Eurobank Research

GLOBAL ECONOMIC & MARKET OUTLOOK

Eurobank EFG

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Main Views and Market Strategy:

- In the US, the recent deterioration of economic data suggests that the economy is heading to a full-fledged recession with a probability of 60%-80%, depending on how deep the housing downturn will prove over the coming months. We feel that our estimates are high enough to put recession in our central scenario.

- We expect the Fed to cut rates to 2.25% by April. The scope for further rate cuts is rather limited as inflation will remain above trend and target, putting a floor to short term interest rates.

- The US downturn will lead to a substantial economic slowdown in both developed and emerging economies, although the world economy may technically avoid a recession.

- With inflation moderating somewhat in the coming months, the ECB will be eventually forced to follow the lead of the Fed and cut interest rates by mid-year as the outlook of the euro area economy will continue to deteriorate.

- Our fundamental view is that the main themes of a US-led recession and "re-coupling" of both developed and emerging economies will continue to dominate medium term trends in global financial markets.

- We recommend increased cash holdings and maintain a series of short-long positions (suggested in 2007), which reflect our fundamental economic views.

- Over the next three months, we expect US equities to underperform Treasuries, small caps to underperform large caps and value stocks to underperform growth stocks. Hence, we recommend short-long positions in these themes in order to hedge for the risk of an upcoming recession.

- We are positive on Bunds versus Treasuries and remain negative on the US dollar against the euro despite a likely improvement in the US trade deficit, as the latter will be due to a cyclical weakness of the US economy.

- We expect EM equities to underperform both US and European equities as a global slowdown will lead to a downward revision of (in some cases, such as China, absurdly high) corporate earnings estimates and a significant re-pricing of risk.

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Macro Forecasts

	2006	2007		2008	
		Eurobank EFG	Consensus	Eurobank EFG	Consensus
Real GDP Growth (y-o-y average)					
US	2.9	2.1	2.2 (1.8 – 2.7)	1.3	2.0 (0.4 – 3.3)
EU-12	2.9	2.6	2.6 (2.5 – 2.7)	1.7	1.8 (1.2 – 2.3)
Japan	2.4	1.8	1.9 (1.7 – 1.9)	1.5	1.5 (1.1 – 1.9)
CPI Inflation (y-o-y average)					
US	3.2	3.0	2.5 (2.1 – 3.4)	3.5	(1.1 – 3.4)
EU-12	2.2	2.1	1.9 (1.9 – 2.1)	2.3	(1.9 – 2.8)
Japan	0.1	0.0	0.2 (0.0 – 0.3)	0.5	(0.1 – 0.5)
Short Term Interest Rates (end of year)	End 2006	End 2007	Current		
US	4.75	4.25	3.00	2.25	2.25 (2.50 – 4.50)
EU-12	4.00	4.00	4.00	3.50	3.50 (3.25 – 4.00)
Japan	0.50	0.50	0.50	0.25	0.25 (0.25 – 0.75)

Note: Range of forecasts in parentheses below point estimates.

Table of contents

1. Executive Summary 4

2. The US economy 11

3. The Euro area economy 26

4. The Japanese economy 32

5. BRICs 38

6. Commodities 59

7. Credit Markets 66

8. Implications for asset allocation 74

Global Outlook and Asset Allocation

1. Executive Summary

Dimitris Malliaropulos

Economic Outlook

In our September issue we expressed the view that the US economy was very likely to enter a recession in 2008 as the continuing housing market downturn and the ongoing credit crunch would leave consumers more exposed to negative wealth effects and employment growth was decelerating rapidly. We expressed this view (at that time admittedly much more pessimistic than Consensus) with a probability of a US recession at 60%, which we subsequently revised to 50% after the upward revision of Q3 GDP data.

Confirming our fundamental view, a sudden string of negative data in January suggested that the labor market and the manufacturing sector have weakened significantly, retail sales have slowed and the housing downturn has intensified. GDP growth took a hit in the final quarter of 2007, decelerating to a meagre 0.6% q-o-q annualized from 4.9% in the third quarter. The substantial deterioration of economic data, combined with the negative wealth effects from declining equity prices and the economic fallout from the credit crunch, are now threatening to push the US economy in a full-fledged recession. We now estimate a probability of recession in the range of 60%-80%, depending on how deep the housing downturn will prove over the coming months. Although, based on the latest data, we project currently only barely positive GDP growth over the first half of the year – implying that, technically, we may still avoid an outright recession of “at least two quarters of negative growth” –, we feel that our estimates are high enough to put recession in our central scenario.

Both the depth and the duration of the upcoming recession in the US and the extent to which this recession will lead to a generalized global economic downturn largely

depend on the fate of the US consumer. Tighter credit conditions, the recent increase in unemployment and rising inflation lead to a substantial deterioration of household finances. Furthermore, the decline in equity prices adds to the existing negative wealth effects from declining house prices, in contrast to 2007, where rising equity markets have outbalanced a considerable fraction of the losses from falling property prices in households' wealth. Looking forward, we expect US consumers to take a substantial hit from declining wealth, tighter lending conditions and rising unemployment. As the economy slows significantly over the next few months and unemployment continues to rise, we expect the Fed to cut rates by another 50 bps in March and by another 25 bps in April, leaving the Fed funds rate at 2.25% by mid-year. Further cuts into 2008 will depend on the duration of the credit crunch, the response of the US economy and inflation developments. In our view, the scope for further rate cuts is limited, as inflation will remain above trend and target, putting a floor to short term interest rates.

The global nature of the credit crisis and the substantial weakening of the US consumer will lead to a substantial economic slowdown for both developed and emerging economies, although the world economy may avoid a recession, as growth in China and India will continue to be largely driven by domestic demand. With inflation moderating somewhat in the coming months, the ECB will be eventually forced to follow the lead of the Fed and cut interest rates by mid-year as the outlook of the euro area economy will continue to deteriorate.

Implications for Asset Allocation

Our approach to asset allocation at the start of the New Year is characterized by extreme caution as the downturn of the US economy intensifies, credit conditions continue to tighten across the globe and growth of the world economy is likely to decelerate significantly from its 2007 levels. At recent lows during the January sell-off, equity markets have come close to pricing the typical cyclical drop in earnings normally associated with a US recession. Investors have come to realise that the economic fallout from the credit crunch will not be confined to the real estate and financial sectors but will have severe global implications. With the US heading into a recession and growth in the euro area and Japan slowing substantially, emerging markets and the BRIC economies will likely "recouple" and slow down into 2008. The relatively more

severe recent correction in Asian, most notably China- and India-related equities, is obviously a strong reversal of the “decoupling” trend that has led to excessive valuations in non-Japan Asian equity markets over the past few years.

An extreme level of uncertainty continues to surround the operation of the credit system and the global economy. We expect volatility in financial markets to remain high, making short-term market movements harder to read, as investor views will likely oscillate from fearing that policymakers are doing too little to prevent a global slowdown to worrying that they are doing too much. However, our fundamental view is that the main theme of a US housing and consumer related recession will continue to dominate medium term trends in global financial markets.

The bottom line for investors is to build up defensive positions against a backdrop of risky asset markets as the economic downturn and the liquidity-squeeze unfolds. Typically, during recessions episodes, cash is the king. We thus recommend increased cash holdings to take advantage of further declines in equity prices and a number of short-long positions which reflect our long-standing fundamental economic views. Over the next three months, we expect US equities to underperform Treasuries, small caps to underperform large caps and value stocks to underperform growth stocks as the cyclical downturn of the US economy gathers pace and the monetary stimulus from Fed funds easing dissipates. Hence, we recommend short-long positions in these themes in order to hedge for the risk of an upcoming recession. We are positive on Bunds versus Treasuries as the euro area economy will not avoid a significant slowdown and the ECB will eventually be forced to cut interest rates, likely before the summer. We remain negative on the US dollar against the euro as the Fed has embarked on an aggressive easing bias, despite a likely improvement in the US trade deficit, as the latter will be due to a cyclical decline in domestic demand rather than the result of stronger export performance. We expect EM equities to underperform both US and European equities as a global slowdown will lead to a downward revision of (in some cases, such as China, absurdly high) corporate earnings estimates and a significant re-pricing of risk.

Government Bonds and Spread Products

Current bond market valuations have in our view fully priced in the probability of a severe US slowdown and an aggressive easing of monetary policy. Our fair value estimates of 10-year Treasury rates in fact suggest that current valuations are neutral with respect to the main fundamentals of the US economy and the short-term prospects for monetary policy. Looking forward, we believe that there is not much room for further declines in Treasury yields, as the recent pickup in inflation contributes to a higher inflation premium and increased bond issuance in order to finance the government's plan for a fiscal stimulus will eventually put upward pressure on yields. We remain neutral on the 2-to10-year spread on Treasuries, as the financing of the government's fiscal stimulus is likely to drive spreads narrower, leading to a progressive flattening of the yield curve for short and intermediate maturities. Finally, we believe that Bunds are likely to outperform Treasuries over the next few months, as economic data from the euro area start to come out weaker, enforcing expectations of ECB rate cuts.

Foreign exchange

While we believe that the US trade deficit will likely continue to decline in 2008, we do not share the view that this will be the catalyst for a sharp rebound of the dollar anytime soon. Looking forward, we believe that the improvement of the US trade deficit in 2008 will come mainly from the cyclical decline in import growth rates as domestic demand (and, most importantly, personal consumption) slows down, rather than from an acceleration of exports, as the effect of past improvements in dollar competitiveness has in our view broadly run its course. If we are right, it is difficult to make a case for a dollar rebound, as the improved trade deficit will only reflect increased weakness of the US economy relative to the rest of the world. Overall, we remain bearish on the dollar over the next three to six months. Our short-term fair value model of the EUR/USD exchange rate suggests that the euro will cross USD 1.50 over the next three to six months as markets start to discount interest rate cuts by the ECB, leading Bunds to outperform Treasuries.

Equities

Our long standing view on global equities was that the risk of a severe slowdown in the US and a prospective corporate profit crunch was (until recently) not sufficiently discounted in stock market valuations (see our May and September 2007 issues). We thus proposed to build up defensive (short-long) positions in large versus small caps, growth versus value stocks and long positions in volatility. All these positions worked well during the past six months as equity markets eventually moved on to reflect a cyclical decline in US corporate profits and a global slowdown due to fears of an upcoming recession in the US.

The scale of the equity market losses during the January sell-off, combined with our view that the US economy will eventually not avoid a recession, suggests that global equities have entered a bear market. We suggest to remain underweight in equities, as further market corrections are likely. In our view, equity markets have not corrected enough, given the state of the economy and the turmoil in credit markets.

First, we believe that the aggressive rate cuts by the Fed and expectations of more cuts to come will provide only temporary relief to equity markets. This is because, typically, the decline in corporate profit growth during recessions is proportionally much stronger than the decline in interest rates, depressing the fair value of equities (see our May 2007 issue).

Second, equity market risk premia have declined to unsustainably low levels during the past five years and are likely to increase too as economic uncertainty is on the rise and volatility has returned in the market. Hence, the correction in equity markets may be this time stronger than average, compared to previous economic downturns, as declining earnings coincide with an upward move in risk premia.

Third, equity prices seem to have already discounted the full scale of monetary policy easing. With inflation on the rise, the 75 bps surprise cut on January 22 will likely be the last positive surprise from the Fed. Hence, looking forward, the Fed will be less able to shore up confidence in equity markets as the economic outlook continues to worsen.

Fourth, historical evidence from previous bear markets suggests that equity prices must decline by a sizable amount to restore fair value relative to Treasuries. Although equities have underperformed Treasuries by roughly 25% since June 07, historical patterns from past bear markets suggest that equities must likely correct by another 10-15% from current levels to restore relative fair value.

Large caps due to outperform small caps

Our view in 2007 has been that the long cycle of out-performance of small capitalization stocks relative to large capitalization stocks is nearing to an end as the US profit slowdown hits small caps harder than large caps because of a stronger dependence of small caps' earnings on the domestic business cycle. We thus recommended a long-short position in large versus small caps as a hedge against a severe slowdown of the US economy in May. Our trade performed well during the summer 2007 sell-off and generated, since then a return of 6% year to date.

As the US economy is heading into a recession, we maintain this position and expect large caps to outperform small caps over the next three months as small caps will increasingly suffer from the profit slowdown, the tightening of credit conditions and high volatility.

Growth stocks due to outperform value stocks

In September 2007 we suggested to open up a long-short position in large growth versus large value stocks, a hedge against the risk of an economic downturn. This trade performed well over the next three months to January, giving a total return of 5.2%. Although the January sell-off hit growth stocks harder than value stocks, we believe that this was mainly due to the unexpected sharp rate cuts by the Fed, which supported value stocks. As the ability of the Fed to deliver positive surprises has diminished substantially and real economy data are likely to worsen substantially over the next three months, we continue to stick on this trade.

EFG Macro Model Forecasts: US Economy & Markets

	2007:Q4	2008:Q1	2008:Q2	2008:Q3	2008:Q4	2006	2007	2008
GDP q-o-q saar	0.6	0.8	1.1	1.7	1.6	2.6	2.2	1.3
GDP y-o-y	2.4	2.5	1.9	1.1	1.3	2.8	2.1	1.7
Consumption y-o-y	1.7	1.8	1.6	1.6	1.6	3.0	2.7	1.7
Disp. Income y-o-y	2.1	2.3	2.1	1.5	1.9	2.9	3.4	2.0
Corp. Profits after tax y-o-y	2.2	2.6	3.2	5.6	6.9	11.6	2.3	4.5
Labor Market								
Employment y-o-y	0.2	0.0	0.5	0.6	0.4	2.0	1.0	0.4
ULC y-o-y	2.6	2.4	2.3	2.1	2.0	2.9	3.5	2.2
Inflation								
Headline CPI y-o-y	4.0	3.8	3.3	3.8	3.1	3.0	3.0	3.5
Core CPI y-o-y	2.4	2.6	2.7	2.8	2.8	2.5	2.3	2.7
Core PCE y-o-y	2.2	2.2	2.4	2.4	2.3	2.2	2.1	2.3
Core PPI y-o-y	2.0	2.1	2.2	2.2	2.2	1.7	1.8	2.2
Interest Rates (% end of quarter)								
Fed Funds	4.25	2.50	2.25	2.25	2.25			
10-y Treasury yield	3.71	3.20	3.30	3.71	3.60			
Spreads (bps, end of period)								
10y Treasury-Fed funds rate	21	63	110	108	127			
10y Treasury-Bund	-29	-22	-16	-16	-13			
Exchange Rates (end of quarter)								
USD/EUR	1.46	1.55	1.61	1.61	1.55			
Probability of								
Fed Funds Cut	0.47	0.54	0.54	0.54	0.55			
10y-1m Spread to increase	0.96	0.99	0.98	0.85	0.93			
S&P500 to outperform 10-y UST	0.11	0.46	0.46	0.46	0.45			
Bund to outperform 10-y UST	0.28	0.58	0.57	0.48	0.51			

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.

2. The US economy

Dimitris Malliaropulos, Olga Kosma

- Recent economic releases suggest that the housing market slump and the worsening of financial conditions are pushing the US economy into recession. Our GDP probit model points to a recession probability of 60% in Q1 2008.
- The scale of the slowdown in personal consumption will determine both the depth and the duration of the economic slowdown.
- There are increasing signs of a more protracted slowdown in consumer spending, with sharp declines in home values, rising oil and food prices, slowdown in hiring as well as reduced availability of credit in a bear equity market.
- Continued upward pressure on inflation, in combination with a negative economic outlook, increases stagflationary risks.
- Our probit model of Fed funds rates suggests that the probability of a rate cut stands consistently above 50% throughout 2008, signalling that more easing towards 2.0% is in the pipeline.
- Compared to previous interest rate cycles, the Fed seems currently to adopt a rather dovish stance. The main risk is that inflation expectations may get out of control, implying that the Fed will have to raise interest rates significantly when credit markets stabilise and the economy starts to rebound from its current weakness.

The US economy is heading into a recession,…

The New Year opened with an extensive financial crisis and a sharp deterioration of US economic data. While the ongoing housing market slump continues to deepen, the most recent monthly economic indicators continue to disappoint, suggesting that the economy is hovering on the edge of a recession. According to our estimates, the risk of a sharp slowdown of the US economy has been relatively high since May (with an estimated probability of a severe slowdown at 50% by that time) and increased substantially in September, when our probit model suggested that the probability of a recession in Q4 07 has jumped up to 60% (see our September Global issue). Although at that time an outright recession was not our baseline scenario, we were much more pessimistic than Consensus and urged investors to take hedging positions against such a nasty outcome.

In the meantime, a string of negative data releases indicate that the housing market slump and the worsening of financial conditions are indeed pushing the US economy into recession. Two of the most important economic activity indicators, the unemployment rate and the ISM manufacturing

index, posted significant declines in December. Manufacturing activity across the US contracted after 10 consecutive months of expansion, falling to its lowest level since 2003, while civilian employment fell by 436k, pushing the unemployment rate from 4.7% in November to 5% in December 2007.

Confirming a weakening economy, real GDP growth slowed to 0.6% q-o-q saar in Q4 07, down from 4.9% q-o-q saar in Q3 07. The main drag on GDP growth was residential investment, which declined by 23.9% q-o-q saar, subtracting 1.2% from real economic growth and inventories which also turned negative, although this component is admittedly very volatile (Figure 2.1). Real consumption growth slowed considerably from 2.8% q-o-q saar in Q3 to 2% q-o-q saar in Q4 07, contributing a mere 1.4% to real GDP growth. In addition, the GDP slowdown was largely contributed to net trade as well; real net exports of goods and services contributed a mere 0.4% in Q4 07, compared to 1.4% in Q3 07. Real exports increased by 3.9% in Q4 07, down from an increase of 19.1% in Q3 07, suggesting that the effect of a weaker dollar on exports has likely faded. Although the trade balance continued to improve for another quarter, the improvement rather reflects the weakening domestic demand, since imports stepped up only 0.3% q-o-q saar in Q4 07, after a 4.4% increase in the previous quarter.

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, such as non-farm payrolls, the rate of unemployment and the median duration of unemployment, points to a recession probability of 65% in Q1 2008 (Figure 2.2). We project a significant deceleration of real GDP growth to 1.3% y-o-y in 2008 from 2.2% in 2007.

The main driver of the increase in the likelihood of a recession is the housing market downturn. Real house prices, as measured by the OFHEO index, declined for the first time by -1% y-o-y in Q3 07 since 1997. According to the same house price index, nominal house prices continued to increase by 1.8% y-o-y in Q3 07, compared to 7.3% y-o-y in Q3 06; however, the S&P/Case-Shiller Home Price Index suggests that house prices declined by 5.7% y-o-y in Q3 07 and 5.9% y-o-y in Q4 07, while median house prices of existing homes decreased by 4.8% y-o-y in Q3 07. In our central scenario, we project that real house prices will decline by 3.5% y-o-y in Q4 07 and by 4% y-o-y on average in 2008, assuming that nominal house prices will continue to increase in Q4 07 by 0.7% y-o-y and decrease by -0.4% on average in 2008.

Figure 2.1

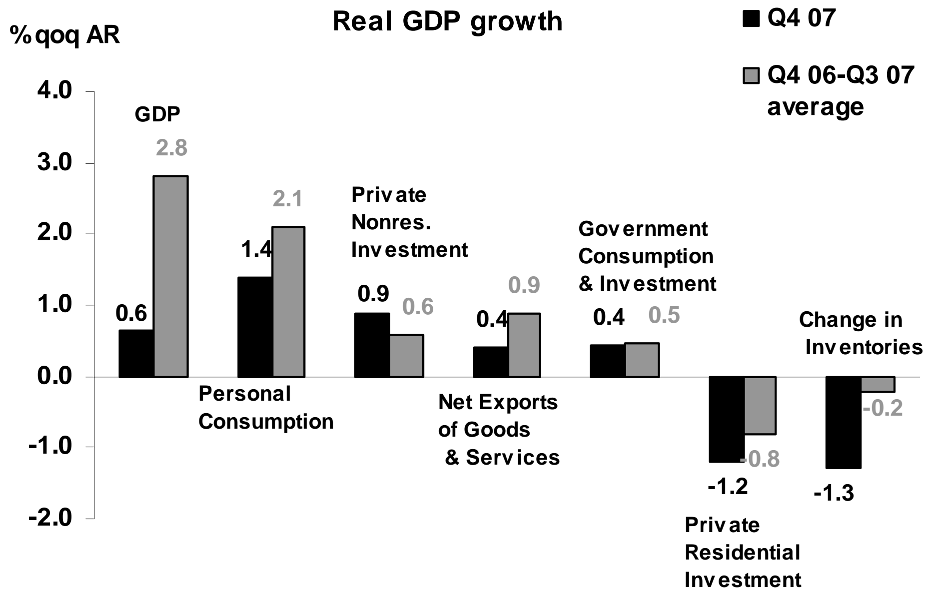
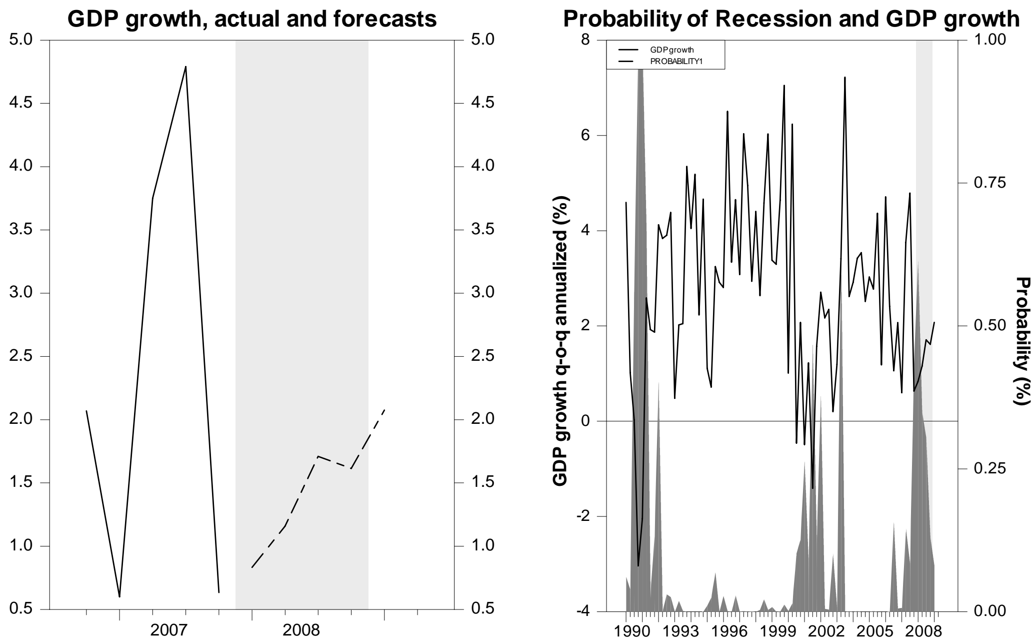


Figure 2.2

GDP growth, q-o-q saar



*Source: Eurobank EFG model estimates

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The probability of a recession increases exponentially, if real house prices decline more sharply than suggested in our central scenario. Indeed, a 4.5% house price decline in real terms in Q4 07, followed by a 5.2% average decline in 2008 (-1.5% in nominal terms) points to a recession probability of 88% in Q1 08. On the contrary, according to our estimates, should the housing market prove to be more resilient, with a 2.5% real house price decrease in Q4 07 and 2.8% average decrease in 2008 (implying a 1.7% y-o-y increase and 0.8% average increase in Q4 07 and 2008 respectively), the probability of a recession holds back to 47% in Q4 07 (Table 2.1).

Table 2.1
Recession probability dependence on house prices

	Real house prices (OFHEO) % y-o-y in 2008	Implied nominal house prices % y-o-y	Probability of recession in Q1 08
Optimistic scenario	-2.8%	0.8%	44%
Central scenario	-4.0%	-0.4%	65%
Pessimistic scenario	-5.2%	-1.5%	86%

*Source: Eurobank EFG model estimates

Note: In order to assess the probability of a recession, we use our GDP probit model, linking the probability of a recession to the change in real house prices, the ISM manufacturing and measures of the state of the labor market, such as payroll growth, the unemployment rate and the duration of unemployment. In our baseline scenario, we assume that the ISM manufacturing index stands at current levels of 47.7 in 2008, payroll growth deteriorates from 1% in Q4 07 to 0.7% in Q4 08, while our standardized labor tightness indicator, moderates from 0.27 in Q4 07 to -0.12 in Q4 08, implying an increase in the rate of unemployment to 5.6% over the year.

Table 2.2 shows that the average duration of the past 10 US recessions was 4.5 quarters. We expect the upcoming recession to be shorter-lived relative to past recession events, lasting about 3

quarters. Real GDP growth is expected to deteriorate from the recent peak of 3.3% y-o-y growth in Q1 06 to 0.8% y-o-y in Q3 08. The decline in real economic activity is expected to push the unemployment rate up to about 6% by year-end, marking a cumulative increase of 1.6% from the recent trough of 4.4% in December 2006. The current recession is likely to be milder compared to historical standards for the following reasons: (a) The FOMC has clearly shifted to an aggressive easing bias, in response to increasing downside risks to real economic growth. The Federal Reserve has already lowered its target for the funds rate by a total of 175 bp since September 2007, and will continue to lower rates by another 75 bps over the next months. (b) The depreciation of the dollar has benefited export growth and it is likely that the declining trade deficit will continue to bolster US economic activity in the face of the housing downturn and the financial crisis. (c) The fiscal stimulus package of USD 150 billions announced by the Treasury will support economic activity in H2.

Table 2.2
GDP, unemployment and fed funds cuts at past recessions

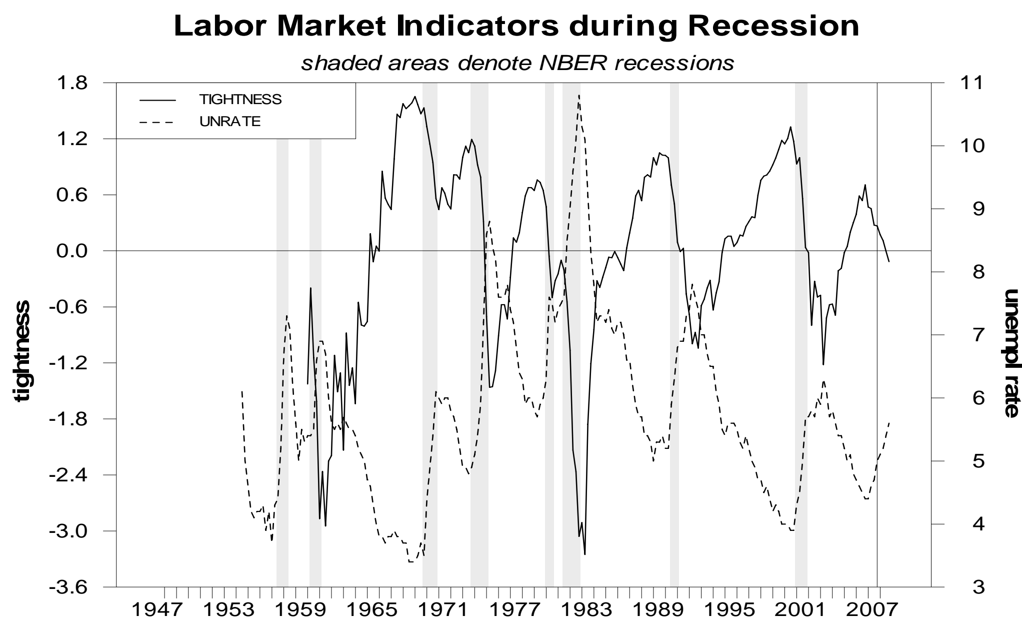
NBER US Recessions	Duration (in quarters)	Cumulative GDP decline*	GDP deceleration**	Cumulative increase in rate of unemployment***	Fed funds rate cuts (bp)
Q4 48 : Q4 49	5	-1.5%	-7.1%	+4.5%	NA
Q2 53 : Q2 54	5	-1.8%	-9.1%	+3.6%	NA
Q3 57 : Q2 58	4	-2.3%	-6.0%	+3.8%	200
Q2 60 : Q1 61	4	-1.0%	-10.1%	+2.3%	200
Q4 69 : Q4 70	5	-0.6%	-5.4%	+2.7%	300
Q4 73 : Q1 75	6	-2.2%	-9.7%	+4.4%	435
Q1 80 : Q3 80	3	-1.9%	-8.1%	+2.1%	475
Q3 81 : Q4 82	6	-1.5%	-7.0%	+3.6%	1000
Q3 90 : Q1 91	3	-1.3%	-5.4%	+2.8%	225
Q1 01 : Q4 01	4	+0.2%	-4.5%	+2.5%	350
Average	**4.5**	**-1.4%**	**-7.2%**	**+3.2%**	**400**

*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.
***Change in rate of unemployment from trough to peak of each business cycle in percentage points.

…or is in one already

It is clear that the US economy is likely to have entered a recession already, but the Cycle Dating Committee of the National Bureau of Economic Research (NBER) cannot yet declare it officially due to technical difficulties. According to the NBER, a recession is defined as “a significant decline in economic activity spread across the economy, lasting more that a few months, normally visible in real GDP, real income, employment, industrial production and wholesale-retail sales.” All these indicators -and, most notably, GDP- tend to be subject to significant revisions, so the Cycle Dating Committee takes a long time to mark the official start of a recession. The bottom line is that when all these indicators turn negative, we will probably already be in a recession.

Figure 2.3



*Source: Eurobank EFG model estimates

One of the most reliable real-time signals of a recession is the unemployment rate, since -in contrast to other indicators- this measure is subject to little revision. Historically, when the unemployment rate had increased by 0.4% on average from its trough, the economy entered a recession (Figure 2.3). According to the latest employment report, the unemployment rate increased from 4.7% in November to 5% in December, marking a 0.6% cumulative increase from its recent low in Q4 06. The unemployment rate has never risen by this magnitude without the economy being already in recession or falling into a recession within the next three months. In six out of eight

previous recessions reported by the NBER since 1957, the unemployment rate increase from its trough was in the range of 0.1-0.6%, and only in the 1957 and 1990 recessions the increase was slightly larger (Table 2.3).

Table 2.3
Increase in unemployment at the onset of recessions

Recession Start	Most recent trough	Cumulative increase from trough
Q3 57 : 4.4%	Q1 57 : 3.7%	0.7%
Q2 60 : 5.4%	Q2 59 : 5.0%	0.4%
Q4 69 : 3.5%	Q4 68 : 3.4%	0.1%
Q4 73 : 4.9%	Q3 73 : 4.8%	0.1%
Q1 80 : 6.3%	Q2 79 : 5.7%	0.6%
Q3 81 : 7.6%	Q4 80 : 7.2%	0.4%
Q3 90 : 5.9%	Q1 90 : 5.2%	0.7%
Q1 01 : 4.3%	Q4 00 : 3.9%	0.4%
Average	**0.97%**	**0.4%**
December 2007 : 5%	Q4 06 : 4.4%	0.6%

*Source: Eurobank EFG model estimates

Table 2.4
Labor market tightness indicator at the onset of recessions

Recession Start	Most recent peak	Cumulative decline from peak
Q4 69 : 1.52	Q1 69 : 1.64	-0.12
Q4 73 : 1.18	Q4 73 : 1.18	0.0
Q1 80 : 0.47	Q2 79 : 0.75	-0.28
Q3 81 : -0.20	Q2 81 : -0.10	-0.10
Q3 90 : 0.70	Q3 89 : 1.04	-0.34
Q1 01 : 0.92	Q3 00 : 1.31	-0.39
Average	**0.97%**	**-0.21%**
December 2007 : 0.27	Q4 06 : 0.71	-0.44

*Source: Eurobank EFG model estimates

Our unemployment stress measure of labor market slack, which is actually the product of the unemployment rate and the median duration of unemployment, had already increased significantly during the first half of the previous year –from 33.0 in December 2006 to 40.4 in August 2007 (Figure 2.3), so our forecasts in our September Global edition highlighted the ongoing labor market deterioration. This measure has increased further to 42.0 in December 2007, and our standardized labor market tightness indicator -the inverse of unemployment stress- has declined from its cyclical peak of 0.71 in December 2006 to 0.27 in December 2007. Table 2.4 shows that an average decrease of 0.21 in the past has been associated with the onset of a recession. Consequently, the current cumulative decline of 0.44 is in our view a strong sign of recession.

Table 2.5
Nonfarm payrolls increase at the onset of recessions

NBER Recessions	Nonfarm payrolls y-o-y increase at the start of each recession	Nonfarm payrolls y-o-y average increase during each recession
11/48 -10/49	1.6%	-1.6%
07/53 -05/54	4.8%	-0.1%
08/57 -04/58	0.9%	-1.4%
04/60 -02/61	2.8%	0.8%
12/69 -11/70	2.8%	1.0%
11/73 - 03/75	3.9%	1.5%
01/80 - 07/80	2.2%	1.1%
07/81 - 11/82	1.9%	-0.7%
07/90 - 03/91	1.6%	0.4%
03/01 - 11/01	0.9%	-0.1%
Average	**2.3%**	**0.1%**
December 2007	1.0%	

*Source: Eurobank EFG model estimates

Moreover, the trend in payroll growth seems to be deteriorating further. Non-farm payrolls increased by 18k in December 2007, recording a 1% increase compared to one year earlier. Payrolls in the construction sector decreased by 49k in December (-2.5% y-o-y), raising the total number of jobs in 2007 to 195k, the sharpest annual pace of loss since 1991. The goods-producing sector bore most of the burden, losing 75k in December and a total of 374k in 2007. Table 2.5 shows that at

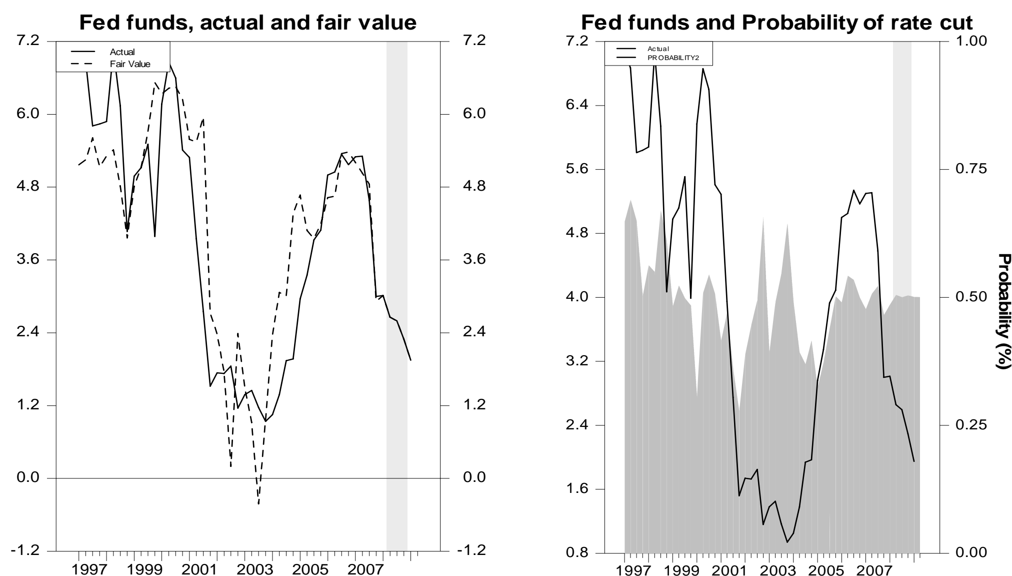
the onset of previous recessions the y-o-y increase in non-farm payrolls was on average 2.1%, 1.1% higher than the y-o-y increase reported in December 2007. Each time payrolls' growth declined to 1% or below this level, the US economy had already been in recession or headed into a recession within the next two months. Although payroll growth may exhibit a downward trend through time due to technological innovations, we cannot ignore this source of labor market weakness. The current situation in payrolls growth resembles the downward trend experienced in December 2000, one month before the 2001 recession.

Fed to the rescue

The recurrence of problems in the financial markets, as well as the worsening housing correction and the consequent risks posed to economic activity, continued to steer FOMC's monetary policy. In response to the recent global equity market sell-off, the Fed cut the federal funds rate by 75bp on January 22nd in an inter-meeting move and by another 50bp in its regular FOMC meeting on January 30th. Compared to previous interest rate cycles, the Federal Reserve has lowered its target for the funds rate aggressively by a total of 225 bp since August 2007, despite upward inflationary pressures.

Figure 2.4

Fed funds rate



*Source: Eurobank EFG model estimates

According to our estimates, the Fed will continue to cut rates to 2.5% in March and to 2.25% in April, in order to respond to heightened recession risks. Our probit model of Fed funds rates suggests that the probability of a rate cut stands consistently above 50% for the whole year, signalling that more easing towards 2.0% is in the pipeline (Figure 2.4).

Continued upward pressure on inflation increases stagflationary risks

While there are clear signs of a serious contraction in the US economy, inflationary pressures remain alive on headline as well as on core measures, raising the risks of stagflation. Headline consumer price inflation picked up to 4.1% y-o-y in December 2007, from 3.7% in September 2007, due to increasing energy and agricultural commodity prices. Indeed, the energy component of the CPI has been increasing by an average of 18% y-o-y over the past three months, the highest energy inflation increase over the last 16 months. Moreover, food price inflation has been on an upward trend during 2007, rising by 4.9% y-o-y over the past two months, the fastest pace of increase since 1990. Although this sharp surge in food prices may partially be attributed to temporary factors, it generally reflects a rising trend in commodity prices due to strong global growth and rising demand for food products.

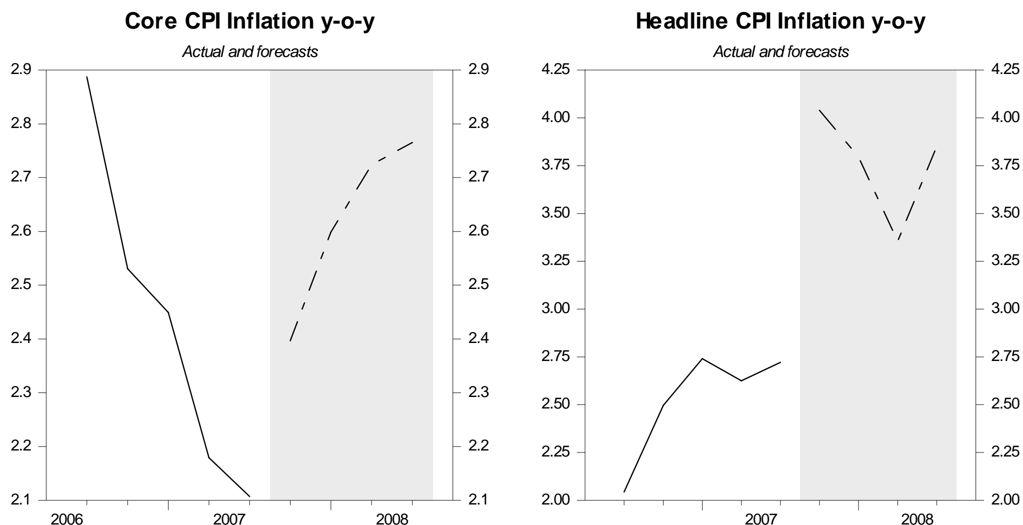
Excluding food and energy prices, consumer price inflation surged to 2.4% y-o-y in December 2007, from 2.1% y-o-y in September 2007, fairly above the implicit Fed's comfort zone. Over the second half of 2007, core CPI inflation has been on a rising trend, increasing by an average of 2.5% m-o-m saar, compared to 2.3% m-o-m annualized in the first half of the year.

Apart from rising energy prices, which seem to have had an indirect effect on core consumer price inflation, rental inflation has also been on an upward trend over the past few months. Owners' equivalent rent (OER is the inputed rent for owner-occupied households), which constitutes over 30% of the core CPI, has accelerated in H2 07, driving core inflation to stubbornly elevated levels. Although on a y-o-y basis, OER had posted an average increase of 2.9% in H1 07, below its long-term trend of 3.7%, on a m-o-m basis OER has accelerated to an average 3.0% annualized pace, up from 2.4% over the first half of 2007. In fact, over Q4 07, OER has increased by an annualized rate of 3.4%, fairly higher than the annualized increase of 1.8% in Q2 07. The downturn in the US housing market and the tightening lending conditions have increased demand for rental accommodation outweighing the negative effect on rents from rising vacancy rates.

Looking forward, core consumer price inflation is likely to keep rising towards 2.7% in 2008, since lagged effects from increased commodity and raw material prices, a depreciated dollar and higher unit labor costs will feed through during 2008. Furthermore, given the fact that the housing downturn shows no signs of abating any soon, we expect the weak housing market to keep rental demand elevated, maintaining the upward pressure to rental and, consequently, to core and headline inflation over 2008. With energy and agricultural prices remaining at high levels, our estimations suggest that headline inflation will remain at high levels though 2008, with an average y-o-y growth rate of 3.5%, up from 3% in 2007 (Figure 2.5).

Figure 2.5

US Inflation



*Source: Eurobank EFG model estimates

Markets bet on a dovish Fed

Fed policy moves since August 07 was a reaction to the credit crisis rather than a reaction to changes in the state of the real economy and inflation. Compared to previous interest rate cycles, the Fed seems currently to adopt a rather dovish stance, leading markets to bet on a Bernanke put: The Fed will eventually give what the market asks. In fact, the Fed slashed interest rates by a total of 225 bps since August in an attempt to prevent a negative feedback loop from credit markets (and, most recently, equity markets) to the real economy and less because of an outright deterioration of the state of the real economy. In fact, based on historic relationships, the rise in unemployment

since June does not justify more than 75 bps of interest rate cuts while the rise in core PCE inflation during the same period should rather prevent the Fed from cutting rates more than 50 bps. So, about 175 bps of the 225 bps total rate cut since August may be actually regarded as the Fed's reaction to the deepening credit crisis.

Table 2.6

Neutral Fed funds rates based on alternative policy reaction functions

Policy Neutral Fed funds rates	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	Total
1. Based on core PCE and tightness of labor market	4.75%	4.50%	4.50%	4.50%	4.50%	4.50%	4.00%	-0.75%
2. Based on core PCE, tightness of labor market and AAA-BAA spread	4.75%	3.00%	3.00%	2.75%	2.50%	2.25%	2.00%	-2.75%
2-1: Effect of credit crisis on Fed funds rate	0.00%	-1.50%	-1.50%	-1.75%	-2.00%	-2.25%	-2.00%	-2.00%

*Source: Eurobank EFG model estimates

In order to illustrate this point, consider Table 2.6, where we report estimates of the path of policy neutral Fed funds rates based on two alternative policy reaction functions. Based on our standard policy reaction function, where the Fed sets interest rates in response to developments of core PCE inflation and the tightness of the labor market (the inverse of product of the rate of unemployment and the median duration of unemployment), the Fed should have cut interest rates to 4.5% by December 07, a 75 bps cut from their peak during the current cycle. However, including the default spread (BBB-BAA) as a proxy of the credit crisis, policy neutral rates decline to 3% in December and remain at these levels until March 08. Hence, default risk does a good job in explaining the path of Fed funds rates since the outset of the credit crisis. Looking forward, with core PCE inflation stabilizing at 2.3% in 2008 (up from 2% in 2007) and the rate of unemployment increasing to 6% by year end, policy neutral Fed funds rates should not change dramatically, unless inflation expectations decline significantly (something we regard as quite unlikely) or the upcoming recession is much deeper than we currently anticipate. Hence, further rate cuts from current levels can only be justified by a significant deepening of the credit crisis. In fact, assuming that the BBB-BAA spread will peak at levels seen during previous credit crises episodes (to near 140bp by Q4:08, up from 126bp currently), our model suggests that Fed funds rates will eventually decline to 2% by Q1:09 (see Table 2.6).

Fed policy likely to backfire in form of rising inflation risk premia in the medium term

The Fed seems to have finally tilted the balance of risks towards growth and to move on aggressively in cutting rates enough to turn market sentiment around and prevent a self-feeding rout in financial markets that feeds back into the real economy. The main risk of the current stance of monetary policy is that inflation expectations may get out of control, implying that the Fed will have to raise interest rates significantly when credit markets stabilise and the economy starts to rebound from its current weakness. In fact, the recent increase in 5-year inflation expectations from TIPS suggests that the longer-term inflation outlook has worsened. We also share the markets' view that inflation in 2008 and beyond is on an uptrend, as the disinflationary impact of globalisation has given way to rising commodity prices, pushing global inflation up. If we are correct in this prediction, bond markets will at some stage start to worry about inflation, leading to a permanent increase in inflation risk premia and, hence, bond yields.

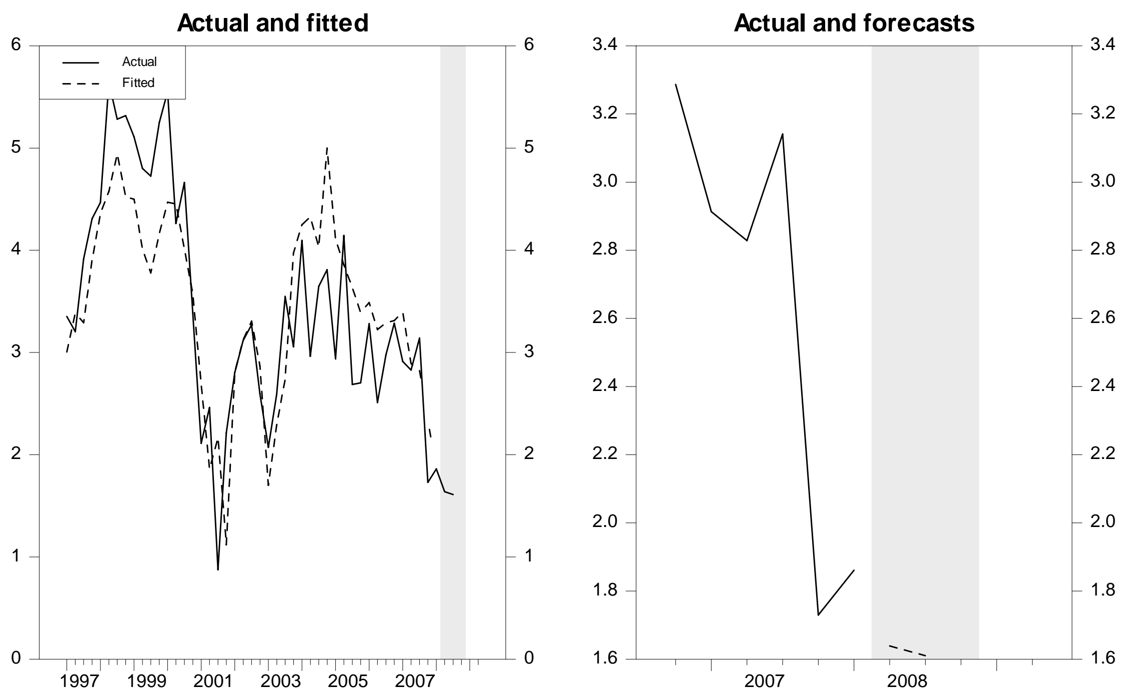
Although there will be cyclical variations on the inflation theme over the next months and quarters, the current rather dovish Fed policy will eventually backfire in financial markets, leading to a move up in risk premia incorporated in both bond/credit and equity markets. The bull run of bond and equity markets over the past 25 years can be largely attributed to a decline in economic volatility which went hand in hand with a sizeable decline in inflation. This trend-decline in inflation and economic volatility has in turn led to a secular decline in risk premia, supporting both bond and equity prices. If inflation risks rises again, financial markets will have to revert to a new rather bleak outlook for macroeconomic risks. With inflation risk premia on the rise, equity markets would have to correct more than the anticipated decline in corporate earnings (currently -15% y-o-y).

The US consumers will take the hit

One of the most important issues the US economy faces at the current juncture is whether the downturn of the housing market will be sufficiently serious to push the economy into a consumer-led recession. Hence, the scale of the slowdown in personal consumption will determine both the depth and the duration of the economic slowdown. There are increasing signs of a more protracted slowdown in consumer spending, with sharp declines in home values, rising oil and food prices and a weakening labor market. Adding to these problems, the severe credit crunch seems to be spreading into consumer credit (credit cards, auto loans), since the high rate of defaults on subprime mortgages is already leading to constraints in consumer credit markets.

The housing market slump and the eruption of the financial and credit crisis is clearly manifested in the sharp fall in consumer confidence. Several polls reveal that the majority of Americans expect a US economic recession over the following year. The Michigan consumer sentiment has gradually fallen during 2007, from 96.9 in January to 80.5 in January 2008. In addition, according to the Conference Board, US consumer confidence has weakened sharply in 2007, taking the level of the index from above 110 in the first two months 2007 to less than 87.9 in January 2008. Considering real data, retail sales declined by 0.4% in December 2007, reflecting the ongoing downward consumption trend and a payback for November's strong retail sales, which were also revised downwards. As a result, real personal consumption expenditures slowed significantly in Q4 07 to an annual rate of 2% q-o-q, from 2.8% q-o-q in Q3 07.

Figure 2.6



*Source: Eurobank EFG model estimates

Looking forward, we expect all the above-mentioned negative factors to generate a significant squeeze on private consumption growth during 2008. With a weakening job market, the housing downturn will weigh on personal expenditures through the impact of home equity extraction. In addition to that, the recent fall in stock markets will probably intensify the negative wealth effects of

falling property prices. Therefore, we have revised downwards our forecasts and expect personal consumption to decelerate from a y-o-y growth rate of 2.7% in 2007 to 1.7% in 2008 (Figure 2.6).

3. The Euro area economy

Dimitris Malliaropulos, Olga Kosma

- The Euro area economy faces a number of headwinds entering 2008, including the impact of the credit crisis and the appreciation of the euro.
- Business confidence signals weakening growth prospects ahead, with real economic activity decelerating below trend in 2008, due to an expected slowing in final demand.
- Although the labor market remains healthy, the underlying fundamentals for consumer demand point to a deceleration of consumption growth.
- The tightening of banks' credit standards for enterprises, the slowing of export growth and the state of the construction sector in some countries such as Spain are likely to dampen business investment.
- Rising energy and food prices keep inflation well above ECB's target, forcing the Central Bank to remain on hold.

Although real GDP growth picked up in Q3 07 to 0.8% q-o-q, after a disappointing growth rate of 0.3% q-o-q in Q2 07 (Figure 3.1), economic activity is expected to decelerate in Q4 07 and in 2008. Apart from the appreciation of the euro against the dollar, which is weighing on the competitiveness of euro area exports, the main factor restraining growth is the tightening of credit standards resulting from the recent financial turmoil. In addition, rising energy and food prices are set to weigh on households' purchasing power, leading to a slowing of consumer demand over coming months. Real GDP growth will likely slow to 1.7% y-o-y in 2008, from an estimated 2.7% for 2007.

Personal consumption due to moderate

Even though the labor market continues to be robust, with the unemployment rate at the lowest level ever reported since the series started in 1993 (7.2% in November 2007), the underlying fundamentals for consumer demand are pointing to a deceleration of consumption growth. The tightening of monetary policy since December 2005 and the worsening lending conditions will probably curb credit growth. In addition, the rise in consumer price inflation due to food and energy prices will probably hurt consumers' purchasing power; the surge in oil prices over the past 12 months, from an average price of $55/barrel in January 2007 to an average price of $94/barrel in January 2008, is expected to have a negative impact on private spending during 2008. Consumer

sentiment eased further to -12.0 in January 2008, from -9.0 in December 2007, pointing to ongoing consumption growth moderation. Retail sales seem to be affected by this consumer pessimism, with the latest data reporting a 0.9% y-o-y decline in November 2007. It is actually the first y-o-y negative change for retail sales since April 2005, and the biggest y-o-y decline after the -1.2% y-o-y decrease in May 1996 (Figure 3.2).

Figure 3.1

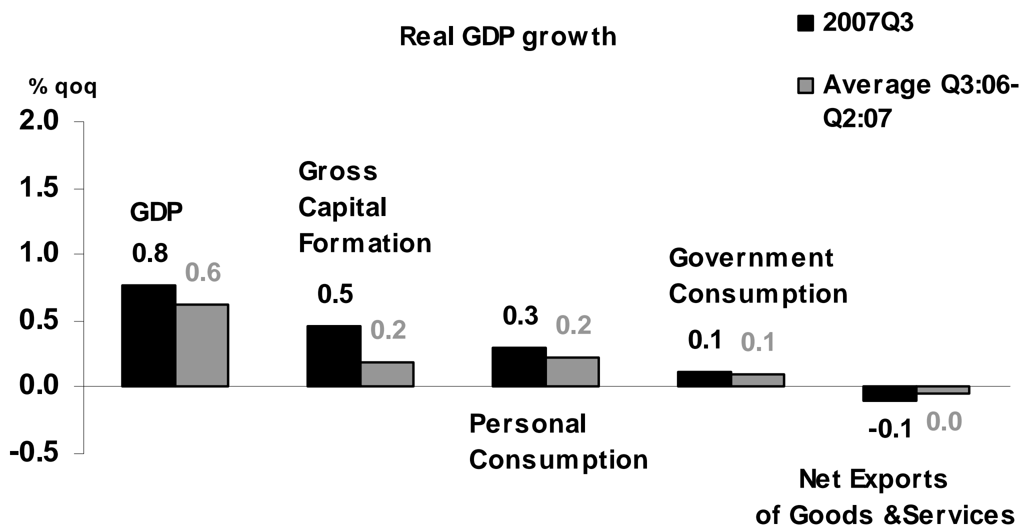


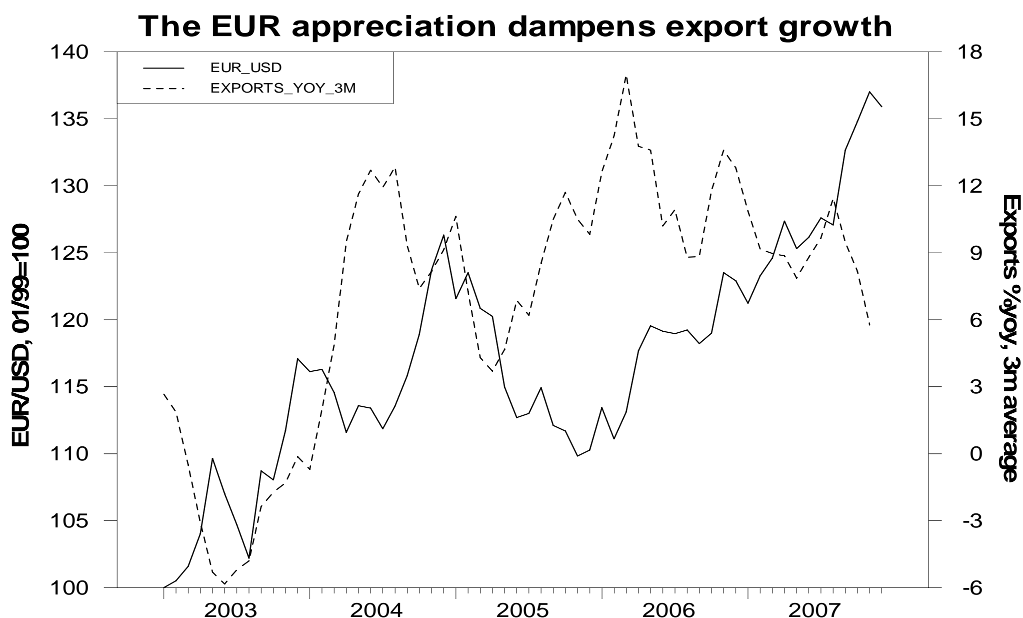
Figure 3.2

The tightening of banks' credit standards for enterprises and the slowing of export growth are expected to dampen business investment. Apart from that, housing and construction appear somewhat vulnerable in a number of euro area countries, pointing to a significant slowdown in residential investment during 2008. The situation is the worst in Spain and Ireland, where the housing market is experiencing a stronger correction, but countries like Italy and France will probably be affected as well. Moreover, given the ongoing equity market correction and the expected deterioration in earnings growth in 2008, investment growth will probably moderate.

Export growth is slowing due to strong euro and global slowdown

The appreciation of the euro against the dollar poses considerable risk to Euro area exports during 2008. Even though the euro has not strengthened as much on a trade-weighted basis, many global commodities are priced in US dollars, so the price of the euro relative to the US dollar plays a significant role for Eurozone's competitiveness. Indeed, there were signs of loss of momentum in trade activity, with exports decelerating in November to 4.4% y-o-y growth (0.3% m-o-m) from 9.6% y-o-y growth (1.2% m-o-m) in October 2007 (Figure 3.3).

Figure 3.3

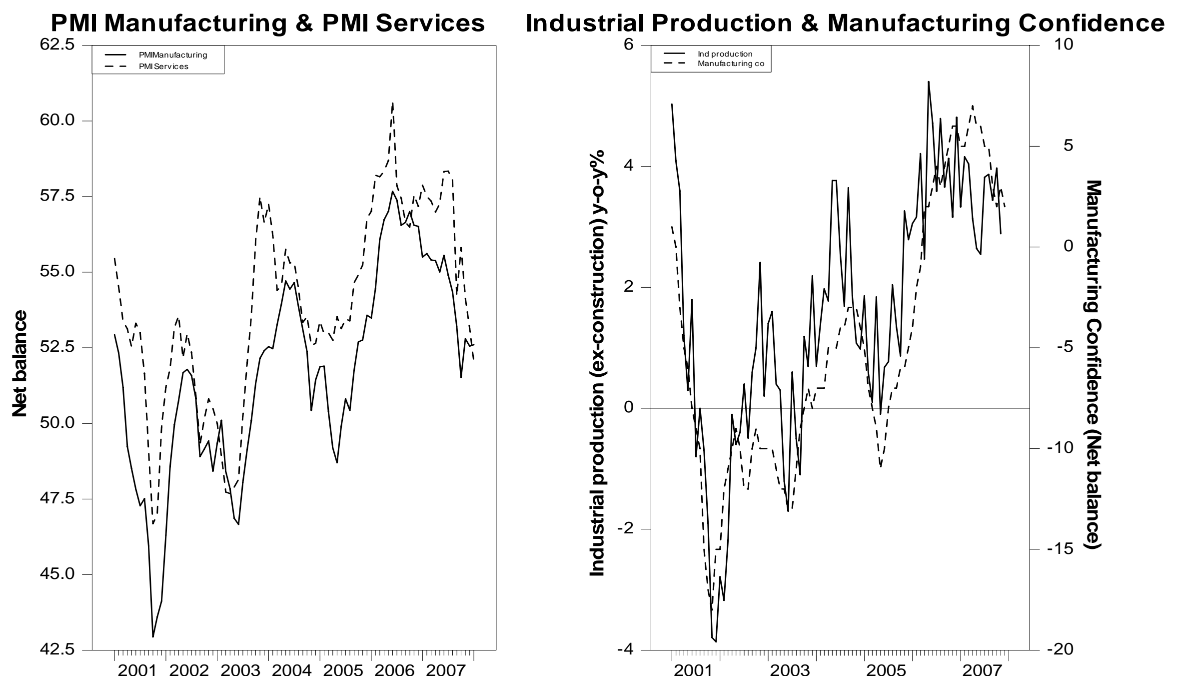


While the US growth prospects are still an important factor for Euro area's exports of goods and services, the outlook for emerging markets is becoming more and more important to the Euro area's prospects. The trade data highlight the dominant role of the emerging economies in driving euro area's export growth, accounting for more than 50% of euro area exports. Provided that emerging market growth moderates marginally throughout 2008, euro area is expected to lose only a little of its share on export markets during 2008. Moderate export growth will be one of the key factors in maintaining a soft landing for the Eurozone countries in 2008.

Business confidence signals weakening growth prospects ahead

Signs of an upcoming slowdown have already started to show, with confidence across Eurozone countries deteriorating significantly over the past few months. The Eurozone flash PMI for January points to a further slowdown in real economic activity, with the manufacturing index staying steady at 52.6 in January 2008, the lowest level for more than two years. The survey revealed that service-sector executives have become more pessimistic about the effects of the tightening in monetary conditions, with the services PMI index declining sharply to 52.0 in January 2008 from 53.1 in December 2007, the lowest reading since August 2003.

Figure 3.4



Industrial confidence has gradually deteriorated to 2.0 in December 2007 from its recent peak of 7.0 in April 2007, and is actually in line with the downward trend in industrial production numbers. Indeed, industrial production growth moderated from its peak of 5.6% y-o-y (1.5% m-o-m) in May 2006 to 2.9% y-o-y (-0.4% m-o-m) in November 2007, providing further evidence of a downturn in activity (Figure 3.4).

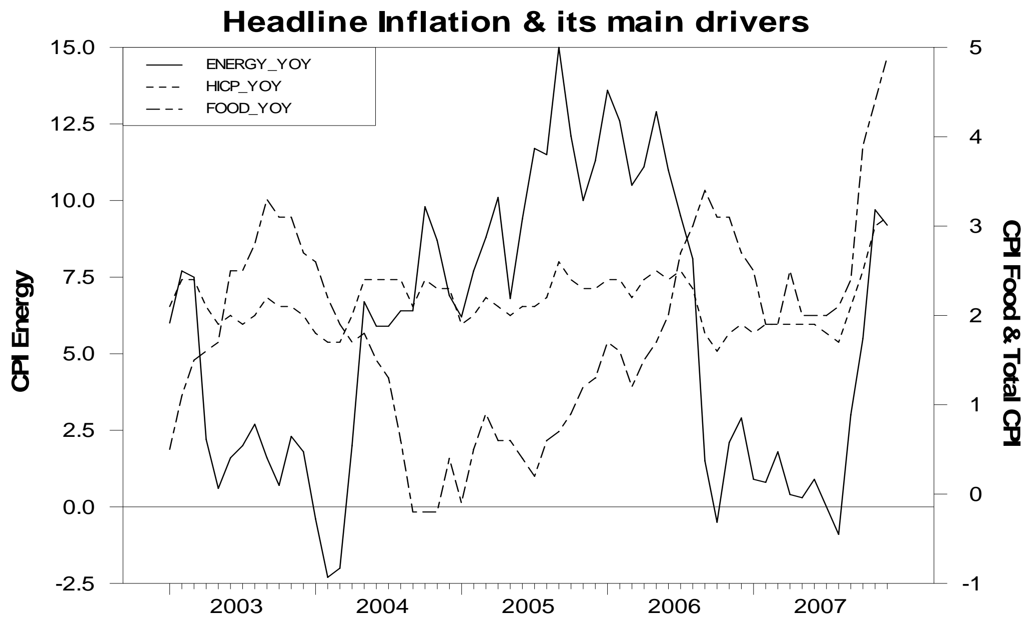
Commodity prices keep inflation well above ECB's target,…

While inflation expectations have been well-contained, in late 2007 inflation increased sharply well above ECB's objective of keeping inflation to or below 2%. Headline flash consumer price inflation has increased to 3.2% in January 2008 from 3.1% in December 2007, the highest rate ever reported. Base effects from the decline of energy prices at the and of 2006, as well as higher energy and food prices, have pushed consumer inflation to record levels (Figure 3.5). Over the last three months, the price of WTI jumped from $74/barrel at the beginning of September 2007 to $96/barrel at the end of December 2007, marking a huge increase of about 30%. In this regard, the recent rapid strengthening of the euro could not offset this increase by containing imported inflation. While ECB President Trichet has repeatedly indicated that there will be "no second-round effects" from the current high level of headline consumer price inflation, we recognize that, if the surge in energy and food prices lasts longer than expected, some second-round effects are unavoidable. Furthermore, higher headline consumer inflation may urge unions to demand higher wage increases on the back of the decline in workers' purchasing power. Trade unions in Germany have already expressed a more aggressive attitude, pushing for major real wage increases. Overall, we expect headline inflation to edge up to 2.3% y-o-y in 2008, from 2.1% in 2007.

…urging the central bank to remain on hold

Despite significant downside risks to the economic outlook, the persistence of high inflation rates ending 2007, makes it difficult for the ECB to ease monetary policy. The ECB seems ready to stand a period of sub-trend growth in order to ensure that the shock increase in commodity prices does not result in a rebound of wage inflation and long-term inflation expectations. Looking forward, however, we believe that the ECB will be forced to cut interest rates by mid-year as economic activity is expected to weaken significantly over the next few months.

Figure 3.5



4. The Japanese economy

Dimitris Malliaropulos, Olga Kosma

- The outlook for economic activity in Japan has weakened considerably, on the back of slower private consumption and a rather temporary slump in housing investment.
- External demand seems to have lost momentum as well, suggesting that the period of robust export growth appears to be ending.
- Given the increasing recession fears in the US, the slowdown of the world economy, the strengthening of the yen and rising oil prices, we have adjusted our forecasts downwards and expect real GDP growth to decelerate from 1.9% in 2007 to 1.5% in 2008.
- Although headline Inflation has turned positive, there are no signs of increasing inflationary pressures since average wage growth is barely positive and core inflation remains in negative territory.
- Given the worsening credit conditions and the unfavorable growth prospects for the Japanese economy, we expect the Bank of Japan to remain on hold throughout most of the year. However, the bias for interest rates is clearly on the downside

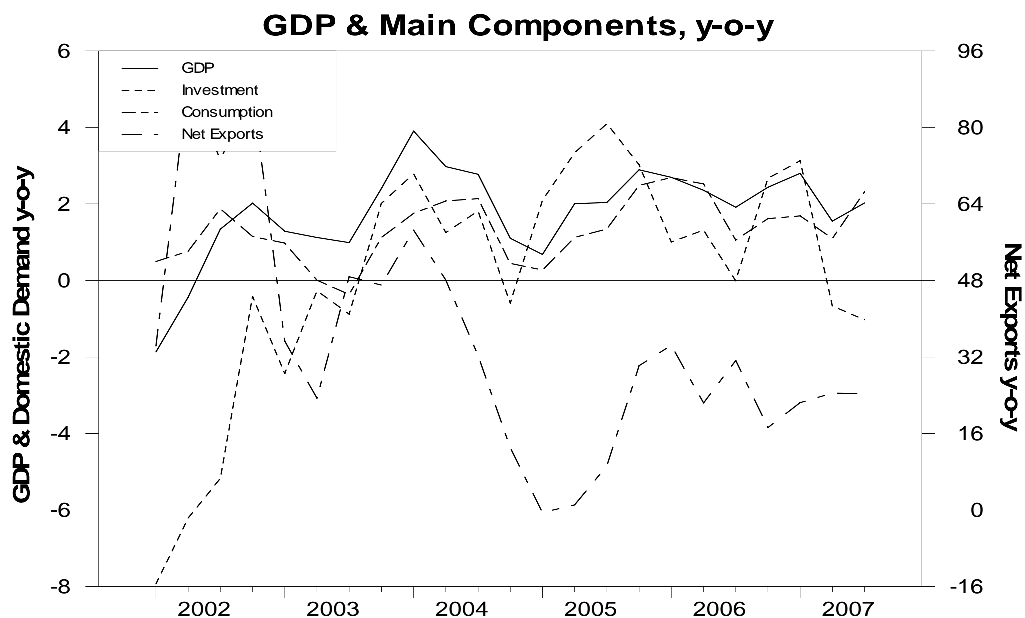
Unfavorable growth prospects on the back of slowing domestic demand,…

Real economic activity has been revised downwards in Q2 07, posting a 0.5% q-o-q decline, mainly due to a decrease in domestic demand by 0.5% in the quarter. Real private consumption growth slowed to 0.2% q-o-q, one third of the rate of the previous quarter, while fixed capital formation declined sharply by 2.6% q-o-q. As expected, real GDP rebounded in Q3 07 from the sudden decline reported in Q2, increasing by 0.4% q-o-q. Net trade accounted for the whole GDP increase since it increased by about 10% compared to the previous quarter. The contribution of net trade actually offset the major drag from real private residential investment, which contracted by 7.9% in the quarter, the biggest q-o-q loss since Q2 1997 (Figure 4.1).

Domestic demand has weakened significantly and real GDP growth is expected to slow sharply in Q4 07 and in 2008 as a whole. The weak consumption data reported by the household survey confirmed the worsening consumption prospects that came to light by the December Economy Watchers Survey. The Diffusion Index of present conditions fell back to 36.6 in December from 38.8 in November, marking the ninth consecutive decrease and the lowest level for nearly four years. According to the household survey, real personal consumption declined by 0.6% y-o-y in November 2007, the highest y-o-y decrease since December 2006. Although real spending growth rebounded

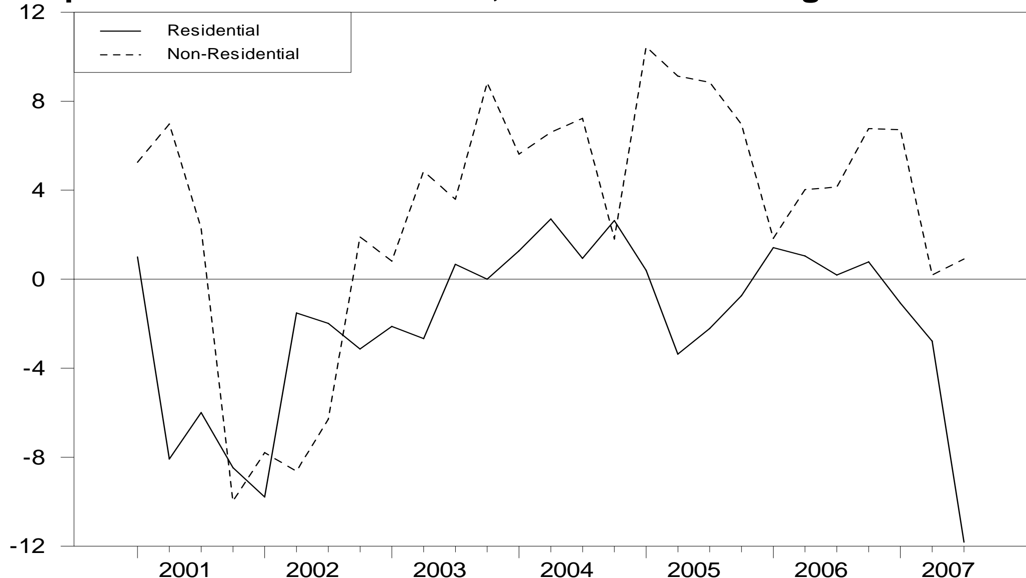
to 2.2% y-o-y in December 2007, consumer expectations point to an economic slowdown. Consumer confidence has deteriorated gradually throughout 2007, falling to 38.3 in December from 40.0 in November 2007, the lowest level ever reported since the series began in 2004. Consumer sentiment seems to have worsened due to local tax increases in July on the back of a significant tax reform and rising energy and food prices. The deterioration in consumer sentiment was probably reinforced by falling stock prices since October 2007. With increasing market volatility and the main equity market indices down about 20% from their peak in October, negative wealth effects are on the rise. We expect negative trend in private consumption to be intensified in Q4 07 and in H1 08 by slowing purchasing power, a weakening labor market and the recent surge in food and gasoline prices.

Figure 4.1



Gross fixed capital formation declined in Q2 and Q3 07 both on a y-o-y and a q-o-q basis, representing the worst investment figure since Q4 01 (Figure 4.2). This performance was largely the result of weakness in residential investment. Construction standard changes that came into effect in June 2007 may have exaggerated the extent of the residential deterioration. Housing starts collapsed by a monthly average of 34.5% y-o-y since July 2007 and slower construction activity is expected to be a significant drag on real GDP growth in Q4 and at the beginning of 2008. Total construction orders declined by a monthly average of 14% since September 2007; however, most of the negative effect is likely temporary since it is related to regulatory changes.

Figure 4.2



However, there have been increasing signs that the deterioration in consumption and construction is now spreading into the manufacturing sector, thanks to which real GDP growth rebounded in Q3 07. Industrial production fell by a monthly average of -0.1% m-o-m during November and December 2007, showing signs of a gradual downward trend to 1.8% average y-o-y growth over the last two months, from its recent peak of 4.4% in August 2007. The Tankan manufacturing survey conducted in January 2008 declined to 17 from 21 in December 2007, providing further evidence of a continuing downturn in the manufacturing sector.

Signs of deceleration are also evident on the investment side, with core machinery orders falling by -2.8 m-o-m in November, on top of a 12.7% surge in the previous month. Core machinery orders, which have been the main driven of machinery capital expenditure, point to increasing risks for a protracted slowdown. Given the manufacturing sector deterioration and the negative prospects for nonmanufacturing due to a slowdown in corporate earnings, we do not expect a rebound in capital expenditure throughout 2008. Indeed, profits of medium-sized Japanese companies feel sharply by 17% y-o-y in Q3 07. According to the finance ministry corporate survey released in December 2007, corporate profits at large companies partly offset the huge drop at medium-sized companies, increasing by 1.3% y-o-y in the quarter. As a result Japan's aggregate corporate earnings fell by 0.7% y-o-y in Q3 07, marking the first y-o-y decline since 2002.

...reinforced by a deceleration in export growth

The slowdown in investment demand can also be attributed to the deterioration in export prospects. Export growth, which had been in double digits for about two years, has lost momentum, increasing by 6.9% y-o-y in December after 9.6% y-o-y in November. Although exports to emerging Asia and Europe have more than offset for the slowdown in exports to the US, in recent months even exports to China have faltered, suggesting that the period of robust export growth appears to be ending. In particular, exports to the US reported the fifth consecutive month of decline, losing 4.5% y-o-y in December, after a 6% y-o-y loss in November 2007. Exports to the EU slowed considerably, increasing by a mere 2.4% y-o-y after a 8.2% gain in November, while exports to Asia slowed to 8.2% y-o-y growth, compared to an average of 12.8% in the previous two months.

Figure 4.3

Apart from the deceleration in global growth, the weaker export performance is undoubtedly underpinned by the recent further considerable appreciation of the yen (Figure 4.3). The yen exchange rate against the US dollar has dropped to 106.7 from its recent peak of 117.6 in November, marking a remarkable appreciation of more than 9% in about two months. Rising risk aversion and the corresponding unwinding of carry trades has kept pushing the Japanese currency

higher in recent weeks. Indeed, the latest survey of the Ministry of Finance (MoF) reveals a worsening export outlook for the beginning of 2008.

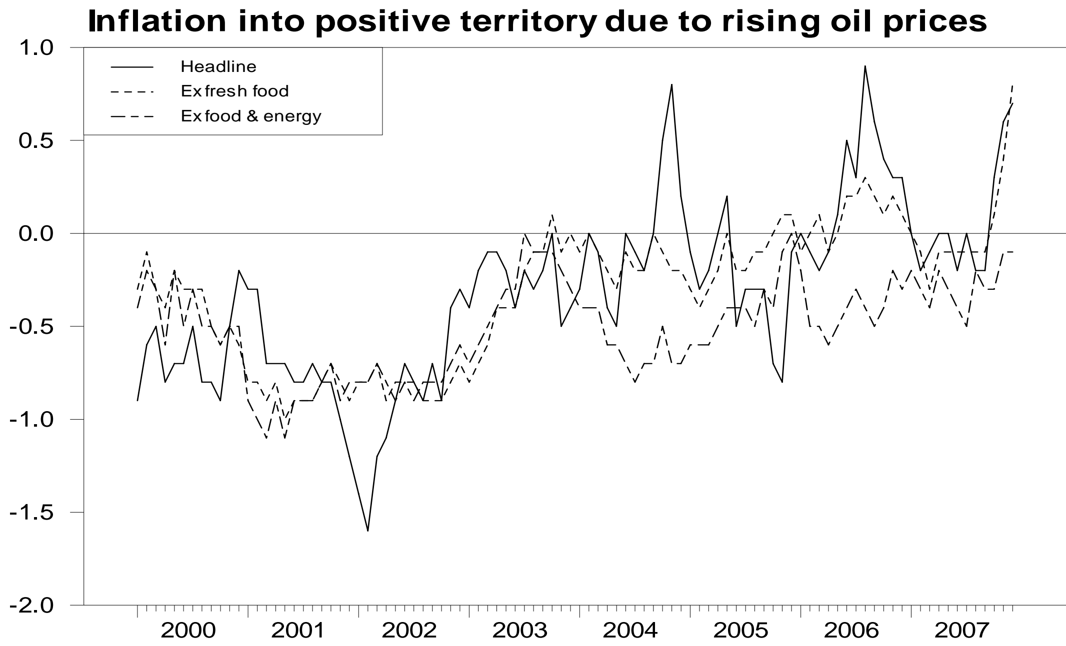
All the above-mentioned weakening economic data point to a sharp slowdown of the Japanese economy. Given the increasing recession fears in the US and the slowdown in the global economy, we have adjusted our forecasts downwards and expect real GDP growth to decelerate from 1.9% in 2007 to 1.5% in 2008, with the risks skewed to the downside.

The BoJ will probably remain on hold in response to a visible deterioration in growth prospects

Inflation has turned positive in Q4 07, after hovering around zero in the first three quarter of 2007. The national headline consumer price index increased by 0.7% y-o-y in December 2007, after 0.6% y-o-y in November, on the back of higher food and energy prices. The national core CPI inflation (excluding fresh food) came in at 0.8% in December 2007, after 0.4% y-o-y in November, while the Tokyo core CPI in January, which is a leading indicator for the national index, points to further acceleration over the coming month. However, there no signs of increasing inflationary pressures in Japan, since average wage growth is barely positive and core inflation excluding energy and food is still negative. In particular, average monthly cash earnings increased by 0.2% y-o-y in November 2007, after a 0.3% y-o-y decline in October 2007, while consumer price inflation excluding energy and food declined by 0.1% y-o-y in November and December 2007 (Figure 4.4). On the contrary, the energy push to the headline price inflation may even have a deflationary effect on the broader economy through its negative impact on real wage growth and households' purchasing power.

The Bank of Japan left the overnight call rate unchanged to 0.5% in its January 22nd meeting, in response to weak economic data, as well as slowing growth prospects in the global economy. Market expectations have started to move towards monetary easing by the BoJ. The overnight index swap market gives over 60% probability of a 25bp rate cut by the August Monetary Policy Meeting. Governor Toshihiko Fukui made it clear at a press conference after the Board's meeting that "the BoJ intends to implement monetary policy flexibly without letting itself be confined by currently low interest rates", confirming a shift to a monetary easing bias.

Figure 4.4



5. BRICs

Dimitris Malliaropulos, Maria Prandeka

Brazil Economic Outlook

- Brazil's economic growth continues to strengthen, supported by strong domestic demand.
- Successive expansionary policies in combination with robust domestic credit growth and improving labor market conditions have fueled the continuation of strong corporate investment and consumer expenditure.
- However, faster economic expansion coupled with currency appreciation continued to weigh on the trade surplus despite strong export growth.
- The strong performance of the Brazilian real has offset so far inflationary pressures.
- Nevertheless, rising international food prices has prompted a recent surge in inflation, leading the Central Bank to keep the benchmark interest rate unchanged at 11.25% after 18 consecutive cuts since September 2005.

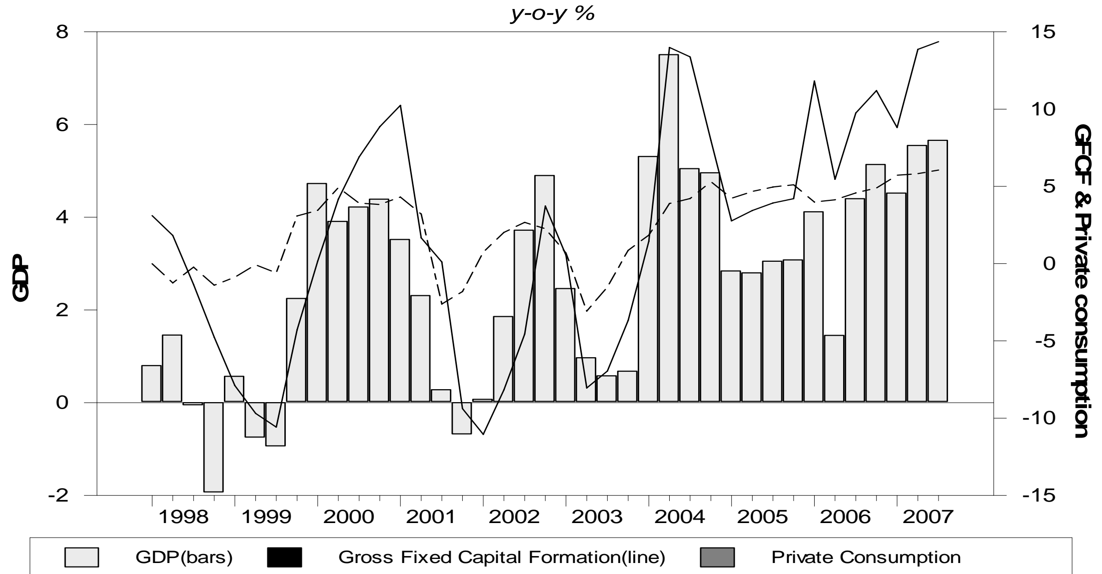
The Brazilian economy is in its best shape since the second quarter of 2004. The expansion remains robust as domestic demand has been the main driver of growth on the heels of monetary easing, rising real wages and improving labor market conditions. Real GDP growth accelerated to 5.7% y-o-y in Q3 07 compared with the revised 5.6% y-o-y increase in the second quarter of the year. The economy has benefited greatly from the surge of gross fixed capital formation alongside the increase of private consumption (Figure 5.1). However, the contribution of the external demand to GDP growth remains negative as exports growth decelerated whereas imports drive through their second successive year of double digit growth.

Table 5.1

Brazil Main Economic Indicators

	2006	2007	2008e
GDP (% y-o-y)	**3.7**	**5.0**	**4.4**
Inflation (% y-o-y)	**4.2**	**3.6**	**4.0**
Exports of Goods & Services (%)	**16.3**	**16.6**	**14.5**
Imports of Goods & Services (%)	**24.1**	**32.0**	**16.0**
Trade Balance (% GDP)	**4.4**	**3.1**	**2.3**
Short Term Interest Rate(%)	**15.28**	**11.98**	**10.21**
Exchange Rate (Per US$)	**2.18**	**1.95**	**1.97**

Figure 5.1



Gross fixed capital formation remains the growth engine of domestic demand. Real fixed investment has reached a multi year peak, rising by 14.4% in Q3 07, underpinned by robust corporate credit growth in the face of declining interest rates and a strengthening of the Brazilian real against the dollar. Industry and commercial loans in Brazil have increased every month since 2004 owing to record low interest rates and buoyant corporate profitability. Specifically, industry loans have risen in 2007 at double the pace of 12.4% posted on average in 2006 (Figure 5.2).

Strong credit coupled with increasing employment and robust growth of real and nominal wages pushed up household consumption growth. Real personal consumption accelerated to 6.1% y-o-y in Q3 07, compared to 4.6% y-o-y in the same period of 2006. Rapid growth in personal consumption is also confirmed by strong retail sales data. Retail sales increased by 6.2% y-o-y on average in 2006 and surged to 9.9% y-o-y in November 2007 (Figure 5.3).

Figure 5.2

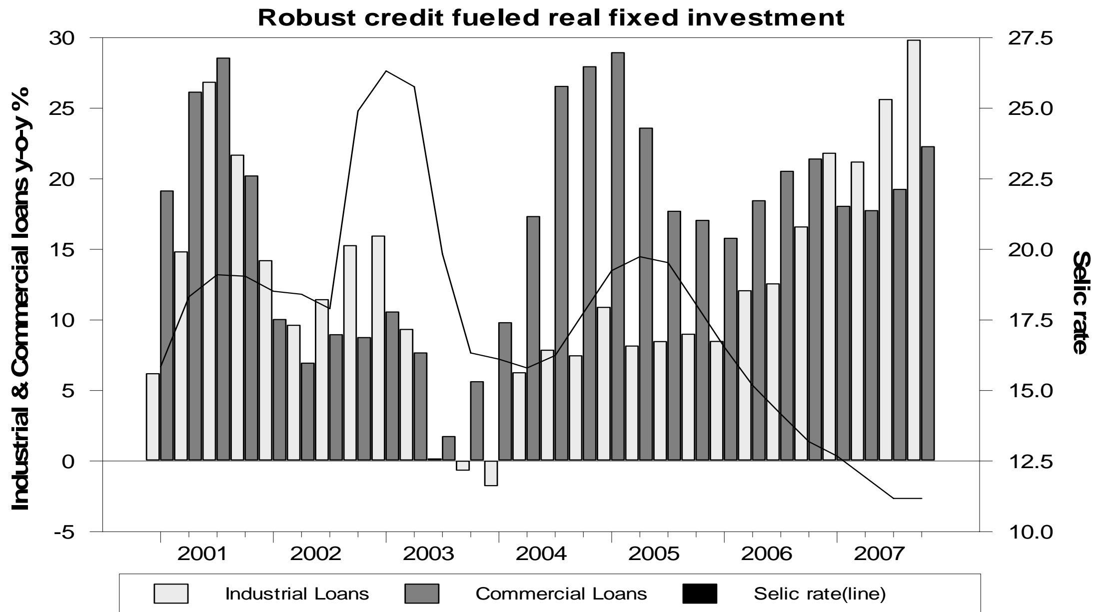
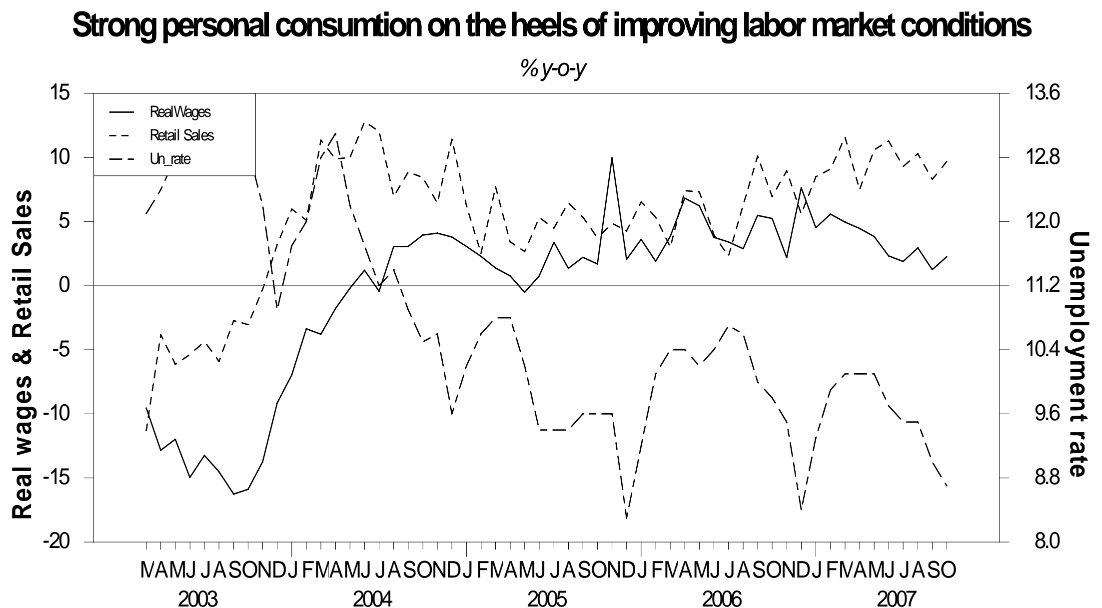


Figure 5.3

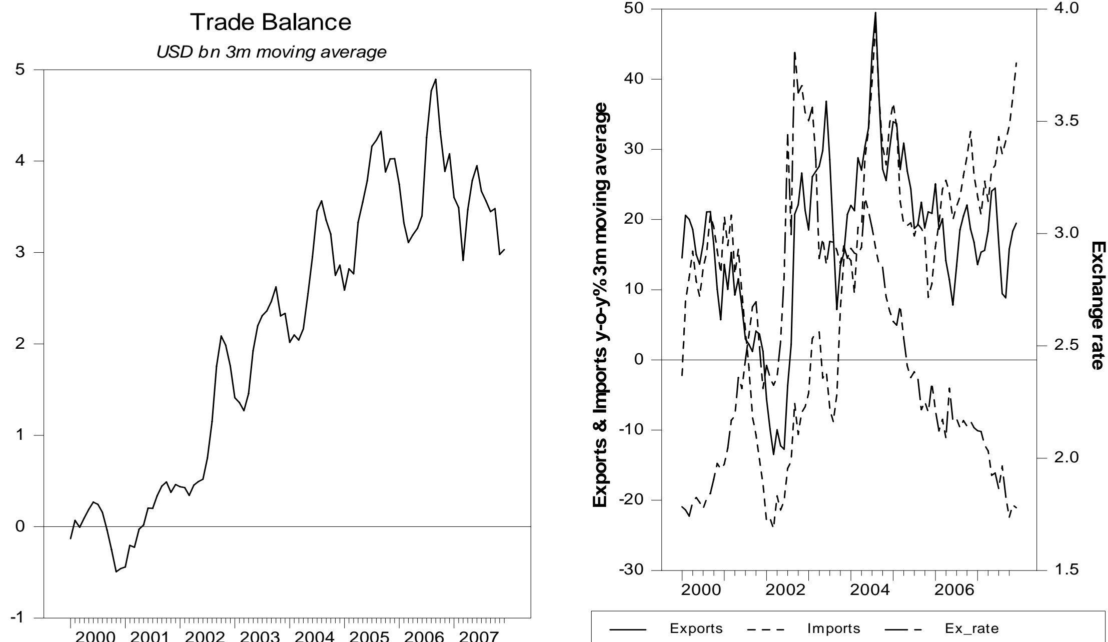


However, the contribution of external demand to GDP growth is declining rapidly as the trade surplus has decreased from US$5.1bn in December 2006 to US$3.6bn in December 2007 (Figure 5.4). The declining trade surplus reflects growing imports underpinned by strong growth in consumer spending and sustained appreciation of the Brazilian real against the dollar. Indeed,

imports drive through their second successive year of double digit growth, increasing by 46.9% y-o-y in December from 39% y-o-y posted in a month earlier. The total value of imports amounted to US$120.6bn in 2007, marking a 32% increase, compared to US$91.4bn, recorded in 2006. The latest data suggest that the expansion of imports is most obvious in the capital goods sector, which reported the fastest y-o-y growth rate in December 2007 (46.8%, compared to 12.2% in December 2006). The surge in imports of capital goods signals that fixed capital investment in Brazil remains strong, promoting the overall growth of the economy. The appreciation of the Brazilian currency has undermined the growth of exports. However, high international commodity prices offset the strengthening of the Brazilian real and, as a result, export growth is being sustained at high levels and the trade surplus remains sizeable. Even so, we expect that imports growth will continue to outpace growth in exports mainly due to the strong exchange rate and buoyant domestic demand (Figure 5.4).

Figure 5.4

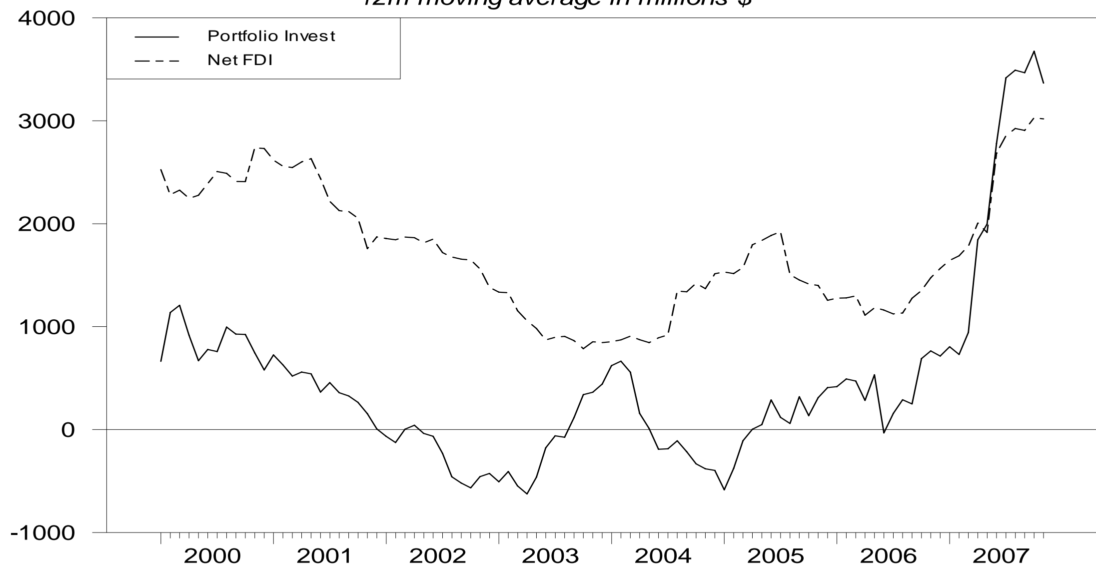
Strong currency undermined the trade surplus despite strong export earnings growth



Over the past few years, Brazil's improving domestic environment coupled with robust global growth and ample liquidity in international capital markets have boosted capital inflows into the country. As a result, a continued appreciation of the Brazilian currency took place and now the

Brazilian real constitutes one of the currencies that have appreciated the most against the dollar over the past years. Indeed, BRL has appreciated more than 50% against the dollar since September of 2002. At the same time, as the global economy slows down, foreign direct investment and portfolio investments into Brazil tend to moderate somewhat, yet strong enough to keep the BRL relatively strong in 2008 (Figure 5.5).

Figure 5.5

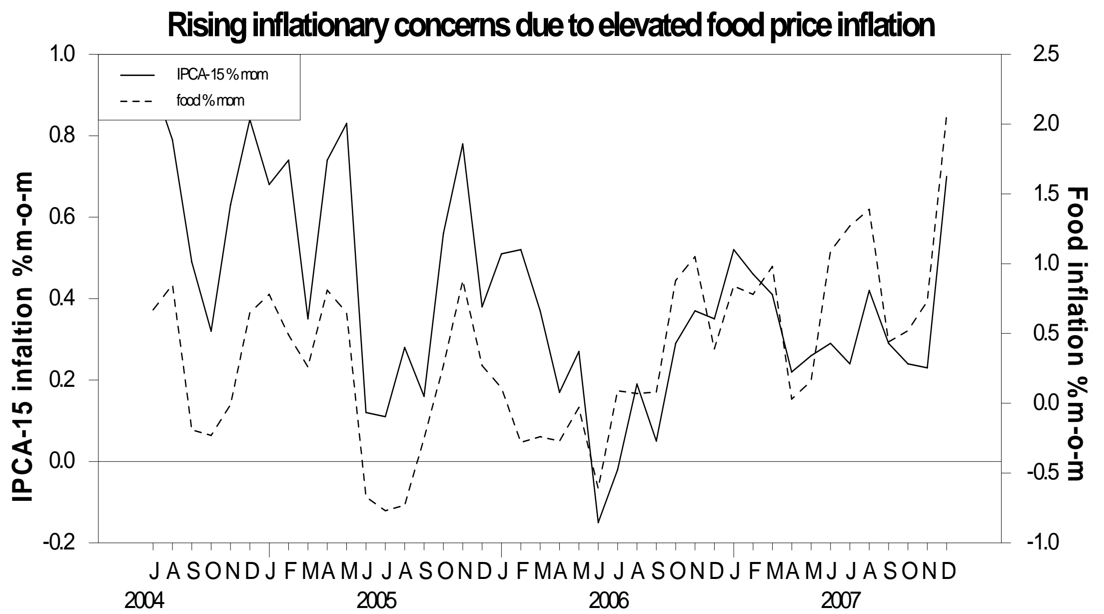


During 2007, the inflationary pressures stemming from elevated international food prices, rapid domestic demand growth, as well as strong credit growth have been largely offset by the strong performance of the Brazilian real. Nevertheless, inflation as measured by the Broad Consumer Price Index (IPCA) jumped to 0.74% m-o-m in December, well above the 0.38% m-o-m posted in November, mainly due to rising food price inflation. As a result, consumer price inflation increased to 4.5% y-o-y in December 2007, reaching the BCB's target range of 4.5% for 2007 (Figure 5.6).

The probability of a US recession and a global economy slowdown increases downside risks to capital flows into Brazil, putting the Brazilian real under pressure. The latter, in combination with strong domestic demand and upward pressure on consumer prices have likely put an end to monetary easing. In fact, the central bank decided to keep the Selic benchmark interest rate unchanged at 11.25% in its December COPOM meeting, after 18 consecutive cuts since September

2005. We expect monetary easing to be put on hold for a while until inflation is contained well below the official target of 4.5%.

Figure 5.6



Russian Economic Outlook

- Russia's economic performance remains robust, with both private consumption and fixed investment expanding rapidly.
- The main challenges of Russia's economy are inflationary pressures and rapid appreciation of the rouble.
- Russia's trade balance continues to deteriorate, due to weak export growth in combination with buoyant import growth, supported by strong currency and robust household consumption.
- Massive capital inflows have increased the pace of foreign reserve accumulation, leading to fast growth of money supply.
- Ample liquidity along with high food prices exerts further inflationary pressures.

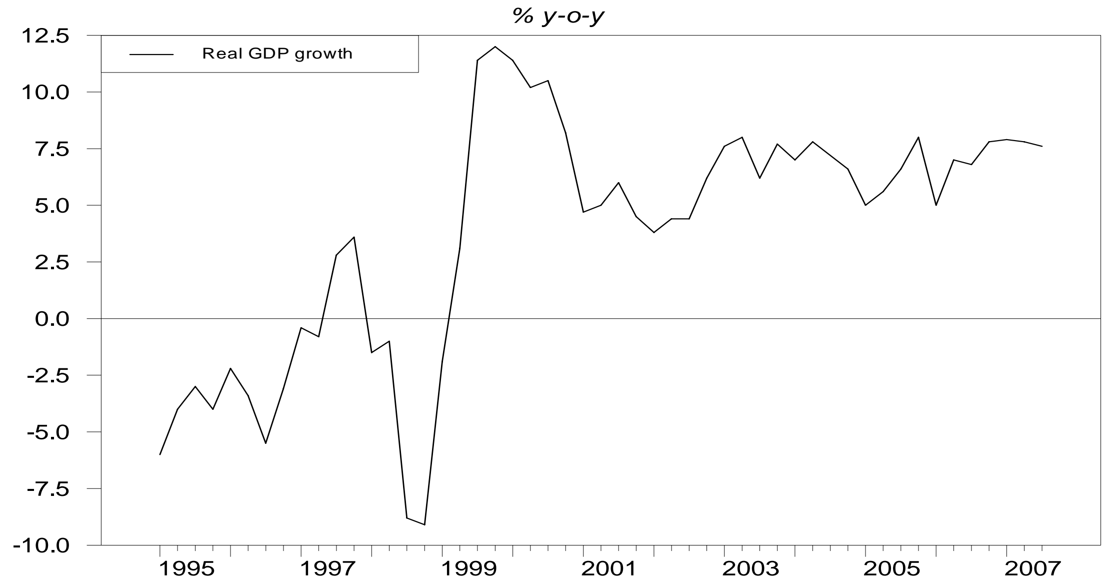
In 2007, the Russian economy continued to strengthen on the back of strong domestic demand and rising oil prices. Real GDP expanded by 8.1% in 2007, following a 7.4% rise in the previous year. Russia's economic performance moderated only slightly in the third quarter of 2007, as compared to the first two quarters of 2007, with the economy growing by 7.6% y-o-y, a growth rate, much stronger than the consensus estimates of 7% (Figure 5.7). Strong growth in domestic demand is the main driver of buoyant growth; retail sales, which surged to 15.2% y-o-y in 2007, were supported by increases in real wages. Moreover, gross fixed capital formation rose by 21% in 2007 compared to 12.6% average growth in 2006. Nevertheless fixed investment continues to have a low contribution to economic growth owing to tightened liquidity conditions.

Table 5.2

Russia Main Economic Indicators

	2006	2007	2008e
GDP (% y-o-y)	**6.7**	**7.6**	**6.5**
Inflation (% y-o-y)	**9.7**	**9.0**	**11.5**
Exports of Goods & Services (%)	**25.0**	**15.3**	**13.1**
Imports of Goods & Services (%)	**31.4**	**34.2**	**27.7**
Trade Balance (% GDP)	**14.1**	**9.7**	**6.8**
Short Term Interest Rate(%)	**11.5**	**10.13**	**11.75**
Exchange Rate (Per US$)	**27.17**	**25.57**	**24.07**

Figure 5.7



The latest industrial production data suggests that manufacturing production started to moderate in November when manufacturing output slowed to a mere 6.3%, from 9% in October. This is largely evident in industrial production growth, which eased to 4.7% y-o-y in November from 6.1% in October (Figure 5.8). It seems that the appreciation of the rouble hit the competitiveness of Russia's manufacturing sectors. Should the rubble appreciation persist and investment demand decelerate in 2008, the domestic industry will moderate further.

On the other hand, the contribution of the external sector remains negative as the strong currency and robust domestic demand fueled consumer demand for imported goods. Imports increased by 37% in the first 11 months of 2007 outpacing a weaker export growth of 15% for the same period (Figure 5.9). However, high oil prices boosted export revenues and, as a result, the absolute value of exports is much larger than that of imports (Figure 5.9). Nevertheless, the current account surplus fell by about 31% to US$55 in the first three quarters of 2007 compared to US$80 in the same period of 2006. Given high oil prices, combined with the fact that imports increase faster than exports and that oil accounts for 35% of Russian exports, we expect the current account surplus to report only a gradual decline.

Figure 5.8

Strong consumption growth counterbalances the deceleration in manufacturing activity

% y-o-y

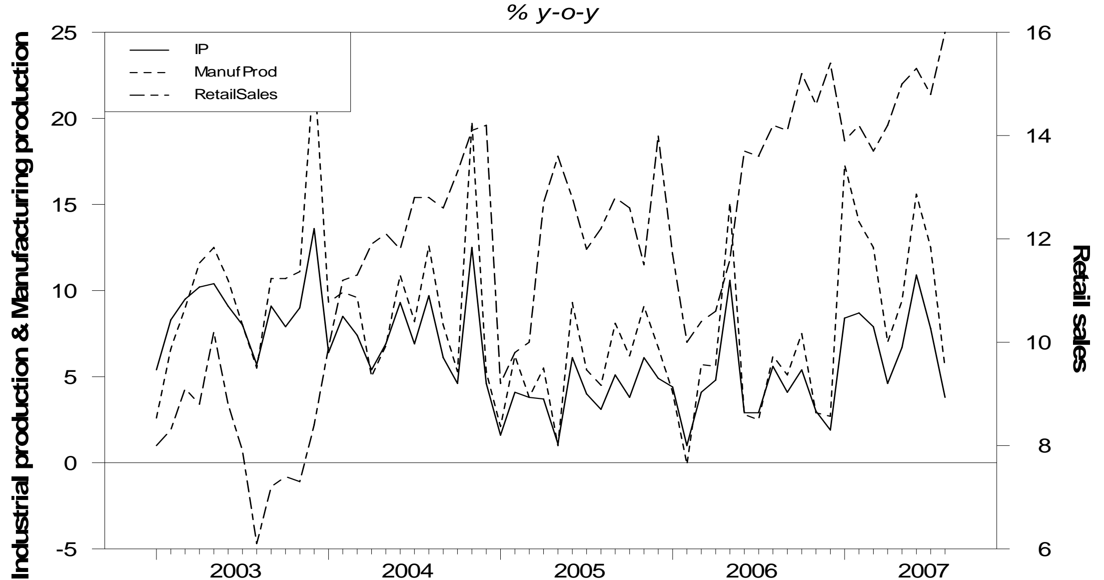
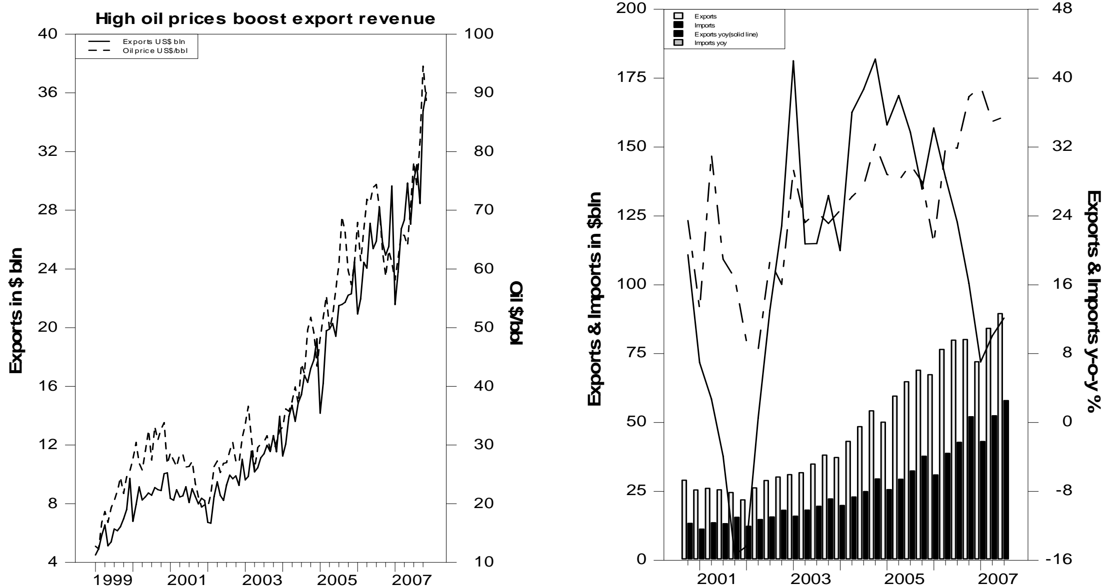


Figure 5.9

Exports & Imports



The deterioration of the current account continued to be offset by massive capital inflows. Foreign direct investment into Russia climbed to US$45.2 bn in the first three quarters of 2007, marking a 120% increase over the same period in 2006. Large capital inflows has increased the pace of foreign reserve accumulation, exerting upward pressure on the rouble and leading to fast growth of money supply in the economy. Indeed, capital inflows in combination with CBR's regularly buying foreign currency in order to prevent excessive currency appreciation have boosted Central Bank foreign reserves to US$476 bn in 2007. Moreover, M2 money supply continued to increase by around 50% y-o-y on average for the third quarter of 2007, albeit easing from 57% in the second quarter of the same year (Figure 5.10).

Figure 5.10

Rising inflation pressures, due to ample liquidity & food prices

Ample liquidity along with rising food prices in global markets, resulted in an increase of Russia's consumer price inflation to 11.9% y-o-y in December 2007, compared to 9% y-o-y in December 2006. Indeed, inflation edged up well above the Central Bank's target of 8% for 2007. As inflation dynamics remain significantly on the upside, we expect CBR to focus more on bringing down inflation by allowing the rouble to appreciate more against the dollar in 2008. Indeed, the rouble has appreciated by about 7% in 2007 against the US dollar. We expect that a stronger rouble in combination with easing of food prices will lead to a gradual moderation of inflation in 2008.

India Economic Outlook

- India's economy continues to strengthen, albeit at a slower pace, driven by rising domestic demand and, in particular, domestic investment.
- Growth is likely to moderate somewhat, due to the global slowdown, lagged effects of past monetary tightening and rupee appreciation.
- Past monetary tightening and the strong currency have pushed wholesale price inflation to a five year low.
- The Reserve Bank of India is likely to put on hold the monetary tightening as long as inflation remains within the central bank's target.

India's economy grew at a robust rate of 8.9% in Q3 2007, well above the 8.5% growth rate posted on average over the last three years, albeit at a slowest pace since the third quarter of fiscal year ending March 2007. Sector-wise, the pattern of growth indicates that the agricultural and services sectors are the main contributors of growth, decelerating marginally to 3.6% y-o-y (3.8% Q3 2007) and 10.3% y-o-y (10.6% Q2 2007) respectively, while industrial sector growth slowed to 8.3% y-o-y, down from 10.6% y-o-y in the April-June period of 2007 (Figure 5.11).

Table 5.3
India Main Economic Indicators

	2006	2007	2008e
GDP (% y-o-y)	**9.6**	**9.1**	**7.8**
Inflation (% y-o-y)	**6.2**	**6.5**	**5.3**
Exports of Goods & Services (%)	**25.6**	**19.5**	**17.7**
Imports of Goods & Services (%)	**25.1**	**24.7**	**22.0**
Trade Balance (% GDP)	**-7.0**	**-7.3**	**-7.7**
Short Term Interest Rate(%)	**6.83**	**7.71**	**7.75**
Exchange Rate (Per US$)	**45.3**	**41.2**	**38.3**

The slowdown in industrial production was mainly attributed to high interest rates, rapid appreciation of the rupee, which undermined the competitiveness of export companies, and weaker global demand. The weakness is concentrated mainly in manufacturing, which moderated to 8.6% y-o-y in Q3 2007, a growth rate significantly lower than the 12.2% y-o-y rate recorded on average in the first half of 2007. The weaker performance of the manufacturing sector can be mainly attributed to slower increases in production of durable goods, which fell by 4.1% y-o-y in November, in contrast to capital goods output, which rose by 24.5% y-o-y in November, compared to 19.3% y-o-y in the first ten months of 2007 and 18.2% y-o-y in 2006. The expansion in the

capital goods sector reveals that investment activity in the business sector was not affected negatively by the Reserve Bank of India's decision to raise the Cash Reserve Requirements (CRR) by 100 bps since July 31st (Figure 5.12).

Figure 5.11

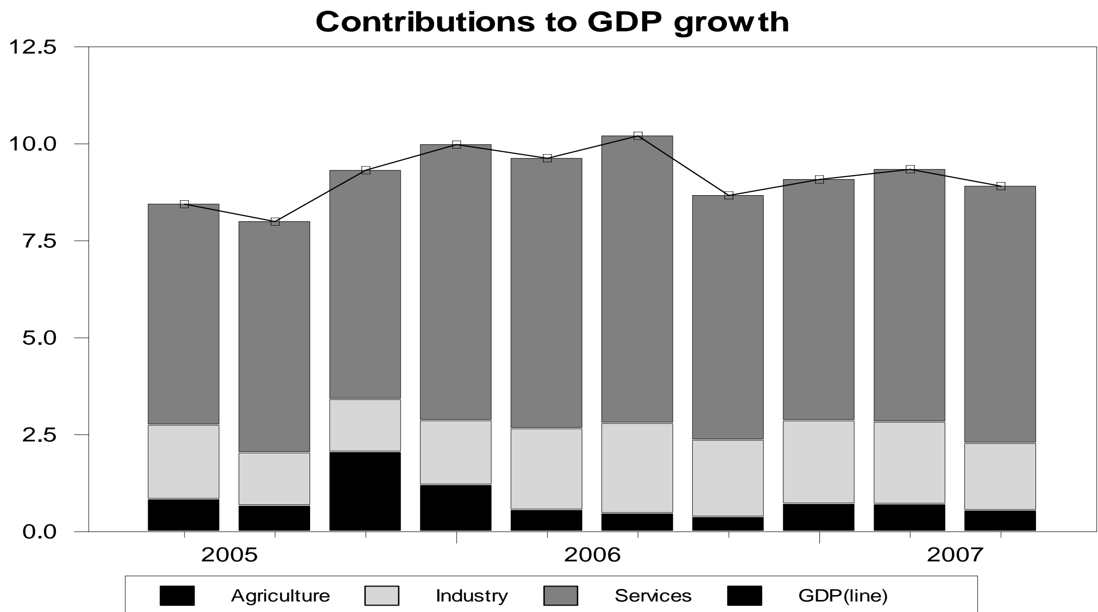
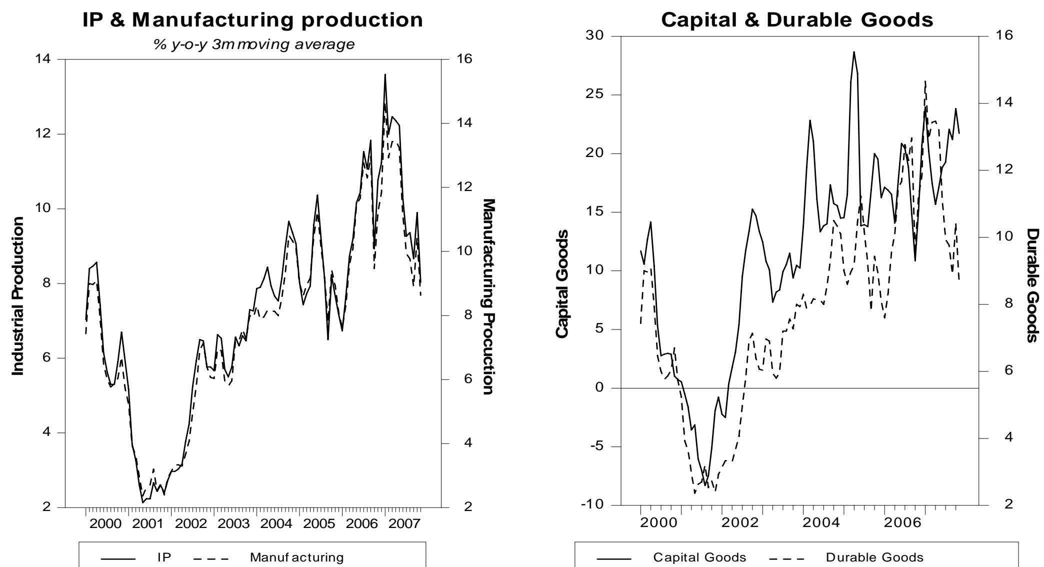


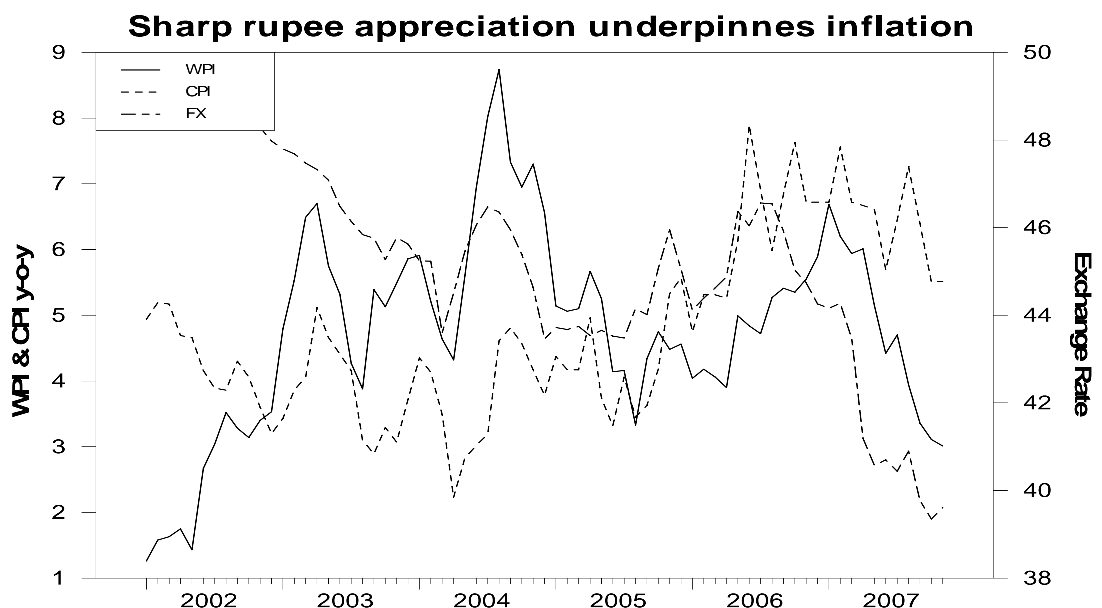
Figure 5.12



Strong GDP growth suggests that the economy is mainly driven by domestic demand and, in particular, real fixed investment. The latter has risen by 14.7% y-o-y on average over the fiscal year 2007 and surged to 15.2% y-o-y in Q3 2007, driven by buoyant corporate profitability. In contrast, personal consumption growth has slowed to 5.6% in Q3 2007 from a 6.2% y-o-y average recorded in the previous fiscal year, likely due to the negative effect of rising food prices on consumers' purchasing power.

High international crude oil prices and rising food prices signal growing concerns about the inflation outlook of the India's economy. In order to control inflation risks and to contain inflation, government authorities have kept fuel prices fixed since the beginning of 2007. The latter, in combination with sharp rupee appreciation, import tariff cuts and monetary tightening have brought down Wholesale Price Index (WPI) inflation, the current benchmark for inflation in India, to a five year low of 3.01% y-o-y in November, from a peak of 6.7% in January, although it edged up to 3.5% in December 2007. In addition consumer price inflation (CPI) for industrial workers declined to 5.5%, in December, down from 6.5% y-o-y on average in the first eleven months of 2007. Should oil prices remain at current levels or rise further in 2008, the government may be forced to raise retail prices of fuel, exerting upward pressures on WPI inflation (Figure 5.13).

Figure 5.13

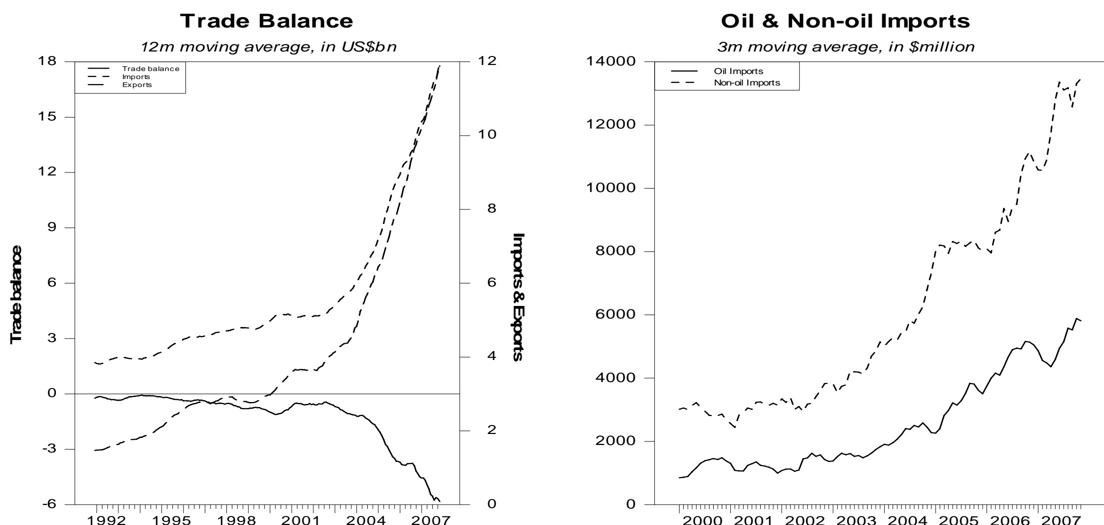


With inflation concerns on the upturn and large capital inflows resulting in excess liquidity, the Central Bank took action allowing the rupee to appreciate against the dollar to fight inflation. As a result, the rupee has appreciated by more than 10% since the start of 2007.

The sharp exchange rate appreciation alongside sustained growth in domestic demand contributed positively to the rapid expansion in imports. Import tariff cuts, aiming at attracting more supplies so as to cool down domestic inflation, have weighed significantly on the imports bill, which reached an accumulated US$198.9bn in the first eleven months of 2007, increasing by 25% y-o-y on average over the same period of 2007. It seems that rising oil prices are not the main cause of buoyant imports, as revenues stemming from non-oil imports have increased more rapidly than revenues stemming from oil imports (Figure 5.14, right). Furthermore, the continued upward trend in imports growth surpassed exports growth with the latter increasing by an average of 17.5% y-o-y in the first eleven months of 2007. As a result the trade deficit amounted to about US$54bn in the financial year to date (April-November 2007) (Figure 5.14, left). Hence, the current account deficit keeps widening, pushing the cumulative gap through the fiscal year 2007 to US$11bn from US$9bn in 2006. However, large private inflows have financed the current account deficit, resulting in an accumulation of foreign exchange reserves. As a result, the latter increased to US$275bn in December 2007 from US$177bn a year earlier.

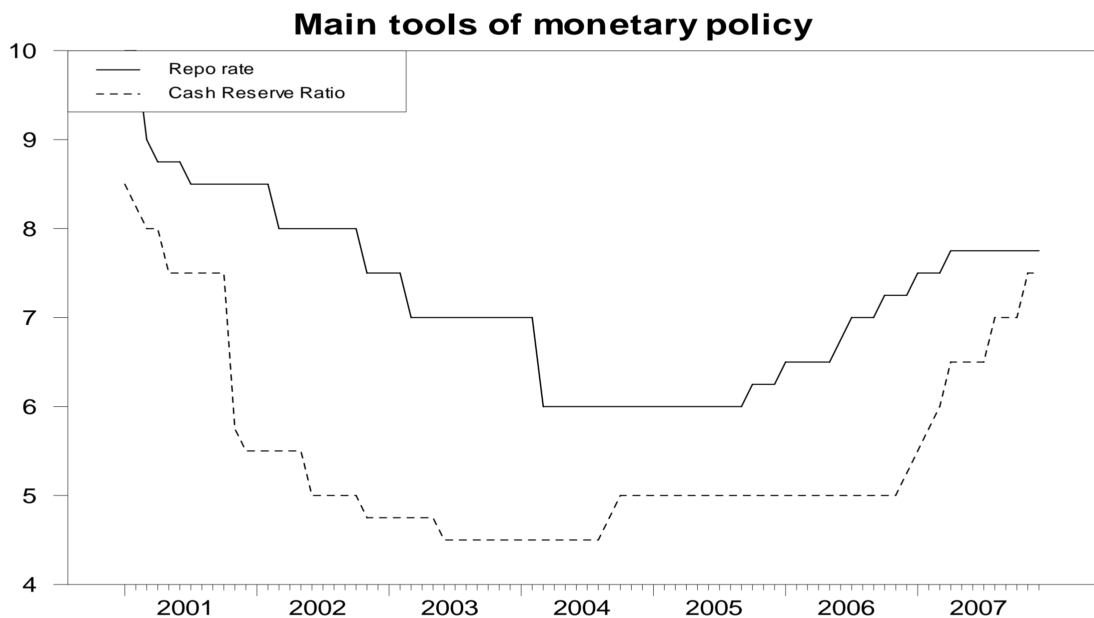
Figure 5.14

External Trade



The biggest challenge for the central bank of India is the management of capital inflows to ensure price and exchange rate stability. In its October meeting, the RBI has left the repo and reverse repo rates unchanged, whereas it announced a 50 bps hike in the cash reserve ratio (CRR) to 7.5% (Figure 5.15), in an effort to remove excess liquidity stemming from capital inflows and rising foreign exchange reserves. As long as inflation remains inside the RBI's target of 5%, there is no reason for the central bank to resume monetary tightening, as this policy will widen interest rate differentials, encouraging more capital inflows. At the same time, it seems that the RBI will not cut interest rates in the near future, as rising international oil and food prices keep consumer inflation at elevated levels.

Figure 5.15



China Economic Outlook

- China's economy grew over 11% in 2007, the fifth subsequent year of double digit growth.
- Inflationary pressures from elevated food prices calls for aggressive tightening in China.
- However, the unfolding slowdown of the global economy will weigh on Chinese exports, leading to a slowdown of the economy in 2008.
- A downturn revision of expectations of corporate profit growth has set a correction to the bull equity market into motion.

In 2007, the Chinese economy expanded at its fastest pace in 13 years. Investment and external demand remained the twin engines of growth. However, the pattern of growth indicates that weak domestic demand, coupled with excess supply is feeding structural imbalances. As the probability of a US recession increases and aggravates further downside risks to the external outlook, authorities should focus on reducing risks associated with China's pattern of growth amid a more balanced distribution of growth.

China's economy sustained a buoyant real GDP growth rate in 2007, accelerating at 11.4% in 2007-the fastest y-o-y pace sine 1994-against 11.1% in 2006. Indeed, 2007 was the fifth successive year of double digit growth with buoyed investment demand and strong export growth driving the rapid expansion of China's economy (Figure 5.16).

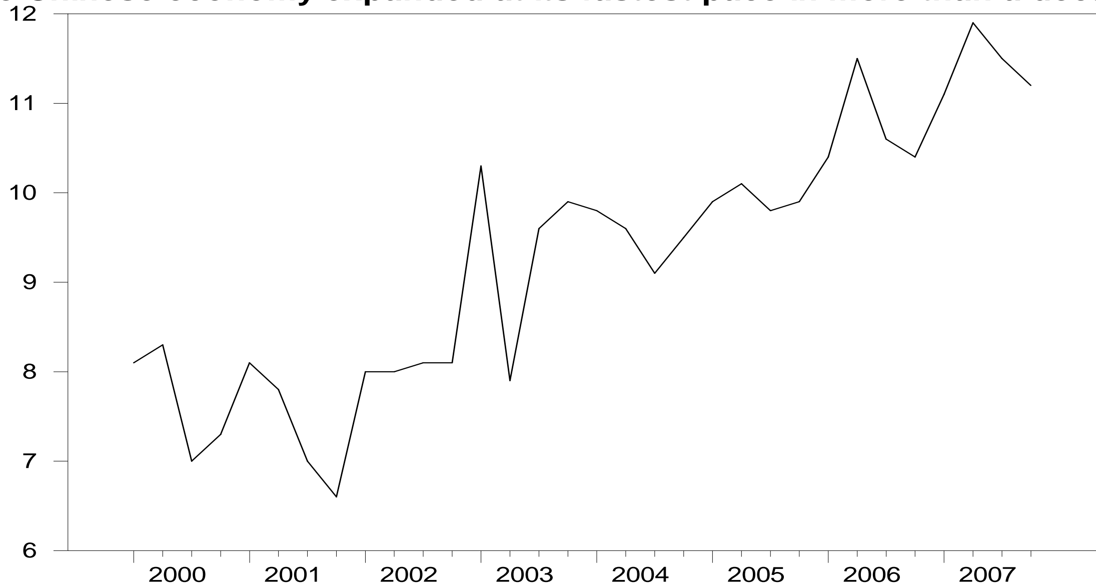
Table 5.4

China Main Economic Indicators

	2006	2007	2008e
GDP (% y-o-y)	**11.1**	**11.4**	**10.2**
Inflation (% y-o-y)	**1.5**	**4.8**	**3.9**
Exports of Goods & Services (%)	**27.2**	**25.7**	**18.5**
Imports of Goods & Services (%)	**19.9**	**20.9**	**17.0**
Trade Balance (% GDP)	**6.8**	**8.1**	**8.2**
Short Term Interest Rate(%)	**5.89**	**6.71**	**7.43**
Exchange Rate (Per US$)	**7.97**	**7.6**	**6.90**

This moderation in the latest quarterly GDP data is mainly attributed to the intensified monetary tightening, as well as the unfolding slowdown in the global economy. However, despite monetary tightening along with administrative controls imposed to restrain investment, total investment in fixed assets reaccelerated in 2007 after a slight moderation in the second half of 2006. Strong profitability, low lending rates and buoyant sales constitute the main incentives for investment activity in China. Industrials profits improved by 36.7% in the first eleven months of 2007, prompting fixed asset investment in urban areas to accelerate by 26.8% in January-November 2007, compared to 25.4% in the same period of 2006.

Figure 5.16



The latest retail sales data suggest that consumption continues to pick up, rising by 16.7% in 2007, up from 13.7% in 2006. Indeed, retail sales accelerated to 20.2% y-o-y in December 2007, the highest pace since March 1996, on the back of higher inflation. However, the surge in retail sales is also attributed to rising incomes supported by strong enterprise profitability.

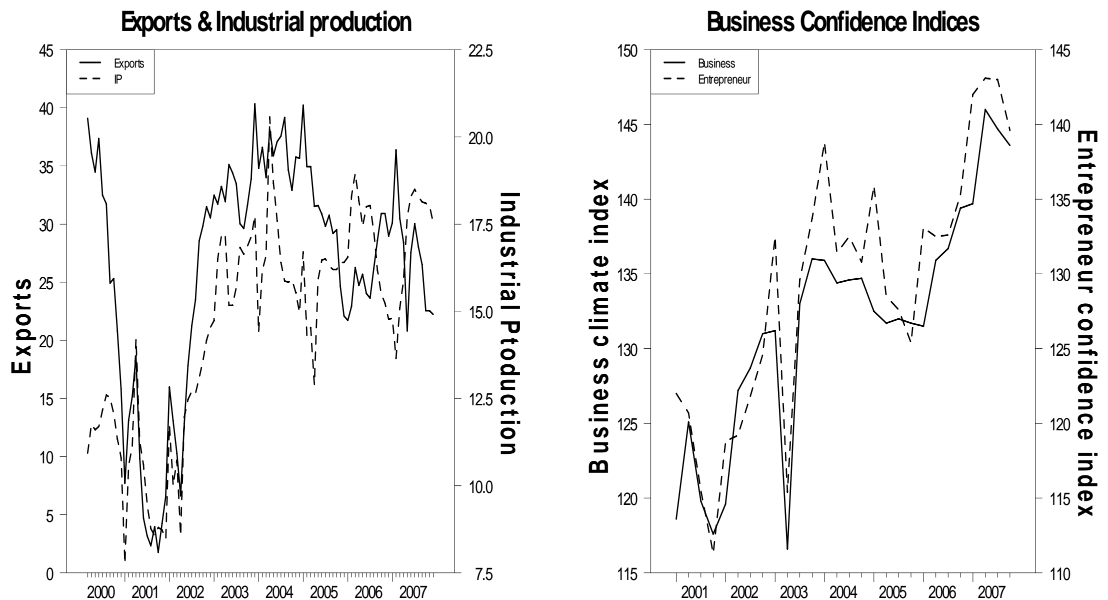
On the supply side, growth was led by industry. Industrial value-added rose by 19.4% y-o-y in June 2007, the largest y-o-y monthly increase since June 2006. However, industrial activity has lost some momentum over the past couple of months, moderating to 17.4% y-o-y in December 2007, partly due to softer external demand (Figure 5.17, left). As a result, business confidence indexes

edged down, after rising at multi year peaks in Q2 2007, when industrial production reached the highest y-o-y growth rate for the last five quarters (Figure 5.17, right).

Figure 5.17

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

(y-o-y%, 3m moving average)

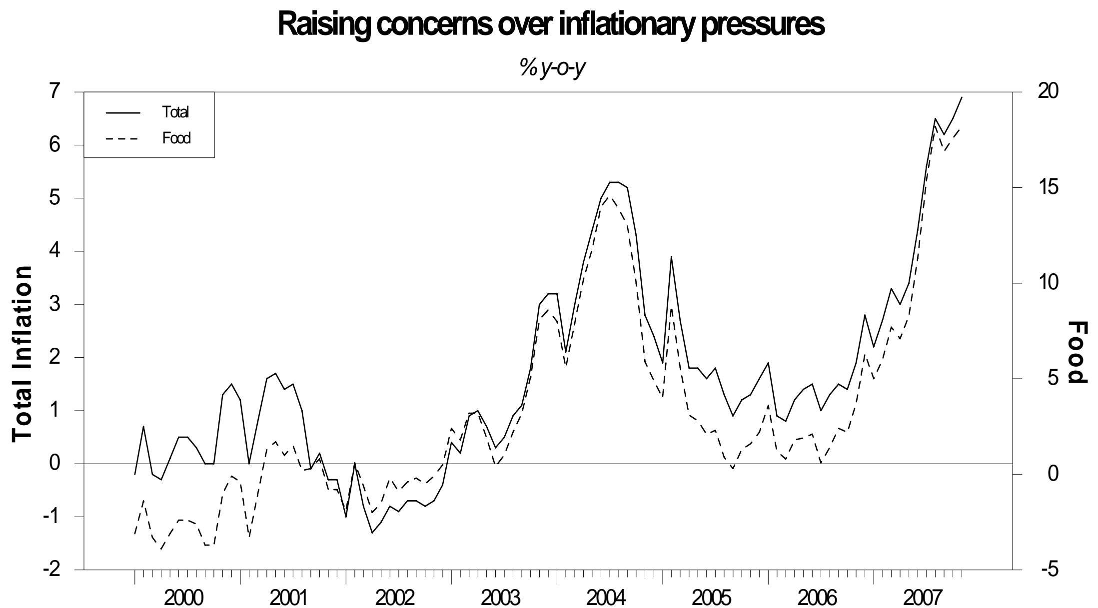


The recent rise in business confidence indexes resulted in expectations of further strong profit rises. The latter, in combination with abundant liquidity, led the Shanghai Composite index to increase more than 200% y-o-y in October 2007. However, the emergence of slower global growth and the expectations of unsustainable corporate profit growth, which has already been reflected in business confidence indexes, have set the stage for a market correction since then.

CPI inflation is rising at its fastest pace in more than a decade. Consumer prices climbed to 4.8% in 2007 from a year earlier. Indeed, in November the rate of inflation recorded its highest level since 1996 rising by 6.9% y-o-y. The upturn in inflation has largely been driven by elevated food prices-food accounts for about a third of the total CPI basket -which climbed to 18.2% y-o-y in November, compared to 17.6% in October (Figure 5.18). Sharp increases in food prices contributed to more than 80% to the rise of headline inflation in 2007. In addition, producer price inflation accelerated to 5.4% y-o-y in December 2007 from 4.6% y-o-y in November, indicating that inflation pressures

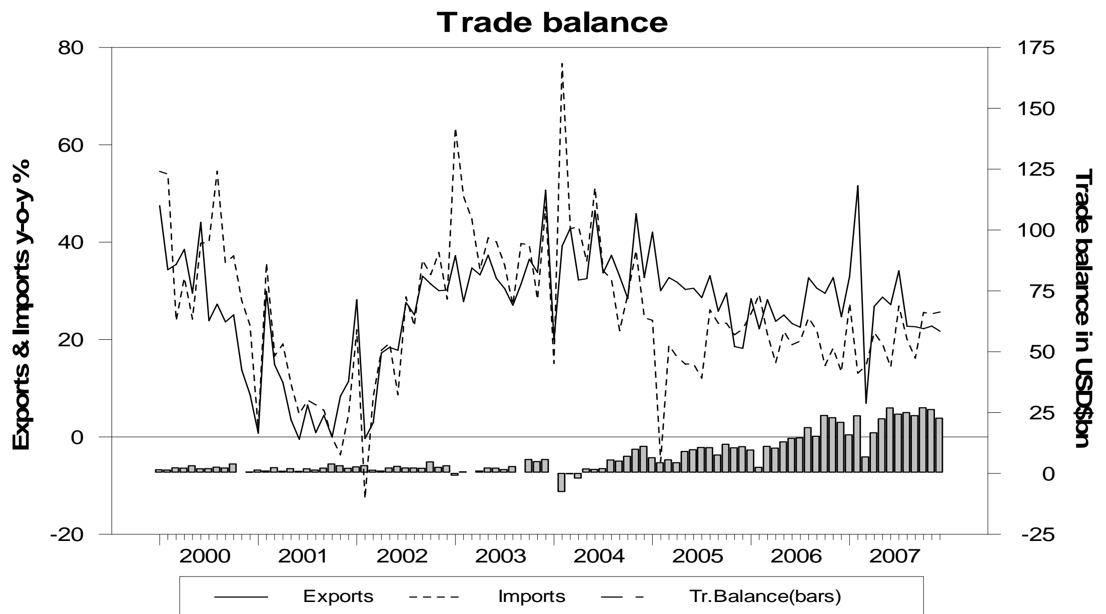
may prove persistent, thus the monetary tightening should continue in the short term. In addition to tighter monetary policy, the Chinese government plans to introduce several measures such as price caps and hikes in export tariffs in order to bring down inflation.

Figure 5.18



China's trade surplus surged sharply during the past few years, making China more vulnerable to external shocks. U.S. is a main export destination for China, thus as the US slowdown unfolds, China's economy will have to deal with potential downside risks. Export tariff cuts combined with weaker U.S. demand have already led export revenues to rise by 22.2% y-o-y in Q4 2007- the slowest quarterly pace since 2002. Meanwhile, imports increased by 25.7% y-o-y over the same period (Figure 5.19). Spending on imports accelerated mainly due to the rising prices in the cost of imported goods, fuelling imported led inflation. Consequently, a faster currency appreciation will help offset some imported inflation. It seems likely that a strong currency and weaker global demand will weigh on export growth in 2008.

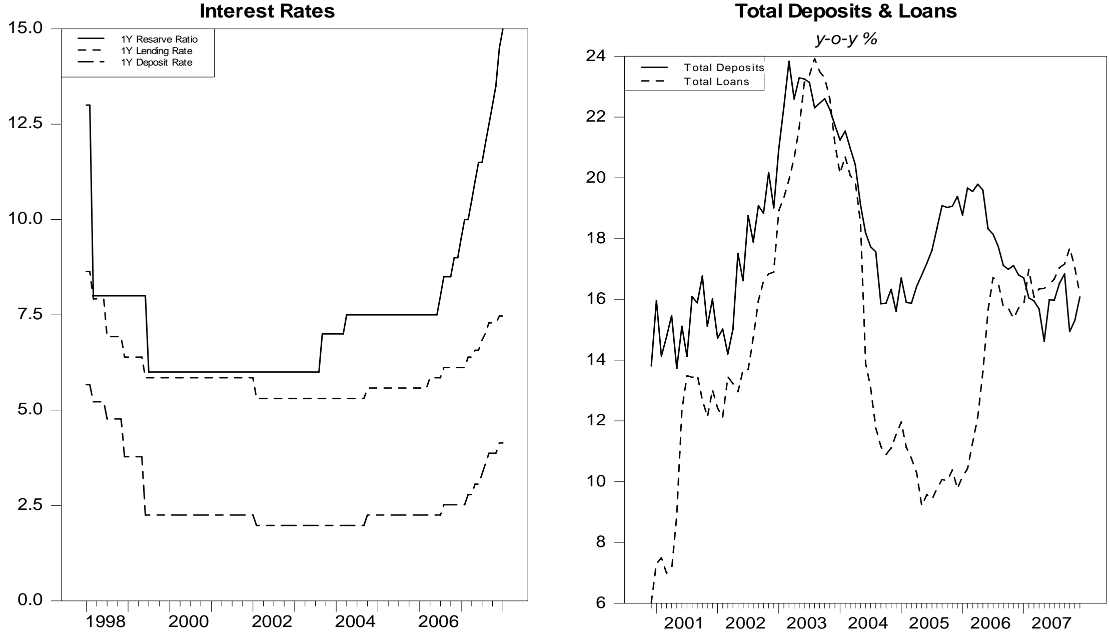
Figure 5.19



With inflation on the rise we expect the PBoC to remain on its current tightening mode. Indeed, the People's Bank of China (PBoC) has raised the reserve ratio from 6% to 15% since September 2003 (ten times in 2007 until now) aiming at tighter liquidity conditions. Additionally the PBoC hiked the 1-year benchmark deposit rate by 1.62 bps to 4.14% and the 1-year lending rate by 1.35 bps to 7.47% since March 2007, with the latest increase taking place in January 2008 (Figure 5.20). Nevertheless, a major concern of Chinese policymakers is that rising interest rates lead to higher capital inflows into China, thus adding further to excess liquidity. In combination with monetary tightening, the Chinese authorities may decide to allow faster appreciation of the CNY against the dollar to take some of the steam out of the overheated economy.

Figure 5.20

Tighter monetary policy to take some of the steam out of the overheated economy



6. Commodities

Dimitris Malliaropulos, Costas Lambrinoudakis

- Commodity returns registered a spectacular 32.7% in 2007, as measured by the S&P GSCI index, outperforming both bonds and equities, which returned 11.2% and 7.1% respectively.
- Energy posted the best performance, yielding 41.9%, followed by agriculture and precious metals, up by 28.3% and 27.9% respectively. Industrial metals were the only sector that deteriorated in 2007, posting a 5.6% decline.
- Looking forward, we view that – even in a deteriorating economic environment – precious metals and agriculture are the two sectors that have the highest upside potential, due to investment-related factors and supportive fundamentals respectively.
- The deteriorating macroeconomic outlook is raising concerns about the performance of energy and industrial metals in 2008, as they have been historically the most growth-sensitive commodity complexes.
- Regarding the energy complex, we believe that tight oil supply/demand dynamics, which are expected to persist this year, limit downside risks, in the sense that hey will provide a floor upon price dips and keep prices at historically high levels on average.
- Regarding industrial metals, further price declines are likely should sentiment for global economic growth continue to deteriorate and supply continue to grow.
- Volatility is expected to be particularly high across commodity markets throughout 2008 due to the high level of uncertainty surrounding the global macroeconomic outlook.

2007 Performance

Commodity returns registered a spectacular 32.7% in 2007, as measured by the S&P GSCI index, outperforming both bonds and equities, which returned 11.2% and 7.1% respectively (Figure 6.1 and Table 6.1). This has been the best annual performance for commodities in the course of the current bull market. Concerning the main commodity complexes, energy posted the best performance, yielding 41.9%, followed by agriculture and precious metals, up by 28.3% and 27.9% respectively. Industrial metals were the only sector that deteriorated in 2007, posting a 5.6% decline.

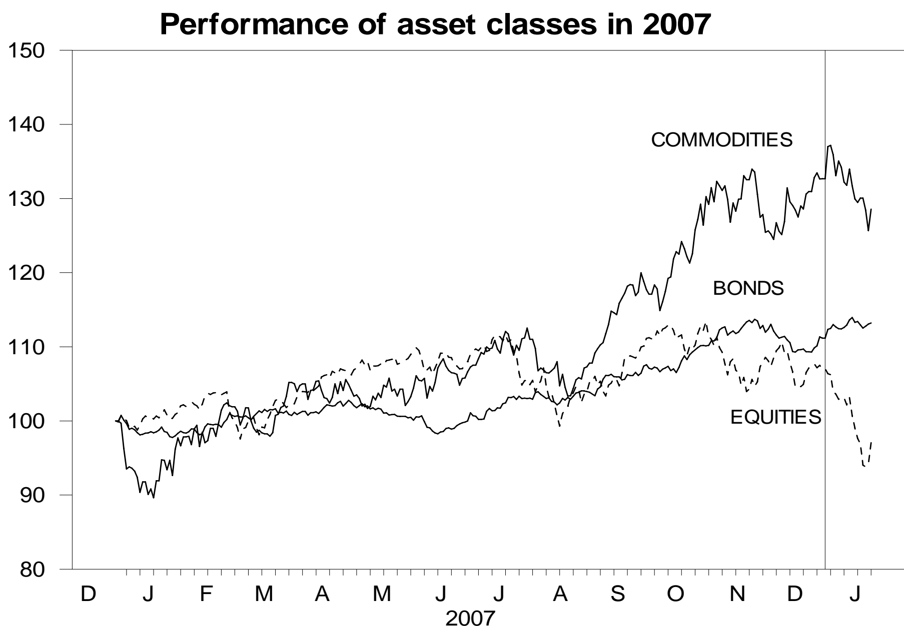
Returns in the energy and the agriculture sectors were mainly driven by tight fundamentals. Oil prices climbed to new historical highs in 2007, as OPEC's cuts in production coupled with robust demand from developing economies created a tight demand/supply balance and increased global market's sensitivity to geopolitical risks. The rally in agricultural prices is mostly attributed to

supply-side factors. In particular, crops fell behind expectations across many agricultural markets due to adverse weather conditions, sending inventories to multi-year lows.

Table 6.1
Performance of Total Return Indices

	24 Jan 2008 level	QTD	2007	2006	2005
Commodities					
S&P GSCI ALL	7236.42	-3.1%	32.7%	-15.1%	25.6%
Energy	1819.51	-5.2%	41.9%	-26.8%	31.2%
Industrial Metals	1894.34	3.2%	-5.6%	60.9%	36.3%
Precious Metals	1227.32	8.3%	27.9%	24.1%	18.6%
Agriculture	865.04	3.8%	28.3%	13.3%	2.4%
Equities					
MSCI World (Developed Markets)	1440.02	-9.4%	7.1%	18.0%	7.6%
MSCI US	1279.99	-8.0%	4.1%	13.2%	3.8%
Bonds					
JP Morgan GBI Global (Developed Markets)	506.23	1.8%	11.2%	9.8%	-4.7%
JP Morgan GBI US	388.42	2.5%	9.5%	2.4%	2.4%

Figure 6.1



The performance of gold was boosted by investment-related factors rather than fundamentals. Specifically, gold prices have been linked to the path of the falling USD (Figure 6.4), while inflationary worries, geopolitical tensions and turbulence in the financial markets further increased investors' demand for gold.

Industrial metal prices eased due to a larger supply response to high prices and to investors' response to the darkening economic outlook, since industrial metals are the commodity sector most closely tied to the business cycle.

2008 Outlook

Commodity prices extended their rally in the first sessions of 2008. Oil prices breached – briefly – for the first time the psychological limit of $100/barrel, while gold prices hit a new all-time high of $913/oz, continuing to power beyond the previous high of $850/oz reached in January 1980 amid the second oil crisis and the invasion of the Soviet Union in Afghanistan. Agricultural prices also performed well, reaching new multi-year highs.

However, after the first trading days of 2008, concerns over the economic outlook – which had been steadily growing during the last couple of months – finally manifested in equity markets. In particular, mounting fears that the US economy will slide into recession and that emerging economies will eventually be affected triggered excessive liquidations in equity markets across the globe. The heavy liquidations also spread to commodity markets amid worries for the economic outlook of emerging economies, which have been the main source of the accelerating commodity demand growth in recent years. However, the sales in commodity markets are attributed to a large extent to investors taking profits after the recent rally, in order to offset losses or meet margin calls in the plunging equity markets. Eventually, both equity and commodity markets rebounded strongly after the FED's unexpected interest rate cut by 75 basis points.

Looking ahead, we view that – even in a deteriorating economic environment – precious metals and agriculture are the two sectors that have the highest upside potential, due to investment-related factors and supportive fundamentals respectively. In particular, Fed's easing bias, which drives the dollar lower and increases inflationary risks, is expected to continue to support gold prices in 2008, while food, feed and fuel demand projections coupled with historically low inventory levels imply that agricultural markets will tighten further in the course of 2008. Energy and particularly industrial metals have been historically the most growth-sensitive commodity complexes. Hence, the deteriorating macroeconomic outlook has raised concerns about the performance of these two sectors in 2008. Regarding the energy complex, we believe that tight supply/demand dynamics, which are expected to persist this year, limit downside risks, in the sense that hey will provide a

floor upon price dips and keep prices at historically high levels on average. In the industrial metal sector, the ongoing increase in supply raises downside risks for prices.

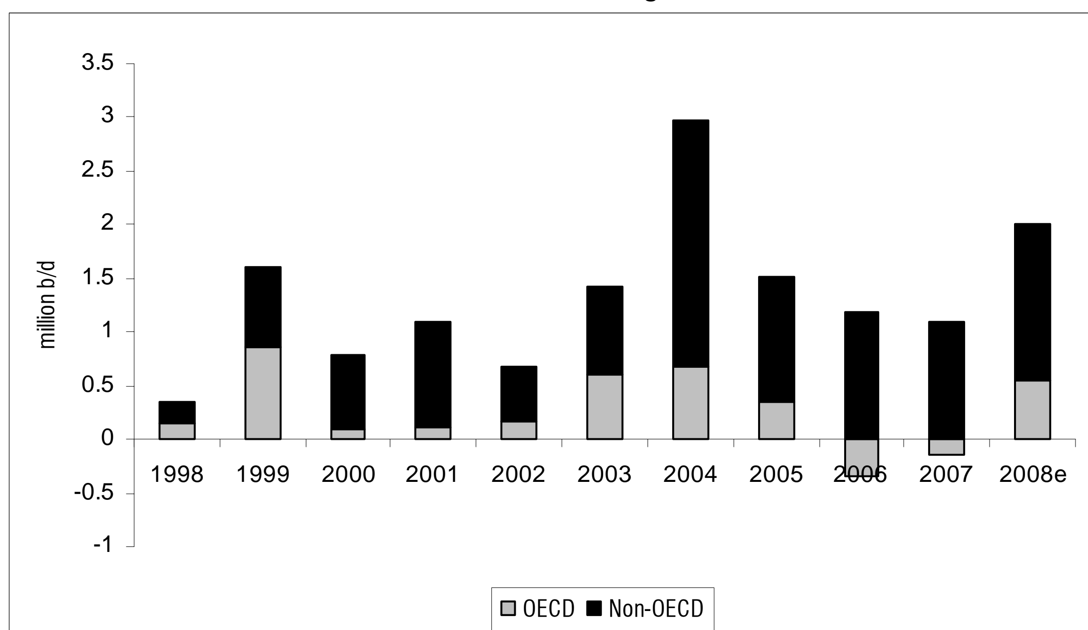
Regardless of the performance that will eventually register, commodity markets are expected to be particularly volatile this year. The reason is the high level of uncertainty surrounding the macroeconomic outlook of developing economies. It is the first global cyclical upturn, in which the contribution of developing economies to the global GDP growth and particularly to the demand growth of commodities has been so significant and consequently any forecasts concerning the decoupling or the recoupling scenario are characterized by a high degree of uncertainty in the absence of relevant historical data.

i) Oil

The annual average of oil prices has risen in 2007 for the sixth consecutive year, reaching $72 a barrel. OECD inventories stand close to the bottom of their five-year range, reflecting tight supply/demand balance. Looking to 2008, prices are expected to remain in elevated levels on average, as further tightening in fundamentals is expected to limit downward price pressure driven by macroeconomic concerns.

Figure 6.2

Global oil demand growth

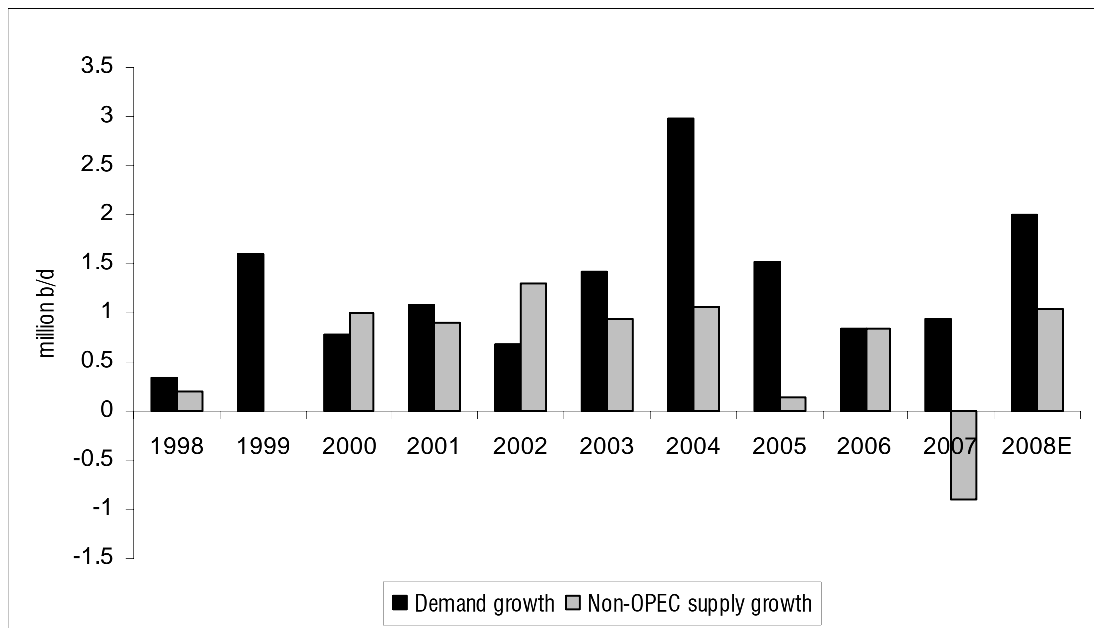


The anticipated strength in fundamentals is a function of both demand and supply factors. According to IEA's projections[1], demand growth is expected to accelerate in 2008, despite economic slowdown in the US. The expected demand growth is mostly driven by non-OECD (Figure 6.2) as well as an assumption of normal weather in the OECD, as opposed to warm winter last year. Regarding supply side factors, non-OPEC supply growth is expected to lag demand growth for the sixth consecutive year (Figure 6.3), implying a further rise in the call on OPEC for 2008, which is constructive to prices, given cautious OPEC output policy.

The main downside risk for oil prices is a sharper than expected downturn in global growth.

Figure 6.3

Non-OPEC production growth and global demand growth



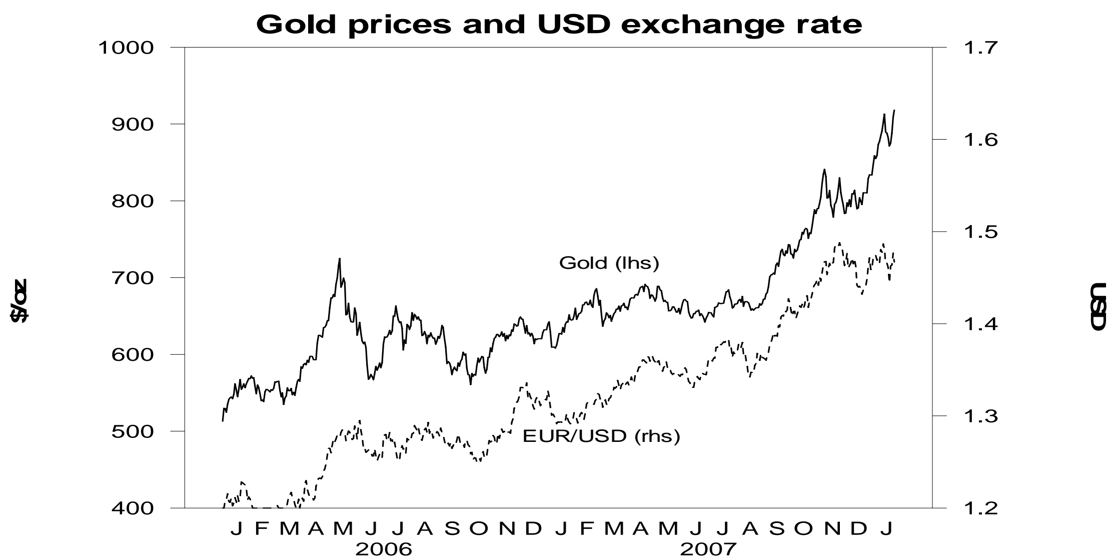
ii) Gold

Gold prices started this year impressively, as they set a new all-time nominal record of $913/oz, surpassing the previous high of $850/oz reached in January 1980. Unlike the previous high, which had been a brief spike, as prices had soared from $400 to $850/oz in just 5 weeks and collapsed to $500 in less than two months later, this time the elevated price levels seem sustainable. Gold prices have been rising steadily since a low of about $250/oz in August 1999. It should be noted, however, that in inflation-adjusted terms the new nominal high is not even half the price achieved in 1980.

[1] IEA, "Oil Market Report", 16 January 2008.

Looking to 2008, prospects for gold prices remain positive. The FED's aggressive rate cut policy, expected to extend in 2008, creates a particularly positive environment for gold, as it puts additional downward pressure on the USD and increase inflationary concerns. In addition, geopolitical tensions, not expected to ease in 2008, and growing uncertainty over global macroeconomic outlook will probably enhance investors' safe-haven demand for gold.

Figure 6.4



iii) Industrial Metals

Industrial metal prices failed to keep up with the impressive performance of the rest of the commodity complexes in 2007, as macroeconomic concerns coupled with an easing in fundamentals drove prices lower. Demand softened, as metal-intensive economic sectors in the US such as construction and autos weakened in the course of 2007, while supply growth accelerated responding to historically high prices.

Looking to 2008, the deteriorating economic outlook and particularly some early signs of a deceleration in the Chinese economy raise downside risks for industrial metal prices. In addition, the ongoing increase in supply is expected to weigh on prices as well.

However, inventories stand still at historically low levels despite the recent rise and production costs in the metal industry are increasing. Hence, any positive surprise regarding economic growth, especially in the developing economies, could trigger a sharp appreciation in prices.

iv) Agriculture

The agricultural sector, being the only commodity complex not having participated in the 5-year commodity bull market, joined the party in 2007, as it registered its highest return in 30 years, as measured by the S&P GSCI sub-index. Robust food, feed and fuel demand growth and supply disappointments have created a particularly tight environment across many agricultural markets, especially grains.

Prospects are positive for agriculture in 2008, especially for corn and soybeans, as fundamentals are expected to remain tight. In particular:

- inventories stand at historically low levels across most of the markets
- global warming has made weather-related supply disruptions (e.g. draughts damaging crops) more frequent than in the past
- current demand growth rates from the food, feed and fuel sectors are expected to be sustained, if not accelerate: demand growth from developing countries is rising with income per capita and does not seem to abate any time soon, while the recently released US Energy Act of 2007 implies that increased corn and soybean production will be needed to satisfy new increased biofuel mandates.

Besides supportive fundamentals, the lower sensitivity of agriculture returns to the uncertain macroeconomic outlook compared to energy and industrial metal returns may also enhance investors' demand.

7. Credit Markets

Dimitris Malliaropulos, Costas Lambrinoudakis

- The significant deterioration in the US mortgage subprime market in 2007 triggered one of the worst crises that credit markets have experienced in the last twenty years.
- Spreads in mortgage-backed securities (CDS on RMBS and ABS CDOs) have widened to unprecedented levels, reflecting increasing stress and default expectations, especially in the lower-quality tranches.
- Uncertainty regarding the amount of overall losses and the exposure of each market participant has increased risk in other structured credit products beyond mortgage-backed securities. Spreads in corporate CDS have also widened significantly. Financial firms, being at the epicenter of the turmoil, were hit the most.
- Looking forward, there is increased risk of further widening of corporate CDS spreads in 2008, considering the high probability of a recession in the US and a slowdown in the EU and Japan, that will increase default expectations and limit corporate profits.
- HY is expected to underperform IG, given the recession outlook for US, since increased default expectations weigh more on HY than IG firms.

2007 Performance

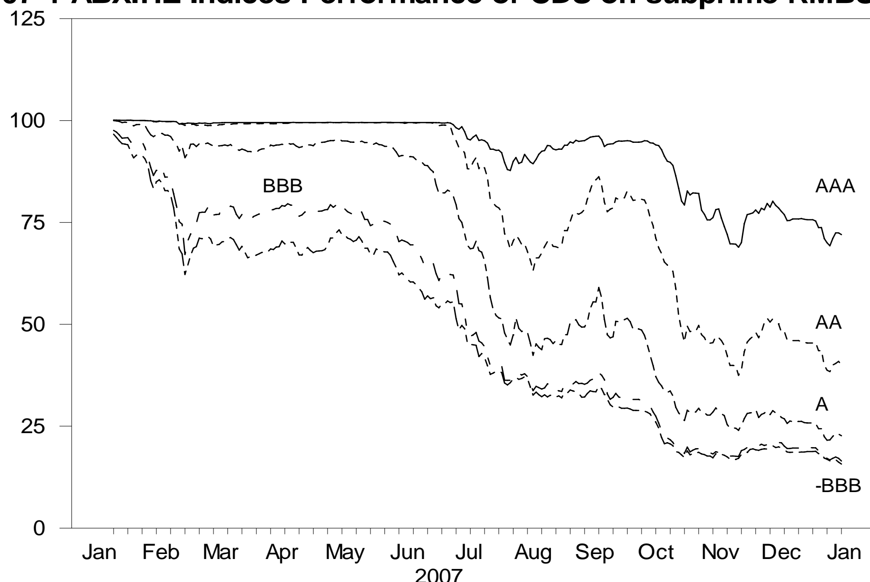
In 2007, credit markets experienced the outbreak of one of the worst crises in the last twenty years. The crisis was triggered by the significant deterioration of the US subprime mortgage market in 2007, caused by falling house prices and – until recently – rising interest rates. The ongoing downturn in the subprime market is reflected in all relevant indicators of mortgage credit. In particular, delinquency and foreclosure rates have climbed to 4-year highs, having doubled from the middle of 2006.

In the face of the severe deterioration of the subprime mortgage sector, investors increased rapidly their expectations for losses on mortgage-backed securities, while rating agencies started downgrading these securities. As a result, indices representing the performance of CDS on RMBS[2] plunged to unprecedented low levels and spreads widened sharply reflecting mounting stress and default expectations in residential mortgage market, especially in the lower-quality tranches (Figure

[2] CDS on RMBS: Credit Default Swaps on Residential Mortgage-Backed Securities, see Box 1 for details

7.1). It is estimated, that the widening of spreads of CDS on RMBS and mortgage-backed ABS CDOs[3] implies an expected loss between $200 and $400 billion from defaulting loans.

Figure 7.1



The high degree of loan securitization that accompanied the reckless lending during the last couple of years is the factor that facilitated the contagion of the subprime crisis to other structured credit product markets beyond mortgage-backed securities. According to market estimates[4], almost 77% of the $1.2 trillion subprime universe has been securitized and sold to a wide range of investor types both inside and outside the US. Moreover, most of these instruments were characterized by lack of transparency and a high degree of complexity, considering the length of the securitization chain: mortgages were turned to RMBS, which were turned into CDOs, which were turned into CDOs of CDOs. Consequently, as the crisis in the subrime mortgage market still unfolds, there is increased uncertainty regarding the amount of overall losses from defaulting loans and the exposure of each market participant to these losses via the mortgage-backed securities, which are widely spread across the broader investment community.

The market of corporate CDS was particularly affected by the aforementioned worries concerning subrime losses. Corporate CDS spreads widened significantly in the course of 2007, reflecting the

[3] ABS CDOs: Collateralized Debt Obligations of Asset-Backed Securities, see Box 1 for details
[4] Bank of America, "The classic cure for a debt crisis – Inflation", 20 December 2007

subrime-driven fear factor prevailing in the credit markets and the more general tightening credit conditions. In particular, spreads in the European and American IG segment have posted a relative widening of approximately 150% since July 2007[5] (Table 7.1, Figures 7.2 and 7.3). The most noticeable widening across the 6 sectors that comprise the IG segment has taken place in financial firms, whose spreads widened by 426%, 4 times the average widening in the 5 non-financial sectors. This comes not as a surprise, since financial firms have been at the epicenter of the recent turmoil.

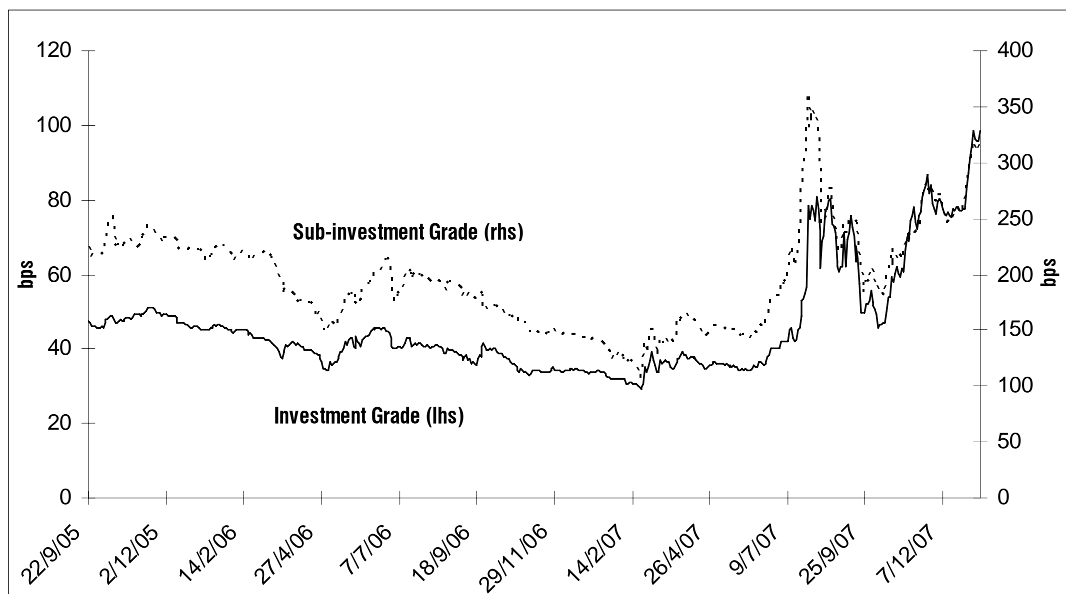
Table 7.1

Spreads of Corporate CDS

	29/6/2007 level (bps)	15/1/2008 level (bps)	Absolute change (bps)	Relative change (%)
CDX (US)				
Investment Grade	40.15	98.49	58.35	145%
Sub-investment Grade	181.31	316.79	135.48	75%
iTraxx (EU)				
Investment Grade	25.08	66.85	41.77	167%
Sub-investment Grade	229.63	405.61	175.98	77%
Financials	10.80	56.78	45.98	426%
Non-Financials	34.48	69.94	35.46	103%

Figure 7.2

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

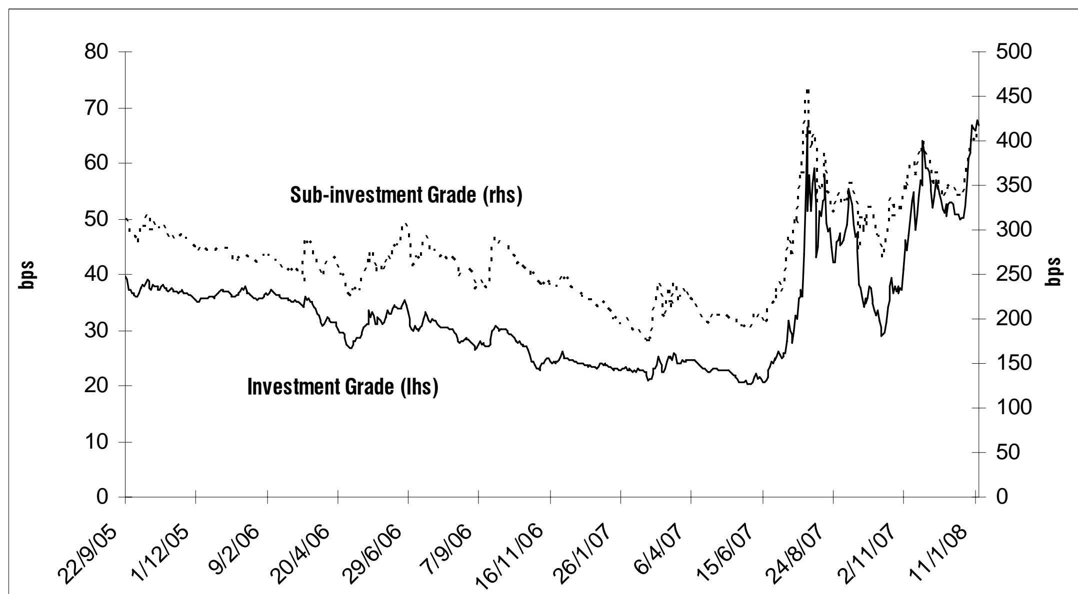


Note: Investment Grade = CDX.NA.IG; Sub-investment Grade = CDX.NA.XO

[5] Until 15/1/2007

Figure 7.3

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



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

2008 Outlook

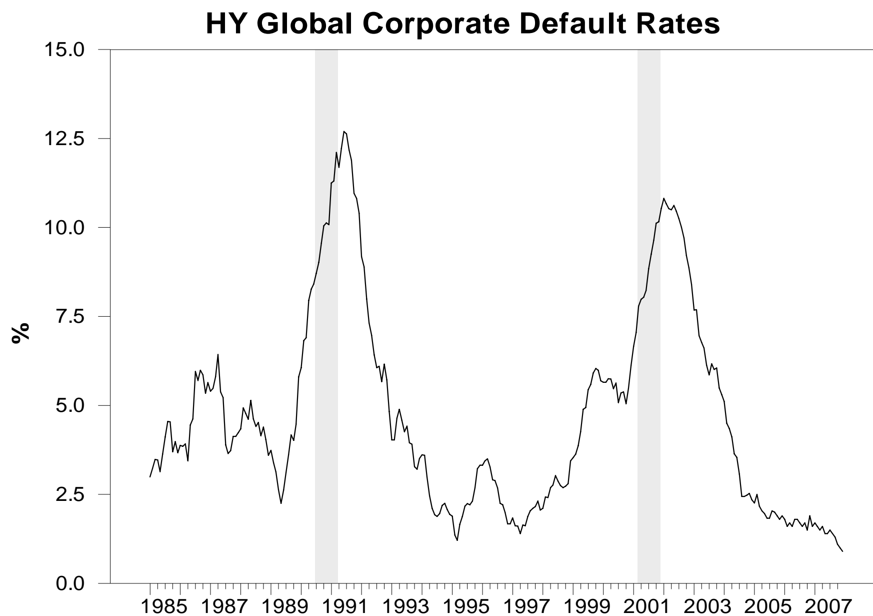
Looking forward, risks are skewed to the upside. Specifically, there is increased risk for further deterioration of spreads in 2008, given (i) the high probability of a recession in the US and a slowdown in the EU and Japan, (ii) the uncertainty regarding the severity and longevity of the subprime crisis and the potential additional losses on mortgage-related securities and (iii) rising risk aversion across investors.

Latest macroeconomic data from the US point to a high probability for the US economy to slide into recession in 2008. On the back of slowing economic growth, corporate profit growth is expected to drop and default rates to rise. In 2007, HY default rates fell to a record low thanks to the plentiful liquidity until recently. However, as economic growth decelerates and credit conditions tighten, rates are expected to increase in 2008. Corporate defaults had risen sharply before the last two recessions (Figure 7.4). As far as the EU economy is concerned, growth is expected to moderate in 2008, albeit a recession is quite unlikely. In addition, credit standards for loans to enterprises are tightening in the EU, as the results of the ECB bank lending survey indicate[6]. The decelerating

[6] ECB, "The Euro Area Bank Lending Survey", January 2008

economic growth, coupled with rising euro/dollar exchange rate, ECB's hawkish bias and more stringent financing conditions for enterprises, is expected to weigh on corporate profit margins and to drive default rates higher. Given the negative outlook for corporate profits and default rates in both the US and the EU, the risk for a further widening of corporate CDS spreads is high.

Figure 7.4



Note: Shaded areas denote US recessions

The prospects of the housing and mortgage markets post another source of risk for the corporate CDS market. Despite the severe deterioration of both of these markets in the US, a further decline in 2008 is not out of the picture. Markets expect US house prices to continue to fall – futures on the S&P Case-Shiller Index imply a downward trend throughout 2008 – and delinquency and foreclosure rates are on an upward path, raising the potential for additional losses on mortgage-related securities. Hence, total losses may not have been fully recognized yet. This means that banks' and other financial institutions' earnings in the course of 2008 may lag even the current low market expectations due to additional subprime-related losses, especially if housing and mortgage markets continue to dip. Downside risks are also rising in the EU, as markets anticipate a weakening in the UK real estate market, which is the source for the bulk of the underlying collateral in European securitizations. In the RICS UK Monthly Housing Survey[7], the balance of surveyors reporting house price falls has reached levels not seen since the early nineties' housing market

[7] RICS, " UK Housing Market Survey", December 2007

correction. Furthermore, price outlook's balance deteriorated markedly, reaching its lowest level since its inception in 1998.

The sharp fall experienced by credit markets in 2007 has damaged investors' sentiment severely. The result is an elevated degree of risk aversion and a reduced appetite for structured products across the investment community.

HY is expected to underperform IG in the course of 2008, given the recession outlook for US, since increased default expectations weigh more on HY than IG firms. In addition, the credit crisis in 2007 hit the IG segments to a larger extent than the HY segments (Table 7.1). There is high probability that this imbalance will unwind in the following months.

BOX 1.

Credit Default Swaps (CDS)

A Credit Default Swap (CDS) is a credit derivative, which acts like an insurance contract against the default of a reference entity. The two parties of the agreement transfer the credit risk of the issuer of the underlying credit asset (e.g. bond) without transferring the asset. The buyer of protection makes periodic payments to the seller of protection, who is obliged to make a one-off contingent payment to the buyer if the reference entity defaults.

The periodic payment (quarterly or semi-annually) is expressed in basis points per notional value of the underlying credit asset and is called the CDS spread. Suppose that a 5-year CDS protecting €10 million of debt is traded at 40 bsp (assume no bid-ask spread). This means that an investor could buy protection, paying €40.000 per annum, or equivalently an investor could sell protection, receiving €40.000 per annum. The higher the perceived credit risk of the issuer of the underlying credit asset, the higher the CDS spread.

Corporate CDS indices (CDX and iTraxx)

A CDS index represents the average performance of a basket of CDS. It is a completely standardized security, unlike single CDS which are OTC securities, and may therefore facilitate active trading and efficient protection against credit risk.

There is currently a harmonized global family of corporate CDS indices, namely CDX Indices, which contain North American and Emerging Market companies and iTraxx indices, which contain companies from the rest of the world. The indices, which were launched for the first time in 2004 and are quoted in CDS spreads, represent the average CDS spread of the125 investment-grade and 50 sub-investment grade companies, which are the most liquid in terms of CDS volume traded in the six months prior to the index roll. A new series of indices is issued every six months (every March and September), with a group of investment banks determining the credit entities that constitute each new issue.

Asset-Backed Securities (ABS) / Mortgage-Backed Securities (MBS)

Asset-Backed Securities (ABS) are bonds or notes backed by the cash flows from a specified pool of underlying credit assets. These credit assets typically include credit cards, auto loans, home equity loans, student loans and equipment leases and loans. Mortgage-Backed Securities are bonds or notes backed by the cash flows from a specified pool of residential (RMBS) or commercial (CMBS) mortgages.

CDS on ABS/MBS and ABX Indices

Unlike a corporate CDS, the reference obligation of a CDS on ABS/MBS is not a single-name entity but an ABS/MBS. The most actively traded CDS on ABS/MBS have been the ones backed by subprime RMBS.

A family of indices representing the performance of CDS on subprime RMBS was launched in January 2006, namely the ABX.HE indices. New series are issued every six months and are comprised of the most liquid 20 RMBS deals closed in the prior 6 months. Every new issue is divided into five subindices according to credit quality (AAA, AA, A, BBB and –BBB).

"Unlike the indices of corporate CDS, such as the CDX and the iTraxx, the ABX.HE indices trade based on price rather than spread, with a pre-determined fixed coupon. The fixed coupon is determined before the launch of the new series. If the quoted price of an index is different from par, the seller and the buyer of protection settle the difference when they enter into a transaction. If the quoted price is below par, the protection buyer makes a (monthly) payment to the protection seller. Over the life of a contract, the protection buyer pays the Fixed Rate Amount to the protection seller, based on the current notional amount of the index. As in the cash bond market, a market price above par means that the market spread is tighter than the fixed rate, and vice versa[1]"

In essence, a buyer of protection would sell the index and a seller of protection would buy the index. The lower the price level, the higher the perceived credit risk of the underlying and hence the more expensive is to buy credit protection.

Collaterlized Debt Obligations (CDOs)

CDO's are securities comprised of pooled credit assets, such as ABS, MBS or CDS on ABS/MBS. CDOs sort the underlying credit securities into tranches with unique risk, return and maturity profiles, which are then traded separately. A CDO's reference portfolio can be assembled with physical cash flow credit assets such as bonds, loans, MBS, ABS etc., or with synthetic credit risk exposures such as a portfolio of CDS.

[1]Nomura, "Synthetic ABS: PAUG and ABX.HE", March 2005

8. Implications for asset allocation

Dimitris Malliaropulos

Our approach to asset allocation at the start of the New Year is characterized by extreme caution as the US economy is heading into a recession, credit conditions continue to tighten across the globe and growth of the world economy is likely to decelerate significantly from its 2007 levels. At recent lows during the January sell-off, equity markets have come close to pricing the typical cyclical drop in earnings normally associated with a US recession. The sell-off has largely corrected what has previously been a contradictory message conveyed by the pricing of various asset classes. Global credit markets along with the US Treasury market and cyclical sectors in the stock market such as financials, consumer-related and real estate sectors were all priced for a sharp deceleration in US economic growth. At odds with this view, global stock markets were until recently conveying a rather sanguine economic outlook.

At first sight, the January sell-off in global equity markets seems to be correcting this dichotomy in market views. Investors have come to realise that the economic fallout from the credit crunch will not be confined to the real estate and financial sectors but will have severe global implications. With the US heading into a recession and growth in the euro area and Japan slowing substantially, emerging markets and the BRIC economies will likely “recouple” and slow down into 2008. The relatively more severe recent correction in Asian, most notably China- and India-related equities, is obviously a strong reversal of the “decoupling” trend that has led to excessive valuations in non-Japan Asian equity markets over the past few years.

An extreme level of uncertainty continues to surround the operation of the credit system and the global economy. Although financial markets seem to be positioned for a sharp cyclical slowdown in the US and global economic contagion, a significant amount of policy action, providing monetary and fiscal stimulus to the US economy, is underway, increasing hopes that the US economy will likely avoid a technical recession. This, in turn, makes short-term market movements at both sector and index level harder to read, as market views start to oscillate from fearing that policymakers are doing too little to prevent a recession to worrying that they are doing too much.

The latest market moves following the January sell-off and the Fed funds 75 bps surprise cut (combined with the announcement of the fiscal stimulus package of the US Treasury) confirm that the macro picture is still mixed. While both Treasury yields and Fed funds futures recently declined to levels usually associated with a recession (negative in real terms) and the broad US equity market indices were beaten down nearly 20% from their peaks, similar to previous recession episodes, sector trends still provide a mixed picture. In particular, consumer-related sectors, financials, commodities and global cyclical stocks have generally held up much better than in prior recessions. Also, small stocks were hit less than large stocks in January and value stocks rebounded relative to growth stocks, both breaking a negative trend of several months. While the recent market moves at sector level are inconsistent with our view of a US recession, we believe that they reflect to a large part risk reduction by investors more than fundamentals.

While it is too early to know how much of recent market moves was due to position adjustment and how much was due to changes in fundamentals, our view is that the main theme of a US housing and consumer related recession will continue to dominate medium term trends in financial markets. Over the next three months, we expect US equities to underperform Treasuries, small caps to underperform large caps and value stocks to underperform growth stocks as the cyclical downturn of the US economy gathers pace and the monetary stimulus from Fed funds easing dissipates. Hence, we recommend short-long positions in these themes in order to hedge for the risk of an upcoming recession. We are positive on Bunds versus Treasuries as the euro area economy will not avoid a significant slowdown and the ECB will eventually be forced to cut interest rates, likely before the summer. We remain negative on the US dollar against the euro as the Fed has embarked on an aggressive easing, despite a likely decline in the US trade deficit, as the latter will be due to a cyclical decline in domestic demand rather than the result of stronger export performance. We expect EM equities to underperform both US and European equities as a global slowdown will lead to a downward revision of corporate earnings estimates and a significant re-pricing of risk.

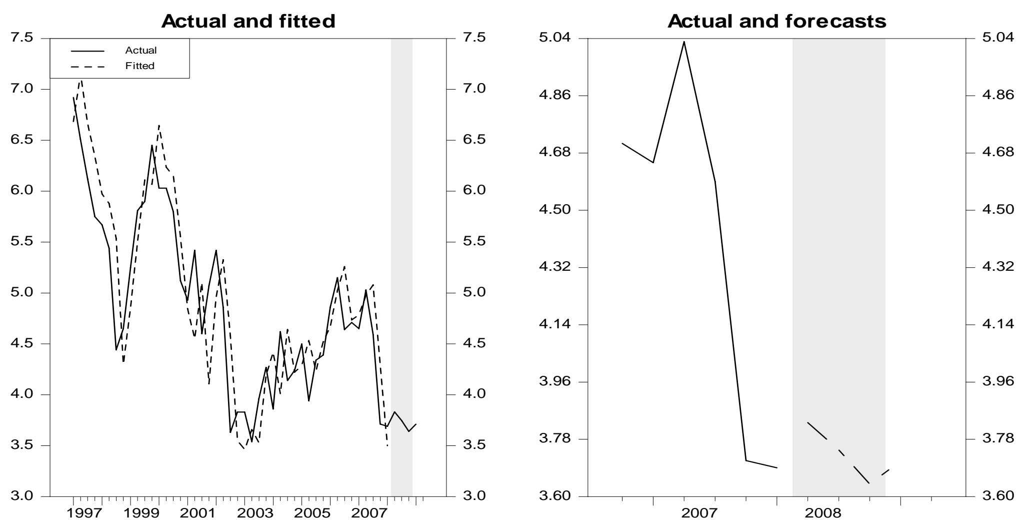
US Treasuries

Treasury yields moved lower during the past six months as the Fed lowered interest rates aggressively in an effort to react proactively to the rapid deterioration of the US economic outlook and prevent a backslash from the worsening credit crisis on the real economy. Yields on 10-year Treasuries declined sharply from their peaks of 5.25% in June to [3.70%] in January and 2-year yields declined to [2.80%], down from xx% in June. As a result, the slope of the Treasury yield curve (10-2 year) steepened by xxbps to xxbps at end-January. Current bond market valuations

have in our view fully priced in the probability of a severe US slowdown and an aggressive easing of monetary policy by an additional 50 bps in March. Our fair value estimates of 10-year Treasury rates in fact suggest that current valuations are neutral with respect to the main fundamentals of the US economy and the short-term prospects for monetary policy. Looking forward, we believe that there is not much room for further declines in Treasury yields, as the recent pickup in inflation contributes to a higher inflation premium and increased bond issuance in order to finance the government's plan for a fiscal stimulus 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 (Figure 8.1).

Figure 8.1

10 year US Treasury rate



*Source: Eurobank EFG model estimates

Slope of US Treasury Curve

With unemployment cumulating over the next few quarters, we expect the yield spread between 10-year Treasuries and Fed funds to steepen significantly as the Fed cuts short term rates and economic growth picks up in H2. Overall, we expect the slope of the term structure (10-year versus Fed funds) to steepen by up to 100 bps until year-end and by another 50 bps in Q1:09 (Figure 8.2, right). The tightening of term spreads has been already set into motion during Q2:07 as the median duration of unemployment has picked up significantly and payroll growth started to ease from its 2006 peaks. With labor market slack cumulating into 2008 (Figure 8.2, left) and recession fears on

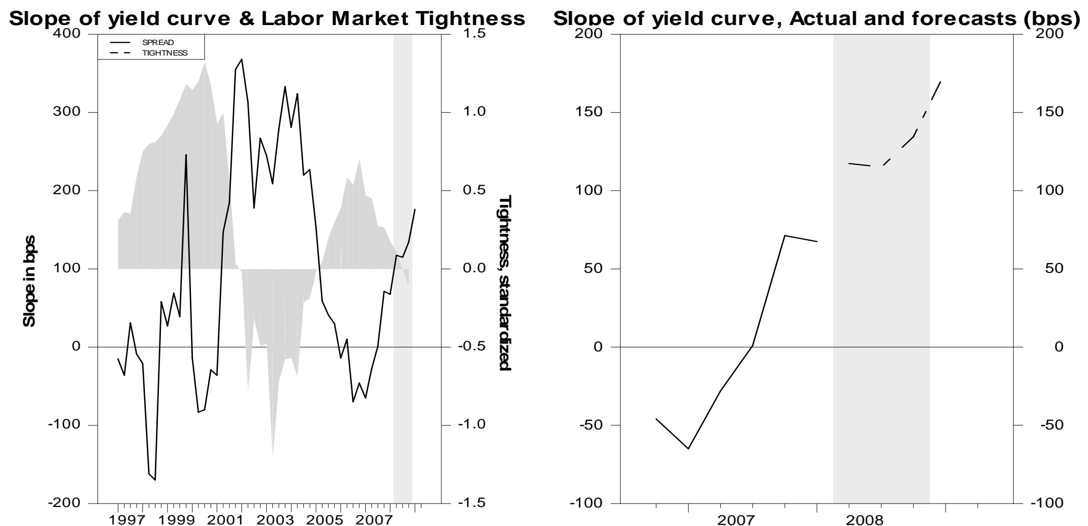
the upturn, we project the upward trend in term spreads to continue. In fact, our probit model estimates suggest that the probability of a steepening in the slope of the Treasury yield curve remains above 90% throughout 2008.

We remain neutral on the 2-to10-year spread on Treasuries, as we expect intermediate yield spreads to narrow as the economic slowdown should lead to a wider budget deficit because of lower tax receipts. In addition to this cyclical effect on government receipts, the budget deficit should widen with the implementation of the government's plan for a fiscal stimulus. The combined fiscal and monetary policy actions should also help restore some 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 for short and intermediate maturities.

Figure 8.2

Slope of Treasury Yield Curve

10-y US Treasury - Fed Funds



*Source: Eurobank EFG model estimates

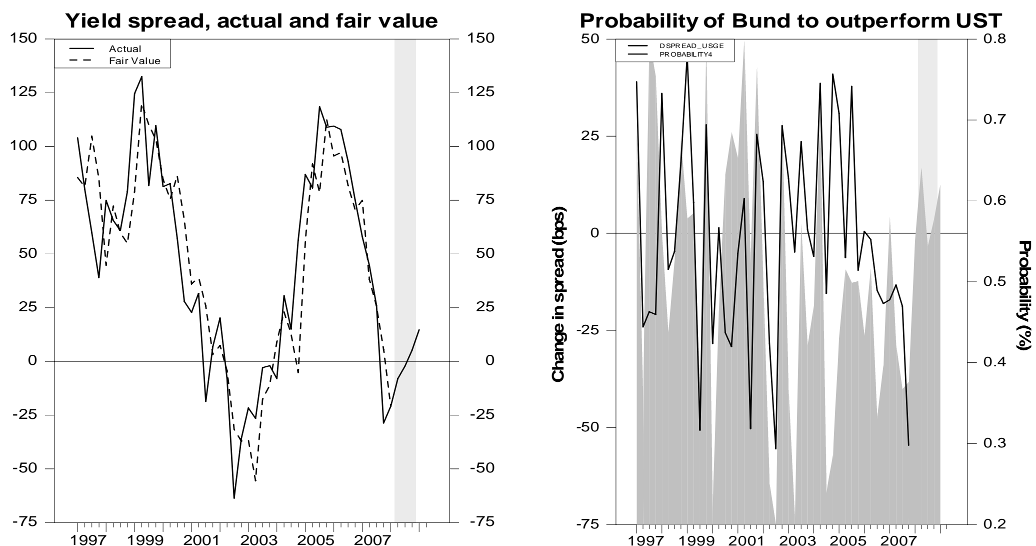
Treasury-Bund spread

The Treasury-Bund spread has tightened significantly from 30 bps in September 07 to -30 bps in January 08 as economic data in the US deteriorated rapidly and the Fed slashed rates aggressively (Figure 8.3, left). Comparing the recent price moves with previous historical episodes, we believe that spread narrowing has nearly run its course already, as spreads have declined by 150bps over

the past twelve months, close to the 2001 recession event, when the Treasury-Bund spread had declined by about 175bps peak to trough. Most of the decline in the spread was driven by the decline in Treasury yields as the result of the cyclical bull run towards Treasuries. Looking forward, we believe that Bunds are likely to outperform Treasuries over the next few months, as economic data from the euro area start to come out weaker, enforcing expectations of ECB rate cuts. In fact, our probit model of the Treasury-Bund spread suggests that Bunds will outperform Treasuries over Q1 and Q2:08 with a probability of 57% (Figure 8.3, right). We expect the 10-year Bund yield to decline by 30bs to 3.70% within the next three months.

Figure 8.3

10-y Treasury - Bund Spread



*Source: Eurobank EFG model estimates

Foreign exchange

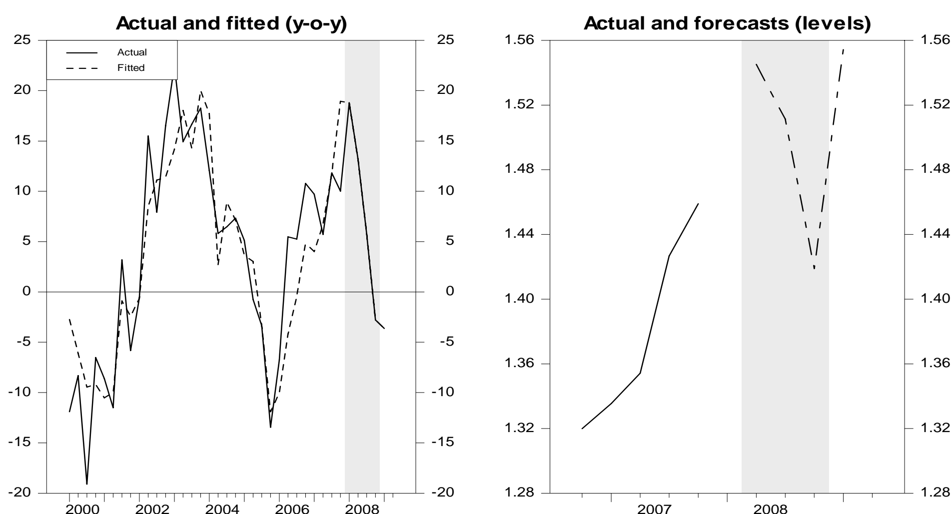
In 2007, our bearish stance of the US dollar against the euro has been nicely confirmed. In fact, over the past four months, the dollar has continued to weaken against most major currencies, as a result of the slowdown in the US economy, Fed policy easing and the unwinding of leveraged carry trades. On a trade-weighted basis, the dollar has depreciated by 3.5% in Q4:07 and by nearly 7% over the past twelve months.

Prospects for the current year are less clear though, as two opposite forces are acting on the dollar exchange rate. On the one hand, the risk of an upcoming recession in the US and the readiness of the Fed to cut interest rates aggressively continue to put downward pressure on the dollar as interest rate differentials narrow and demand for US assets declines. On the other hand, the dollar now looks cheap on a PPP basis while its depreciation over the past few years has increased the competitiveness of US exports, resulting in an improved of the US trade deficit. In fact, strong export growth over the past year was the main catalyst of economic growth in Q2 and Q3 in the face of faltering domestic demand.

While we believe that the trade deficit will continue to decline in 2008, we do not share the view that this will be the catalyst for a sharp rebound of the dollar anytime soon. Looking forward, we believe that the improvement of the US trade deficit in 2008 will come mainly from the cyclical decline in import growth rates as domestic demand (and, most importantly, personal consumption) slows down, rather than from an acceleration of exports, as the effect of past improvements in dollar competitiveness has in our view broadly run its course. If we are right, it is difficult to make a case for a dollar rebound, as the improved trade deficit will only reflect increased weakness of the US economy relative to the rest of the world.

Figure 8.4

EUR - US Dollar exchange rate



*Source: Eurobank EFG model estimates

Overall, we remain bearish on the dollar over the next three to six months. Our short-term fair value model of the EUR/USD exchange rate suggests that the euro will cross USD 1.50 over the next three to six months as markets start to discount interest rate cuts by the ECB, leading Bunds to outperform Treasuries (Figure 8.4).

Equities

Our long standing view on global equities was that the risk of severe slowdown of the US economy and a prospective corporate profit crunch was (until recently) not sufficiently discounted in stock market valuations (see our May and September 2007 issues). We thus proposed to build up defensive (short-long) positions in large versus small caps, growth versus value stocks and long positions in volatility. All these positions worked well during the past six months as equity markets eventually moved on to reflect a cyclical decline in US corporate profits and a global slowdown due to an upcoming recession in the US.

The January sell-off in global stock markets has resolved in our view a dichotomy between a relatively sanguine outlook conveyed in broad equity indices on the one hand and a downbeat economic outlook discounted in government bond markets, credit markets and real estate and consumer related cyclical sectors of the US economy. With the large sell-off across global equities, investors have presumably come to accept that the fallout from the credit crisis will not be confined to the real estate and financial sectors but will spread to the real economy, dragging the US into a sharp slowdown which might develop into a typical recession and a re-coupling of economies across the globe.

The scale of the recent equity market losses, combined with our view that the US economy will eventually not avoid a recession, suggests that global equities have entered a bear market. 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 more than 30%. 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). So, with the scale of the current equity market losses near 20% from their peaks of October 07, the central question for investors is whether equity markets have corrected enough given the state of the economy and the turmoil in credit markets. Unfortunately, the answer is probably not yet.

First, we believe that the aggressive rate cuts by the Fed and expectations of more cuts to come will provide only temporary relief to equity and credit markets. This is because, typically, the decline in corporate profit growth during recessions is proportionally much stronger than the decline in short-term interest rates, depressing the fair value of equities (see our May 2007 issue).

Second, risk premia rise too as economic uncertainty increases and risk appetite declines. As a result, the combined effect of a decline in both earnings and short term interest rates is typically to drag the fair value of equities lower. Risk premia in credit markets have increased substantially since the outset of the credit crisis in August 07. Equity market risk premia have also declined during the past five years below historical norms and are likely to increase too as economic uncertainty is on the rise and volatility has returned in the equity market. Hence, the correction in equity markets may be this time stronger than average, compared to previous economic downturns, as declining earnings coincide with a move up in risk premia.

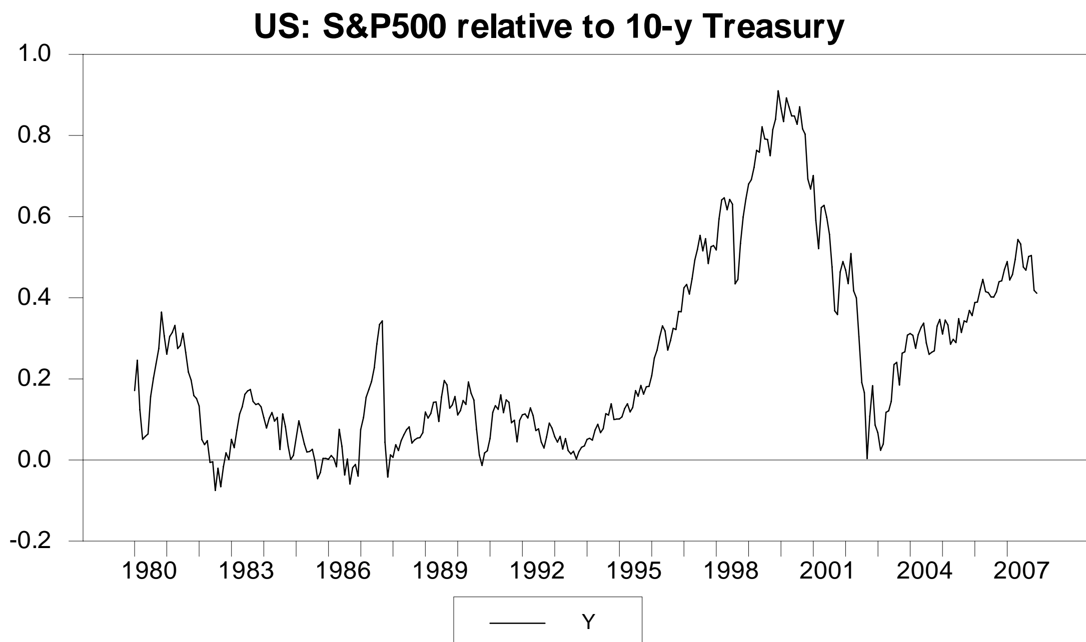
Third, equity prices seem to have already discounted the full scale of monetary policy easing. With inflation on the rise, the 75 bps surprise cut on January 22 will likely be the last positive surprise from the Fed. Hence, looking forward, the Fed will be less able to shore up confidence in equity markets as the economic outlook continues to worsen.

Fourth, historical evidence from previous bear markets suggests that equity prices must decline by a sizable amount to restore fair value relative to Treasuries. Although equities have underperformed Treasuries by roughly 25% since June 07, historical patterns from past bear markets suggest that equities must likely correct by another 10-20% from current levels (end-January) to restore relative fair value.

In order to illustrate this point, consider Figure 8.5, which plots the relative price of the S&P500 versus the 10-year Treasury bond index since 1980. Relative performance of stocks versus bonds is measured on a logarithmic scale, so zero indicates equal performance (parity), positive numbers indicate cumulative overperformance of stocks relative to bonds (for example 0.8 suggests 80% overperformance) and negative numbers indicate cumulative underperformance. When the relative performance on the log scale drops to zero, relative prices of stocks versus bonds approach unity, that is, a parity in relative prices is established. Although equity prices tend to increase faster than bond prices in good economic times, the relative price of equities versus bonds tends to decline sharply in bad economic times, most notably during recessions (1981, 1990, 2001), periods of

sharply falling interest rates (1983-1986, 1991-1993) or when bubbles burst (1987, 2000). Figure xx makes also clear that at the end of every bear market episode since 1980, relative equity prices have fallen enough to restore a 1:1 parity with bond prices. During such bear market periods, the relative price of equities versus bonds has declined on average by 44% in order to restore parity between the two asset classes (see Table 8.1). The declines in the value of stocks relative to bonds vary quite a lot in a range between 19% (1991 recession) and 82% (2000 burst of the dotcom bubble). Excluding the two episodes of falling Fed funds rates and stable growth (1983-1986 and 1991-1993), which have led both equity and bond markets to perform well, the average decline in the relative price of equities versus bonds during past recessions and bubble bursts is 40%.

Figure 8.5



Notably, during the last equity bull market, which started in March 2003, equities have outperformed government bonds by about 55% (see Figure 8.5). The bull market of equity market out-performance ended in May 2007. Since then, relative prices of equities versus bonds have gone a long way in adjusting towards parity: By the time of writing, the S&P500 has fallen by 12% (since May 2007) whereas prices of 10-year Treasuries have increased by 14%, leading to a cumulative decline in relative prices of stocks versus bonds of 26% from their peak in May 2007. So, how much must equity markets fall to restore long-term fair value relative to bonds? This depends mainly on how much lower Treasury yields are likely to fall.

Table 8.1
Performance of S&P500 relative to10-year Treasuries during past episodes

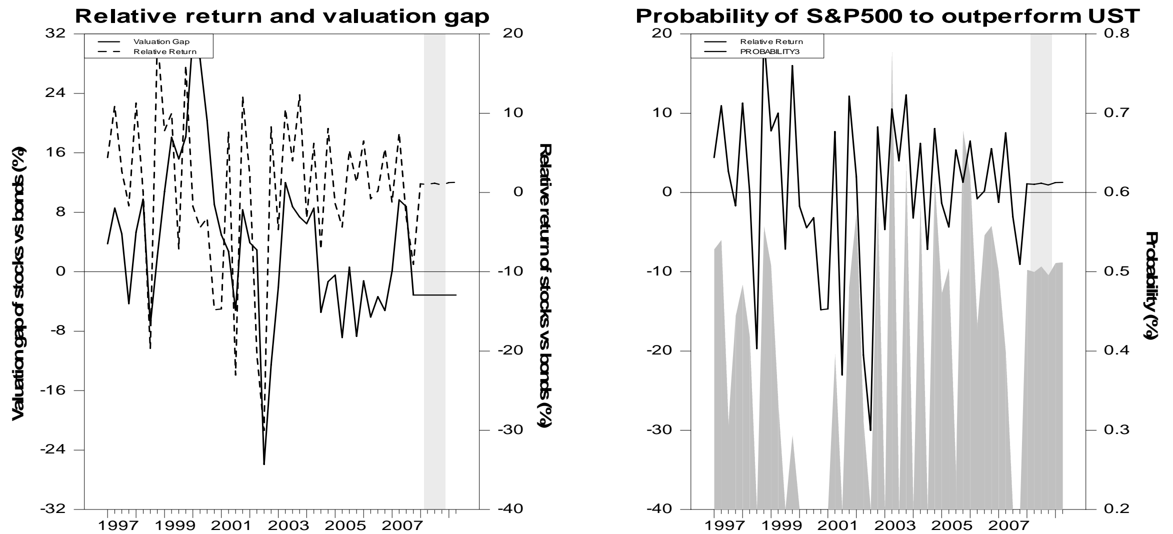
	Period	Duration (months)	S&P 500 (return)	10Y Treasuries (return)	S&P 500/10Y Treasuries relative performance	Market conditions
1	28/11/1980 - 30/7/1982	20	-24%	18%	-42%	Recession 1981-1982
2	31/8/1983 - 30/9/1986	37	41%	78%	-37%	Falling interest rates
3	30/9/1987 - 30/11/1987	2	-28%	5%	-34%	October 1987 crash
4	31/5/1990 - 31/10/1990	5	-16%	3%	-19%	Recession 1990-1991
5	31/5/1991 - 30/9/1993	28	18%	38%	-20%	Falling interest rates
6	31/12/1999 - 30/9/2002	33	-45%	37%	-82%	Dot.com bubble burst & recession 2001
	Overall average	**21**	**-9%**	**30%**	**-40%**	
	Average of recession or crisis related drops	**15**	**-28%**	**16%**	**-44%**	
7	31/5/2007 - 28/1/2008	8	-12%	14%	-26%	Current period: Credit crisis and recession

Table 8.1 illustrates that during periods of such corrections in relative prices, bond prices increase either very little (5% in 1987, 3% in 1990) or quite a lot (78% in 1983-1986, 38% in 1991-1993), depending on the position of the economy in the business cycle and the potential of the Fed to cut interest rates. In our view, bond markets have currently discounted quite a lot of Fed funds easing, implying that long-term Treasury yields have likely bottomed. Even if 10-year Treasury yields decline by another 50 bps, implying a further increase in 10-year Treasury prices of roughly 3.5%, the total increase in bond market prices since May 2007 will not exceed 18% (currently 14%), slightly higher than the average increase in Treasury prices during past recession and bubble burst episodes (Table 8.1). Given that the relative price of stocks versus bonds has declined on average by 40% during similar episodes and stocks have already fallen by 12% from their peaks, the S&P500 must decline by a total of 22% from its peak in October to a level near 1,200.

In fact, our relative fair value model of equities versus bonds suggests that the S&P 500 will underperform Treasuries over the next quarter (Figure 8.6)

Figure 8.6

S&P500 relative to US Treasury



*Source: Eurobank EFG model estimates

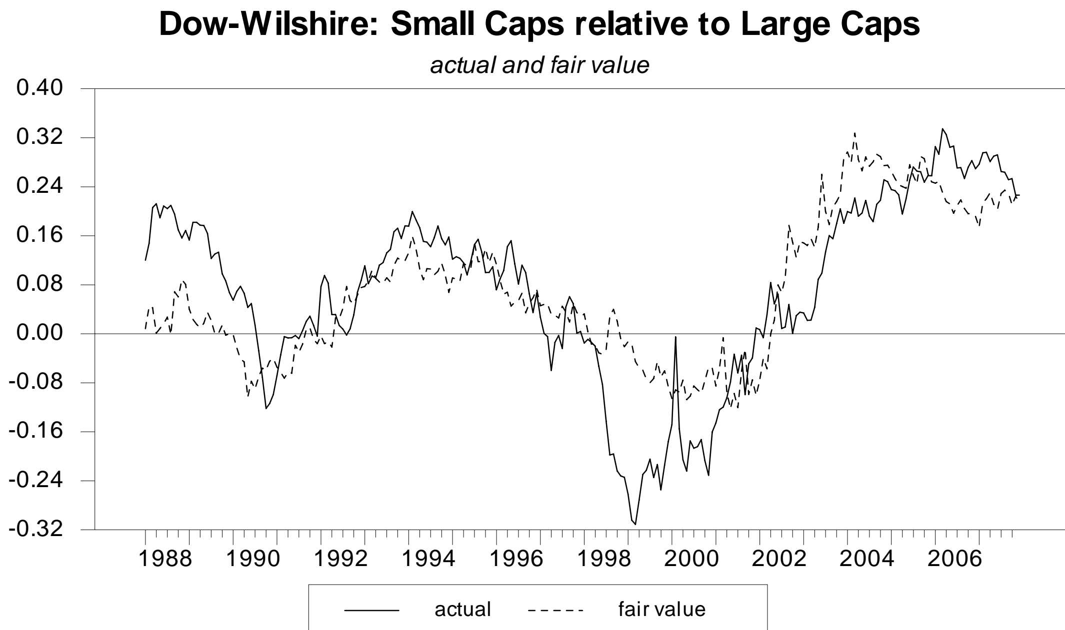
Large caps due to outperform small caps

Our view in 2007 has been that the long cycle of out-performance of small capitalization stocks relative to large capitalization stocks is nearing to an end as the US profit slowdown hits small caps harder than large caps because of a stronger dependence of small caps' earnings on the domestic business cycle. We thus recommended a long-short position in large versus small caps as a hedge against a severe slowdown of the US economy in May. Our trade performed well during the summer sell-off and generated a return of 6% year to date (see Table 8.2).

Table 8.2
Returns year to date since May 31 2007 (Dow-Wilshire indices)

Large caps	Small caps	Large-Small
-10%	-16%	6%

Figure 8.7



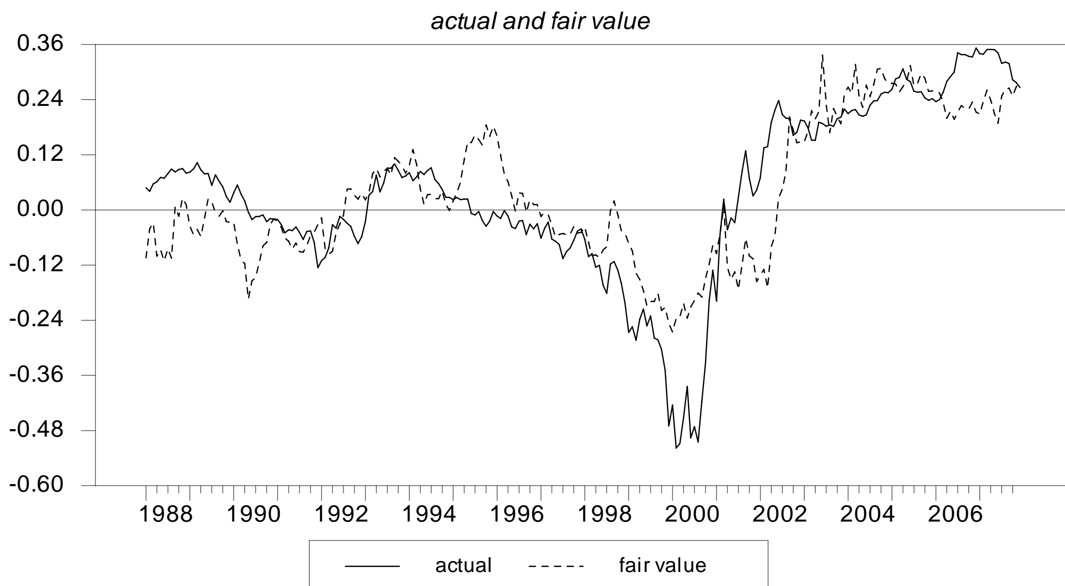
As the US economy is heading into a recession, we maintain this position and expect large caps to outperform small caps over the next three months although the valuation gap between small and large caps has declined considerably over the past few months (Figure 8.7). In our view, small caps will likely continue to suffer from the profit slowdown and the tightening of credit conditions, relative to large caps as the market seems to be too optimistic on the recovery of small cap profits in H2. In addition, we find that volatility and the slope of the yield curve are also important determinants of the relative performance of small versus large caps. We expect both volatility to remain elevated and the slope of the 10-year – 1-month yield curve to steepen, both factors weighing on small cap returns.

Growth stocks due to outperform value stocks

The turn in the US business cycle has also clear implications for style investing. Value stocks tend to outperform growth stocks when the economy rebounds (similar to small and medium capitalisation stocks) and underperform when the economy enters into a business cycle slowdown.
In September 2007 we suggested to open up a long-short position in large growth versus large value stocks, as large value stocks looked overvalued relative to large growth stocks by nearly 10% based on the state of the economy (proxied by our index of labor market tightness) and the earnings-bond yield differential (Figure 8.8). This trade performed well over the next three months to

January, giving a total return of 5.2%. Although the January sell-off hit growth stocks harder than value stocks, we believe that this was mainly due to the unexpected sharp rate cuts by the Fed, which supported mainly value stocks. As the ability of the Fed to deliver positive surprises has diminished substantially and real economy data are likely to worsen substantially over the next three months, we continue to stick on this trade.

Figure 8.8



Commodities

In our view, prospects for agriculture and precious metals are positive for 2008, even in a deteriorating economic environment. Tightening fundamentals and increased investors' demand due to the relative immunity of agriculture returns to macroeconomic weakening – as opposed to energy and industrial metal returns – are expected to support prices across the agricultural complex. Gold prices seem also set to register positive returns in 2008, as major drivers are constructive: the USD is on a falling trend, inflationary fears are growing and geopolitical and economic uncertainty is on the rise.

The deteriorating economic outlook concerning both the US and the developing economies raises downside price risk for energy and industrial metals, which have been historically the complexes most closely tied to the business cycle. Regarding energy, we view that tight fundamentals will

offset downward pressure triggered by macroeconomic concerns and keep oil prices at high levels on average throughout 2008. Regarding industrial metals, further price weakness is likely, since growing supply has somewhat eased the – until recently – tight fundamentals. However, any positive surprise concerning the macroeconomic environment could trigger a strong rebound of prices, given the still historically low level of inventories.

Finally, the high degree of uncertainty concerning the global economic outlook is expected to inject a significant degree of volatility in commodity markets this year.

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