www.eurobank.gr/research



Division of Research and Forecasting Director: Gikas Hardouvelis ghardouvelis@eurobank.gr

Authors:

Dimitris Malliaropulos Research Advisor dmalliaropoulos@eurobank.gr

Olga Kosma Economic Analyst okosma@eurobank.gr

Main Views and Market Strategy:

- Fears of a hard landing of the US economy have gradually dissipated from market valuations, making room for the scenario of a "happy" slowdown as the markets' baseline forecast.
 - We disagree with the view that markets gradually converged to the Fed's more optimistic growth outlook. Instead, we view the upward move of expected Fed funds rates and Treasury yields since October as the result of increasing inflation worries, as breakeven inflation has rebounded strongly.
- We also disagree with the view that the US economy is in fact growing faster than current spending and production data suggest. Analysing past revisions of GDP data, we find that both the GDP level and growth rate have been systematically revised downwards since 2000.
- The Q4 06 strength of the US economy is in our view temporary, owing to lower oil prices and the mild weather.
- Our Fed policy reaction function suggests that current Fed funds rates are in line with estimates of the policy neutral rate. We expect Fed funds to remain flat for most of the year and decline by 25bps in H2.
- Euro area growth seems resilient to the US slowdown as domestic demand and employment conditions are improving. ECB to hike rates to 3.75% in March and to 4.0% in June.
- Outlook for Japanese economy remains positive, despite soft Q3 data.
 Flat inflation will likely keep BoJ on hold until early H2.

Summary of Asset Allocation Themes

Main theme	Rationale	Strategy
Global growth	Global growth is decoupling from US, as BRICs contribute 50% to PPI adjusted global growth rate and US less than 10%. In addition, Japan and Europe maintain their positive momentum.	Risky assets: Long term, overweigh BRICs as a structural theme. EM Equities: Reduce short-term exposure, as EM equity risk premia have been compressed considerably since June 06 rebound.
US growth	Mild weather and declining oil prices led to a string of positive news from the real sector in Q4:06. Support to growth will be temporary as the drag from the housing market remains. We expect growth to moderate in 2007 to 2.3% y-o-y from 3.4% y-o-y in 2006.	Equities: Overweight US construction sector, as most indicators have already rebounded. Underweight cyclicals as a profit slowdown will hurt these sectors most.
US inflation	CPI inflation has come down due to declining oil prices in H2 06. However, the labor market remains tight, pushing up wages. We expect core inflation to remain at elevated levels for most of H1 and decline later in the year.	TIPS: Maintain long position in US inflation indexed bonds to hedge against core inflation surprises over the coming months. Partly take profits, as breakeven inflation has rebounded since October.
Interest rates	The Fed will likely remain on hold until Q3:07, and cut rates by 25 bps in Q4. The ECB will likely hike rates to 4% by mid-07 and go on hold afterwards.	Eurodollar futures: Short-term neutral, as market has priced out expectations of an aggressive easing of Fed policy.
US profits	We maintain our view that the profit slowdown will be the major theme in 2007, as economy is slowing and profit margins are compressed.	Underweight US equity, go short on small and mid-cap US equity and long on big caps to hedge against the risk of a downturn in the profit cycle.
Bonds	Current yields of US Treasuries discount a "happy slowdown" of the US economy. We expect economic activity to soften over the next several months, leading yields lower to 4.60-4.70. In the sort- term, however, we remain cautious as some negative core inflation news are still in the pipeline.	Take long positions in 10-year Treasuries at yield levels above 5%. On relative trades, we prefer Treasuries to bunds and position for a further narrowing of the Treasury-Bund yield differential in the medium term.
Equities	Valuations are supportive on a long-term basis. However, risks have increased that a profit slowdown in the US will hurt equity markets in the short term.	Overweight Europe and Japan relative to US. Underweight EMs relative to core markets. Overweight equities as an asset class after a market correction.

Macro Forecasts

	2006	2007					
		Eurobank EFG	Consensus				
Real GDP Growth							
(y-o-y average)							
US	3.4	2.3	2.4 (2.3 – 2.8)				
EU-12	2.7	2.1	2.0 (1.9 – 2.3)				
Japan	2.4	2.2	2.0 (2.0 – 2.4)				
	CPI Inflat (y-o-y aver						
US	3.4	2.2	2.0 (1.4 – 2.2)				
EU-12	2.2	2.0	2.1 (1.7 – 2.0)				
Japan	0.1	0.3	0.4 (0.1 – 0.4)				
Short Term Interest Rates (end of year)							
US	5.25	5.00	5.00 (4.50 – 6.00)				
EU-12	3.50	4.00	4.00 (4.00 – 4.00)				
Japan	0.25	0.50	0.75 (0.50 – 1.25)				

Note: Range of forecasts in parentheses below point estimates.

Table of contents

1. Executive Summary	5
2. The US economy	9
3. The Euro area economy	27
4. The Japanese economy	34
5. Implications for asset allocation	38

4

Dimitris Malliaropulos e-mail: <u>dmalliaropoulos@eurobank.gr</u>

Olga Kosma e-mail: <u>okosma@eurobank.gr</u>

Global Outlook and Asset Allocation

1. Executive Summary

Since our previous October issue of Global Economic & Market Outlook, global markets have been mainly driven by expectations about the extent and the implications of the US slowdown. US real sector data have surprised markets with a string of positive releases in December-January, leading to an upgrade of expectations regarding the state of the US economy. Declining oil prices in H2 06 and the mild winter weather have also contributed to this upgrade. As a result, fears of a hard landing of the US economy have gradually dissipated from market valuations, making room for the scenario of a "happy" slowdown as the markets' baseline forecast.

The upward revision of growth prospects has been followed by an equivalent adjustment of expectations of Fed funds rates and upward pressure on Treasury yields, which increased by 40 bps since December (10-year bond). Money markets seem now to discount that Fed funds rates will likely remain flat for most of the year, as opposed to three months ago, when eurodollar futures were discounting a 75bps rate cut by the Fed in the course of 2007.

The change in US interest rate prospects has also benefited the dollar, which appreciated by 2.5% against the EUR and by 4.8% against the Yen since its recent troughs in December. Stock markets seem to have weathered the upward revision of Fed funds rates expectations very smoothly over the past few months as growth expectations for the US economy have been revised upwards at the same time. Global stock markets continued their upward trend since June 06, posting significant gains in December-January, as global growth seems to gradually decouple from the US (driven mainly by robust growth in the BRIC's and an upgrade of growth prospects in the euro area and Japan) and inflationary pressures remain bounded worldwide. The vision of a

global "goldilocks" economy with strong growth and low inflation has further reduced risk premia, leading to a continuation of the bull market for risky assets on a global scale.

Overall, the emergence of the "happy slowdown" scenario seems to broadly explain market movements over the past three months. Should this scenario materialize, the growth slowdown in the US will not severely affect corporate profits and inflation will remain on a downward trend, supporting equity valuations both in the US and on a global scale.

Three months ago, we viewed money market expectations of a 75bps rate cut by the Fed in 2007 as excessive and saw Fed funds risks to the upside rather than to the downside, as the job market remained tight and inflationary pressures were still mounting. In the meantime, the market moved in the correct direction, pricing out an aggressive rate cut, as predicted in our October issue, but, on a first sight, for the wrong reasons. US inflation has benefited from the decline in oil prices in the second half of the past year but apparently failed to affect expectations of future Fed funds rates. Instead, money markets reacted strongly to the positive news about the US economy, as the housing market has shown some signs of stabilization in December and job market data continued to come in stronger than expected. So, it seems that money and bond markets have gradually converged towards the more optimistic view of the Fed, that growth may be stronger than previously expected.

We disagree with the view that the change in money and bond market valuations since October reflects an upgrade in expectations about US growth. Markets have in our view priced out expectations of an aggressive easing of Fed policy mainly because of inflation worries, not because of a brighter growth picture. If the latter were the case, inflation expectations should be unchanged since October and the upward move of Treasury yields should reflect higher expected growth of the US economy. But inflation indexed yields remained flat over the past four months, suggesting that the TIPS market does not discount any upgrade of the growth prospects of the US economy. Instead, 5-year breakeven inflation has increased sharply from 2.10% in October 06 to 2.42% in January 07, explaining fully the rise in 5-year nominal Treasury yields from 4.57% in October to 4.86% in January.

In our view, real sector data in the US is currently benefiting from two temporary factors: falling energy prices in H2 06 and exceptionally warm weather in December-January. These factors, however, are likely to provide little support to economic activity beyond Q1 as oil prices are already heading up and the weather normalizes. As a result, the headwind from the housing sector on growth dynamics will gradually come through and news on real economy data will become softer.

In addition, we believe that the relatively good picture of 2006 GDP growth is partly the result of a substantial downward revision of GDP in 2005 and earlier, as repeated downward revisions of past GDP data make current year growth often seem stronger than it actually turns out to be years later. Comparing initial releases of GDP data and final releases since Q1 2000, we find that GDP data were systematically revised downwards by an average of 1% per year during the period 2000-2005. Our interpretation of the data is that the systematic pattern of GDP revisions is related to the rise and fall of the new economy paradigm in the US. Hence, if GDP continues to be systematically overestimated like in the previous five years, GDP growth in 2006 will likely turn out to be softer rather than stronger than estimated currently.

Our analysis is broadly in line with the view that US productivity growth has slowed considerably after the 2001 recession, pushing potential growth of the US economy over the next decade lower. This development suggests that a growth slowdown towards 2.3% in 2007 will not push down core inflation as fast as the Fed seems to expect, since potential growth has also declined. This is because with lower productivity gains, wage increases will be increasingly rolled over to consumer prices, faster than we have witnessed during the 1990s, when increased productivity used to protect companies' profit margins from rising costs.

Implications for asset allocation

Our view that developments in money and bond markets over the past three months are related to increasing inflation worries rather than to an upgrade of growth prospects in the US has important implications for investors.

First, given our view on the prospects of US growth and inflation, we remain cautious on Treasuries in the short term, as negative core inflation news are probably in the pipeline over the next few months. However, we view any increase of 10-year Treasury yields above the 5% level as a buy opportunity, as we expect growth surprises to turn negative and inflationary pressures to gradually fade, allowing the Fed to reverse the course of short term interest rates.

Second, on relative trades, we prefer Treasuries to bunds, as the ECB continues to normalize rates, and position for a further narrowing of the Treasury-Bund yield differential to below 60 bps over the next three to six months.

Third, stock markets seem to take a rather different view on inflation from money and bond markets as they continued to move higher despite a pickup in breakeven inflation since October. This is in contrast with past experience, as stock prices used to correct when inflation worries built up. The disagreement between stock and bond market valuations is now stronger than three months ago, when stock markets seemed to take a more optimistic view on growth prospects than bond markets. With some negative core inflation news still in the pipeline and earnings growth decelerating from its Q4 peaks, equity market valuations seem rather stretched currently.

Fourth, since Fed funds seem to have peaked, the dollar is expected to loose support from interest rate differentials against low interest rate currencies. Furthermore, the slowdown of the US economy will weigh on the dollar in the long term, as the growth differential against the euro area continues to decline. Hence, the recent rebound of the dollar against the euro seems to be rather a temporary blip than a reversal of the longer term negative trend.

2. The US economy

Fears of a hard landing have been priced out of market valuations

Declining oil prices, continuing strength of the labor market and some early signs of stabilization in the housing sector in December have led to an upgrade of expectations regarding the state of the US economy during the past three months. Fears of a hard landing of the US economy have gradually dissipated, making room for the scenario of a "happy" slowdown as the markets' baseline forecast.

With the exception of bonds, financial markets responded positively to the good news. The upward adjustment of growth expectations has been followed by an equivalent adjustment of expectations of Fed funds rates and upward pressure on Treasury yields, which increased by about 30 bps (10-year bond). Money markets seem now to discount that Fed funds rates will likely remain flat for most of the year, as opposed to three months ago, when eurodollar futures were discounting a 75bps rate cut by the Fed in the course of 2007 (Figure 2.1).





In our view, real sector data in the US is currently benefiting from two temporary factors: falling energy prices in H2 06 and exceptionally warm weather in December-January. These factors, however, are likely to provide little support to economic activity beyond Q1. Oil prices are already heading up from their lows in the mid January and are likely to increase further towards USD 60 per

barrel as the weather normalizes towards the typical winter chill. As the effect of these factors gradually dissipates in the spring, the headwind from the housing sector on growth dynamics will become stronger and news on real economy data will become softer.

The pattern of past GDP revisions suggests that current growth estimates are overstated

The view that the US economy is in fact stronger than we thought is supported by the fact that the labor market maintains its strength despite a slowdown in economic activity, as measured by spending and production data. In fact, the Fed proposes in the December FOMC minutes this explanation as one possible resolution of the growth-unemployment puzzle, i.e. the observation that the rate of unemployment continues to decline despite the slowdown of the US economy. This view necessarily suggests that future revisions of 2006 GDP will likely be on the upside rather than on the downside.

We disagree with the view of "a stronger than we thought" economy, as the relatively good picture of 2006 GDP growth (3.4% y-o-y) is the result of a substantial downward revision of GDP in 2005 and 2004, rather than an upgrade of GDP growth in 2006. Repeated downward revisions of past GDP data make current year growth often seem stronger than it actually turns out to be years later. This is in our view because the pattern of GDP revisions over the past few years is not completely random. In order to test this proposition, we look at official revisions of GDP data over the past six years. Revisions of GDP data can be computed by comparing final estimates of GDP (i.e. data of past years' GDP available today) with real time data, i.e. first releases of GDP estimates by the FRED database. Real time data are also available from the FRED database at the Federal Reserve Bank of St. Louis (www.stlouisfed.org).

Comparing initial releases of GDP data and final releases since Q1 2000, we find that GDP data were systematically revised downwards by an average of 1% per year during the period 2000-2005 (Figure 2.2). In other words, the level of real GDP has been systematically overestimated since 2000. Downward revisions of the initial data were often of the order of 1% of GDP per year or higher.



Figure 2.2: Revisions of GDP (in % of initial release)

Our interpretation of the data is that the systematic pattern of GDP revisions is related to the rise and fall of the new economy paradigm in the US. The emergence of the new economy paradigm during the late 1990s has boosted official GDP estimates of past years systematically upwards. The 2001 recession seems to have destroyed the new economy paradigm, resulting in a series of systematic downward revisions of previous GDP estimates.

Revisions in the level of GDP affect also estimates of GDP growth. Figure 2.3 plots three releases of GDP growth for every year since the 2001 recession. The first release of GDP growth (in Q1 of the following year) is systematically higher than the first update (which is released in Q3 of the following year). The final estimate is even lower than the first update, by between 0.3 and 0.8% y-o-y. Since 2006 data have not been revised yet with the exception of Q1, past experience suggests that 2006 GDP growth will be gradually revised down over the following quarters by 0.3 pp to 3.1% y-o-y, from 3.4% of the current Consensus estimate.





Hence, if GDP continues to be systematically overestimated like in the previous six years, GDP growth in 2006 will likely turn out to be softer rather than stronger than estimated currently.

The housing sector remains a drag on the economy

The downturn in the housing market has been the cause of much of the slowing in the US economy during 2006. Real residential investment fell at an annualized rate of 20.8% q-o-q in the fourth quarter of 2006 and at an average annualized rate of 13.2% q-o-q during the whole year. Home sales have been on a downtrend during the whole previous year (Figure 2.4), resulting in an increased overhang of inventories (Figure 2.5).



Figure 2.4: Signs of stabilization in home sales





However, home sales showed some signs of stabilization in November (Figure 2.4) due to improving affordability, which reflects the recent decline in mortgage rates since July 2006 and the correction in median sales prices of both new and existing homes (Figures 2.6,2.7). Mortgage loan purchase applications, which have been declining since the second half of 2005, also proved much

stronger during recent weeks. Although weekly mortgage applications are very volatile, the trend in purchase applications has increased significantly since October 2006 (Figure 2.8).





Figure 2.7: Correction in OFHEO house prices has further way to go



Figure 2.8: Mortgage purchase applications



Similarly, housing starts and building permits showed some signs of stabilization in December (increasing 4.5% and 5.5% mom, respectively) after a year of consecutive monthly declines, suggesting that the worst may be over in the housing sector. The underlying trend, however, remains negative, with housing starts declining 18% y-o-y and building permits down 24.3% y-o-y,

suggesting that starts have further to fall in order to reduce gradually the increased inventory of homes available for sale (Figure 2.9).





As a result, we expect the downturn in US housing activity to remain a drag on the economy for some time, though this drag should weaken as 2007 proceeds. Figure 2.10 illustrates the results of our calculations concerning real residential investment growth in 2007. Provided that housing starts, building permits and new home sales continue to fall on a q-o-q basis at a slower pace, the direct drag from the homebuilding sector on GDP growth should continue throughout 2007, although at a lower pace. Real residential investment is expected to decline by about 11.6% on average for 2007 after a drop of 13.2% in 2006.





Note: Real residential investment is estimated as:

 $\Delta QResid.$ Investment=0.51 – 0.06* $\Delta QHousing Starts$ +0.18* $\Delta QBuilding Permits$ (-1)

+0.09* Δ QNew Home Sales(-1)+0.50* Δ QResid. Investment(-1)

(4.02) (9.55)

Adjusted $R^2 = 0.73$ (sample = 1980Q1 - 2006Q3) t-statistics in parentheses

The goods sector is softening

The slowdown in the manufacturing sector since October adds to concerns that the housing market correction may spread to the rest of the economy. The downturn in housing construction and the restructuring in the auto manufacturing sector have led to an inventory overhang, which probably has had a bad influence on industrial production. The latter has fallen for the third consecutive month in a row on a y-o-y basis (Figure 2.11).

Confirming the ongoing deceleration in the manufacturing sector, the ISM index fell below 50 in November for the first time since April 2003 (Figure 2.12). After briefly rising above the 50 threshold in December, the index fell back again below 50 to 49.3, suggesting that the recent rebound in manufacturing activity may be rather a blip than a change in the underlying trend.





Unlike the manufacturing sector, the service sector remains healthy. The ISM non-manufacturing index is well above 50, slipping slightly to 56.7 in December from 58.3 in November.



Figure 2.12: ISM Index: The diverging path of services and manufacturing

The weakness of the US economy in the second half of 2006 is also confirmed by the gradual deceleration of small business plans during the course of the year, which declined from 54 in January to 36 in December 2006 (Figure 2.13).



Figure 2.13: Small Business Plans & Real GDP

Personal consumption remains robust

The strong growth of real wages since Q1:2006, combined with lower gasoline prices has led to a significant boost in personal disposable income and, as a consequence, a remarkable upturn in personal consumer spending in recent months (Figure 2.14). The trend in real consumer spending during the past three months averaged at about 3.7% y-o-y despite the downturn of the housing sector and the negative wealth effect from house prices.





Even though the November and December data may include a large amount of holiday spending, there is still no evidence that households have become more cautious, and acting to increase significantly their saving rate rather than consuming. To the contrary, the household savings rate averaged almost -1% over the last quarter of 2006.

Consumer confidence is holding above 100, a level consistent with significant growth in real consumption. The December release actually showed a surprising strength in confidence, which soared to 110.0 from an upward-revised 105.3 in November. Furthermore, consumer confidence remained essentially unchanged in January at a strong 110.3 and was actually the best reading for the last five years (Figure 2.15).



Looking forward, we expect personal consumption growth to soften by about 0.7% y-o-y on average in 2007, as the negative wealth effect from the downturn of the housing market will gradually work through to consumption. Overall, we project that even if house prices remain stable in real terms, personal consumption will likely decline by a total of about 5% over the following 5-7 years, as the positive wealth effect from increasing house prices of the past decade will cease to exist.

The "growth-unemployment puzzle"

Despite the economy's slowdown in H2 06, employment growth continued to strengthen and the rate of unemployment declined to 4.6% in January from 4.8% in July (Figure 2.16). In the December FOMC minutes, the Fed points out that the strength of the labor market of the recent quarters "stood in contrast to the softer pace of economic expansion, suggested by the spending and production data". We term this situation of slowing growth and declining unemployment as the "growth-unemployment puzzle".

The Fed proposes three possible explanations of the puzzle:

1. Because employment reacts with a lag to a slowdown in economic activity, "growth in employment would probably slow over the next quarter or so";

2. "The growth of structural productivity could be weaker than currently thought";

3. "The recent pace of activity may have been stronger than that indicated by the spending and production data".





The resolution of the growth-unemployment puzzle has important implications for monetary policy. This is because if employment growth is expected to soften in the next few quarters (explanation 1) as a result of the slowdown, the rate of unemployment will likely increase, giving the Fed the necessary signal to cut interest rates. If, however, structural productivity is lower than previously thought (explanation 2), then inflationary pressures are higher than currently estimated (as real wage growth is pushing unit labor costs higher, given lower productivity growth), hence, requiring further interest rate hikes. Similarly, if current GDP growth is stronger than estimated, interest rates will likely remain flat for a longer period than currently discounted in order to curb inflationary pressures.

Given our analysis of past GDP revisions, we view the third explanation as most unlikely, in contrast to the view of some FOMC members expressed in the December FOMC minutes that "gross domestic income had grown substantially more quickly than measured GDP over the past year". 2006 GDP growth is in our view overestimated rather than underestimated, as previous years' growth estimates were systematically revised down since the 2001 recession. In the following sections, we investigate the second explanation of the growth-unemployment puzzle. We conclude that the slowdown in economic activity will eventually lead to a softening in employment growth from 2.2% y-o-y currently to 1.8% y-o-y on average during 2007. However, provided that the labor force continues to grow by an average of 1.5% y-o-y (similar to 2006), the slowdown in employment growth will not be enough to push the rate of unemployment higher for some time. This will likely delay an easing of monetary policy until later in the year.

The labor market maintains its strong momentum mainly due to the strength of the service sector (Figure 2.17). Indeed, the service sector, which represents 84% of the total non-farm employment,

continues to grow at a healthy pace and has actually added an average of184k per month to employment over the past five months. On the contrary, the goods-producing and the construction sector payrolls may have increased in January but on average they have been declining for the last five consecutive months by an average of 20k and 1k per month, respectively. The decline in the payroll data of the construction sector will likely intensify in the following months as residential investment will continue to correct and the positive effect of the mild winter on the data will gradually dissipate. Confirming our view, the Chicago PMI index declined in December below the 50 threshold and decelerated further in January to 42.8, suggesting that prospects of employment growth turned negative (Figure 2.18).





Figure 2.18: The Chicago PMI employment is pointing south



The tightness in the labor market is indicated not only by the low unemployment rate but also by the continued growth in wages, which supports personal income and consumption. Average hourly earnings have continued to increase in January at a solid y-o-y pace of 4.0% (0.2% m-o-m) and have actually been increasing by 4.1% y-o-y on average since the second half of 2006. This

Index % yoy Tight Tight Average 1985-present: 43,3 TIL Unemployment Stress (inverted, left) Average Hourly Earnings (right)

Figure 2.19: Wages are increasing as labor market tightens

development is in line with the cyclical decline in unemployment and the duration of unemployment from their peaks in early 2003 (Figure 2.19).



In fact, our estimates suggest that, given that US growth will moderate in 2007 to about 2.3% y-o-y from 3.3% y-o-y in 2006, civilian employment growth will moderate gradually to about 1.8% y-o-y growth by the end of the year from the current growth levels of 2.2% (Figure 2.20). Provided that civilian labor force continues to grow by 1.5% y-o-y on average, the rate of unemployment may ease further to 4.2% by the end of H1 before it reverts its downward trend of the past three years.





Note: civilian employment growth is estimated as:

$$\begin{split} \Delta Employment &= -0.20 + 0.28^{*} \Delta GDP(-1) + 0.52^{*} \Delta Employment(-1) \\ & (-1.39) \quad (4.30) \qquad (5.99) \\ Adjusted R^{2} &= 0.73 \quad (sample &= 1985Q1 - 2006Q2) \\ t-statistics in parentheses \end{split}$$

Inflation pressures have recently eased but they still remain a concern

Inflation was truly well behaved in the last two months of the year, with a flat core PCE deflator in November and an increase of 0.1% in December mom. On a y-o-y basis, core PCE inflation eased to 2.2%, from 2.4% in the previous three months, moving closer to the Fed's comfort zone of 1-2%. Core consumer price inflation was also flat in November and increased by 0.2% in December on a mom basis, easing to a 2.6% y-o-y (Figure 2.21).



We view this deceleration of core inflation as a temporary effect and expect core inflation pressures to increase over the next few months. The main driver of the recent deceleration in the core CPI was the transportation sub-index, which contributed negatively by about 0.2% in November (Figure 2.22). More specifically, used car prices decreased at a -17.2% annualized rate in November, the largest decline for the last three years. This weakness was not surprising given the problems the motor vehicle industry faces, however, extreme price fluctuations in this sector look temporary rather than permanent. This is the reason why this huge decline of used car prices was limited in December to -9.6%. On the contrary, core services, one of the more stable components of core CPI, have been rising and rent and owner's equivalent rent increased over the last two months by about 4.4% y-o-y (Figure 2.23).



Figure 2.22: CPI: Transportation sub-index

Figure 2.23: CPI: Housing sub-index



As a result, the recent deceleration in core consumer price inflation is likely temporary, mainly due to the positive effect of declining oil prices, which drove airline fares and transportation prices in general lower. Indeed, core consumer price inflation has already rebounded, increasing in December by 0.2% on a mom basis, since the transportation index increased as well by 1.8% on a mom basis. With oil prices stabilizing at current levels, core inflation will remain stubbornly high for some time as core producer prices continue to increase at a 2% y-o-y pace and wage growth remains strong. Interestingly, 5-year breakeven inflation jumped to 2.42% in January 2007, from 2.1% in October, suggesting that bond markets view the recent deceleration of inflation as a rather temporary phenomenon (Figure 2.24).





Unit labour costs, along with core PPI inflation, have been one of the key drivers of core consumer price inflation during the past year. The combination of the acceleration in compensation per hour and the slowing in labor productivity growth during 2006 has increased the annual growth rate of unit labor costs from 0.6% y-o-y average in 2004, to 2% in 2005 and to 3.2% for the first three guarters of 2006.

With the labour market remaining tight for the first half of the year, as employment growth usually responds with a lag to a slowdown in economic activity, we expect wage growth to remain strong at least during H1. This development is fully in line with past history, as a decline in the rate of unemployment and the duration of unemployment below their long-term average has been systematically associated with strong wage increases since 1985 (Figure 2.19). We measure the state of the labor market with unemployment stress, which is computed as the product of the rate of unemployment and the median duration of unemployment. In fact, unemployment stress has been on a downward trend since Q1:03, suggesting that the labor market is tightening. The correlation between wage growth and unemployment stress is very high and statistically significant, explaining the recent trend in wage demands. Wage growth has remained subdue in 2003-2005 as unemployment remained high but rebounded strongly in 2006 as unemployment stress dropped below its cyclical average. In fact, wages seem to have adjusted more than justified by the current strength of the labor market. Regressing wage growth on our proxy of the state of the labor market suggests that wage increases in 2006 have been about 0.5% higher than justified by the degree of tightening of the labor market (Figure 2.25). As a result, we expect wage growth to loose steam gradually as the economy slows down and unit labor costs to decelerate gradually to a 2.4% y-o-y growth on average in 2007.



Note: compensation per hour is estimated as: Δ Wages= 5.12 - 0.04*Unemployment Stress (61.35) (-23.59)

```
Adjusted R^2 = 0.72 (sample = 1989m1 - 2006m12)
t-statistics in parentheses
```

Given our view about the state of the labor market and core drivers of consumer prices, we expect core inflation to remain above the comfort zone of the Fed for most of the year. Our estimates suggest that ULC growth, combined with pressures on PPI will keep core inflation stable at currently elevated levels of about 2.5% on average during 2007 (Figure 2.26).



Note: core inflation is estimated as:

$$\begin{split} \Delta \text{QCPIcore} &= 0.56 + 0.06 * \Delta \text{QULC}(-1) + 0.06 * \Delta \text{QULC}(-2) + 0.18 * \Delta \text{QPPIcore}(-3) + 0.16 * \Delta \text{QPPIcore}(-4) \\ &\quad (0.97) \quad (2.19) \quad (1.95) \quad (3.45) \quad (3.03) \\ &\quad + 0.22 * \Delta \text{QPPIcore}(-5) + 0.40 * \text{ Infl. expectationsMichigan 1y} \\ &\quad (4.36) \quad (1.82) \\ &\quad \text{Adjusted R}^2 &= 0.58 \quad (\text{sample} = 1985\text{Q1} - 2006\text{Q2}) \\ &\quad \text{t-statistics in parentheses} \end{split}$$

Fed to stay on hold for most of the year

In our October issue we expressed the view that Fed funds rates will remain stable or even increase by 25 bps in Q1 in contrast to market expectations of an aggressive easing by 75bps. We maintain our view that Fed funds risks are rather on the upside than on the downside in the short term. In the meantime, the market has adjusted its expectations about future rates in the correct direction.

We continue to believe that, with inflationary pressures still remaining a concern, the Fed may not be willing to ease policy in the near term, despite the slowing of the economy. In fact, our Fed reaction function (Figure 2.27) suggests that given the state of the economy and underlying inflationary pressures, Fed funds are currently fully in line with our estimate of the level of the policy neutral rate. With the economy slowing below trend, core PCE inflation remaining above the 2%

comfort zone and unemployment stress gradually increasing during the second half of 2007, we expect the Fed to cut rates by a total of 25 bps during the last quarter of the year (Figure 2.28).

Figure 2.27: Fed policy reaction function



Note: The policy neutral fed funds rate is estimated according to the policy reaction function: Effective fed funds rate = 6.95 - 0.12 Unemployment Stress + $1.14 \Delta PCEcore$ (14.8) (-14.1) (10.9) Adjusted R² = 0.82 (sample = 1987Q1 - 2006Q3) t-statistics in parentheses



Figure 2.28: Fed likely to stay on hold for most of the year

3. The Euro area economy

GDP growth in the euro area has decelerated in Q3 06 to 0.5% q-o-q from the very strong growth rates seen in the first half of 2006, mainly attributed to a surge in imports growth that led to a negative contribution from net trade, after a very strong economic activity in the first half of 2006. Real GDP growth continues to be supported by final domestic demand, which still grows at a healthy pace. The main driver of growth was personal consumption, which was supported by robust job creation and high consumer confidence, contributing 1.4% to the total growth of the real economy. The second driver was gross fixed capital formation growth, which eased to a contribution of 0.7%, after a remarkable 2% in Q2 (Figure 3.1).





Investment growth for 2006 seems to have been the highest since the boom in 2000 and prospects are ripe for further gains. The slowdown in the pace of investment during the third quarter was in our view a normalisation after the significant rebound during the second quarter rather than a backdrop, so the underlying dynamic in gross fixed capital formation remains robust.

Although the contribution of net trade to GDP growth was very small during 2006 (at about 0.1%), exports continue to growth by 7% qoq annualized in Q3, supporting corporate investment as well as employment. Export growth is expected to remain strong in the following quarters despite the

slowdown of the US economy, driven by robust growth of domestic demand in emerging Asia and the rebound of the Japanese economy. Improved competitiveness of export companies, especially in Germany, as a result of subdue wage increases and corporate restructuring over the past few years, will continue to support export growth despite the appreciation of the euro.

The German investment recovery

The recovery of gross fixed capital formation is especially strong in Germany and is mainly related to the significant improvement in the competitiveness of German companies over the past four years (Figures 3.2 and 3.3). Corporate restructuring and subdue wage increases have lifted profit margins of German companies, contributing to the significant surge of investment activity. Recent surveys suggest that investment should continue to perform well in the near future. The IFO business survey index rose sharply to 108.7 in December after 106.8 in November, its highest level since the series started in 1991. Current conditions rose to 115.3 after 113.9 and are at their strongest ever, since January 1991, the first month that the series started, while business expectations increased to 102.5 after 100.2. The DIHK survey concerning the investment expectations of the German firms is at multi year peaks (Figure 3.4).







Figure 3.4: German Investment Expectations



The surge in German business confidence is a reassuring sign that the German economy will probably stand up to the fiscal adjustment and growth will rebound in the second quarter of 2007, after a temporary weakness in the first quarter due to the VAT hike in January. Overall, fiscal tightening envisaged by the German government in 2007 is substantial, as the fiscal deficit to GDP ratio is targeted to decline below 2% in 2007. Along with the VAT hike by 3 percentage points (from 16% to 19%), several tax benefits will be reduced in 2007. The sum of all the new measures could add up to around 1% of GDP or more. Fortunately, offsetting measures are also planned, so the net effect will be limited to the VAT increase. The latter is expected to lead to a temporary contraction in German consumption in Q1 07.

Looking forward, the German economy will likely absorb the underlying fiscal tightening without serious spillovers, as the continuing strength of the labour market will lead to higher disposable income and lift consumer confidence further. Furthermore, the increasing tightness of the labour market will likely boost real wages in 2007, not only as a compensation for the VAT hike but also for the purchasing power lost in recent years (Figure 3.5).



Figure 3.5: German wages compared to other European countries

The outlook for employment remains bright

The rate of unemployment in the euro area edged down further from 7.6% in November, to 7.5% in December and is now at its lowest level since the series started in 1993. In fact, the unemployment rate has only fallen to such levels (7.8%) in 2001 and it has been rising until the beginning of 2004, when the euro area labour market has started to improve gradually (Figure 3.6). The decline on the month primarily reflects a 0.3% improvement in the German unemployment rate to 9.8%, from 10.1% in November. Germany continues to surprise on the upside, with very good successive employment reports. The latest data suggest that employment actually rose by 43,000 in December after 51,000 previously. Looking ahead to December, the decline in the German national unemployment rate (from 9.8% in December to 9.5% in January, the second reading in a row below 10% since 2002), suggests that there is potential for the euro area unemployment rate to move even lower in next month's report, although developments in other euro area countries will, of course, remain important in that regard.





Leading indicators confirm brighter growth outlook

The German ZEW survey of analysts' expectations, which declined during 2006, increased for the first time in December and posted another consecutive increase in January to -3.6 from –19.0 in December. The euro zone ZEW survey of analysts' expectations gave an optimistic picture as well, increasing to -1.8 in January from -3.0 in December, as well as the IFO business expectations index, which pointed the third consecutive increase after several months of consecutive declines. It actually rose in December to 102.5 after 100.2, a reassuring sign that the corporate sector is not much worried about upcoming fiscal tightening and slower US growth. Meanwhile, the assessment of ZEW current conditions in Germany continued to climb from 63.5 in December to 70.6 in January 07 and for the Euro zone as a whole from 56.8 in December to 66.1 in January.

The rebound in the ZEW index of analysts' expectations for the last two months probably shows that analysts are also less worried that the VAT hike will dampen growth for a prolonged period. Indeed, the fundamental situation of the German economy remains very healthy and we expect, after a VAT related dip in Q1, on-going robust growth in the following quarters (Figure 3.7).





Euro area manufacturing PMI eased slightly to 55.5 in January after 56.5 in December due to a huge decline in the French index. The business activity in the services sector declined slightly in December to 57.2 from 57.6 in November. The significant falls in France and Italy were offset by a further rise in Germany's PMI service index. Even though the PMI composite index is far from its June peak (60.4), it is well above its long term average (54.4), suggesting further activity growth in the Euro area in the last quarter of 2006 (Figure 3.8).



Although industrial production data from the main euro countries would suggest stronger output growth, euro area industrial production, excluding construction, declined in November on a y-o-y basis to 2.5% from 3.7% in October. This weakness was mainly due to Irish production, which dropped by 10.8% y-o-y, the largest decrease for about two years, while, among the main countries, industrial production in France decreased by 1.1%, after a 2.4% growth in October (Figure 3.9).

Figure 3.9: Industrial Production



Further policy tightening

Risks for short term interest rates remain clearly on the upside, as the economy rebounds, leading to tighter labor market conditions and increased wage demands, especially in Germany, where labor unions push for hefty wage increases as a compensation for the real wage losses of the past few years. In addition, headline inflation is expected to increase during the first months of the year, as German companies roll over the VAT increase to consumer prices (Figure 3.10).

Figure 3.10: HICP Inflation still good ending 2006



Given the robust growth of the Euro area economy and the favourable growth prospects for the near future, we expect the ECB to hike rates to 4.0% by the end of 2007. Due to the uncertainty that the German VAT hike creates, the next hike will be likely delayed to March 07, as the ECB will probably wait for the first data releases revealing the effects of the German fiscal tightening before proceeding with further tightening (Figure 3.11).





4. The Japanese economy

Japan's economy grew by a mere 0.8% q-o-q saar in the third quarter of 2006. The major drag on growth was personal consumption, which declined by 3.7% on the quarter saar. Although the domestic sector performed quite unfavourably, overall GDP finally increased owning to the external sector (Figure 4.1). Real exports increased by about 12% q-o-q saar, supported by a remarkably weaker yen which has declined to historic lows. The strong export performance seems to be continued in Q4 2006 with exports growing at a healthy pace of 9.1% in the last three months. The recent oil price decrease will probably have an impact on Japan's imports, resulting in a stronger trade surplus.





The surge in real exports has led to increased export earnings. As a result, corporate profits increased by almost 15% on a y-o-y basis in the third quarter of 2006, the largest increase for nearly two years (Figure 4.2). The underlying strength of the corporate sector is confirmed by business confidence indicators, such as the Tankan business survey, which continued to increase in Q4 06 and is actually at multi-year peaks (Figure 4.3).









Meanwhile, labour market conditions continue to improve steadily. The growth trend in permanent employees, which returned in positive territory in the beginning of 2005 after eight years of negative growth, has been gradually increasing. Furthermore, the unemployment rate has actually fallen in November to its lowest level since 1998 and the jobs to applicants ratio has climbed to the highest level in more than 14 years (Figure 4.4).





The corporate strength, combined with the tightness of the labour market, should be translated into higher wage income in 2007 and consequently to higher disposable income, leading to an acceleration of personal spending. The bad performance of personal spending during Q3 06, due to

the stock market correction that began in the second quarter, seems to be temporary, so Japan's undergoing domestic recovery will probably prove sustainable; monthly data releases suggest that consumption has rebounded during the last two months from its third quarter levels, when it faced a significant slowdown. Indeed, according to the Cabinet Office's consumer confidence survey, private consumption growth is showing signs of strength in the last quarter of 2006 (Figure 4.5). Although the seasonally unadjusted December consumer confidence index declined to 45.9 from 48.7 in November, the seasonally adjusted quarterly series suggests that the index has actually increased to 47.3 in Q4, from 45.6 in Q3.





Despite tightened labour market conditions, wage increases have been remarkably flat. As a result, inflation continues to be subdued; headline inflation eased to 0.4% y-o-y in Q4 from 0.6% in Q3 and core consumer prices increased by a modestly 0.2% on a y-o-y basis, mainly due to declining oil prices (Figure 4.6). Japan may have come out of the period of sustained inflation and changes in final domestic demand deflator may have returned into positive territory in Q3:2006, but the overall GDP deflator continues to decrease on a y-o-y basis (Figure 4.7) and there are still downside risks to inflation in case oil prices fall even further.







Figure 4.7: GDP deflator is still declining but at a smaller degree

We do not believe that the trend in consumer price inflation will turn again negative; CPI inflation is expected to increase gradually during 2007. But the recent weak inflation data, combined with the slowdown of GDP growth, has discouraged the BoJ from raising rates in January. BoJ's further tightening will depend on the next CPI readings, as well as the strength of personal consumption. The Bank may be willing to stay on pause until early H2 2007, so as to ensure that the undergoing domestic recovery of the Japanese economy is sustainable. After confirming that the personal spending is robust and that CPI accelerates further, the BoJ will probably start tightening from the second half of 2007 (Figure 4.8).



Figure 4.8: BoJ may stay on hold until the end of 2007

5. Implications for asset allocation

The global economic environment

We expect global growth to remain robust into 2007, despite a marked slowdown of the US economy, as the result of a global growth decoupling. With the share of the BRICs in the world economy increasing, the contribution of this block of rising economies to global growth is an astonishing 50% (PPP weighted) whereas the US is contributing only 10%. With the Euro area and Japan rebounding and the BRICs retaining their positive growth momentum, global growth will downshift somewhat from its 2006 peak but remain firm (Figure 5.1).





With the world economy continuing to grow at near the current rates, global liquidity still-abundant and high earnings yields over bond yields, we continue to expect out-performance of equities relative to government bonds. The emergence of the "happy slowdown" scenario is not necessarily bad for equities, provided that inflation declines faster than growth. Should this scenario materialize, the growth slowdown in the US will not severely affect corporate profits and inflation will remain on a downward trend, supporting equity valuations both in the US and on a global scale.

However, there are significant risks ahead related to the corporate profit slowdown in the US. Corporate profit growth in the US is expected to slow markedly into 2007 as economic growth decelerates and wage increases squeeze profit margins of companies. This development is in our view not yet fully discounted in market valuations, providing the potential of negative surprises. On 37

the other hand, equity valuations generally remain supportive compared with historical standards, providing some protection against a turn in the profit cycle (Table 5.1 and Figures 5.2-5.3). Hence, we acknowledge the risk of a short term correction, as the result of negative earnings or inflation surprises, but remain constructive for equities as an asset class in the longer term.

Table 5.1: Stock market valuations remain supportive

P/E (Price to current year earnings ratio)								
		1990-2005	2005	2006f	2007f			
US	S&P 500	22	20	16	15			
Europe	MSCI EMU	17	16	15	14			
Japan	MSCI Japan	49	19	19	17			
UK	MSCI UK	17	16	14	13			
Emerging Markets	MSCI EM	NA	17	14	12			
World	MSCI AC World	21	17	16	14			

E: Based on EFG earnings estimates

*: Current prices to 2007 EFG earnings estimates

P/E 2006f





EPS Growth %



38

Is the "happy" slowdown of the US economy the driving force of global markets?

Over the past three months, global markets have been mainly driven by expectations about the extent and the implications of the US slowdown. US real sector data have surprised markets with a string of positive releases in December-January. As a result, fears of a hard landing of the US economy have gradually dissipated from market valuations, making room for the scenario of a "happy" slowdown as the markets' baseline forecast.

Adding to the growth optimism, US inflation was well-behaved as a result of the decline in energy prices, which also drove core inflation lower due to a sharp drop in transportation prices. However, inflation expectations, as measured by breakeven inflation (the implied rate of expected inflation priced in inflation-indexed Treasury bonds) reversed their negative trend, increasing by 0.30 pp since October. Hence, the market seems to continue worrying that the slowdown of the US economy will not be enough to curb inflationary pressures without the help of monetary policy.

As a result, monetary easing by the Fed has been priced out from money market valuations and 10year Treasury yields increased by 40 bps since December (Figure 5.4). Money markets seem now to discount that Fed funds rates will likely remain flat for most of the year, as opposed to three months ago, when eurodollar futures were discounting a 75bps rate cut by the Fed in the course of 2007.





The upward revision of US interest rate prospects has also benefited the dollar, which appreciated by 2.5% against the EUR and by 4.8% against the Yen since its recent troughs in December. Stock markets have weathered the upward revision of Fed funds rates expectations very smoothly as growth expectations for the US economy have been revised upwards at the same time. The vision

of a global "goldilocks" economy with strong growth and low inflation has further reduced risk premia, leading to a continuation of the bull market for risky assets on a global scale.

Inflation worries have not been priced out

Three months ago, we viewed money market expectations of a 75bps rate cut by the Fed in 2007 as excessive and saw Fed funds risks to the upside rather than to the downside, as the job market remained tight and inflationary pressures were still mounting. In the meantime, the market moved in the correct direction, pricing out an aggressive rate cut, as predicted in our October issue, but, on a first sight, for the wrong reasons. US inflation has benefited from the decline in oil prices in the second half of the past year but apparently failed to affect expectations of future Fed funds rates. Instead, money markets reacted strongly to the positive news about the US economy, as the housing market has shown some signs of stabilization in December and job market data continued to come in stronger than expected. So, it seems that money and bond markets have gradually converged towards the more optimistic view of the Fed, that growth may be stronger than previously expected.

We disagree with the view that the change in money and bond market valuations since October reflects an upgrade in expectations about US growth. Markets have in our view priced out expectations of an aggressive easing of Fed policy mainly because of inflation worries, not because of a brighter growth picture. If the latter were the case, inflation expectations should be unchanged since October and the upward move of Treasury yields should reflect higher expected growth of the US economy. But inflation indexed yields remained flat over the past four months, suggesting that the TIPS market does not discount any upgrade of the growth prospects of the US economy. Instead, 5-year breakeven inflation has increased sharply from 2.10% in October 06 to 2.42% in January 07, explaining fully the rise in 5-year nominal Treasury yields from 4.57% in October to 4.86% in January (Figure 5.5). The same qualitative picture emerges from comparing 10-year nominal and inflation-indexed Treasuries.



Figure 5.5: U.S. Real Yields and Inflation Expectations

The US economy is weaker than it currently appears

In our view, real sector data in the US is currently benefiting from two temporary factors: falling energy prices in H2 06 and exceptionally warm weather in December-January. These factors, however, are likely to provide little support to economic activity beyond Q1 as oil prices are already heading up and the weather normalizes. As a result, the headwind from the housing sector on growth dynamics will gradually come through and news on real economy data will become softer.

In addition, our analysis suggests that the relatively good picture of 2006 GDP growth is partly the result of a substantial downward revision of GDP in 2005 and earlier, as repeated downward revisions of past GDP data make current year growth often seem stronger than it actually turns out to be years later.

Implications for asset allocation

Our view that developments in money and bond markets over the past three months are related to increasing inflation worries rather than an upgrade of growth prospects in the US has important implications for investors.

First, given our view on the prospects of US growth and inflation, we remain cautious on Treasuries in the short term, as negative core inflation news are in the pipeline over the next few months. However, we view any increase of 10-year Treasury yields above 5% as a buy opportunity, as we expect growth surprises to turn negative and inflationary pressures to gradually fade, allowing the Fed to reverse the course of short term interest rates.

Second, bunds appear rich relative to Treasures as economic activity in the US slows and Fed funds have likely reached a cyclical peak. Figure 5.6 suggests that the yield spread between10-year Treasuries and Bunds closely follows the ratio of the US PMI to the German IFO expectations index.



Figure 5.6: 10y Treasury-Bund spread and PMI to IFO ratio

The sharp decline in this ratio during the past two years suggests that the Treasury-Bund spread will remain on a downward trend. The fair value of the Treasury-Bund spread based on the PMI/IFO ratio and Federal funds rates is estimated at 60bps (Figure 5.7). Hence, on relative trades, we prefer Treasuries to bunds, as the ECB continues to normalize rates, and position for a further narrowing of the Treasury-Bund yield differential over the next three to six months.



Figure 5.7: 10y Treasury-Bund spread

Third, stock markets seem to take a rather different view on inflation from money and bond markets as they continued to move higher despite a pickup in breakeven inflation since October. This is in contrast with past experience, as stock prices used to correct when inflation worries built up (Figure 5.8). The disagreement between stock and bond market valuations is now stronger than three months ago, when stock markets seemed to take a more optimistic view on growth prospects than bond markets. With some negative core inflation news still in the pipeline and earnings growth decelerating from its Q4 peaks, equity market valuations seem rather stretched currently.



Figure 5.8: S&P 500 returns and inflation expectations

Fourth, since Fed funds seem to have peaked, the dollar is expected to loose support from interest rate differentials against low interest rate currencies. Furthermore, the slowdown of the US economy will weigh on the dollar in the long term, as the growth differential against the euro area continues to decline. Hence, the recent rebound of the dollar against the euro seems to be rather a temporary blip than a reversal of the longer term negative trend.



A few words about EFG Eurobank Ergasias S.A. (Eurobank EFG)

EFG Eurobank Ergasias S.A. (Eurobank EFG), is the second largest bank in Greece with assets of around \in 45 billion. Founded in 1990, Eurobank EFG has received high marks from the most reputable international rating agencies (Standard & Poor's, Fitch and Moody's), not only for its financial strength, but also, for the Group's client focus, high level of services, its heavy investment in modern technologies and its professional and dynamic management and personnel. As a member of EFG Group – a Geneva-based banking Group – it has access to all European financial markets.

Eurobank EFG offers a comprehensive array of banking products and services for individuals, corporations and institutions. It currently employs more than 17,000 people in Greece and abroad and runs a distribution network of over 900 branches and alternative distribution channels. In recent years, the Bank has expanded into Bulgaria, Romania, Serbia, Turkey, Poland and Ukraine.

More information about Eurobank EFG can be found at http://www.eurobank.gr

More research by Eurobank EFG's Division of Economic Research & Forecasting can be found at http://www.eurobank.gr/research

Eurobank EFG, Division of Economic Research & Forecasting Othonos 6, 105 57 Athens, Greece, tel. +30-210-3337365, fax. +30-210-3337687 www: http://www.eurobank.gr/research email: Research@eurobank.gr

DISCLAIMER

- 1. This report has been written by Mr. Dimitris Malliaropulos and Mrs. Olga Kosma and issued by EFG Eurobank Ergasias S.A., a member of EFG Group. EFG Eurobank Ergasias S.A. is regulated by the Bank of Greece. This report may not be reproduced in any manner or provided to any other person. Each person that receives a copy by acceptance thereof represents and agrees that it will not distribute or provide it to any other person. This report is not an offer to buy or a solicitation of an offer to buy or sell the securities mentioned therein.
- 2. The investments discussed in this report may be unsuitable for investors, depending on the specific investment objectives and financial position. The investments discussed in this report are subject to risks and in respect of some investments there is risk for multiplied losses to be caused in respect to the capital invested.
- 3. The information contained herein has been obtained from sources believed to be reliable but it has not been verified by EFG Eurobank Ergasias S.A. The opinions expressed herein may not necessarily coincide with those of any member of the EFG Group.
- 4. No representation or warranty (express or implied) is made as to the accuracy, completeness, correctness, timeliness or fairness of the information or opinions herein, all of which are subject to change without notice.
- 5. No responsibility or liability whatsoever or howsoever arising is accepted in relation to the contents hereof by EFG Eurobank Ergasias S.A. or any of its directors office or employees.
- 6. The remuneration of Mr. Dimitris Malliaropulos and Mrs. Olga Kosma is not tied to the investment banking services performed by EFG Eurobank Ergasias S.A. or any of its legal persons.