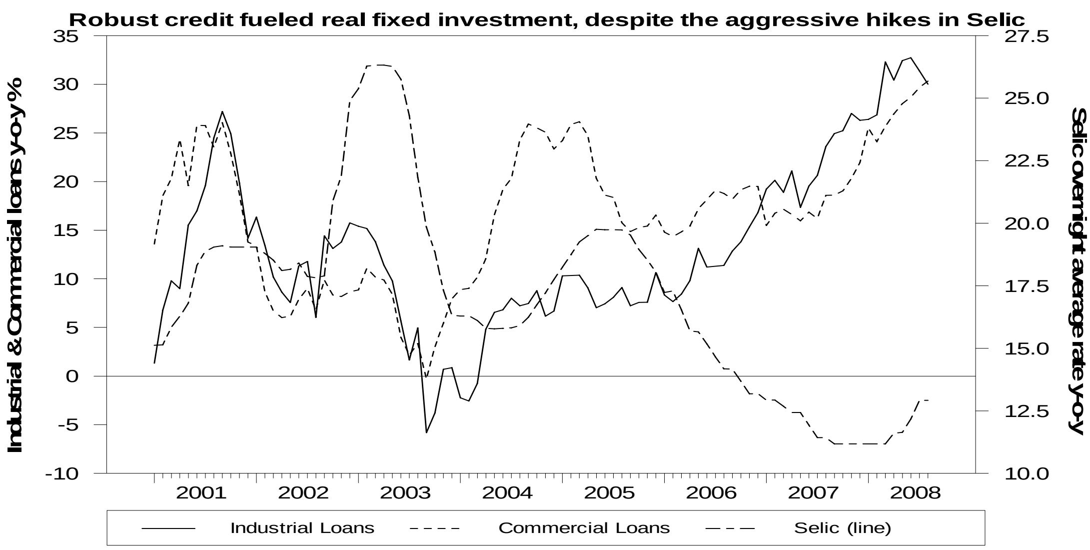


Figure 4.18



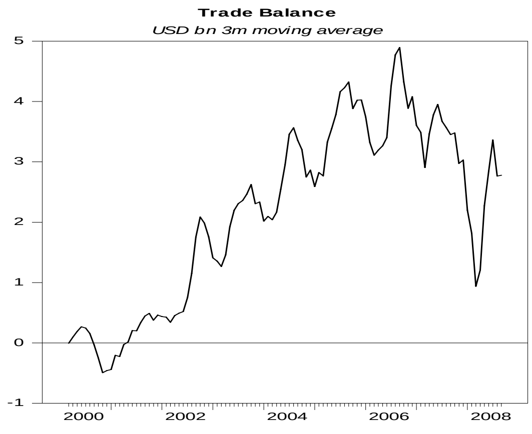
The first signs of moderation in economic activity will become evident after the third quarter of 2008

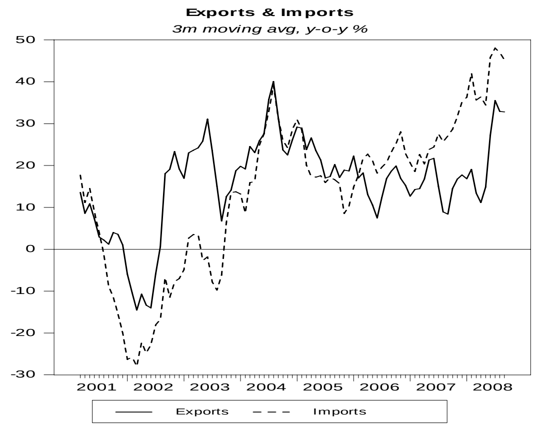
As the global credit crunch unfolds and the lagged effects from monetary tightening become more apparent on credit growth, negative effects would be transmitted to the economy. Moreover, the contribution of external demand to real GDP growth continues to be negative for a second year and is likely to worsen, with export growth slowing significantly on the back of weakening global demand. Additionally, given that the government increased its primary fiscal surplus target from 3.8% of GDP to 4.3% for 2008, the promotion of increased public and private investment in infrastructure could be slowed. The above factors will start taking full effect upon domestic demand and consumer confidence after the third quarter of the year. Thus, we expect the Brazilian economy to moderate to 4.5% y-o-y in 2008 and decelerate more sharply in 2009 to 3.5% y-o-y.

Exports deceleration and widening current account deficit will be key factors for Brazil's economic outlook

Strong import growth, underpinned by the robust pace of consumer spending and higher commodity prices, resulted in a substantial decline of the trade surplus to US$20bn in the first nine months of 2008 from US$31bn over the same period in 2007. Export growth, which was sustained at high levels on the back of high international commodity prices, seems to reflect the negative effects from the slowing external demand (Figure 4.19). Exports in US and EU, which account for more than 40% of total exports, have already started to moderate pointing to a deteriorating outlook for net trade. Furthermore, rising profit remittances have increased mainly due to a surge in foreign direct investment during the past few years. As a result, the current account as a percent of GDP turned negative for the first time since 2002 and is expected to deteriorate further.

Figure 4.19





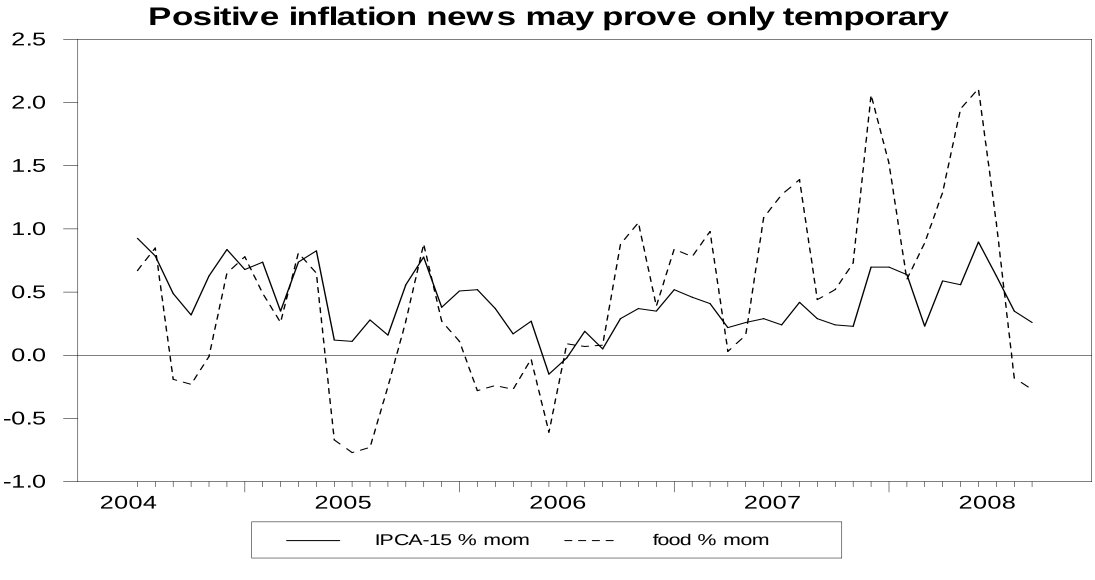
Despite some temporary positive inflation news, the risks for the inflation outlook are on the upside, ...

Brazil's inflation dropped slightly to 6.2% y-o-y in September 2008, after having increased steadily since the first quarter of 2008 well above BCB's target rate of 4.5%. IPCA-15 inflation benefitted from the easing of commodity prices from their summer peaks (Figure 4.20). The sharp drop in price pressures and the aggressive hikes of the policy interest rate by BCB led to a downward adjustment of inflation expectations for 2008 to 6.4% from their peaks of 6.7% in mid-year. However, producer price inflation has been rising strongly over the past year, suggesting persisting pressures on core inflation. Thus, inflation will likely remain at high levels for the rest of the year. The improvement in the inflation outlook will become evident during the course of the next year, as cooling domestic demand will contain inflation pressures. Indeed, inflation expectations for 2009 have remained slightly above the target rate at 4.7%.

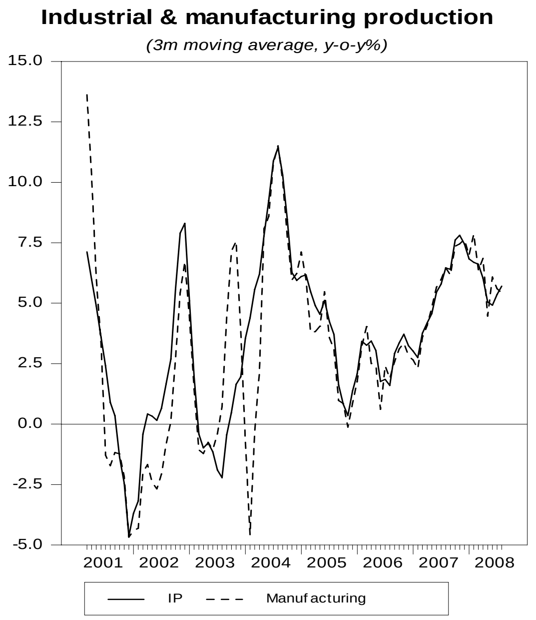
...delaying the end of the current tightening cycle

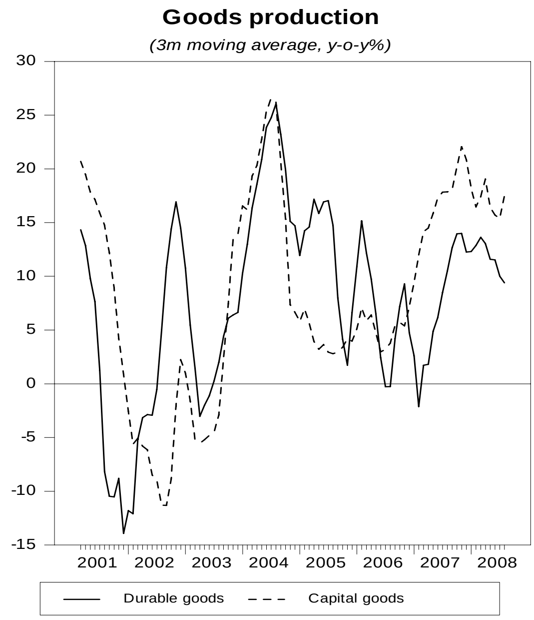
Persistent inflationary concerns have been preventing the Brazilian Central Bank from responding to the downside risks to growth so far in 2008. As the major priority for the central bank is the convergence of inflation to the target rate, BCB is likely to continue its tightening pace for the rest of 2008 at the cost of lower economic growth. Should slowing domestic demand and declining commodity prices alleviate inflationary pressures, the current tightening cycle will likely end in early 2009.

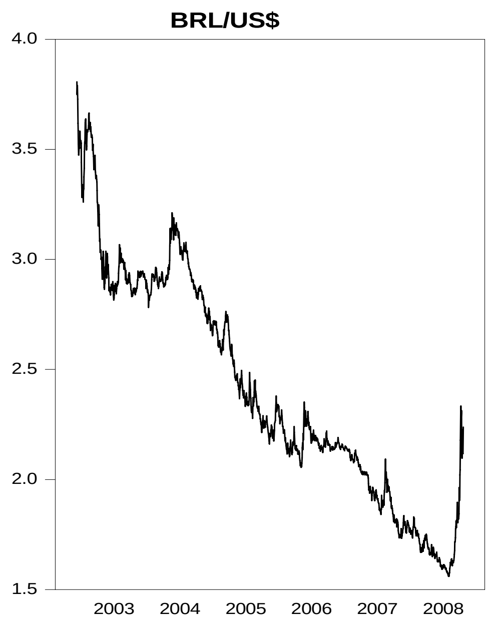
Figure 4.20

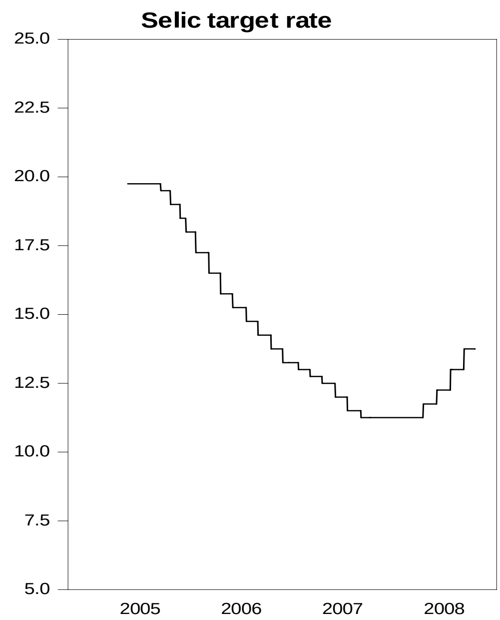


BRAZIL CHARTS









IV. Global Markets Outlook and Strategy

5. Government Bond Markets

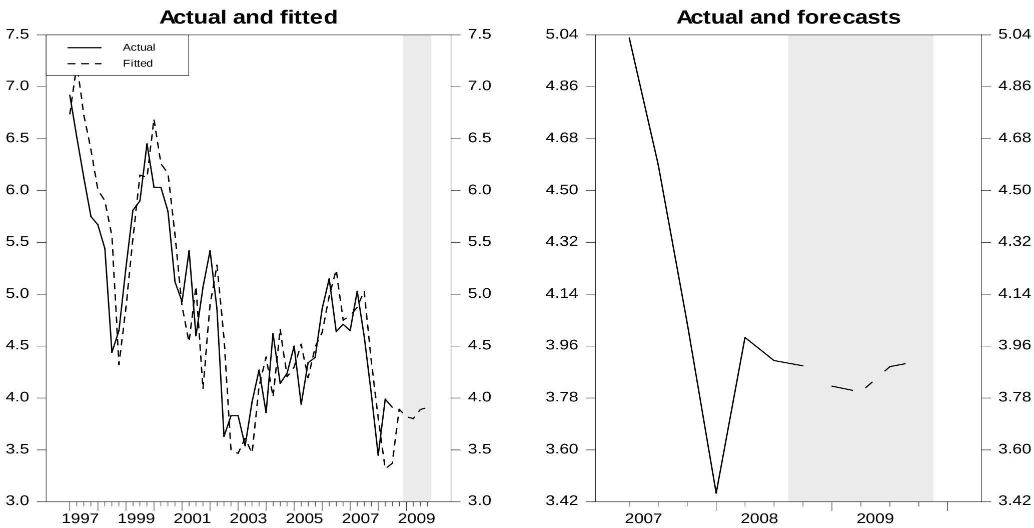
Dimitris Malliaropulos

US Treasuries

Treasury yields moved lower during the past three months as the US economy has entered recession, credit market strains intensified substantially and inflation expectations came down as oil prices declined sharply from their summer peaks. Following the bankruptcy of Lehman Brothers in mid-September, credit markets entered a state of unprecedented crisis, interbank lending effectively seized up and stock markets fell sharply. Amid this turbulence, Treasuries rallied, especially short term Treasury bills, whose rates were driven close to zero, as fearful investors were looking for safety in government paper. Current bond market valuations have in our view fully priced in the probability of a severe global recession and a likely further easing of monetary policy. Looking forward, we believe that there is not much room for further declines in Treasury yields, as core inflation will remain elevated for some time and increased bond issuance in order to finance the government's bank rescue plan will eventually put upward pressure on yields. Thus, we project 10-year Treasury bond yields to remain range bound over the next few months, before heading up as the economy rebounds in H2:09. (Figure 5.1).

Figure 5.1

10 year US Treasury rate



*Source: Eurobank EFG model estimates

Slope of US Treasury Curve

We believe that spread widening has mainly run its course, as cumulating recession fears have driven short term Treasury yields sharply lower over the past few months, leading to a significant increase in the slope of the Treasury yield curve to 220 bps in October, up from 130 bps in end-June. With economic activity weakening over the next few quarters, we expect the yield spread between 10-year and 2-year Treasuries to steepen only slightly (by about 20 bps), mainly driven by the short end of the yield curve.

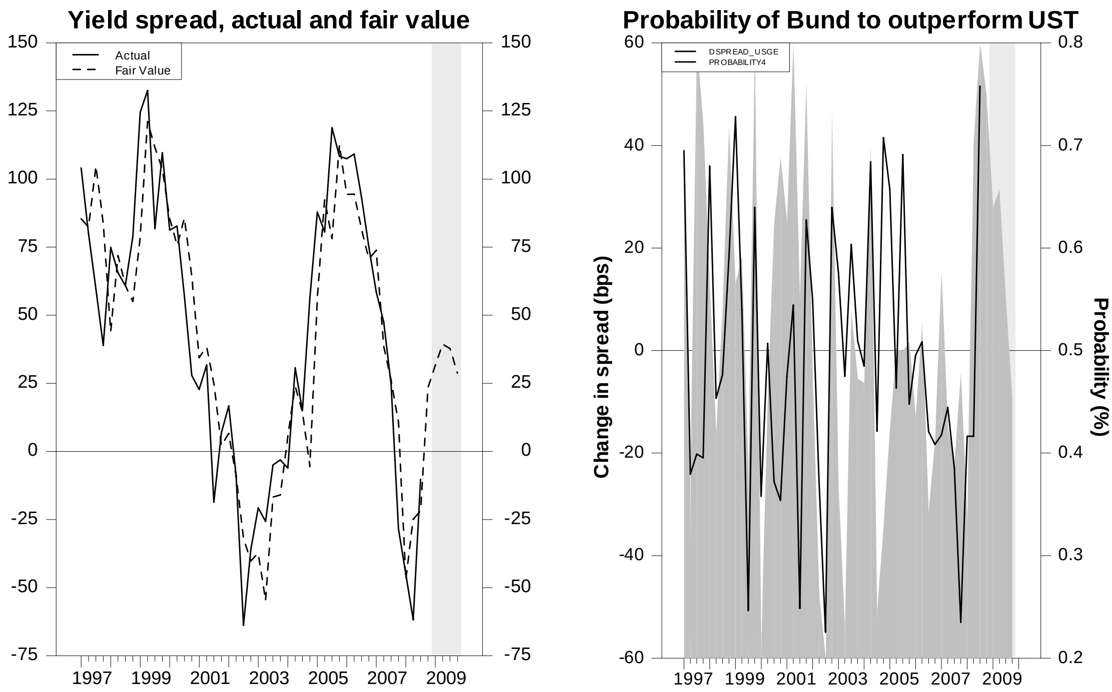
The combined fiscal and monetary policy actions should also eventually help restore stability in credit markets, leading to some unwinding of the flight-to-quality bid on Treasuries. Overall, we believe that all these factors could drive spreads narrower, leading to a progressive flattening of the yield curve at the short end.

Treasury-Bund spread

The Treasury-Bund spread has narrowed significantly from -40 bps in June to near zero in October as economic data in the euro area deteriorated and the ECB eventually removed its hawkish bias and slashed interest rates by 50 bps in October (Figure 5.2, left). Looking forward, we believe that Bunds are likely to outperform Treasuries over the next few months, as economic conditions in the euro area deteriorate, prompting expectations of further ECB rate cuts. In fact, our probit model of the Treasury-Bund spread suggests that Bunds are likely to outperform Treasuries in Q4:08 with a probability of 75%, decreasing to 65% in the first half of 2009 (Figure 5.2, right). We thus expect the 10-year Bund yield to decline to 3.50% over the next three to six months.

Figure 5.2

10-y Treasury - Bund Spread



*Source: Eurobank EFG model estimates

6. Equity Markets

Dimitris Malliaropulos

Our long standing view on global equities was that the risk of a severe recession in the US and a prospective corporate profit crunch was (until recently) not sufficiently discounted in market valuations (Global Economic & Market Outlook, February 2008, June 2008). The October sell-off in global stock markets has finally resolved this uncertainty, suggesting that investors came to accept that the US, along with most of the developed world, is heading into one of its deepest recessions in post-war history. The S&P500 has plunged by 43% since its last peak in October 2007, with half of this correction taking place over the past four weeks. The correction has so far exceeded our central forecast of last February, which was for a cumulative decline of the S&P 500 by 35% from its October 2007 peaks (see our Global Economic & Market Outlook, February 2008)

The scale of the recent equity market losses is much bigger than the “typical” bear market decline, making the current decline comparable to the most dramatic bear markets in post war history, such as the 1973-74 bear market (49% peak to trough decline) and the 2000-2002 bear market (50% peak to trough decline). Looking back into the bear market events of the past fifty years suggests that the S&P 500 has typically lost between 20% and 50% during bear periods, with an average of 32%. The typical duration of a bear market is 13 months with a range between 3 months (June 1990 to October 1990 bear market) and 31 months (May 2000 to October 2002 bear market).

Does the equity market correction reflect a severe deterioration in economic fundamentals or is it to some extent a, rather temporary, overreaction to the escalation of the credit crisis during the past few weeks? Our view is that the sharp correction in stock markets did in fact reflect a deteriorating economic environment. To some extent, though, the price falls seem to be overdone, based on fundamentals. In order to illustrate this point, we present below some fair value calculations based on our long-term relative valuation model of stocks versus bonds.

Table 6.1 reports our estimates of the valuation gap of the S&P 500 relative to 10-year Treasury Index and the decomposition of the change in the fair value of stocks relative to government bonds. In fact, the stock market seemed to be overvalued by more than 20% relative to bonds in June, explaining the sharp correction in September-October. Our estimates suggest that fair value of stocks relative to government bonds has declined by 15% in Q3 relative to Q2, explaining about

60% of the drop in the S&P500 over the period June-October. Most of this deterioration was due to increasing volatility (-17%) and tightening labor market conditions (-7.5%) as unemployment surged in September. The increase in consumer confidence in July and August due to the effect of the fiscal stimulus package and the decline in Fed funds rates have supported fair value of stocks versus bonds by 3.8% and 5.7%, respectively.

Table 6.1
Stocks versus Bonds Fair Value Model
(S&P 500 relative to 10-y Treasury Index)

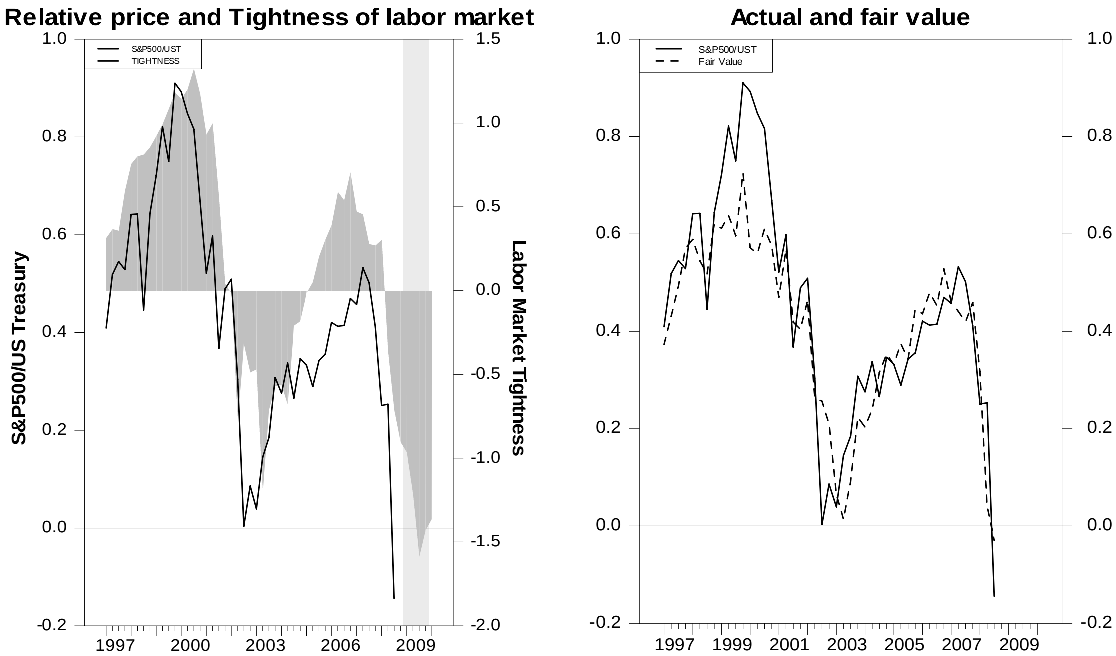
	Q2:08	Q3:08
Valuation gap (% deviation of market from fair value)	21.0	-4.0
Breakdown of % change in fair value		
	Relative to previous quarter	**Relative to previous year**
Labor Market Tightness	-7.5	-21.0
Consumer Confidence	+3.8	-30.0
Fed funds	+5.7	+18.0
Volatility	-17.0	-19.0
Total change in fair value (%)	-15.0	-52.0

*Source: Eurobank EFG model estimates

Looking at the longer term picture, equities have underperformed government bonds by nearly 70% since Q1:07. Figure 6.1 suggests that our model can explain this correction fairly well as the result of a significant deterioration of macro fundamentals and elevated risk premia. In fact, the fair value of stocks versus bonds has declined over the period September 2007 to October 2008 by 52%, explaining about 75% of the price correction in the S&P500 relative to the 10-year Treasury index. Table 6.1 suggests that most of the decline in the fair value of stocks versus bonds was due to the deterioration of the state of the economy, proxied by our index of labor market tightness, and the decline in consumer confidence. The decline in short term interest rates has supported fair value but this effect has been almost exactly counterbalanced by the sharp increase in volatility, which has shaved 19% y-o-y of the fair value of stocks versus bonds.

Figure 6.1

S&P500 relative to US Treasury



Overall, we believe that the market correction has so far run its course in terms of fundamentals, as current valuations in our view reflect both the depth and the duration of the current recession. Having said that, it is clear that markets can (and probably will) overreact to the downside as de-leveraging unfolds, leading to forced sales of hedge funds by end-year and further market correction. As this process seems to have accelerated in recent weeks, we expect the market to reach a trough over the next two months and rebound in early 2009. However, in our view, the way up will be very volatile as economic conditions will continue to deteriorate for a while and corporate earnings will likely continue to decline over the next few quarters.

7. Banks

Dimitris Malliaropulos, Costas Lambrinoudakis

- As the credit crisis has escalated, governments finally stopped taking ad hoc measures and announced large-scale systematic rescue plans commensurate with the scale of the crisis. The basic points are (a) recapitalization of banks with public money, (b) state guarantees for bank debt and (c) enhanced liquidity provided by central banks.
- In our view, these policy measures have a good chance to contain the banking crisis, because they attack directly the two main problems creating financial mess, namely solvency and liquidity issues in the banking sector. Previous experience concerning the efficiency of different resolution policies corroborates our views.
- We expect significant economic deterioration. The historical record on banking crises suggests that we should be prepared for a recession resembling those of the 1970s and early 1980s
- During past banking crises and the subsequent recessionary environment, stock prices rebounded well ahead of the real economy and soon after governments intervened in a large-scale systematic way. If the past is any guide, an inflection point in equity markets will likely occur within the next few months. Once the trough takes place, bank stocks outperform.

Escalation of the crisis

The escalation of the current credit crisis has been dramatic in September and October, as major financial firms in the US collapsed or were nationalized/taken over in order to avoid collapse. In particular, AIG, the largest insurance company in the world, was nationalized, the twin mortgage giants Fannie May and Freddie Mac were de facto nationalized and Washington Mutual, the largest US savings bank, defaulted in the largest US bank failure ever. In addition, stand-alone investment banks essentially seized to exist, as Lehman Brothers went bankrupt, Merrill Lynch was taken over by Bank of America and the last remaining Goldman Sachs and Morgan Stanley gained approval to transform into commercial banks, in order to gain direct access to the central bank's lender of last resort support. Bank solvency problems seem to be spreading to Europe as well, since the Dutch-Belgian bank and insurance giant Fortis became the first large European financial group that was bailed out in order to avoid failure. On the back of the extraordinary shock to the financial system, stock markets plunged at a pace not seen in several decades, money and credit market spreads spiked to unprecedented levels, while certain segments of the money markets were essentially shut down.

Rescue plans

The crucial question that arises at the moment is which is the most efficient plan that will restore calm in the financial markets and, most importantly, pave the way for the resolution of the crisis. As soon as policy makers realized that the present situation calls for a large-scale systematic response instead of ad-hoc measures, two major plans were announced, namely the $700bn TARP (Troubled Asset Relief Program) in the US and the £500bn banking sector bailout plan in the UK. The key points of the UK plan are the following:

- **UK plan**
  - The UK Treasury is making available £25bn in permanent capital to raise banks' Tier 1 capital ratios, with a further £25bn as a stand-by for the same purpose. The government will take stakes in the participating banks through preference shares, though it may also underwrite issues of ordinary shares.
  - The government will, for a fee, guarantee new short and medium term debt issues by the banks to encourage them to lend to each other. The guarantee will be of the order of £250bn.
  - The Bank of England will double the size of its special liquidity scheme, under which banks can swap illiquid assets for Treasury bills and get short-term loans, to £200bn.
  - To participate in the scheme, banks will have to sign up to an FSA agreement on executive compensation and dividends.

The announcement of the British plan had a major impact, as it became the blueprint for policy measures in the US and Europe. In a significant policy U-turn, US officials decided to use $250bn – from the $700bn allotted to TARP – for the recapitalization of US financial institutions. Initially, the $700bn were granted exclusively for the purchase of troubled assets from US financial institutions. The key points of US policy measures are now the following:

- **<u>US plan</u>**
  - TARP (revised form)
    - The Treasury is providing up to $450bn for the purchase of troubled debt from financial institutions in the US. Prices will be determined by market mechanisms where possible, including reverse auctions.
    - The Treasury is making available $250bn for Tier 1 capital injections in financial institutions in the US. The state will take preferred shares in return. Participating institutions will have to accept restrictions on executive compensation.
  - The FDIC (Federal Deposit Insurance Corporation) guarantees all new unsecured bank debt issued before June 2009 for three years.
  - The FED loosens its collateral eligibility restrictions.

Euroland came up with a coordinated plan that set the framework, under which the individual European countries should develop their national rescue plans. The main points of the Euroland plan are the following:

- **<u>EU plan</u>**
  - <u>Recapitalization of financial institutions</u>: Each Member State will make available to financial institutions Tier 1 capital by acquiring preference shares or other instruments including non-dilutive ones.
  - <u>State guarantee of new bank debt</u>: Governments will guarantee all new bank debt issues (issued before the end of 2009) up to 5 years.
  - <u>Enhanced liquidity</u>: The ECB committed to take further measures to enhance liquidity in the banking system.
  - <u>Temporary loosening of accounting rules</u>: Financial and non-financial institutions are allowed to value their assets with risk or default assumptions rather than on a mark-to-market basis.

At the time of writing, national rescue plans unveiled by European countries amounted to €1.8tr, including guarantees on bank debt, injections of Tier 1 capital and money pledged for acquiring illiquid assets from banks' balance sheets. In addition, the ECB switched to fixed rate auctions for both dollars and euros, in order to provide banks with as much liquidity as they demand (against appropriate collateral), while it relaxed its collateral eligibility regulations.

In our view, the aforementioned plans – all sharing the British plan's basic structure – have a good chance to contain the banking crisis, because they attack directly the two main problems creating financial mess, namely solvency and liquidity issues in the banking sector. Specifically, the government guarantees on bank debt, which essentially remove counterparty risk, combined with the recapitalization of banks, which reduces insolvency risk, should help to restore confidence among banks and reignite money markets. In addition, the liquidity that the central banks committed to pump in the system should help to mitigate liquidity problems across banks.

It is also our view that the recapitalization of banks is a necessary measure for containing the crisis. We don't argue that creating an entity to buy troubled assets from banks is a bad idea, since it may help banks to clean up their balance sheets and eventually restore confidence in the banking sector. However, we believe that the efficiency of any such scheme is questionable unless it involves some form of capital injection in banks. Recapitalization is beneficial for both financial institutions, as it reduces the risk of insolvency, and the state, which has the opportunity to participate in the upside potential by selling its stakes when the banking sector recovers. Furthermore, buying troubled assets from banks entails some risks. The most important issue regards the pricing of these assets, given that for most of them a market price cannot be established. If the price paid by the state is too low, write-offs in already struggling banks may be exacerbated or banks may choose not to bring out all of their troubled assets, delaying the purge of their balance sheets. On the other hand, if the price is too high then fiscal costs may be inflated and taxpayers may incur significant losses.

Previous experience corroborates our views. As far as resolution policies of past banking crises are concerned, the updated banking crises database of the IMF[5], which includes 42 banking crises between 1970 and 2007, suggests that:

- <u>Recapitalization should be part of any resolution scheme</u>. Recapitalizations of banks with public money appear to be more successful than the creation of asset management companies handling distressed assets. The use of asset management companies to manage distressed assets is associated with higher fiscal costs, while recapitalizations are associated with lower fiscal costs and lower output losses[6].
- <u>Systematic rescue plans are expensive but necessary</u>. Total fiscal costs in the four biggest banking crises in developed economies during the post-War period (see further details below)

[5] Laeven, Luc A. and Valencia, Fabian V., Oct 2008. "Systemic Banking Crises: A New Database". IMF Working Paper No. 08/224.
[6] Fiscal costs are total outlays of public money for banking system support, while output loss is the total deviation of actual GDP from trend GDP from the crisis year through three years after, expressed as % of trend GDP.

average 9.8% of GDP or 7.5% net of eventual asset recoveries, which for the US would be currently \$1.4tr and \$1tr respectively[7]. However, fiscal costs and output losses are negatively correlated. This suggests that a large-scale response is necessary, because otherwise the hit of the banking crisis to the real economy will be bigger.

- The speed of reaction matters. Whenever governments delayed a systematic intervention in the banking system, fiscal costs and output losses soared. Japan is a classic example, as the dithering of the government to apply large-scale systematic measures in the 1990's crisis led to huge fiscal costs (24% of GDP) and a severe economic decline. The 1990s are often called "Japan's lost decade".
- The loosening of mark-to-market accounting rules might not be a good idea. Regulatory forbearance – when prudential regulations are temporarily suspended or not fully applied – is ineffective, as it usually leads to higher fiscal costs, more severe credit supply contraction and economic decline.

Future economic and market developments

In order to get an indication of how the current crisis will play out and where an inflection point might lie in terms of future market and economic developments, we compare the present US crisis with previous systemic banking crises. In particular, we focus on the four biggest systemic banking crises that emerged in developed economies during the post-War period, as identified by Reinhart and Rogoff[8] (2008). The present US situation bears some important similarities with these four big crises[9] in terms of macroeconomic characteristics and asset price developments. In particular, there is strong resemblance across all five cases in the run-up of housing prices, in public debt accumulation and current account deficit widening. In addition, all five crises were preceded by a process of financial liberalization that eventually led to a lending boom. The US is not an exception, in the sense that, during the pre-crisis era, new and lightly-regulated financial entities dominated the financial system, while a wave of financial innovation flooded the markets with new and complicated securities.

[7] Results are biased by the high costs of the Japanese crisis, which was handled poorly. Excluding Japan, the average gross and net costs drop to 5.1% and 2% of GDP respectively.
[8] Reinhart, Carmen M., and Kenneth S. Rogoff. 2008. "Is the 2007 US Sub-prime Financial Crisis So Different? An International Historical Comparison" *American Economic Review*, 98(2): 339–44.
[9] The crisis in Spain (1977) was excluded (Reinhart and Rogoff identify five big crises), as data on Spanish bank stock prices for the 1970s was not available.

It should be noted, that we do not argue that systemic banking crises are identical to one another and that previous crises are necessarily a guide for the present US situation. However, we believe that the aforementioned similarities allow us to use the crises in our sample as a potential road map for current events.

The historical record suggests that the economic fallout from systemic banking crises is significant. The crises in our sample were associated with severe economic deterioration. In particular, the average cumulative output loss, measured from pre-crisis real GDP peak to crisis trough as percentage of peak GDP, was 5.5%, while the average duration of economic weakness, measured as the number of quarters with negative yoy real GDP growth, was 6.5. In the case of Finland, the problems were exacerbated by the collapse of the Soviet Union, a main destination for Finnish exports. Excluding Finland, the average duration and output loss drop to 5.3 quarters and -3.2% respectively. These figures are closer to those of the 1973-1982 period severe recessions than those of the early 1990's and 2000's mild recessions (Table 7.1). Our results are in line with a recent IMF study[10], reporting that banking crises-induced recessions are deeper and more prolonged than those not preceded by banking crises.

Table 7.1

Banking crises and economic fallout

Recessions	Duration (quarters with negative real GDP yoy growth)	Output loss (cumulative peak-to-trough loss in real GDP as % of peak GDP)
Banking-related, average*	6.5	-5.5%
Banking-related, average**	5.3	-3.2%
US Recessions (not banking-related)	**3**	**-2.0%**
1973 – 1975	5	-3.1%
1980	3	-2.2%
1981 – 1982	4	-2.9%
1990 – 1991	3	-1.3%
2001	0	-0.4%

*Crises included: Finland (1991), Sweden (1991), Norway (1991), Japan (1997)
**Excluding Finland (1991)

[10] IMF, World Economic Outlook, Chapter 4, October 2008.

However, the initial conditions before the onset of the current banking crisis suggest that the economic fallout in terms of depth and duration will likely approach the lower bound of the range set by the previous episodes. In particular, the macroeconomic impact of a banking crisis is associated with the extent of the asset and credit boom in the period preceding the crisis. At the beginning of the present crisis, credit ratios, asset prices and bank assets in the major developed economies were not as high as those at the onset of previous episodes. Besides, the rapid monetary policy response, including both interest rate cuts and massive supply of liquidity to the banking system, is also expected to moderate the economic fallout.

As far as equity markets are concerned, the case looks somehow different. Albeit stock prices – especially in the banking sector – experienced massive drops during past banking prices and the subsequent recessionary environment, they rebounded well ahead of the real economy, delivering very strong returns in the year following the stock market trough (Table 7.2). Equity prices in our sample declined on average by 52% from pre-crisis peak to trough, with the banking sector leading the way and registering a 77% drop on average. Once equity prices reached their lows, they soared by 106% on average in the following 12 months. The move was again led by the banking sector, which registered a stunning return of 333% on average. The current fall in US equity prices is close to historical averages. As measured by the S&P 500 index, US stocks have plunged by 42% from their previous peak (October 2007) to this October low, with banking stocks shedding 66% from their previous peak (December 2006).

Table 7.2

Banking crises and equity markets

	Peak-to-trough equity returns	Equity returns 1 year from trough
Banking-related average*	-52% (-77%)	106% (333%)
Current** (US)	-42% (-66%)	-

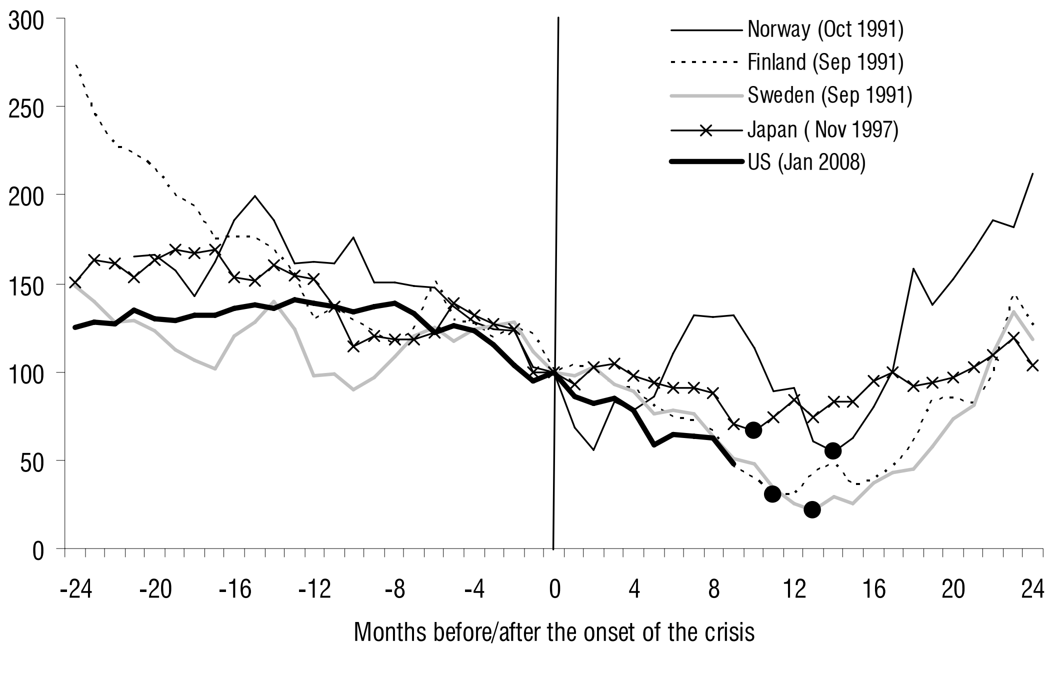
*Crises included: Finland (1991), Sweden (1991), Norway (1991), Japan (1997)
**Until October 2008 low.

Note: Figures in parentheses refer to the banking sector.

In order to get an indication of where the equity market inflection point might lie, we use two benchmarks in terms of the road map of a systemic banking crisis. The first one is the onset of the crisis and the second one is the peak of government intervention, namely the time at which governments stop treating problems in the banking sector in an ad-hoc manner and decide to intervene in a large-scale systematic way. The IMF identifies the starting date of a systemic banking crisis as the period, in which the first major financial institution defaults or runs into serious solvency problems. In this context, we regard the takeover of Countrywide Financial – the largest US mortgage lender – by Bank of America in January 2008 as the event that established the onset of the current systemic crisis. In addition, we regard the coordinated plans announced recently as the peak in government intervention. Under these assumptions, bank stock prices in our sample reach their lowest level 10 to 14 months after the onset of a systemic banking crisis (Figure 7.1). In terms of peak government intervention, stocks rebounded – in three out of four cases – at the month of the intervention or one month later. This applies for the whole equity market as well, as the trough in the banking sector tended to coincide with the total market trough in the crises examined. Hence, if stocks in the US market follow patterns similar to those observed in previous crises, prices are expected to rebound sometime in the period between November 2008 and March 2009.

Figure 7.1

Bank stock prices indexed to the onset of systemic banking crises



Note: The starting month of previous systemic crises is identified in IMF's database. Following IMF's definition (the month during which the first major financial institution defaults or runs into serious solvency problems), we regard the takeover of Countrywide Financial – the largest US mortgage lender – by Bank of America in January 2008 as the event that marked the onset of the current systemic crisis.
Dots highlight price troughs.

Source: Ecowin, Bloomberg

Summarizing, historical record suggests that stock prices rebound well ahead of the real economy and soon after governments intervene in a large-scale systematic way. Given that the current drop in equity prices has approached the historical average, we can argue that – if the past is any guide – most part of the decline for this crisis has taken place. Hence, an inflection point will likely occur within the next few months, if not taking place within the next few weeks at least for banks. This doesn't mean that the rebound will be immediate. Since it will take a while before markets fully restore confidence for banks irrespective of any policy measures, it is likely that prices will enter a very volatile trade range before establishing an upward trend. Previous experience suggests that banks outperform, once the trough takes place.

8. Credit Markets

Dimitris Malliaropulos, Costas Lambrinoudakis

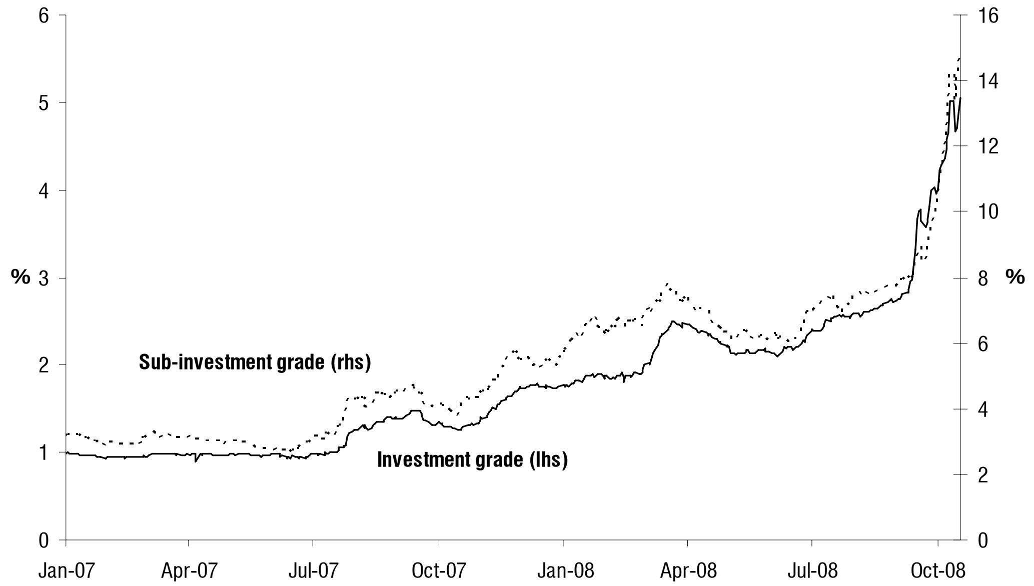
- Both CDS and corporate bond markets have been on an exceptional rollercoaster over the last two months due to a cascade of extraordinary credit events, including Fannie May, Freddie Mac, Lehman Brothers, AIG and Washington Mutual.
- In the light of the coordinated rescue plans announced by global governments, we expect that the focus of valuations will be gradually shifted from financial system turbulence and credit events to macroeconomic environment and corporate fundamentals.
- Latest macroeconomic data post a dim outlook for global growth, suggesting that we should expect lower corporate earnings and increased default rates.
- Given the deteriorating fundamental backdrop, we expect high yield paper to underperform high grade paper, as lower quality issuers are more affected by a weakening economic environment.
- From a sector perspective, we expect the latest government interventions to affect positive financials. In addition, sectors that are less affected by the fluctuations of the business cycle, including health care and utilities, should also outperform.

Credit markets, being at the epicenter of the present financial turmoil, experienced in September and October one of the most turbulent periods in history. Both CDS and corporate bond markets have been on an exceptional rollercoaster over the last two months due to a cascade of extraordinary credit events, including Fannie May, Freddie Mac, Lehman Brothers, AIG and Washington Mutual. Spreads in the CDS market have widened by 30% to 60% since September 12 (as of October 17), a day before Lehman Brothers' default, which is the event that set off the panic in financial markets (Figures 8.3 and 8.4). The widening in corporate bond spreads has been even bigger, ranging between 60% and 95% (Figures 8.1 and 8.2). The hardest hit on the cash market with respect to the derivative market is attributed to technical factors. In particular, the liquidity freeze in money markets forced many leveraged investors to unwind investments positions, such as basis packages and total return swaps. This unwinding entailed extensive selling of corporate bonds.

The two main drivers of the current bear market in credit markets have been the crisis in the financial sector and macroeconomic weakness. Although it is difficult to disentangle the effects of each factor on market valuations, we believe that the former has been the main driver so far. All significant spikes (August 2007, March 2008, and September 2008) in spreads so far have been preceded by credit events in the financial sector. In addition, the financial sector in credit markets has substantially underperformed all other sectors.

Figure 8.1

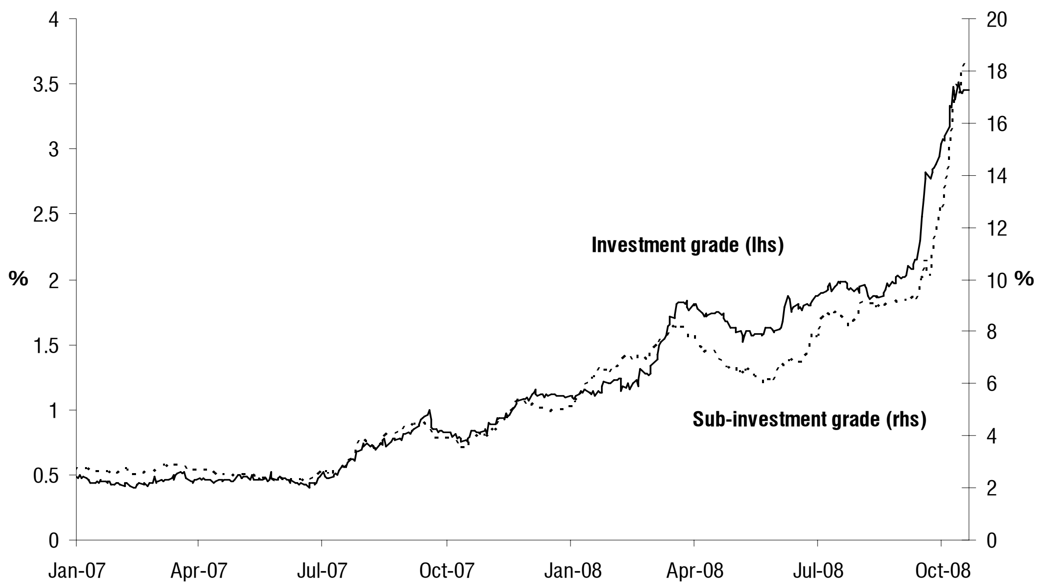
US Corporate bond yield spreads[1] over 10-year government bond



[1] Investment grade = spreads between yields on Merrill Lynch US IG Corporate Master Index (C0A0) and on 10-year US government benchmark bond; Sub-investment grade = spreads between yields on Merrill Lynch US High Yield Master II Index (H0A0) and on 10-year US government benchmark bond

Figure 8.2

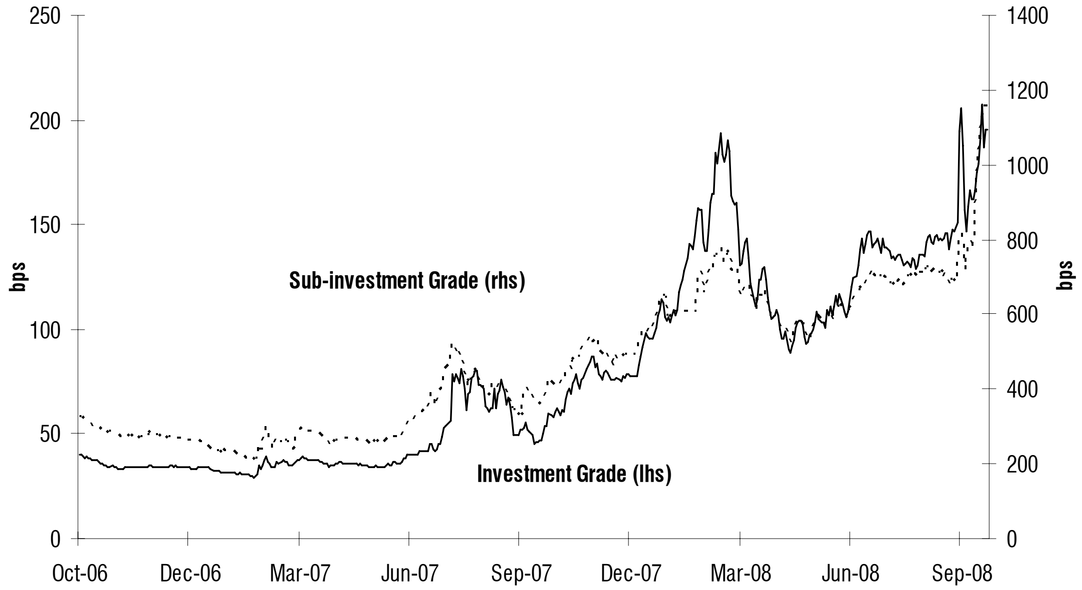
EU Corporate bond yield spreads[1] over 10-year government bond



[1] Investment grade = spreads between yields on Merrill Lynch Euro Zone Broad Corporate Index (ER00) and on 10-year Euro Zone government benchmark bond; Sub-investment grade = spreads between yields on Merrill Lynch European Currency High Yield Index (HP00) and on 10-year Euro Zone government benchmark bond

Figure 8.3

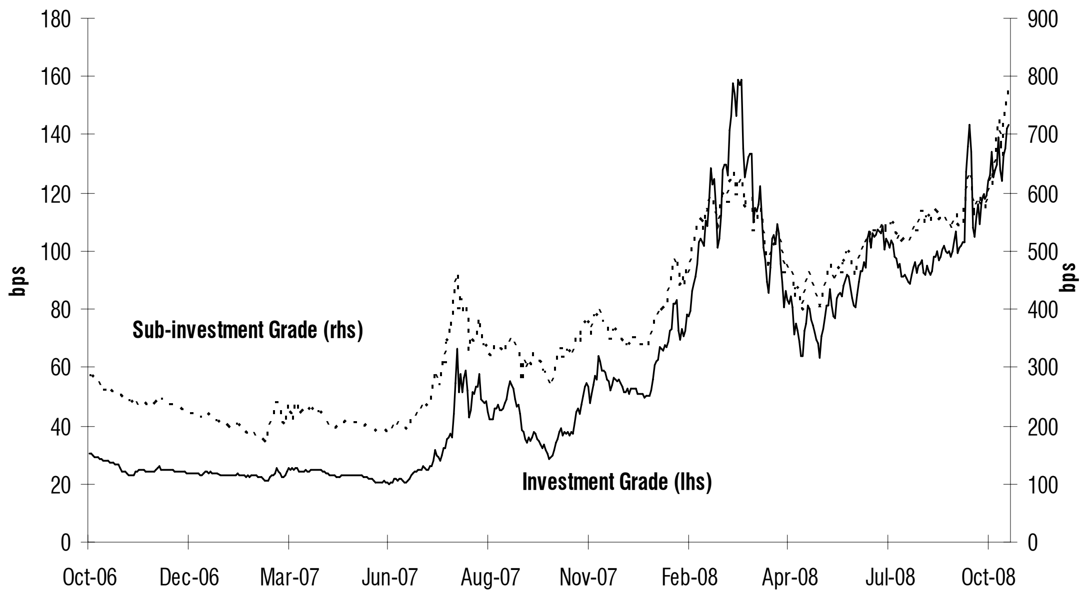
CDX (on-the-run) Indices: 5yr CDS Spreads – North America



Note: Investment Grade = CDX.NA.IG; Sub-investment Grade = CDX.NA.XO

Figure 8.4

iTraxx (on-the-run) Indices: 5yr CDS Spreads – Europe



Note: Investment Grade = iTraxx Europe Main; Sub-investment Grade = iTraxx Europe Crossover (Xover)

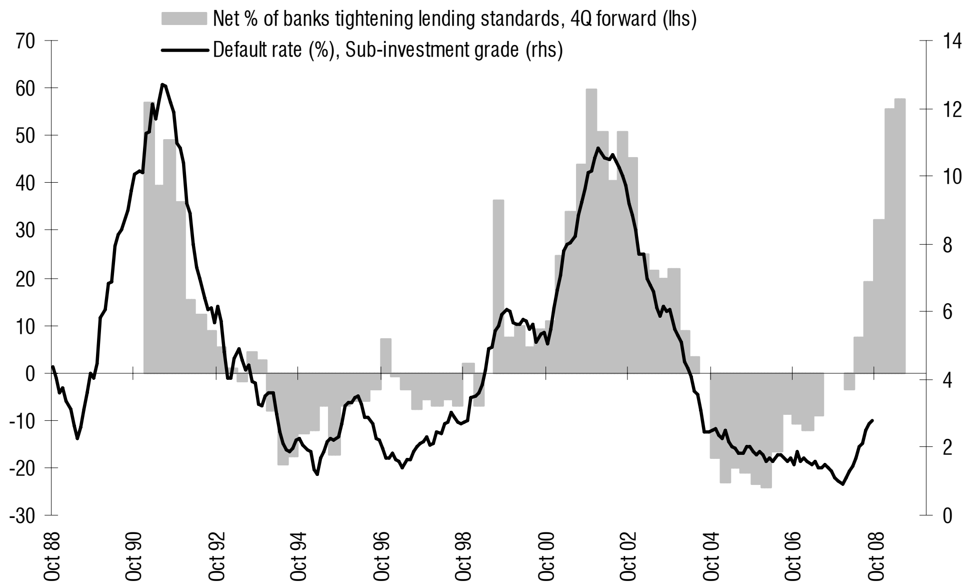
In the light of the coordinated rescue plans announced by global governments, we expect that the focus of valuations will be gradually shifted from financial system turbulence and credit events to macroeconomic environment and corporate fundamentals. The main policy measures comprise recapitalization of banks with public money, state guarantee of bank lending and enhanced liquidity provided by the central banks. We believe that these plans have a good chance to contain the banking crisis and pave the way for its resolution, because they are designed explicitly to address the two main problems, namely liquidity and solvency issues in the banking sector. Besides, the scale of the response indicates that governments are determined to take any measure necessary to stabilize the financial system. Summarizing, the likelihood of another major credit event in the financial sector has decreased substantially after policymakers' response. The credit markets' initial response to the announcement of the measures is in line with our view, as financials were the only sector that registered a significant tightening in spreads.

On the other hand, developments on the macroeconomic front are not as good as those on the banking crisis front. Latest macroeconomic data post a dim outlook for global growth, suggesting that developed economies will not avoid an outright recession and developing economies a slowdown. A weak economic outlook is bad for corporate spreads because it is usually associated with lower earnings and increased default rates. During the last few years default rates had fallen to unprecedented low levels due to the exceptional availability of credit that had prevailed. Rates bottomed in November 2007 and have been rising since then. The historical record suggests that an increase in the rate at which banks tighten lending conditions is followed by an increase in corporate default rates. Hence, the recent abrupt tightening in lending conditions by banks implies that corporate default rates – should they follow historical patterns – will rise sharply throughout 2009. Moody's announced recently that it expects rates to rise to 4.2% by the end of the year and to 7.9% a year from now. According to the latest data release, default rates stood at 2.8% at the end of September 2008 (Figure 8.5). The likelihood of severe economic deterioration is to large extent priced in, since spreads are currently close to multi-decade highs. However, given that credit markets are at the epicenter of the current crisis and that the process of deleveraging has not finished yet, it would be very risky to call a market bottom.

In brief, with the most acute dangers in the financial system moderating, credit markets' concern will likely shift to the deteriorating fundamental backdrop. We don't argue that confidence in the banking sector and liquidity conditions in money markets will be restored immediately. On the contrary, we expect this to be a time consuming process with many setbacks. However, it is likely that a turning point in the financial portion of the crisis has been reached.

Figure 8.5

Commercial banks lending standards and corporate default rates



Source: FED, Moody's

In that context, we expect high yield paper to underperform high grade paper, as lower quality issuers are more affected by a weakening economic environment in terms of earnings decrease and higher default rates. From a sector perspective, we expect the latest government interventions to affect positive financials. In addition, sectors that are less affected by the fluctuations of the business cycle, including health care and utilities, should also outperform, given the bleak economic outlook. However, investors should be extremely cautious across credit markets under all circumstances, as pressure from technical factors – forced liquidations of highly leveraged investors – is likely to continue for some time.

9. Commodities

Dimitris Malliaropulos, Costas Lambrinoudakis

- After peaking in early July, the commodity market has experienced heavy losses thus far in H2 08. As measured by the S&P GSCI indices, the energy sector was hit the most, posting a negative return of 45.9% thus far[11] in H2 08, followed by the agricultural, the industrial metal and the precious metal sectors, which plunged by 38.9%, 37.9% and 19.5% respectively.
- The sharp fall in prices was initially triggered by (a) the sharp rebound of the USD and (b) growing concerns about commodity demand weakening. Both factors were the result of a negative shift in sentiment concerning ex-US global economic growth.
- Since mid-September, the escalation of the crisis in the financial system accelerated the price fall, as markets started pricing in an increased likelihood that global growth slowdown will intensify and that risks concerning weaker commodity demand will materialize.
- Given the bleak outlook for the global economy, we see price risks skewed to the downside.

After peaking in early July, the commodity market has experienced heavy losses thus far in H2 08. Price declines spread across all commodity sectors, eroding the gains registered in the first half of the year, when many key commodities had reached new all-time or multi-year highs. As measured by the S&P GSCI indices, the energy sector was hit the most, posting a negative return of 45.9% thus far[1] in H2 08, followed by the agricultural and the industrial metal sectors, which plunged by 38.9% and 37.9% respectively. Precious metal prices declined by 19.5% over the same period. The decline in precious metals has been more modest compared to the other commodity sectors, as investors' safe-haven buying amid the recent financial havoc mitigated losses.

The sharp fall in prices was initially triggered by (a) the sharp rebound of the USD and (b) growing concerns about commodity demand weakening. Both factors were the result of a negative shift in sentiment concerning ex-US global economic growth owing to a series of poor macroeconomic data from the ex-US developed and the major developing economies. This shift in sentiment had a twofold negative effect in commodity prices, as it prompted a sharp rebound of the USD against many major currencies (mostly because the ex-US global economy looked worse than expected, rather than because the US economy looked better), while it raised fears about a weakening in global commodity demand especially in the developing economies. Concerns about demand weakening were further reinforced by the sharp rise in commodity prices in H1 08.

[11] As of October 17, 2008

Table 9.1

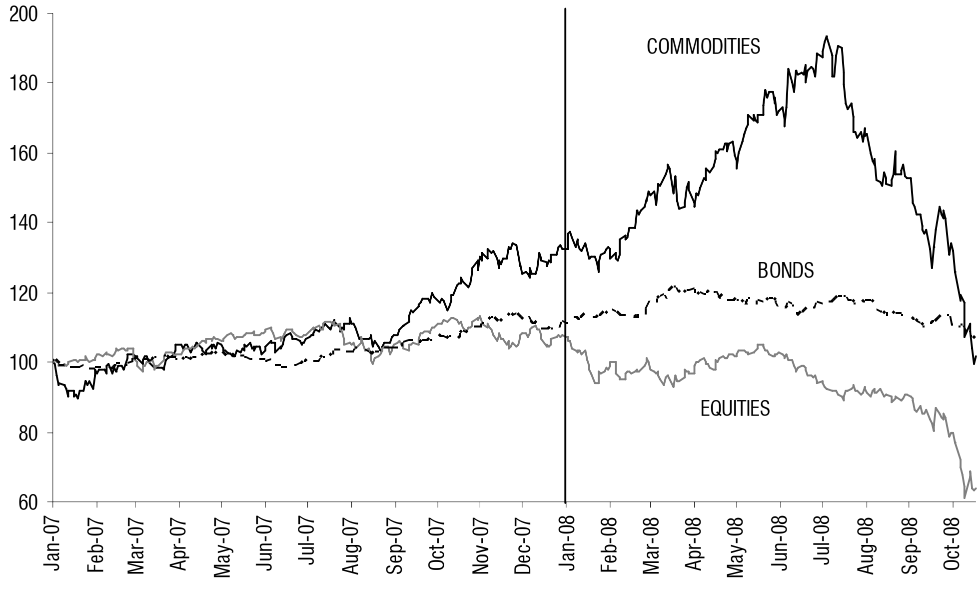
Performance of total return indices

	17 Oct 2008 level	H2 2008*	H1 2008	2007	2006	2005
Commodities						
S&P GSCI ALL	5714.79	-45.9%	41.4%	32.7%	-15.1%	25.6%
Energy	1488.25	-49.2%	52.6%	41.9%	-26.8%	31.2%
Industrial Metals	1318.90	-37.9%	15.7%	-5.6%	60.9%	36.3%
Precious Metals	1009.89	-19.5%	10.7%	27.9%	24.1%	18.6%
Agriculture	586.50	-38.9%	15.2%	28.3%	13.3%	2.4%
Equities						
MSCI World (Developed Markets)	950.77	-32.2%	-11.7%	7.1%	18.0%	7.6%
MSCI US	889.56	-27.3%	-12.1%	4.1%	13.2%	3.8%
Bonds						
JP Morgan GBI Global (Developed Markets)	479.07	-8.2%	5.0%	11.2%	9.8%	-4.7%
JP Morgan GBI US	398.17	3.1%	2.0%	9.5%	2.4%	2.4%

*Until October 17, 2008

Figure 9.1

Performance of asset classes (rebased at 100 on 29/12/2006)



Note: Commodities = S&P GSCI TR, Bonds = JP Morgan GBI Global TR, Equities = MSCI World TR

Since mid-September, the escalation of the crisis in the financial system accelerated the price fall in commodity markets. In particular, the evolution of the credit crisis into a fully-fledged systemic banking crisis exacerbated the already weak economic and commodity demand outlook. Since banking crises are usually associated with severe recessions, the markets are pricing in an increased likelihood that the downside recessionary risk concerning weaker commodity demand will materialize.

Looking ahead, the crucial question concerning commodity markets is how big the impact of the banking crisis will be on global economy. Given that previous experience implies that this impact will likely be heavy, we see price risks skewed to the downside. Furthermore, in terms of asset price behavior over the business cycle, commodities tend to outperform stocks in early stages of economic weakness. However, as economic deterioration proceeds, commodities consistently underperform equities[12]. In that context, we may have arrived at the point where commodities will not be able to compete with stocks in terms of expected return.

(i) Oil

After hitting a new all-time high at $147.27 a barrel on July 11, crude oil prices have plunged thus far in H2 08. Prices are currently trading in the rage of $70-75 a barrel, having shed almost 50% of their July peak.

The sharp decline in oil was initially triggered by a series of poor macroeconomic data from Europe and Asia, indicating that the slowdown in economic growth and in turn in oil demand growth will likely not be confined to the US. These fears were aggravated in September and October, as the financial crisis accelerated, exacerbating economic outlook further.

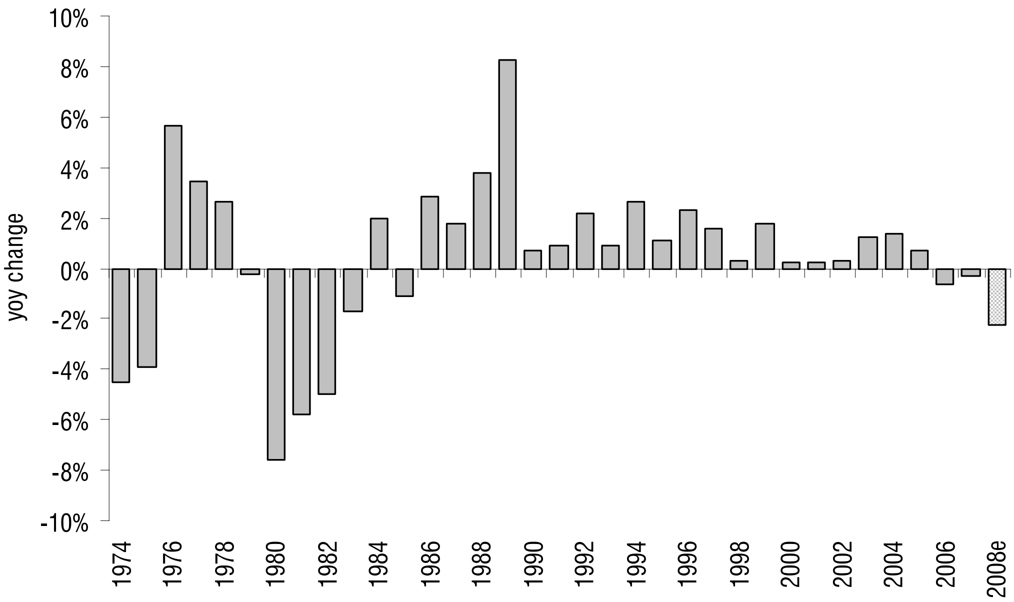
The impact of global economic weakness on oil demand has been more acute in the developed world so far. The latest figures suggest that oil demand weakening in the developed economies is escalating at levels not seen since the aftermath of the second major oil crisis in the early1980s. In particular, OECD demand for 2008 is projected to average 48.1 million barrels a day[13], 1.1 million barrels a day or 2.2% less than 2007. This represents the largest annual drop since 1982 in terms of both percentage and absolute change (Figure 9.2). Concerning the developing world, there are growing fears that oil demand growth, though still resilient, will also ease on the back of slowing economic growth.

[12] For details see: Malliaropoulos, D. and Lambrinoudakis, C., November 2007, “Special Edition: Recent Developments in Commodity Markets and Implications for Investors”, Eurobank EFG Research.
[13] IEA, “Oil Market Report”, October 2008

Looking ahead, we expect price weakness to be sustained during the next quarters, given the bleak outlook for the global economy. We also expect OPEC to attempt to enforce a floor to prices in the range of $70-80 a barrel. This is manifested in the 1.5 million barrels a day production cut announced at the cartel's meeting on October 24, which was expeditiously moved forward from November in the light of the recent rapid decline in prices.

Figure 9.2

Oil demand growth in developed economies



Source: IEA

(ii) Gold

Gold prices declined sharply in July, August and early September. After trading to a high of $986/oz in mid-July, slightly lower than the historical high registered in March this year, gold prices fell by almost 25% until mid-September on the back of weaker oil prices and a stronger USD. The escalation of the financial crises in mid-September spurred investors' safe-haven buying, providing support to gold prices in contrast to the rest of the commodity complex.

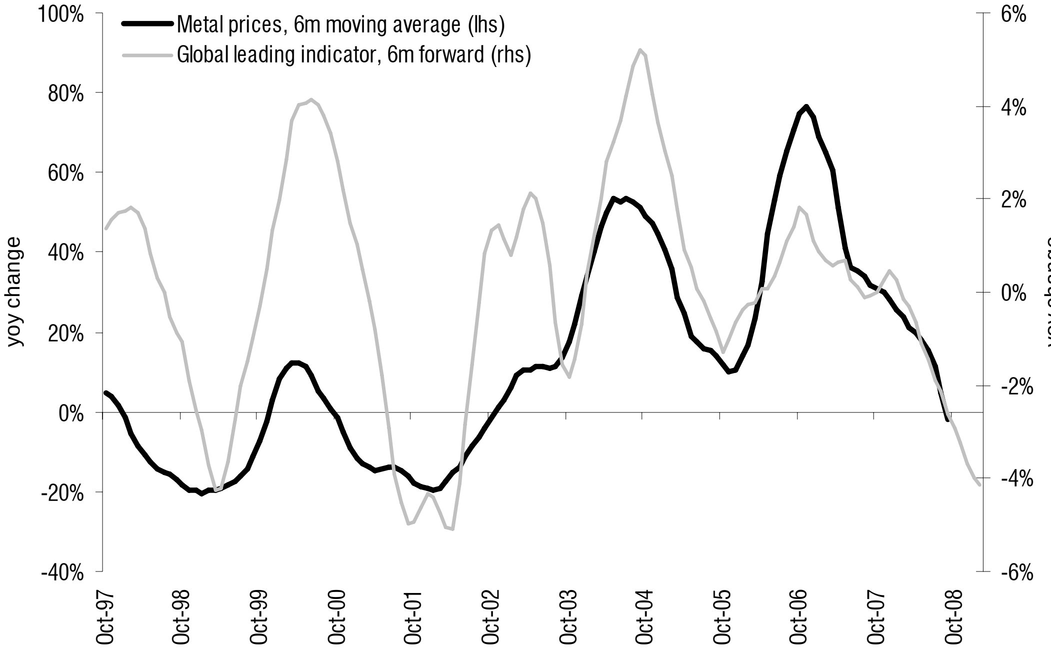
Looking forward, we expect that as long as the uncertainty in the financial system continues gold prices will be supported, as safe-haven buying will continue to dominate price formation. When the dust settles down and systemic risk worries about the financial system abate, gold prices will recouple with the USD exchange rate.

(iii) Industrial metals

Industrial metal prices continued to retreat in Q3, as the global growth outlook deteriorated markedly over the last months, bolstering demand-related concerns for industrial metals. These concerns were reinforced by the rising inventories for most of the metals over the last quarter, indicating that global demand is weakening. As measured by the S&P GSCI sub-index, prices plunged by 37.9% in H2, extending the aggregate decline since early-March peak to 45%.

Figure 9.3

Metal prices and world economic growth



Note: Metal prices = CRB Metals Index, Global Leading Indicator = GDP-weighted average of the OECD Composite Leading Indicators (CLIs)

Looking ahead, we see further downside risk for prices, given that US, EU and Japan are at the brink of recession and signs of the slowdown spreading to the developing economies are mounting. Our global leading indicator[14], which is designed to indicate turning points in economic activity approximately six months in advance, implies that there is a high probability of further weakness for metal prices (Figure 9.3) over the next six months. On the other hand, metal prices would be the

[14] Our global leading indicator is a GDP-weighted average of the OECD Composite Leading Indicators (CLIs) for both developed and developing economies.

first to rebound in case of any positive surprise concerning economic activity, as they are the most growth-sensitive commodity sector.

(iv) Agriculture

The agriculture sector was also hit hard in H2, as prices dipped 38.9% (as measured by the S&P GSCI sub-index), with corn and soybeans leading the way and registering losses close to 45%. This sharp drop was driven mostly by the broader negative commodity sentiment. This is reflected in the scale of investment capital outflows from the agricultural sector over the last months, which was higher compared to other commodity sectors. Falling energy prices – given that corn and soybeans are used to produce bio-fuels – and an improving outlook for harvests, since the damage on corn and soybean crops from US Midwest flooding turned out to be less severe than previously thought, have also contributed to the price fall.

Looking forward, price risks are skewed to the downside, since the outlook for energy prices is negative and the broader commodity market sentiment remains poor due to macroeconomic and financial concerns.

Eurobank EFG

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