



21 October 2009

## European Equity Strategy

# The 2010 debate begins....

Although we upgraded our YE 2009 Stoxx600 forecast to 265 from 225 in Tuesday's bi-weekly we've kept our 2010 forecast at 225, just under 10% below current levels. Relative to current levels this isn't particularly extreme but relative to where we may end 2009 it does look fairly aggressive. In this note we want to expand on why the medium-term outlook still remains challenging and full of tremendous uncertainties. Clearly we may end up smoothly working our way through the aftermath of the biggest crisis in nearly 80 years but the tail risks are huge, and the structural (possibly negative) forces still significant.

For now we are in the sweet spot, or perhaps the eye of the storm. We have a cyclical recovery with some momentum with the additional advantage of it being combined with ultra low short and long-term rates. It really couldn't be any better for risk. However it's worth reminding ourselves that we've never had such accommodative interest rate and fiscal policy. If this was a good thing and a sign of strength then we could argue that we should have such a 'ZIRP' all the time. BoE rates are the lowest in the bank's 315 year history and Fed Funds are also around the lowest on record.

As we go around the world no-one truly knows whether this crisis will end up in inflation or deflation but an increasing amount of investors are thinking that it will end up with a bias towards one or the other. Historically equities have seen highest valuations in a low and stable inflation world. The fat tail risk should not be underestimated.

In this note we outline why the medium-term (6-18 months) may not be as positive as the short-term. Clearly in these uncertain times everything all of us knew prior to this crisis has to be re-evaluated. After re-evaluating and debating the themes we may find that we are in a more normal environment than we think at this point. However as we approach the time when people are contemplating their 2010 views we wanted to open up and encourage some debate around some of the medium-term themes. Some of the discussion in this short note will be a repeat of previous published views/graphs but hopefully we can start to open up debate as we start work on our annual outlook. We are trying to find a way to be more positive on 2010 but hedge the tail risks. It's these tail risks that are the main concern. The most likely scenario could be more optimistic than the weighted probability of outcomes. All feedback and comments are welcome.

## Zero Interest Rate Policy (ZIRP) - A sign of Strength or Weakness?



Source: Deutsche Bank, GFD, NBER

### Jim Reid

Strategist  
(+44) 20 754-72943  
jim.reid@db.com

Deutsche Bank AG/London

All prices are those current at the end of the previous trading session unless otherwise indicated. Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies. Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Independent, third-party research (IR) on certain companies covered by DBSI's research is available to customers of DBSI in the United States at no cost. Customers can access IR at <http://gm.db.com/IndependentResearch> or by calling 1-877-208-6300. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MICA(P) 106/05/2009

## Earnings

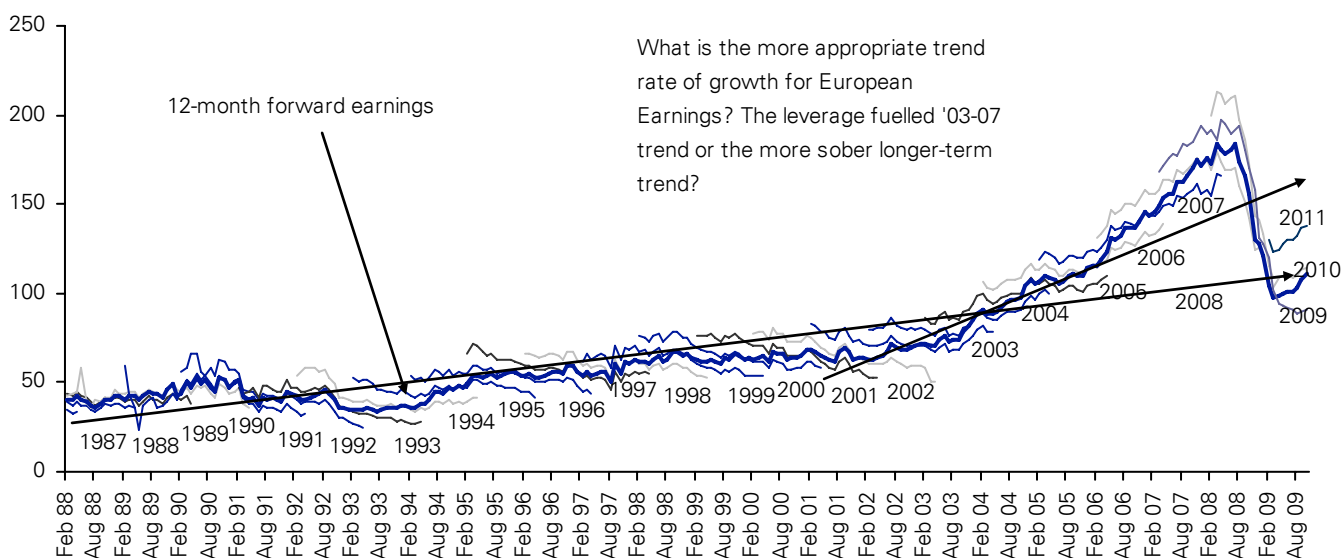
First let's look at what our forecasts mean for valuations based on earnings multiples.

Based on the consensus bottom-up earnings growth forecast of -20% this year and +26% next year, 2010's PE ratio would be 11.7x based on a 225 Stoxx600 forecast. Our 2009 end target of 265 would mean an end 2009 P/E of 17.4. Based on our top-down model, our earnings growth forecast is for -27% this year and +18% next year. The multiples based on this are 13.2x for 2010 and 18.3x for 2009. The long-term average for European markets is around 13x.

Based on consensus earnings our forecasts equate to a multiple compression of 28% from 2009 to 2010. This is significant but not without historical precedent. We had huge multiple volatility in the 1930s and in more recent times in the 1970s. Indeed we saw such an event between 1974 and 1976. In 1974 multiples fell 49%, then rose 91% in 1975 and then fell 17% in 1976. We are in living in extreme times more consistent with the 1930s and the 1970s rather than the more sanguine 1980s, 1990s and early part of this decade. We therefore are more inclined to believe in more extreme outcomes than our collective minds have been accustomed to in recent decades. In the section looking at structural forces we explain why multiples could be lower in the future than they have been over the last decade.

Taking a longer-term look at the trend of European Earnings we still don't know whether the long-term trend (back to 1988 in the chart below) is appropriate or whether the leveraged fuelled trend of 2003-2007 will reassert itself. We have more faith in the longer-term trend but think the market is perhaps starting to price in a return to the 2003-07 trend post 2010. At the moment forward 2010 earnings forecasts return us to the longer-term trend line and as such are not unreasonable. However on our way of thinking about the world any further upgrades will start to return us to a '03-07 type world. The bigger picture question is probably what multiple needs to be applied to earnings post crisis. Here there are some unanswered structural concerns.

**Figure 1: 12-Month Forward European Earnings Trend**

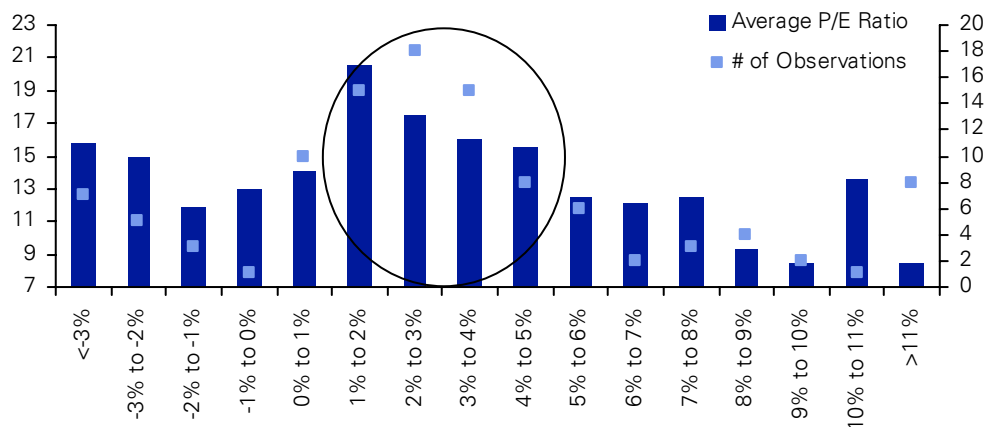


Source: Deutsche Bank, Thomson IBES

## Post crisis, will we live in a lower multiple world?

Over the past couple of months we've been adjusting our stance to reflect the current 'sweet spot'. Indeed 2009's market moves can perhaps be easily explained by developments in the chart below, one we previously used in 'Dropping the Anchor'.

**Figure 2: Average P/E Ratio Based on Different Inflation Buckets**

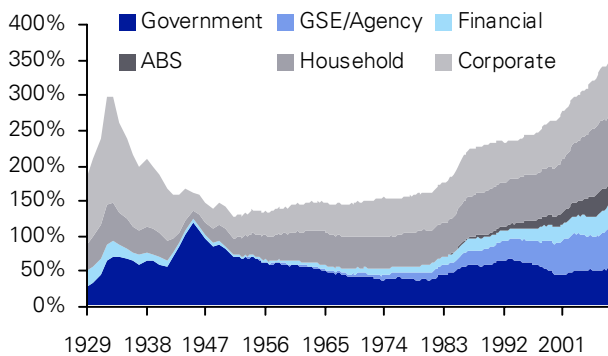


Source: Deutsche Bank, Bloomberg, *Irrational Exuberance (Second Edition)* (Robert Shiller), S&P

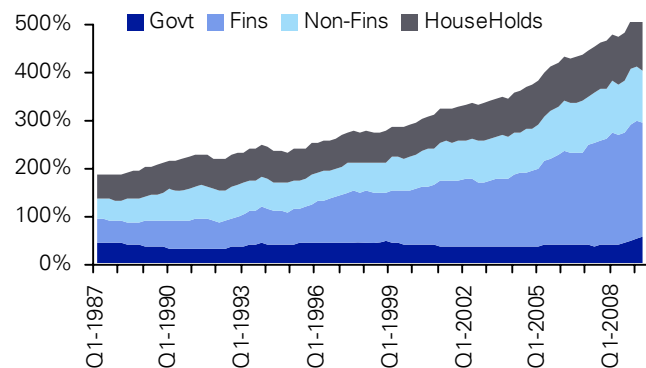
In this chart we show that equity valuations (using over 100 years of US data) are highest when inflation is low but positive. In Q1 of this year the fear was that we'd break out on the left hand side of this 'sweet spot' and towards deflation. However unparalleled and extraordinary intervention has taken us back into the sweet spot that has dominated the macro-economic landscape for nearly 30 years.

When you read books on how bubbles are formed you tend to find that long, sustained periods of macro-economic stability are often an accompanying backdrop. Historically such a backdrop has steadily led to higher valuations, until finally investors get so confident that they extrapolate out the prevailing conditions far into the future, thus laying down the conditions for chronic over-valuation. For us this has been the story of the last decade and a half in Western equity markets. From the mid-1990s investors started to sense something special with regards to the macro backdrop while later finding a new technology to be the bubble cheerleader. When you consider the favourable demographics often discussed in our research (and briefly mentioned later), the perfect conditions for a bubble had formed.

Why all of this is important is because the authorities responded to the savage post-2000 correction in a way that ensured that we stayed in this macro-economic sweet spot while the bubble deflated. The short-term stability of the economy/financial system was seen as the priority. However the consequence of maintaining this macro economic stability and still historically high equity valuations has been ever higher debt burdens in the Anglo-Saxon world. Indeed the charts below show the cost of sedating the volatility of macro-economic variables (mainly growth and inflation) in the UK and the US. The period of 'The Great Moderation' was increasingly sustained by ever larger Global imbalances, without which macro-economic volatility would likely have been far higher.

**Figure 3: US Debt to GDP back to 1929**

Source: Deutsche Bank, Federal Reserve, The Statistical History of the US, from Colonial Times to the Present, by Ben Wattenberg

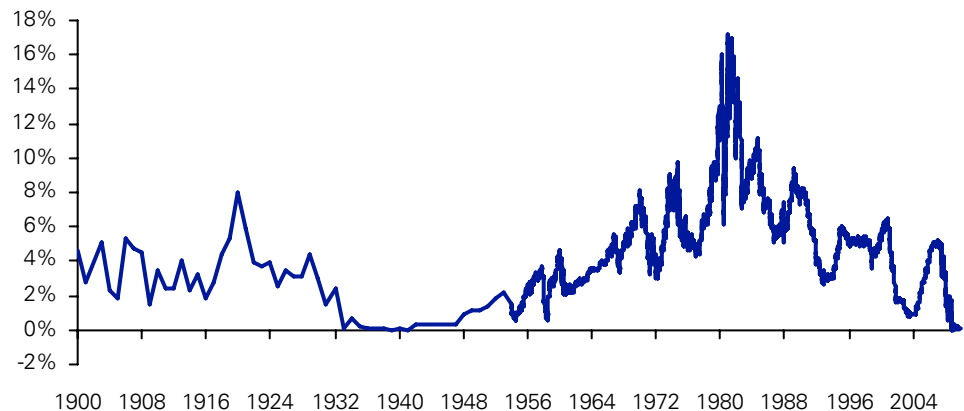
**Figure 4: UK Debt to GDP Ratios**

Source: Deutsche Bank, Office of National Statistics

So the longer we can stay in a world where the market is convinced that we will see positive (and firm) growth with low but positive and steady inflation, the longer equity market valuations can stay above their long-term averages. With the huge conflicting inflationary/deflationary forces currently at work it does take a big leap of faith to believe that the authorities will keep us perfectly and permanently in the sweet spot. The more likely scenario is that they won't do enough or probably more likely they will try to do too much. In 2010 the debate could move on to when inflation becomes a concern for markets, or when the bond market bear will start to wake from its near 30-year bull market. However any pulling back of stimulus and deflation will be back on the agenda. It really is that delicate a balancing act and the decisions that will eventually determine the outcomes have probably yet to be made.

So there is a compelling reason for equities to trade above their long-term valuations as long as bond yields fail to see any inflation risk on the horizon. We were slightly uncomfortable that the deflation risk had been completely priced out of markets in recent weeks. With such huge forces operating on both sides, it's too early to declare a winner; if indeed there will be one. Overall we feel that in a fiat currency world the medium-term risks are more inflationary given the authorities determination to avoid a debt-deflation spiral.

We also still find it puzzling that there is such a strong consensus suggesting that Zero Interest Rate Policy (ZIRP) is a positive. An alternative theory could be that this reflects a very weak underlying system. The most obvious examples of ZIRP in modern economic history are the 1930s and 1990s- Japan. There is an argument that ZIRP has been put in place earlier than in those circumstances but the uniqueness of this situation should not be underestimated. Again the early response could be inflationary or we could still be in a liquidity trap that characterized the 1930s Global Economy or 1990s- Japan.

**Figure 5: US 3-month Government Yield – ZIRP a rare and troubling event?**

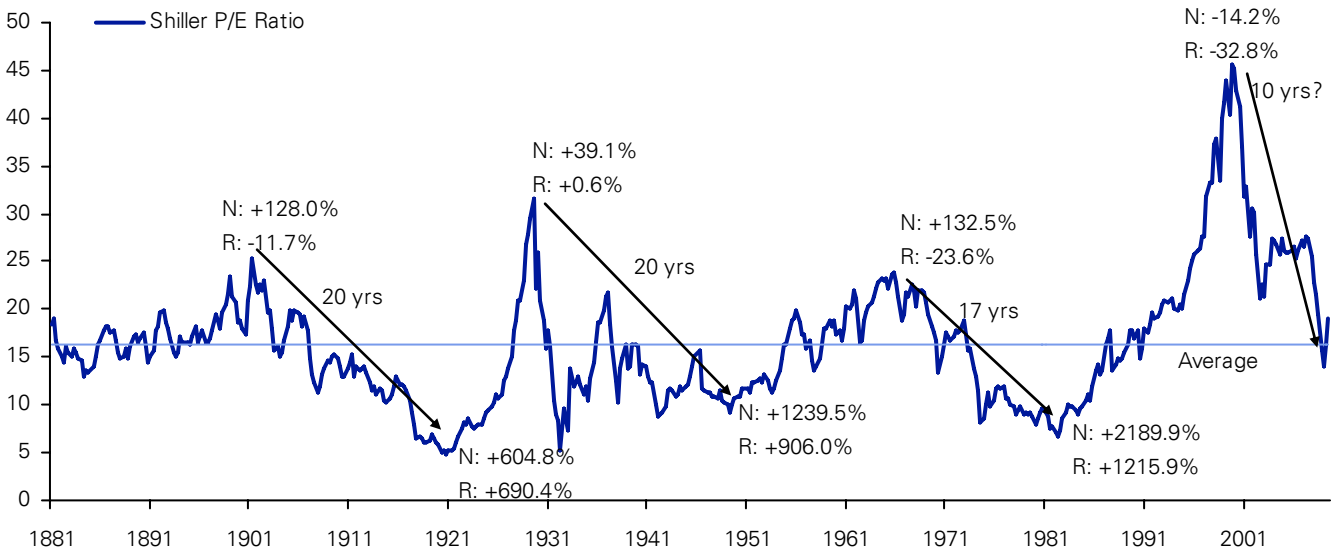
Source: Bloomberg, GFD, NBER

What the 'ZIRP' has done is prevented the Global Economy from rapidly adjusting in a chaotic way post crisis. This doesn't mean the adjustments won't eventually have to be made but it does mean that the problems can be masked. Over the last two-three months we've written about how the authorities have engineered a 2007-lite Economic system. So instead of making painful structural adjustments they have pumped money and energy into restoring the old and arguably fatally flawed system. The problems of too much debt in the West have been solved by more debt. Auto and Housing subsidies are examples of this. It may be that when these and other stimulus programs expire, the end demand is still lacking. The authorities may have to continue to offer up these incentives to keep activity higher. This will then raise the discussion on whether Government bond markets will be as willing to finance these deficits in the future as they have been in a QE driven world.

### **Structural concerns that may lead to lower multiples**

We are not yet sure whether the structural decade long bear market in equities has been fully resolved. There is little argument that equities are in the ball park of long-term fair value (probably just on the expensive side) but history tells us that averages rarely hold. In fact long-term sweeping cycles tell us that investors fall in and out of love with equities over a generation which tends to swamp short-term economic cycles.

**Figure 6: Shiller P/E Ratio and Total Returns in Nominal (N) and Real (R) Terms covering Structural Bull/Bear Markets**

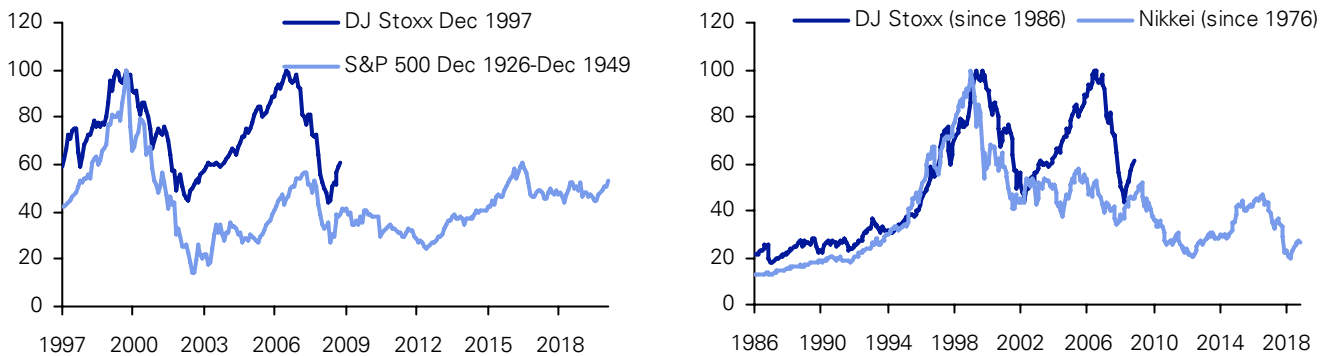


Source: Deutsche Bank, Bloomberg, Irrational Exuberance (Second Edition) (Robert Shiller), S&P, US Bureau of Labour Statistics

So can we wholeheartedly say that we won't get lower than average multiples after a long period of chronic overvaluation? History would at least suggest we shouldn't rule out the possibility over the next few years.

When we plot this decade long bear market against the two most famous structural bear markets of the last century (the 1930s and Japan post 1990) it is hard to say that we have completely decoupled from history. In the charts we simply rebase the DJ Stoxx600 at 100 at its peak in 2000 with the equivalent peak in the US in 1929 and Japan in 1990 (both also rebased at 100 at the peak).

**Figure 7: Current DJ Stoxx 600 vs US 1929- (left) and Japan 1990- (right). All rebased to 100 at respective peaks**



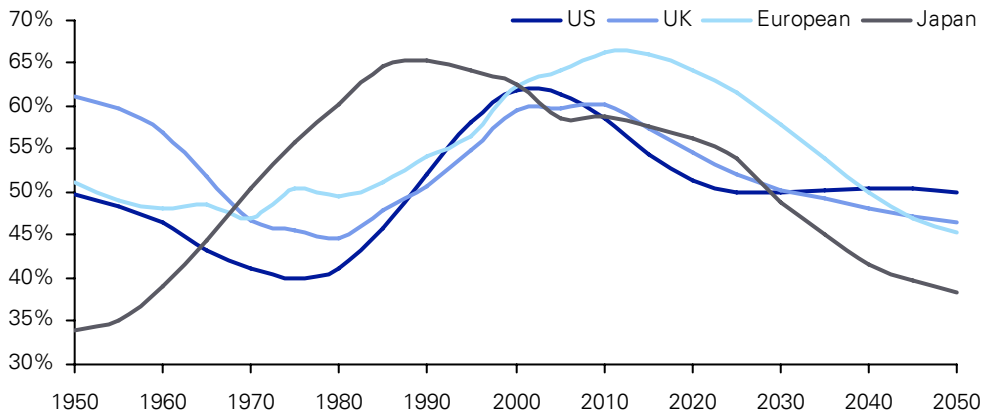
Source: Deutsche Bank, Bloomberg

Could equity markets from 2000 onwards still be broadly tracking the same big picture pattern as seen after 1929 in the US and Japan after 1990. We simply do not know but there are some remarkable similarities, especially in the timings of the peaks and troughs. If we are still a hostage to history we still could have a few years of range trading markets, albeit with the possibility of large cyclical ranges.

Finally while we are on structural themes its worth remembering that Western World demographics have been utterly supportive for equities and risk assets in general until this

decade. In Japan this demographic support peaked in 1990, the exact same point that their equity market peaked. We can't rule out that an aging Western population will have a similar reluctance to be as aggressive in equities as they were when they were a surging society of baby boomers. This may mean a period of lower multiples ahead. We simply don't know how an aging Western population is going to feel about a volatile asset class that has provided a decade of negative returns. They perhaps should now be looking at the renewed value in the asset class but they instead may irrationally keep a lighter weighting in equities reflecting a more risk adverse mentality.

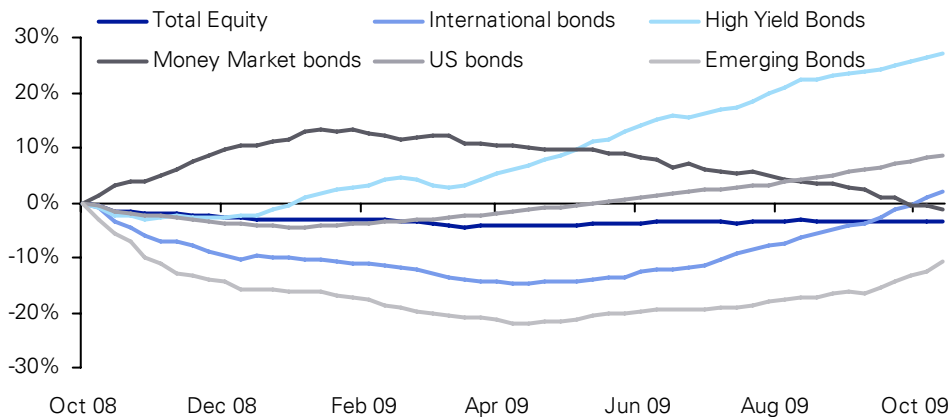
**Figure 8: Global 35-54yr Dependency Ratios**



Source: Deutsche Bank, UN Population Division

Indeed the flows we've seen since March in some way backs this up. Since this point Fixed Income flows seem to have recovered in a more positive manner than equity flows. There are huge risks to this if the authorities allow inflation to be unleashed, however flows are not always rational and could be a reflection of the patterns/performance seen for most of this past decade. The flows into Fixed Income could also be linked into the demographic transition Western economies are now undergoing.

**Figure 9: International Asset Allocation changes since October 2008**



Source: EPFR / Deutsche Bank Calculations

## Reason for Stoxx600 2009 YE Upgrade

Outside of the well versed discussion on the “sweet spot”, there is increasing evidence that we are in the early stages of a strong reporting season on both sides of the Atlantic and although the bar has been raised since Q2, it does seem that shocks are unlikely to materialise in earnings over the next few weeks.

According to our analysis, which tracks the results from Bloomberg, of the 100 companies that have reported so far in the S&P 500 (since October 1st), 81% have beaten expectations, relative to 18% who have missed. In Q2 the final number of beats to misses was 76%/23%. In Europe, only 32 of the Stoxx 600 have reported and 21 (66%) have beaten with 11 (34%) missing.

On revenues Q2 saw 51% beat and 49% miss in the S&P 500 with the comparable numbers being 49% and 51% for Stoxx600. So far in Q3 66% have beaten in the US with 56% beating in Europe. We also show Q2 for comparison.

**Figure 10: Q3 09 US and European EPS and Revenue vs. Consensus Estimates**

		EPS				Revenue			
		Count	Percentage	Average Beat	Median Beat	Count	Percentage	Average Beat	Median Beat
S&P 500	Beats	81	81%	13.0%	8.5%	66	66%	4.5%	2.4%
	Misses	18	18%	-12.2%	-6.3%	34	34%	-2.9%	-1.6%
	In Line	1	1%	N/A	N/A	0	0%	N/A	N/A
	All	100		8.2%	6.1%	100		2.0%	1.0%
DJ STOXX 600	Beats	21	66%	10.7%	6.4%	18	56%	4.0%	1.4%
	Misses	11	34%	-18.2%	-15.9%	14	44%	-5.5%	-1.8%
	In Line	0	0%	N/A	N/A	0	0%	N/A	N/A
	All	32		-0.9%	1.1%	32		-0.2%	0.1%

*Note: In calculating averages and medians we have excluded outliers (i.e. all EPS/revenue data that beat consensus by more than +50% or miss consensus by less than -50%). Source: Deutsche Bank, Bloomberg*

**Figure 11: Q2 09 US and European EPS and Revenue vs. Consensus Estimates**

		EPS				Revenue			
		Count	Percentage	Average Beat	Median Beat	Count	Percentage	Average Beat	Median Beat
S&P 500	Beats	374	76%	13.28%	10.17%	252	51%	4.86%	2.33%
	Misses	115	23%	-10.04%	-4.82%	240	49%	-5.57%	-2.95%
	In Line	6	1%	N/A	N/A	2	0%	N/A	N/A
	All	495		7.75%	5.80%	494		-0.29%	0.03%
DJ STOXX 600	Beats	272	58%	14.92%	11.53%	235	49%	4.72%	1.98%
	Misses	195	41%	-15.00%	-11.33%	246	51%	-4.44%	-2.22%
	In Line	4	1%	N/A	N/A	1	0%	N/A	N/A
	All	471		2.81%	3.45%	482		-0.15%	-0.17%

*Note: In calculating averages and medians we have excluded outliers (i.e. all EPS/revenue data that beat consensus by more than +50% or miss consensus by less than -50%). Source: Deutsche Bank, Bloomberg*

## Conclusion

The short-term outlook is boosted by the favourable macro environment and the current positive earnings season. However as we gaze into the crystal ball for 2010, many of the Global imbalances remain. It's debatable whether the market has fully appreciated the impact of a potentially more volatile macro-economic world going forward and the structural forces that may lead to lower than average multiples in the future. None of this is set in stone and the uncertainty level is high, however we think it's dangerous to think that the 6-18 month outlook is as rosy as the 3-6 month one dominated by extra-ordinary intervention.

# Appendix 1

## Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on a security mentioned in this report, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr>.

## Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s). In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Jim Reid

### Equity rating key

**Buy:** Based on a current 12-month view of total shareholder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield), we recommend that investors buy the stock.

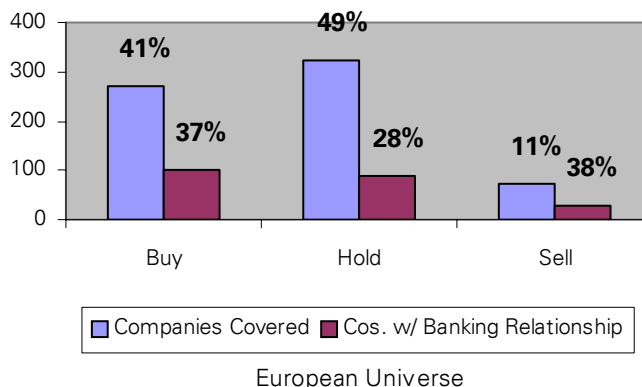
**Sell:** Based on a current 12-month view of total shareholder return, we recommend that investors sell the stock

**Hold:** We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

**Notes:**

1. Newly issued research recommendations and target prices always supersede previously published research.
2. Ratings definitions prior to 27 January, 2007 were:
  - Buy: Expected total return (including dividends) of 10% or more over a 12-month period
  - Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period
  - Sell: Expected total return (including dividends) of -10% or worse over a 12-month period

### Equity rating dispersion and banking relationships



## Regulatory Disclosures

### 1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at <https://gm.db.com/equities> under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

### 2. Short-Term Trade Ideas

Deutsche Bank equity research analysts sometimes have shorter-term trade ideas (known as SOLAR ideas) that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. These trade ideas can be found at the SOLAR link at <http://gm.db.com>.

### 3. Country-Specific Disclosures

**Australia:** This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

**EU countries:** Disclosures relating to our obligations under MiFiD can be found at <http://globalmarkets.db.com/riskdisclosures>.

**Japan:** Disclosures under the Financial Instruments and Exchange Law: Company name - Deutsche Securities Inc. Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations.

**New Zealand:** This research is not intended for, and should not be given to, "members of the public" within the meaning of the New Zealand Securities Market Act 1988.

**Russia:** This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

## Deutsche Bank AG/London

### European locations

#### Deutsche Bank AG London

1 Great Winchester Street  
London EC2N 2EQ

Tel: (44) 20 7545 8000

#### Deutsche-Bank AG,

Secursale de Paris  
3, Avenue de Friedland  
75008 Paris Cedex 8  
France  
Tel: (33) 1 44 95 64 00

#### Deutsche Bank AG

Equity Research  
Große Gallusstraße 10-14  
60272 Frankfurt am Main  
Germany  
Tel: (49) 69 910 00

#### Deutsche Bank Sim S.p.a

Via Santa Margherita 4  
20123 Milan  
Italy

Tel: (39) 0 24 024 1

#### Deutsche Bank AG

Herengracht 450  
1017 CA Amsterdam  
Netherlands

Tel: (31) 20 555 4911

#### Deutsche Securities

S.V.B, S.A.  
PO de la Castellana, 42  
7th Floor  
28046 Madrid, Spain  
Tel: (34) 91 782 8400

#### Deutsche Bank AG

Stureplan 4 A, Box 5781  
S-114 87 Stockholm  
Sweden

Tel: (46) 8 463 5500

#### Deutsche Bank AG

Uraniastrasse 9  
PO Box 7370  
8023 Zürich  
Switzerland  
Tel: (41) 1 224 5000

#### Deutsche Bank AG, Helsinki

Kaivokatu 10 A, P.O.Bvox 650  
FIN-00101 Helsinki  
Finland

Tel: (358) 9 25 25 20 0

#### Deutsche Bank AG

Hohenstaufengasse 4  
1010 Vienna  
Austria

Tel: (43) 1 5318 10

#### Deutsche Bank AG

Aurora business park  
82 bld.2 Sadovnicheskaya street  
Moscow, 115035  
Russia  
Tel: (7) 495 797-5000

#### Deutsche Bank AG, Warsaw

al.Armi Ludowej 26  
Budynek FOCUS  
00-609 Warsaw  
Poland  
Tel: (48) 22 579 87 00

#### Deutsche Bank AG, Turkey

Eski Buyukdere Cad. Tekfen Tower  
No:209 Kat:17-18  
TR-34394 Istanbul  
Tel: (90) 212 317 01 00

#### Deutsche Bank AG, Greece

23A Vassilissis Sofias Avenue  
6th Floor  
10674 Athens, Greece  
Tel: (30) 210 72 56 150

### International locations

#### Deutsche Bank Securities Inc.

60 Wall Street  
New York, NY 10005  
United States of America  
Tel: (1) 212 250 2500

#### Deutsche Bank AG London

1 Great Winchester Street  
London EC2N 2EQ  
United Kingdom  
Tel: (44) 20 7545 8000

#### Deutsche Bank AG

Große Gallusstraße 10-14  
60272 Frankfurt am Main  
Germany  
Tel: (49) 69 910 00

#### Deutsche Bank AG

Deutsche Bank Place  
Level 16  
Corner of Hunter & Phillip Streets  
Sydney, NSW 2000  
Australia  
Tel: (61) 2 8258 1234

#### Deutsche Bank AG

Level 55  
Cheung Kong Center  
2 Queen's Road Central  
Hong Kong  
Tel: (852) 2203 8888

#### Deutsche Securities Inc.

2-11-1 Nagatacho  
Sanno Park Tower  
Chiyoda-ku, Tokyo 100-6171  
Japan  
Tel: (81) 3 5156 6701

## Global Disclaimer

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). The information herein is believed to be reliable and has been obtained from public sources believed to be reliable. Deutsche Bank makes no representation as to the accuracy or completeness of such information.

Deutsche Bank may (1) engage in securities transactions in a manner inconsistent with this research report, (2) with respect to securities covered by this report, sell to or buy from customers on a principal basis, and (3) consider this report in deciding to trade on a proprietary basis.

Opinions, estimates and projections in this report constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof in the event that any opinion, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Prices and availability of financial instruments are subject to change without notice. This report is provided for informational purposes only. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy.

Deutsche Bank has instituted a new policy whereby analysts may choose not to set or maintain a target price of certain issuers under coverage with a Hold rating. In particular, this will typically occur for "Hold" rated stocks having a market cap smaller than most other companies in its sector or region. We believe that such policy will allow us to make best use of our resources. Please visit our website at <http://gm.db.com> to determine the target price of any stock.

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed investment decisions. Stock transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. In the U.S. this report is approved and/or distributed by Deutsche Bank Securities Inc., a member of the NYSE, the NASD, NFA and SIPC. In Germany this report is approved and/or communicated by Deutsche Bank AG Frankfurt authorized by the BaFin. In the United Kingdom this report is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange and regulated by the Financial Services Authority for the conduct of investment business in the UK and authorized by the BaFin. This report is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. This report is distributed in Singapore by Deutsche Bank AG, Singapore Branch, and recipients in Singapore of this report are to contact Deutsche Bank AG, Singapore Branch in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), Deutsche Bank AG, Singapore Branch accepts legal responsibility to such person for the contents of this report. In Japan this report is approved and/or distributed by Deutsche Securities Inc. The information contained in this report does not constitute the provision of investment advice. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10). Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published by any person for any purpose without Deutsche Bank's prior written consent. Please cite source when quoting.