

# EYE ON THE MARKET OUTLOOK 2011

J.P. Morgan Private Bank



Figure 1: Printing Press

The illustration represents the money created by various central banks since January 2008 to buy their own government bonds, or bonds of other countries to limit exchange rate adjustments. Crates are labeled by amount created, and expressed as a percentage of GDP. See inside cover for more details.

J.P.Morgan

What is “money”? If you go to the Bureau of Printing and Engraving at the U.S. Treasury, you won’t actually see the machines running in overdrive. In an era of electronic money, the Federal Reserve can increase the monetary base (also known as “high-powered money”) by increasing bank reserves to pay for the Treasury bonds that it purchases. The same applies to government bond purchases in the United Kingdom. The other countries shown engage in a different kind of money creation: an expansion of the monetary base to fund the purchase of foreign assets instead of domestic ones, with the goal of limiting exchange rate appreciation. Most of these countries drain domestic liquidity to try and prevent inflation, but still create two separate distortions. The first is domestic: By maintaining an undervalued currency and very low real interest rates, they risk inflation of wages, goods and asset prices. The second is international: These actions contribute to the global pool of central bank savings invested in U.S. government bonds. What used to be a functioning private sector market with price signals regarding inflation and growth risks is now increasingly subject to price controls and systemic shocks. By the time QE2 is over, more than half of all Treasuries will be owned by U.S. and non-U.S. central banks.

Note how the representative from the European Monetary Union, which is not engaging in this kind of activity to any large degree, looks on in despair from outside the building.

**MARY CALLAHAN ERDOES**

Chief Executive Officer

J.P. Morgan Asset Management

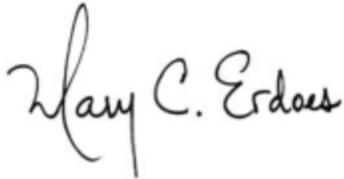
How do you summarize a year that was in many respects indefinable? On one hand, the European sovereign debt crisis, contracting housing markets and high unemployment weighed heavy on all of our minds. But at the same time, record corporate profits and strong emerging markets growth left reason for optimism.

So rather than look back, we'd like to look ahead. Because if there's one thing that we've learned from the past few years, it's that while we can't predict the future, we can certainly help you prepare for it.

To help guide you in the coming year, our Chief Investment Officer Michael Cembalest has spent the past several months working with our investment leadership across Asset Management worldwide to build a comprehensive view of the macroeconomic landscape. In doing so, we've uncovered some potentially exciting investment opportunities, as well as some areas where we see reason to proceed with caution.

Sharing these perspectives and opportunities is part of our deep commitment to you and what we focus on each and every day. We are grateful for your continued trust and confidence, and look forward to working with you in 2011.

Most sincerely,

A handwritten signature in black ink that reads "Mary C. Erdoes". The signature is written in a cursive style with a large, looping initial "M".

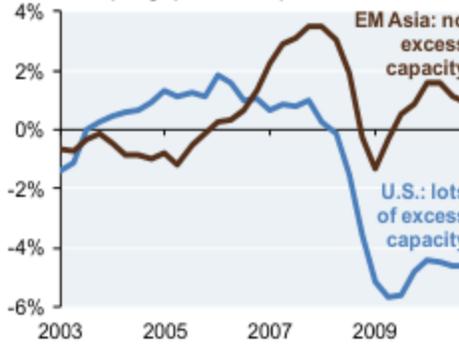
**The Printing Press**

As we head into 2011, global profits are rising, U.S. household incomes and debt burdens are improving, the Asian production boom continues, global services are starting to rebound, and Germany is seeing its largest manufacturing and consumer revival since reunification. The twin engines of world growth, the U.S. and China, are in expansion mode again (c1).

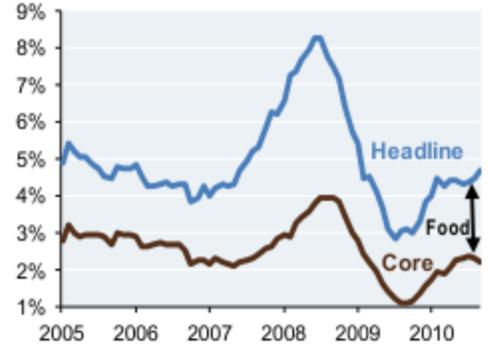
**(c1) U.S. and China manufacturing output surveys, Index level, sa**



**(c2) Excess capacity in the U.S. and Asia, Output gap, GDP vs potential**



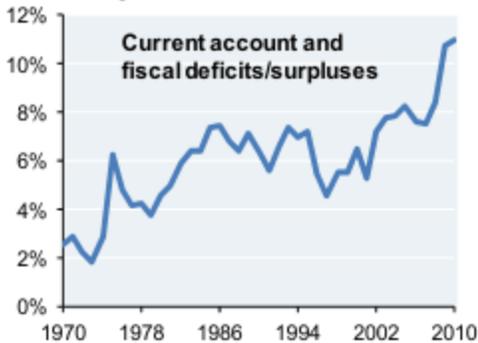
**(c3) Asia ex-Japan and Latin inflation Percent, YoY change**



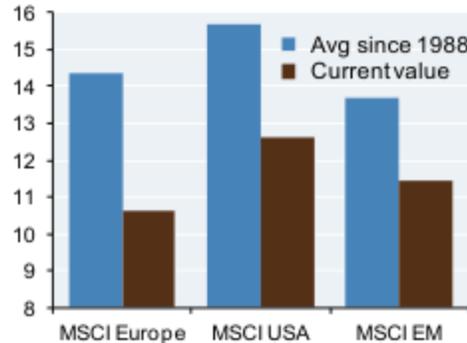
Given pressures for fiscal tightening in the West, it's hard to blame monetary authorities around the globe for trying to keep these things moving. That's why the global monetary experiment captured by the cover art continues uninterrupted. **But it may be beyond traditional linear thinking to grasp all the ways this could turn out.** The lowest inflation since 1958 and a large output gap in the U.S. (an inexact measure of spare labor/productive capacity) give the Fed justification for its approach (c2). The same cannot be said for Asia, where the output gap is smaller (or may not exist at all), and where inflation is rising.

The chart below is something we have been thinking a lot about (c4). It's a measure of **global imbalances**: the extent to which some countries spend more than their incomes, and rely on other countries to finance the difference; how much they intervene in their currency markets; and how much they offset inadequate private sector demand through budget deficits. **Does this matter given the good news above? When P/E multiples on global equity markets (c5) are so low? And when mountains<sup>1</sup> of household, corporate and Sovereign Wealth Fund cash are capable of driving asset prices higher?** We think it does, since the risks of unintended consequences are higher when the magnitude of imbalances (and experimentation) is this high as well.

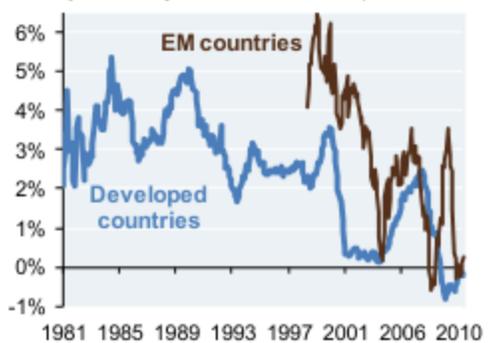
**(c4) An index of global imbalances Percent of global GDP**



**(c5) Global equity multiples Forward P/E ratio**



**(c6) Cost of money = zero Policy rates adjusted for inflation, percent**



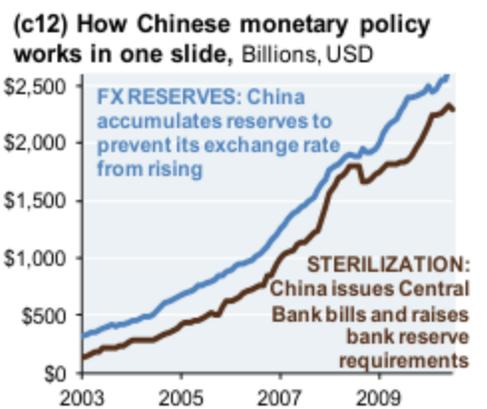
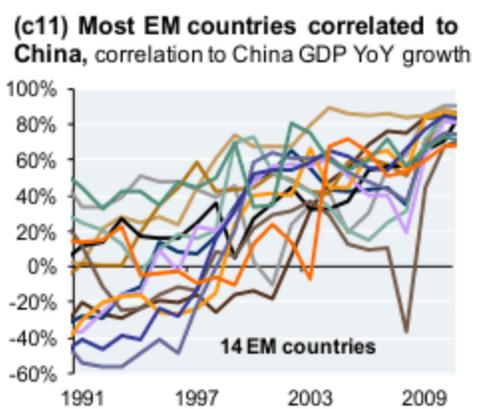
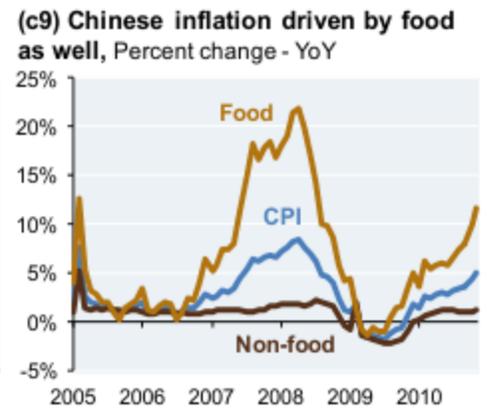
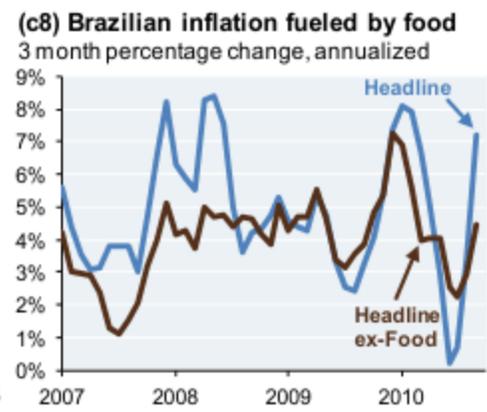
**We have invested client portfolios around the globe in the belief that the world will *not* suffer a major relapse, with significant holdings in public and private equity, credit, hedge funds, commodities and real estate.** We expect 2011 to be like 2010: volatile, rising equity markets, and modest returns on a balanced portfolio of financial assets. That these returns are made more attractive by the world's *Printing Press* policy, which renders cash savings useless as a store of value (c6), is a mixed blessing at best. This publication reviews our market, investment and portfolio stance as 2011 begins.

Michael Cembalest  
Chief Investment Officer

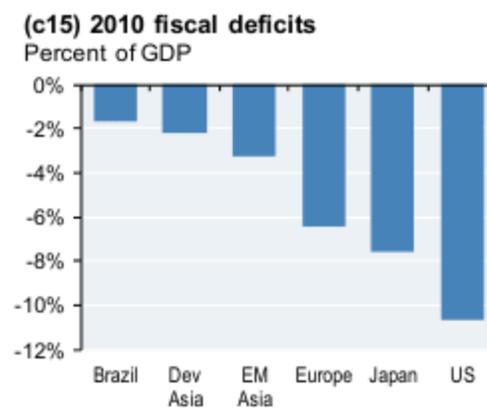
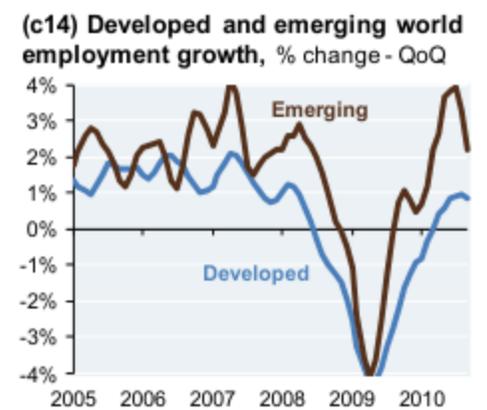
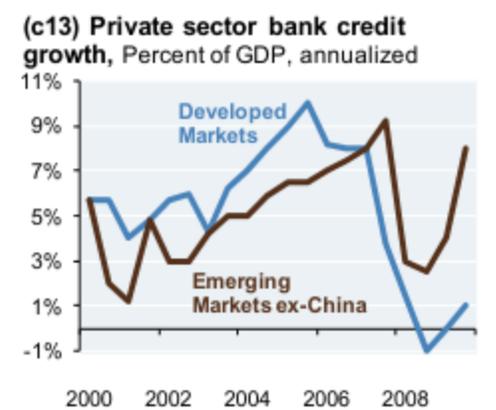
<sup>1</sup> A ratio of US corporate sector cash/tangible assets is at its highest level on record. A measure of household cash and bonds as a % of discretionary financial assets is not far off. Sovereign Wealth Fund balances have grown from \$1 trillion to \$4 trillion since 2005. Sources for all charts and tables, as well as a list of acronyms used, appears on page 12.

**Fast growth, inflation pressures: a better set of problems in Asia and the emerging world**

If we are not in an Asia-dominated world yet, we may be there soon. Asia's share of world output, even when excluding Japan, is now double that of the U.S. and still growing (c7). As a result, the Asian/EM inflation question is a very important one. As shown on page 1, headline and core inflation in Asia and Latin America are rising. Inflation pressures are mostly food-driven (c8, c9), but are beginning to impact wages and prices as well. China's inflation controls (increased bank reserve requirements, Central Bank bill issuance and legions of administrative measures) may be losing their effectiveness, as shown by frequent large spikes in its residential property markets (c10). This may be why China raised its inflation target to 4% in December. **Why so much discussion about China?** Like a giant tractor beam (c11), China pulls the emerging world into its orbit. A positive view of the world must assume China can continue to control inflation and deliver ~8% growth, unorthodox model and all (c12).



We expect EM Central Banks to cool things down, after which we expect EM growth to continue. Asian exports are already rising after their fall slowdown, particularly in countries like Korea, Taiwan and Singapore. EM ex-China bank credit is growing (c13), supporting the business cycle and employment growth (c14). This is in stark contrast with the West, where deleveraging still rules. Should EM countries overdo monetary tightening, fiscal deficits and debt ratios are generally low enough (c15) to support additional stimulus, with some exceptions (India, Czech Rep.). In China, bank loan and money supply growth of 20% (down from 30% in 2009) indicate that the risk of over-investment and capital misallocation remains high. As in 2010, we hold positions in Asian currencies (funded vs. G3 currencies), as we believe they are undervalued.

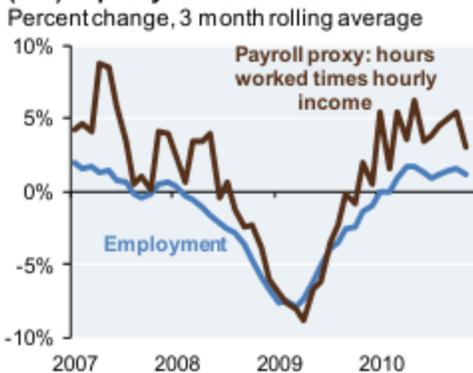


**The United States: modest private sector recovery trumps fiscal problems, for now...**

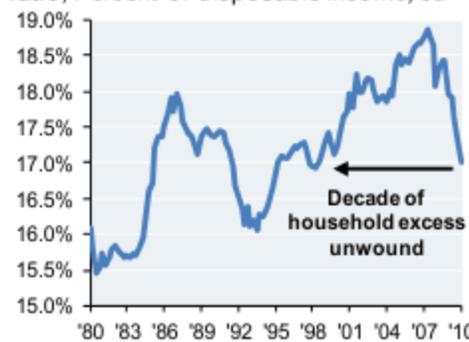
With many emerging economies limiting FX appreciation, a rebalancing of demand to the East will happen more slowly. As a result, the world still relies on the US consumer, whose discretionary and non-discretionary purchases make up 70% of US GDP. **Recent spending data have been positive, despite weak job creation.** This may reflect two factors. First, labor incomes have risen faster than job growth (c16), and second, household debt service burdens have now erased the last 15 years of excess, courtesy of both lower interest rates and defaults (c17). Credit card and early-stage mortgage delinquency rates are showing marked improvements as well. Based on a variety of recent indicators and surveys, we expect payroll gains of ~200k per month in 2011, and 3.0%-3.5% GDP growth.

**Corporate sector cash balances are at a 50-year high, and are finally being spent.** Business and equipment spending (c19) and productivity (c20) will probably slow but remain positive. Commercial construction, at its lowest level since 1958, should stop declining. These gains will be partially offset by \$80 bn of belt-tightening at the state/local level. NY is one example; absent changes to current law, its structural deficit for 2012 is \$9 bn on \$90 bn in expenditures. Housing is still a mess (30% of mortgages underwater, shadow inventory 2x the number of homes for sale), and credit creation remains low.

**(c16) A proxy for labor income**



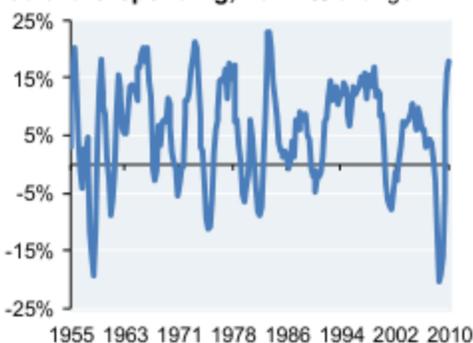
**(c17) Household financial obligations ratio, Percent of disposable income, sa**



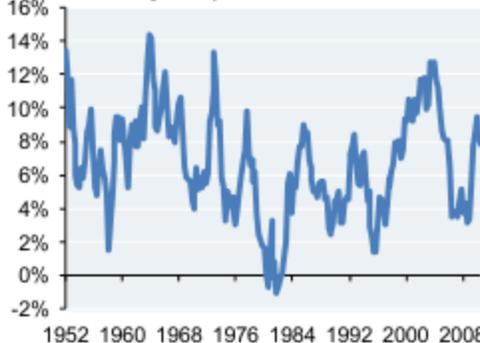
**(c18) U.S. retail sales growth**



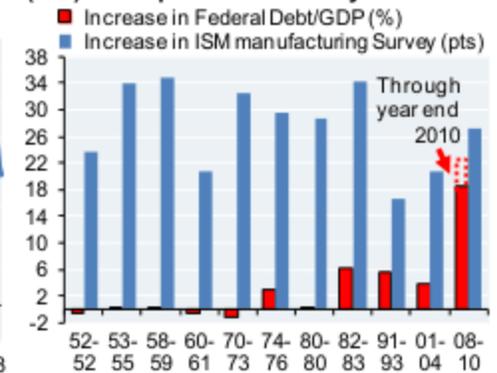
**(c19) Business equipment and software spending, YoY - % change**



**(c20) Nonfarm business productivity**



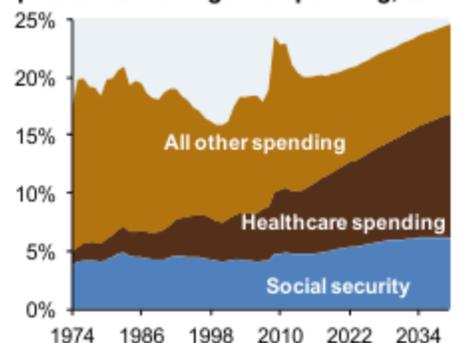
**(c21) An expensive recovery**



**The elephant in the room: the eventual need for fiscal tightening.** The production rebound was consistent with prior ones, but cost a lot more in terms of Federal debt to generate (c21). Tax cut extensions and payroll tax reductions will increase 2011-2012 deficits by \$800 bn compared to current law. If this “all-in” strategy results in consistent 4% growth, 2015 budget deficits could fall to 3%. Otherwise, the US will eventually need to make tough choices (the IMF estimates required US 2010-2020 fiscal adjustments that are greater than Spain’s). Bowles-Simpson recommendations tried to spread the pain equitably (tax increases and spending cuts), but were rejected by legislators on the Commission that drafted them. How does the US fiscal picture look to China? A recent paper published by Peking University was entitled “*Eying the Crippled Hegemon: China’s Grand Strategy Thinking in the Wake of the Global Financial Crisis*”.

**A lot of faith** resides in the Fed’s “portfolio rebalancing channel” theory of lowering interest rates, driving up equity markets, increasing confidence and consumer spending, and eventually, employment. In its interim stages, it lifts financial asset prices more than employment, destroys the purchasing power of savings, and may result in much higher commodity prices. **Jury: still out.**

**(c22) Short & long-term fiscal pressures from gov’t spending, % GDP**



**Europe: Irreconcilable Differences?**

Our writings on Europe in 2010 might have been as long as the EU Constitution<sup>2</sup>. Here's an abbreviated 5-point summary:

1. Germany is rebounding impressively (c23), but in Q2 and Q3, net exports were the largest contributors to German growth (c24). German export performance does not help pull other EMU countries along.
2. The periphery is stuck in austerity as a quid pro quo for bilateral EU and IMF assistance (c25), which is worsening GDP, unemployment (see c57 on page 11, worst on record) and VAT tax declines. Can it be sustained? In contrast, over in Iceland, real wages, employment, exports, stock markets and tourism are rising after their default/devaluation.
3. During crises in Latin America (1980s) and Asia (1990s), Argentina (1984) and Thailand (1997) were first thought to be exceptions, and that problems could be ring-fenced. In both cases, a broken paradigm applied to more countries.
4. Spain is now the Maginot Line. Its international banks should be able to survive a period of low growth, and its regional banks could be fixed for 5%-10% of Spanish GDP. But there's still all the Spanish private sector *non-financial* debt, which is among the highest in the world. This is not just a sovereign debt or banking sector problem.
5. Germany and France might have to agree to more direct subsidies, larger bilateral aid facilities or something more explicit, like "European Union government bonds". Will they do it? Last month, former EU President Jacques Delors said in response to the crisis that Europe needs to find its "soul". In 2011, we will find out whether the soul of Europe is based on its national identities, or a new Federal one. See page 11 for more on this topic.

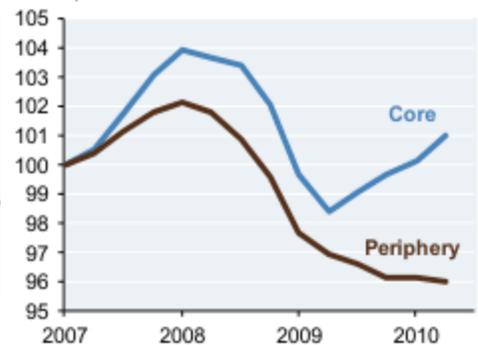
**(c23) German retail & manufacturing surveys, Index, sa**



**(c24) German GDP driven by exports**  
Percent contribution to 2010 GDP



**(c25) Core vs. periphery GDP**  
Index, 100 = 2007



Bottom line: while there are some safe zones (e.g., the health of banks and less reliance on foreign bond buyers in Italy; lower public debt in Spain), **the concentration of red flash points in our Sovereign Risk Scorecard is high**. We expect the question of the periphery to overshadow the German recovery until it is resolved in some way.

	Oct 2010 Unempl. Rate	Labor Mobility	Interest Payments/Tax Receipts	Gross Debt/GDP 2012E	Domestic Ownership of Govt Debt	Fiscal Deficit 2010	Req. Fiscal Adjustment 2010-2020	2010 Current Acct %GDP	Net Int'l Investment Pos. %GDP
Portugal	11.0%	7.4%	7.9%	101%	20%	(7.3%)	8%	-10.3%	(114%)
Ireland	14.1%	8.2%	9.5%	116%	17%	(11.7%)	10%	-0.3%	(102%)
Italy	8.6%	0.8%	10.6%	133%	48%	(5.0%)	4%	-3.3%	(20%)
Greece	12.2%	0.7%	13.1%	142%	33%	(9.6%)	9%	-10.5%	(87%)
Spain	20.7%	0.7%	4.2%	80%	56%	(9.3%)	10%	-5.5%	(98%)
	Price/wage differential vs Germany	Tradables %GDP	ECB Borr. % Bank assets	Q3 2010 PMI Services	Q3 2010 PMI Manufact.	Q3 GDP, QoQ Annualized	Bank foreign lender reliance	World cup / Euro cup victories	World reserve currency in:
Portugal	11% 13%	62%	7.2%	N/A	N/A	1.6%	28%	0	1450-1530
Ireland	25% -3%	164%	7.8%	50.8	51.2	N/A	32%	0	N/A
Italy	10% 35%	46%	0.8%	54.4	52.0	0.7%	8%	5	200BC-275AD
Greece	19% 20%	42%	17.5%	N/A	43.9	(4.5%)	15%	1	500BC-200BC
Spain	20% 33%	53%	2.1%	48.3	49.1	0.1%	15%	3	1530-1640

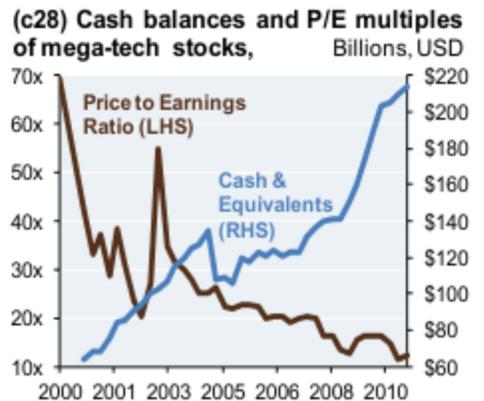
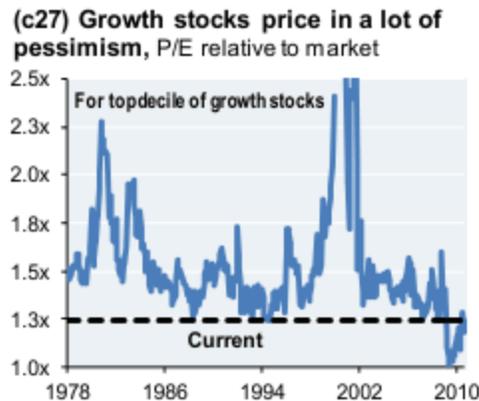
**Notes:** "Net International Investment Position" measures external debt less external assets (loans, bonds, equity). A larger negative number indicates a greater net external liability; those shown are among the highest in the world. Price/wage differentials vs Germany as of Q3 2010 based on consumer prices and unit labor costs for manufacturing, both indexed to December 1998. The OECD considers the wage measure more relevant for assessing competitiveness. Ireland was never the world's reserve currency, but according to author Thomas Cahill, its monks safeguarded Western civilization during the Dark Ages by transcribing works before Barbarians burned them.

<sup>2</sup> The original "Treaty for a Constitution in Europe" was 784 pages. The 2009 Lisbon Treaty was whittled down to 280 pages.

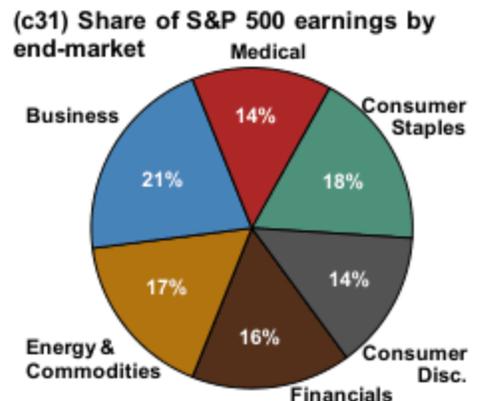
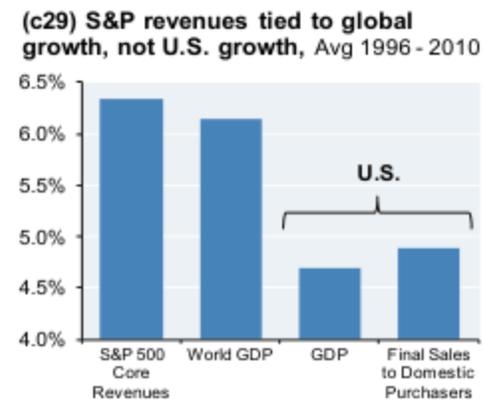
**On our investment portfolios**

**Equities: pricing in a fair bit of pessimism**

The prior pages refer to challenges the world is still facing; the good news is that equity markets are pricing a lot of them in. Forward P/E multiples for the US, Europe and the Emerging Markets are clumped together around 10x-13x (c26). That's why we are comfortable holding 35%-45% equities in Balanced and Growth portfolios (both figures exclude additional equity exposure through private equity and certain hedge fund categories). Growth stocks in particular look cheaply priced (c27), although there is something strange going on in the large cap technology space<sup>3</sup>, where P/E multiples are low and cash holdings are extremely elevated (c28). **A ratio of P/E to earnings growth is at a 20-year low** for the S&P 500, another sign of market pessimism. Flows into equities have been negative this year, suggesting a lot of underweight positions.



**US profits growth and margins are in good shape, which is why the US is our largest regional equity allocation.** Keep this in mind: S&P 500 revenues over the last 15 years have been more linked to World GDP growth than US GDP growth (c29), driving offshore profits higher as a % of GDP (c30), and to 35% of total US profits. Another positive: the S&P 500 tends to have less exposure to the US consumer than the US economy does, and more exposure to capital spending, energy and healthcare. In terms of valuation, technology and healthcare appear most attractively priced. We prefer large cap to small cap as the latter trades at a 30% P/E premium, and generally prefer growth over value.



**Analysts have underestimated S&P 500 earnings by around 10% per quarter since Jan 2009.** During the recession, US companies kept costs down as demand plunged. Now, as demand rises, incremental margins on new revenues are high. We expect this to continue in 2011. We expect 8%-10% earnings growth and stock buybacks (now running at 2% of market cap) to deliver roughly 10% S&P 500 returns in 2011, with some bumps along the way.

While US *profit margins* are high, US *corporate sales* are at a 50-year low (c32). **How can these 2 things co-exist? Because labor costs as a % of revenues are at their lowest levels, by some measures since 1929.** That's why we're reluctant to forecast much higher multiples; earnings are too reliant on low real wages.



<sup>3</sup> Stocks used for this analysis include: Microsoft, IBM, Apple, Intel, Hewlett-Packard, Cisco, Oracle, Google, Qualcomm, Corning

After the US, emerging markets are our next largest equity allocation, followed by Europe and then Japan. Over the last 1 and 3 years, these equity tilts have worked well (c33). We expect these relative rankings to continue in 2011; **we are more inclined to suffer the risk of inflation in the emerging world than the risk of deflation in Europe.** Within Europe, most of our equity exposure is tied to German exporters, whose stock prices generated strong gains in 2010.

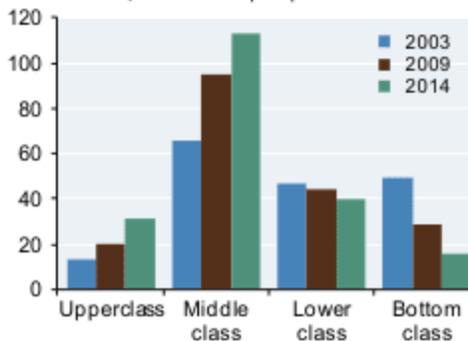
We hold Asia as the bulk of our emerging markets exposure, with smaller exposures in Latin America and Eastern Europe. On **Brazil**, we are encouraged by the development of the middle class (c34), and increased international trade (its mining, oil and agricultural exports to China have quadrupled since 2004). But there are some risks related to inflation, an overvalued exchange rate, and reliance on portfolios inflows rather than foreign direct investment. Our preferred approach to Latin America and Brazil in particular involves long and short positions; private equity investments, particularly in consumer-related companies which are only 10%-15% of the Bovespa (see page 8); and investments in local Brazilian credit and interest rate markets.

**(c33) Global equity returns**

Total returns through 12/10/10

	USD terms		Local currency terms	
	1 year	3 year	1 year	3 year
	S&P 500	15%	(4%)	15%
MSCI EM	18%	(2%)	15%	(1%)
MSCI EM Asia	19%	(2%)	16%	(0%)
MSCI Europe	5%	(10%)	11%	(6%)
MSCI Japan	9%	(7%)	4%	(16%)

**(c34) Ascent of Brazil's middle class consumer, Millions of people**



**BRAZIL: Pluses and Minuses**

Positives	Negatives
* Household credit: low	* Wage & price inflation risks
* Rapidly growing trade with China/Asia	* Real exchange rate: looking expensive
* Higher institutional participation in equity markets	* Increased reliance on portfolio flows over foreign direct investment
* P/E multiples: 12x	* High corporate tax rate
* 50% poverty decline since 2000	* Among world's highest real interest rate

**Fixed income: government bonds and credit**

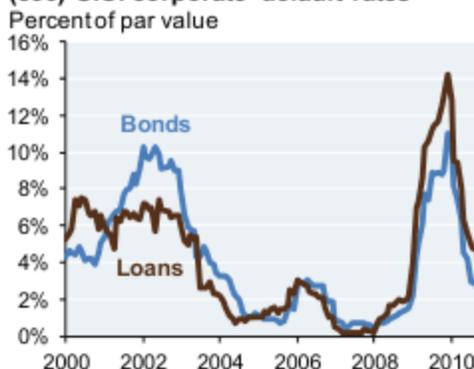
The global *Printing Press* creates money that needs to find a home. At the same time, total issuance in the US has been negative: while Federal and municipal issuance grew, companies and households reduced issuance at an even faster pace (c35). **The result: a supply-demand imbalance that supported global bond prices.** Think about this: by the time QE2 is finished, the Fed will own 1/3 of all Treasuries outstanding in 4-20 year maturities, and finance 94% of the 2011 Treasury deficit. We expect G3 banks and EM Central Banks to continue to buy Treasuries. However, our sovereign and municipal durations remain low, given limited yield benefits of longer duration paper, and the risk of higher yields at some point (see page 10 for more on bond market risks). Our current underweight to government bonds is one of the largest active positions in portfolios.

We expect another year of stable credit spreads, although returns will be markedly lower than in 2009 and 2010 given how much spreads have already tightened. We hold senior bank loans alongside high yield, which is still reasonably priced at a spread of 600 bps after last year's rally. We expect to trim high yield positions in 2011 as spreads tighten further. The current decline in default rates (c36) helps explain why spreads have tightened this much, but liquidity conditions are undeniably affecting the pricing of credit.

**(c35) Net issuance of U.S. Credit Instruments over last 12 months (\$blns)**

Treasuries	\$1,468
Agencies	-\$70
Municipals	\$94
Corporate & Asset Backed	-\$129
Mortgages	-\$598
Bank Loans	-\$424
Consumer Credit	-\$47
Commercial Paper	-\$249
Other loans	-\$241
<b>Total</b>	<b>-\$195</b>

**(c36) U.S. corporate default rates**



**(c37) Property decline cushion, AAA CMBS subordination adjusted for LTVs**



The structured credit market reached its Icarus moment in 2007, when it offered little value to investors. At that time, a AAA-CMBS investor could barely sustain any property losses before losing principal (c37). We did not recommend structured credit to clients during this period for this reason. Since then, subordination protections have improved substantially, and spreads are wider. As a result, we have been adding structured credit to portfolios since markets re-priced this kind of risk in early 2009. We also see opportunities in US bank preferred stock that may be called early as banks restructure their capital.

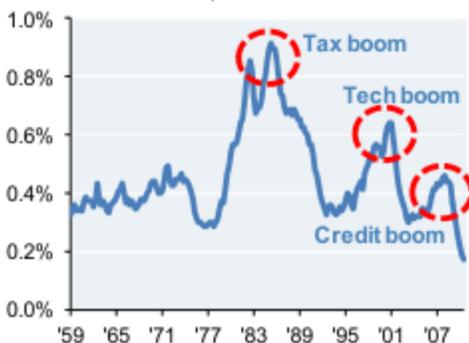
**US commercial real estate**

After having reduced allocations to commercial real estate in 2007, we are now reinvesting. Our preferences: where capital is scarce and where lending positions can be well-collateralized (commercial mortgage backed securities rollovers, mezzanine lending [c40] and distressed real estate). A silver lining of the biggest residential housing mess ever: there was less of a commercial overbuilding boom this time around. The worst commercial property boom took place in the mid 1980s (c38), after a 1981 tax reform bill which allowed active income to be offset by passive losses, a provision which ended with the Tax Reform Act of 1986. The next biggest mess: the tech boom of the late 1990s. In contrast, overbuilding during the credit boom (a different concept from overpaying) was less of an issue this time.

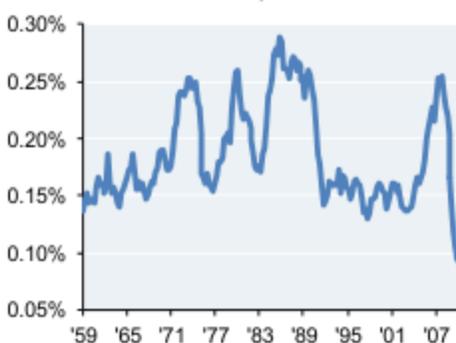
The liquidity boom which has led to lower credit spreads has also pushed up real estate prices, but mostly for “bond-like” office and multi-family properties that are well leased, and in major market locations. Opportunities persist in properties with leasing, debt maturity or completion risks that require the experience of an operator and not just a financial buyer.

It will take time for all the vacant space to be absorbed (CB Richard Ellis forecasts that office vacancy rates won't peak until the second quarter of 2011). But as is typical with most business cycles, **asset prices tend to rise well before their respective fundamentals do**. This has been the case over many decades, as US and European equities, bank stocks and high yield bonds started to rise well before improvements in unemployment, earnings declines, bank failures and corporate bankruptcies (See *EoTM December 6, 2010 for more details*).

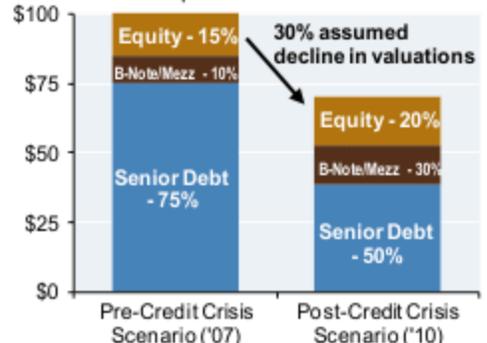
**(c38) New office supply, Private fixed investment in office, Percent GDP**



**(c39) New retail center supply, Private fixed investment in retail, Percent GDP**



**(c40) Evolution in capital structures**  
Illustrative example

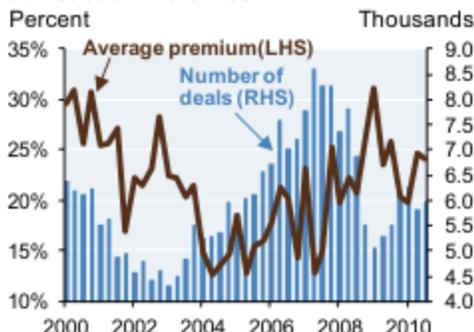


**Hedge funds**

We are optimistic about prospects for continued merger activity (c41), and hedge funds which benefit from them. We also see little reason to pull back on macro hedge funds, given the world's unresolved imbalances shown on the first page. Macro hedge funds often benefit from volatility in equity, commodity, interest rate and FX markets. We also maintain exposure to credit hedge funds, which focus on opportunities related to refinancing and restructuring of overleveraged balance sheets.

However, we are looking to reduce funds which face challenges from the high correlation of individual stocks. In the US, the pairwise correlation of stocks has risen sharply (c42). This makes some long-short investing styles such as statistical arbitrage harder to do. A consequence of high correlations: a collapse in the “unexplained alpha” of stock price movements, after stripping out common factors (capitalization, sector, growth vs value, etc) that drive individual stock prices (c43). Outside the US, stock selection appears to have more promise, given lower correlations.

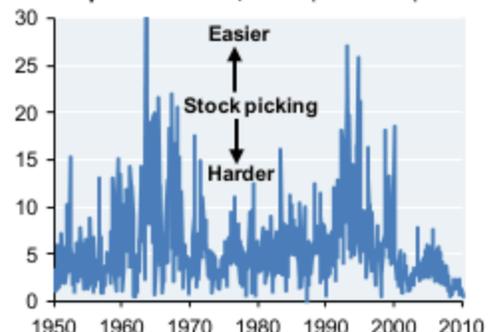
**(c41) Rising M&A premiums and transaction volumes**



**(c42) Tough environment for stock picking, Median pairwise correlation**



**(c43) Company specific drivers of stock performance, Unexplained alpha**



**Private equity: opportunities in high and low growth areas of the world**

**Investing where growth is low: Europe**

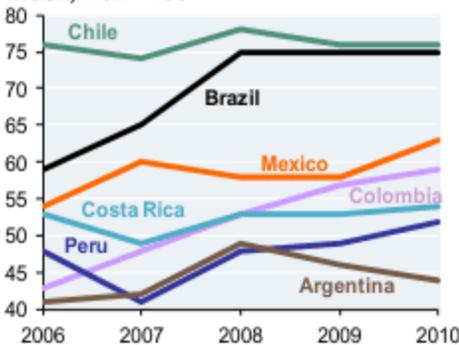
As explained in prior notes, European household, business and government borrowing levels are among the highest in the world. Should the European Monetary Union continue along its current path, we believe that many borrowers will face deflationary pressure, and shrinking banks (in particular, RBS, Hypo Real Estate, WestLB and HSH Nordbank). We are working with private equity managers focused on distressed European residential mortgages, corporate debt and real estate. Recent purchases of senior-secured bank loans have taken place at around 65 cents on the dollar, which we estimate as 50% on a traditional loan-to-value basis. European non-performing residential mortgage purchases have traded as low as 35 cents of face value.

**Investing where growth is high: Brazil**

While private equity has a long history in Brazil (with BNDES, starting in 1982), its penetration is not deep. Even in the boom-year of 2007, more private equity capital went into Africa and the Middle East than Latin America. However, these trends are changing as Brazil evolves. Brazil has made substantial progress on issues valued by private equity investors (c44). The accompanying table shows what these attributes are, according to the Economist Intelligence Unit. The top nine are where Brazil ranks highly, while the last three in italics are where Brazil has very low marks. In aggregate, its scores are now similar to Israel, Taiwan and Spain. That may explain why Brazil accounted for 18% of all EM private equity fundraising in 2009.

Services, transports and telecoms (ex-financials) make up around half the Brazilian economy but only make up 15% of the Bovespa, given the latter's large weights in commodities and industrial metals (c45). As a result, a lot of private sector output related to the consumer is not represented on Brazil's publicly traded equity markets, creating opportunity for private capital.

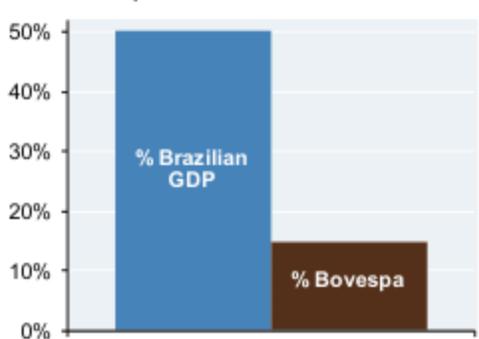
**(c44) EIU Private Equity Attractiveness Index, max = 100**



**EIU Brazil PE/VC scorecard**

- + Laws regarding VC/PE fund formation
- + Tax treatment of VC/PE funds
- + Protection of minority shareholder rights
- + Restrictions on institutional investment
- + Bankruptcy procedures/creditors rights
- + Capital markets development/exit feasibility
- + Corporate governance requirements
- + Use of international accounting standards
- + Entrepreneurship
- *Strength of judiciary*
- *Perceived corruption*
- *Protection of intellectual property rights*

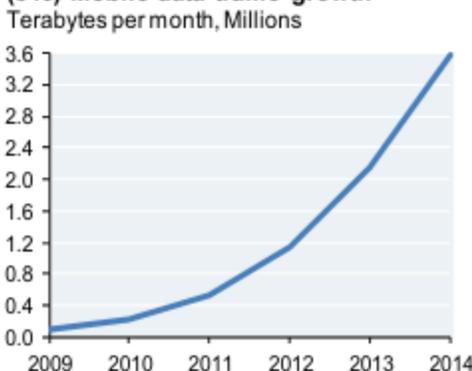
**(c45) Services, Transports and Telecoms, ex-Financials**



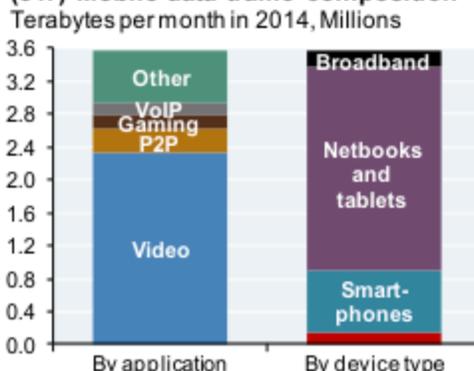
**Investing where usage is high: "demand for band"**

We are working on investments related to the global explosion in bandwidth usage and demand. A decade ago, many business models failed due to excess leverage and the lack of an application that could command premium pricing. However, the infrastructure created at the time has become a foundation for a new generation of electronic content (online and mobile video) and e-commerce. OECD broadband users continue to grow (from 15% of total population in 2006 to 25% in 2010), along with bandwidth demands by new products for new services (c46, c47). In addition, as cable companies upgraded their networks for HD content starting in 2004 (c48), they increased their network capacity. This in turn created opportunities for companies involved in digital rights management, bandwidth connectivity, "TV-everywhere" services and software, video content aggregators and applications that enable mobile e-commerce. We will cover this topic in greater detail early next year.

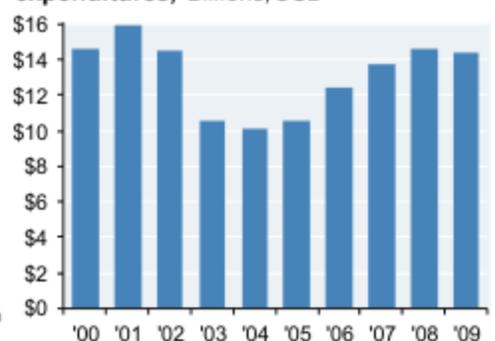
**(c46) Mobile data traffic growth**



**(c47) Mobile data traffic composition**



**(c48) U.S. cable industry infrastructure expenditures, Billions, USD**



**Commodities/The US dollar**

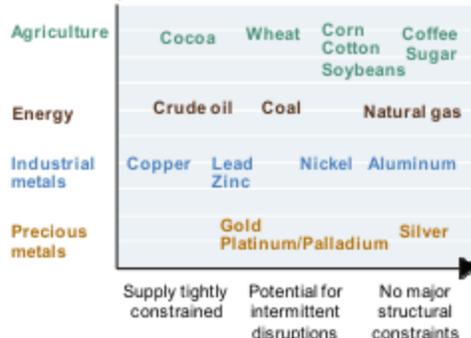
We are holding onto commodity investments, with a focus on copper<sup>4</sup>, oil, gold, platinum and palladium. We expect easy monetary policy from the Fed, and only modest steps from emerging markets countries to tighten. However, buying commodities does not always imply taking an outright long position, particularly at today's higher prices. Many of our commodity investments are designed to have downside protection, wherein we receive a payment as long as the commodity is rising, even at a very slow rate (this has worked well in oil markets, stable since mid-2009 [c51]).

Commodity demand is still growing in the emerging world, where job creation tends to take precedence over inflation-fighting (a country like Mexico would be an exception). Emerging economies require a greater share of the world's natural resources in order to grow (c49). Some of the shares shown have doubled in just 15 years, a remarkable demand shift versus history.

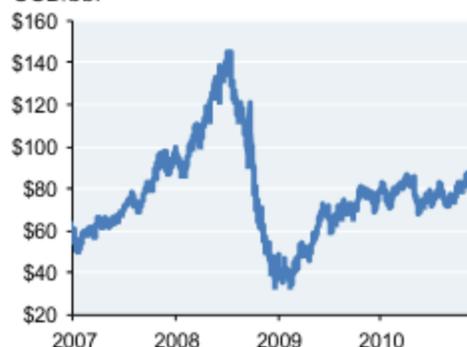
**(c49) Rising share of EM commodity usage, Percent of global consumption**



**(c50) Commodity supply grid**  
Commodity asset class



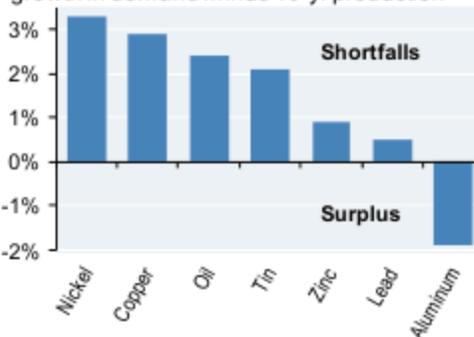
**(c51) Oil prices since 2007**  
USD/bbl



**We select commodities based on scarcity rather than momentum (see c50 and c52 for what we prefer and avoid).** On oil, gains in Iraq are needed to offset production declines in Mexico, Norway and the UK that began to accelerate in 2004. There have been improvements in oil recovery rates, and the IEA estimates an additional 6 million barrels per day from CO2 injection and other Enhanced Oil Recovery techniques by 2030. However, given the expected loss of many more barrels per day from existing fields, there's still a huge projected production gap. Overall, we expect spare capacity to decline, as demand growth and non-OPEC production losses exceed new OPEC supply of both conventional and non-conventional liquids.

**On gold, we expect its wild ride to continue.** While concerns about the dollar's reserve currency status are premature (see below), the *Printing Press* increases demand for gold. Emerging markets Central Banks own gold at less than 5% of reserves, which might account for increased demand. However, a November surge in Chinese gold imports came from its private sector. China just approved the first "QDII" gold fund, which allows Chinese citizens to buy gold through an ETF. EM inflation risks play as large a role as US inflation concerns in driving demand for gold. For all the hype, the market cap of gold ETFs is roughly the same as that of Verizon. In other words, a lot of individuals, institutions and sovereign entities are likely to be underinvested relative to some abstract definition of "normal". There will be bouts of profit-taking, since gold has had a great run. But we expect gold prices to be higher by the end of 2011 rather than lower.

**(c52) Production shortfall, %, trend growth in demand minus 10-yr production**



**What next for the US dollar?**

Roughly 85% of all FX transactions occur in US\$ (BIS data), with 39% in Euros, 19% in Yen, 13% in Sterling and 0.3% in Chinese RMB (numbers add to 200% given two sides to each FX transaction). No smoking gun here. However, there are parallels between the Sterling's loss of reserve currency status in the early 20<sup>th</sup> century and the US\$ today. Members of the British Commonwealth maintained Sterling reserves after WWI/II despite Britain's financial and military decline; it was in their mercenary self-interest to do so given a desire for export-led growth. Commonwealth countries held on until 1967, when Sterling devaluation imposed losses that were too great to bear. The relationship between EM Central Banks and the US dollar looks eerily similar. Policy-driven swings in \$-Euro will continue (we do not have a high-conviction view on this bilateral pair), but we believe the tide of history and economics leans towards higher values for Asian exchange rates versus the US\$ and Euro.

<sup>4</sup> Copper-intensive products are flying off the shelves in China: cars, refrigerators, and TV consumption is up 40%-80% since 2008. JPMS estimates that hotels will be constructed at the rate of 1,000 per year, with internal tourism growing at 15%. An increase in electrification in countries like Pakistan, India and Indonesia are also part of the copper demand picture.

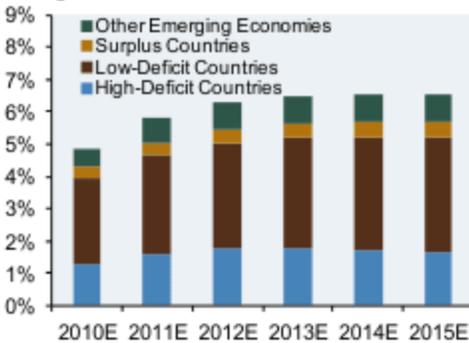
**Appendix I: there better not be a policy mistake related to interest rates**

The good news is that world GDP is driven by as much by countries with low fiscal deficits as by high-deficit countries (c53)<sup>5</sup>. The bad news: some high-deficit countries are like unexploded land mines. The cost of *servicing* public debt is not extremely high in Japan<sup>6</sup>, Italy or the United States, but that's **mostly because interest rates are so low**, rather than debt being at a sustainable level. Low servicing costs also reflect low average debt maturities for the US and Japan, at around 4 years.

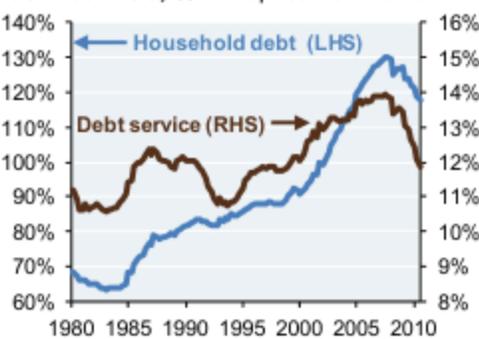
This "OK-as-long-as-rates-don't-rise" paradigm extends to households as well. In the US, improved household obligations ratios shown on page 3 are more a function of lower interest rates and defaults than paydown of debt (c54). Household debt has only declined from 130% to 118% of disposable income. In Hong Kong, where apartment prices are skyrocketing, some research asserts that affordability ratios don't look so bad. To us, this is another example of something looking normal only because of abnormally low interest rates. HK affordability looks good (c55) since mortgages only cost 2.5% in a country growing at 9% per year, and where inflation is 2.7%; again, the **real cost of money is zero**. Another example: a modest rise in Japanese interest rates would render its fiscal accounts inoperable (c56).

**Theoretically, the Fed has the infinite ability to create money, finance budget deficits and keep rates low.** The problem: there may be economic and political limits preventing central banks from doing this for too long; see Bernanke's "change of heart" (box)<sup>7</sup>. For whatever reason, if interest rates rose sharply without a commensurate rise in private sector incomes and government tax receipts, we would expect another round of debt-related problems ahead. There was an article in the LA Times discussing the benefits of plentiful liquidity, too much bearish sentiment, the low hurdle rates for stocks, a weaker dollar to stimulate exports, low equity valuations and the scope for dividend increases. The thrust of the article, "*Despite Caution Signs, Market Stirs High Hopes*", was to explain how all these things were good news for stocks. **Publication date: March 8, 1987.**

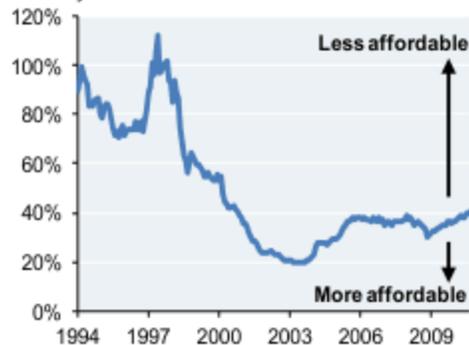
**(c53) World growth driven by low budget deficit countries, Percent**



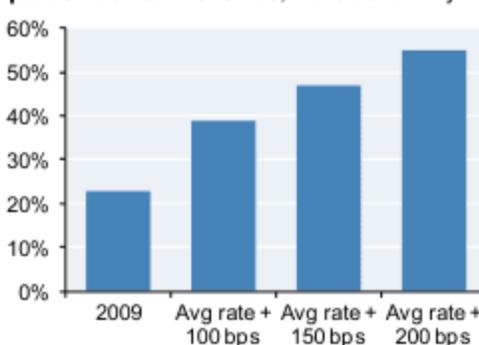
**(c54) U.S. household debt levels and service ratio, % of disposable income**



**(c55) Hong Kong housing affordability? Monthly installment/median household inc.**



**(c56) Japanese interest expense as a percent of tax revenue, Rate sensitivity**



**Bernanke 2002: The central bank can finance government spending, at no cost:**  
 "Under a fiat (that is, paper) money system, a government (in practice, the central bank in cooperation with other agencies) should always be able to generate increased nominal spending and inflation, even when the short term nominal interest rate is at zero. . . . The US government has a technology, called a **printing press** (or, today, its electronic equivalent) that **allows it to produce as many US dollars as it wishes at essentially no cost.**"

**Bernanke 2009: Or maybe not**  
 "Prompt attention to questions of fiscal sustainability is particularly critical because of the coming budgetary and economic challenges associated with the retirement of the baby-boom generation and continued increases in medical costs. . . . With the ratio of debt-to-GDP already elevated, we will not be able to continue borrowing indefinitely to meet these demands."

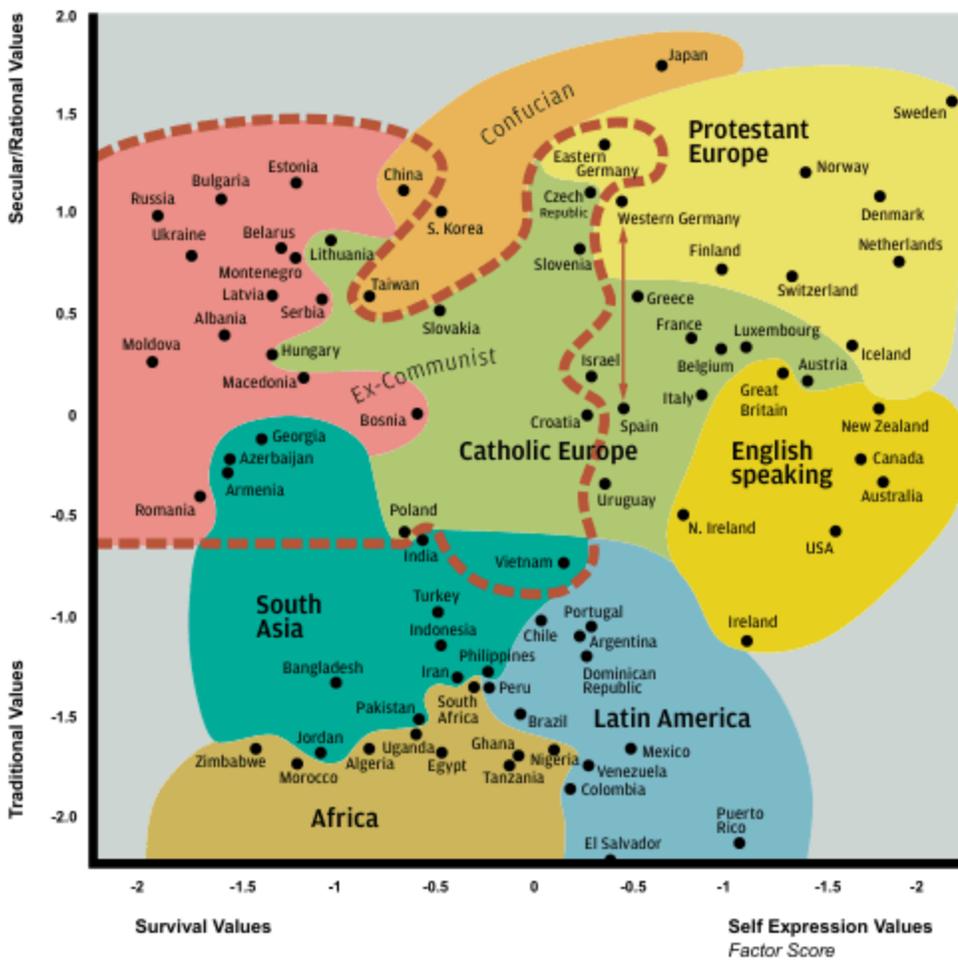
<sup>5</sup> This chart weights each country according to its purchasing power GDP, rather than its nominal GDP.  
<sup>6</sup> We generally have limited interest investing in Japan, unless it becomes very cheap (e.g., below 1x book value). Japanese equities tend to outperform the US for a quarter or two, and then slip back into extended periods of underperformance. Growth is stalling (5 months of production declines through October), retail sales and bank lending to corporate and households are fading, and deflation remains around -1.0% per year. The long-term issues: Japan's old-age dependency ratio (the worst in the world, followed by Italy and Germany); and debt ratios (see "Are JGBs the Short of a Lifetime", EoTM, August 23, 2010).  
<sup>7</sup> "Bernanke's Paradox: Can He Reconcile His Position on the Federal Budget with His Recent Charge to Prevent Deflation?", Pavlina R. Tcherneva, Bard College, November 2010

**Appendix II: European Federalism and the cultural/social divide**

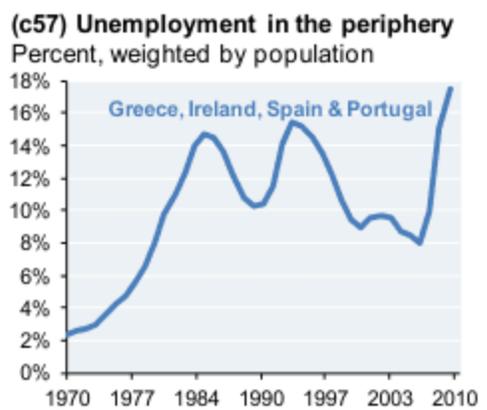
The Sovereign Risk Scorecard on page 4 tries to capture the economic and fiscal challenges that Europe is facing. The visual below attempts to capture some of the cultural and social ones. Since 1981, Professors Ron Inglehart (University of Michigan) and Christian Welzel (University of Bremen) have used data from their World Values Surveys to assess belief systems and their impact on social and political change using surveys from 90 countries. After plotting the proxy for each country’s “relative value system” (y axis) and “degree of individualism and self-expression” (x axis), the authors superimpose geographical regions, which fit pretty neatly over the data. Each axis represents a synthesis of 10-15 different survey questions<sup>8</sup>.

Countries in the European Monetary Union share a lot in common regarding the x-axis, as Germany, Italy, Spain, France, Belgium, Portugal and Greece appear in a very tight corridor. However, on the y-axis, they are quite different. These latter differences, for example between Spain and Germany, are large. They are greater than differences between countries in Latin America, Eastern Europe or China/Korea. They’re also greater than differences the authors compute *within* each country (e.g., university-educated vs rest of sample).

As Europe deals with regional austerity, the highest Periphery unemployment on record (c57) and the need for large fiscal transfers (if not full-blown Federalism), these cultural differences will need to be overcome as part of the process. Recent Eurobarometer polls showing almost the lowest level of support for EU membership since 1973 indicate that Europe’s leaders still have a lot of work to do (see “*A Don Quixote Thanksgiving*”, EoTM, November 18, 2010).



**From the authors**  
 “Cross-national differences dwarf the differences within given societies.... Despite globalization, nations remain an important unit of shared experiences, and the predictive power of nationality is much stronger than that of income, education, region or gender.”  
 “Even today, the nation remains a key unit of shared socialization, and in multiple regression analyses, nationality explains far more of the variance in these attitudes than does education, occupation, income, gender or region.”



<sup>8</sup> “*Changing Mass Priorities: The Link between Modernization and Democracy*”, Ronald Inglehart and Christian Welzel, *Perspectives on Politics*, June 2010, Volume 8, Number 2. Their conclusions about the durability of cultural and national differences are similar to Geert Hofstede’s pioneering analysis on the subject. An aggregation of Hofstede’s 4 cultural dimensions show that Spain, Portugal and Greece are considerably more “different” vs Germany than Switzerland, Italy and the entire English-speaking world.

**Acronyms**

EM – Emerging Markets; IMF – International Monetary Fund; EMU – European Monetary Union; EU – European Union; VAT – Value-Added Tax; QE – Quantitative easing; CMBS – Commercial Mortgage-Backed Securities; FX – Foreign exchange; M&A – Mergers and acquisitions; E&P – Exploration and production; ETF – Exchange-traded fund; QDII – Qualified Domestic Institutional Investor; OECD – Organization for Economic Co-operation and Development; IEA – International Energy Agency; BIS – Bank for International Settlements

**Chart sources**

(c1) Institute of Supply Management, CLSA-Markit, Nov 2010	(c30) Bureau of Economic Analysis, Q3 2010
(c2) J.P. Morgan Securities LLC, October 2010	(c31) Bank of America Merrill Lynch, November 2010
(c3) J.P. Morgan Securities LLC, October 2010	(c32) Bureau of Economic Analysis, Q3 2010
(c4) OECD, J.P. Morgan Securities LLC, September 2010	(c33) Bloomberg, December 2010
(c5) Factset, November 2010	(c34) FGV, IBGE, LCA, Ministerio da Fazenda, September 2010
(c6) J.P. Morgan Securities LLC, September 2010	(c35) Bridgewater Associates, LP, September 2010
(c7) Historical Statistics for the World Economy - Angus Maddison	(c36) J.P. Morgan Securities LLC, December 2010
(c8) J.P. Morgan Securities LLC, November 2010	(c37) J.P. Morgan Securities LLC, Trepp, rating agencies, Bloomberg
(c9) National Bureau of Statistics, J.P. Morgan Securities LLC, November 2010	(c38) Bureau of Economic Analysis, Q3 2010
(c10) J.P. Morgan Securities LLC, Centaline, November 2010	(c39) Bureau of Economic Analysis, Q3 2010
(c11) International Monetary Fund, 2009	(c40) J.P. Morgan Securities LLC
(c12) "The Costs and Implications of PBC Sterilization", John Greenwood, Cato Journal, Spring/Summer 2008, CEIC	(c41) Bloomberg, Q3 2010
(c13) Bridgewater Associates, LP, October 2010	(c42) J.P. Morgan Securities LLC, November 2010
(c14) J.P. Morgan Securities LLC, September 2010	(c43) Barclays Quantitative Equity Strategy, November 2010
(c15) IMF, European Commission, OECD, Institute of International Finance, Banco Central Do Brasil	(c44) Latin American Venture Capital Association – EIU Scorecard Report, 2010
(c16) Bureau of Labor Statistics, November 2010	(c45) Economic Commission for Latin America, Bovespa, Q2 2010
(c17) Federal Reserve Board, Q2 2010	(c46) Cisco VNI Mobile, 2010
(c18) Census Bureau, November 2010	(c47) Cisco VNI Mobile, 2010
(c19) Bureau of Economic Analysis, Q3 2010	(c48) Kagan Research, December 2009
(c20) Bureau of Labor Statistics, Q3 2010	(c49) Wood Mackenzie, October 2010
(c21) Federal Reserve Board, Bureau of Economic Analysis, Office of Management and Budget	(e50) Barclays Capital
(c22) Congressional Budget Office, Q2 2010	(e51) Bloomberg, December 2010
(c23) Markit, IFO Institute, December 2010	(e52) Bridgewater Associates, LP, November 2010
(c24) German Federal Statistics Office, Q3 2010	(e53) IMF, OECD, World Bank, Malaysia Ministry of Finance, Indonesia Ministry of Finance, Empirical Research Partners, October 2010
(c25) Various central banks, Q3 2010 (Q2 2010 for Ireland)	(e54) Federal Reserve, BEA, Q3 2010
(c26) Factset, November 2010	(e55) Gavekal, Centaline, September 2010
(c27) Corporate reports, Empirical Research Partners, Q3 2010	(e56) Japan Ministry of Finance, June 2010
(c28) Factset, Q3 2010	(e57) J.P. Morgan PB, Bank of Spain, Bank of Portugal, Greece National Statistics Service, Ireland Central Statistics Office, November 2010
(c29) S&P, U.S. Department of Commerce, IMF, corporate reports, Empirical Research Partners, BEA, Q2 2010	

**Table sources**

(t1) OECD, "Labor Mobility and the Integration of European Labor Markets", IZA Institute for the Study of Labor, February 2009, European Commission, Fitch Ratings, Hong Kong Monetary Authority, International Monetary Fund, J.P. Morgan Securities LLC, Greece National Statistics Service, Ireland Central Statistics Office, Italy National Institute of Statistics, National Statistics Institute of Spain, Eurostat
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