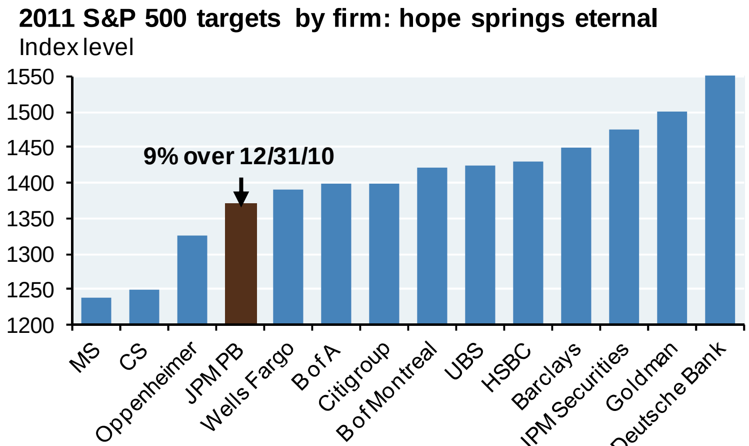
Topics: US equity and labor markets; US Federal debt ceiling; Greece, Lysistrata and the EU bailouts; the investment implications of Germany's plan to decommission nuclear power and increase renewable energy; Gold

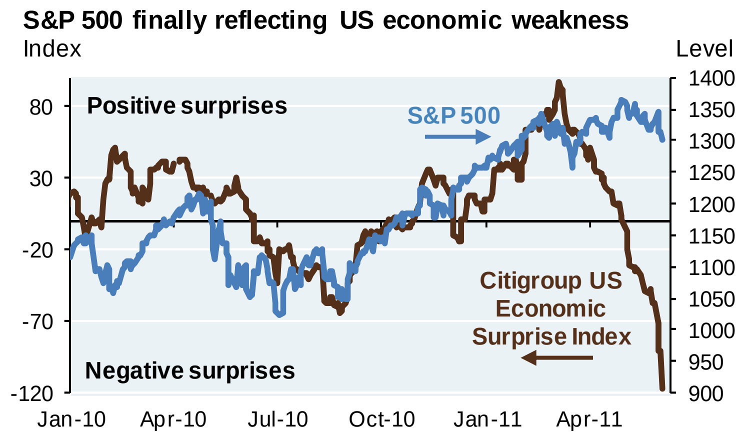
Occam's Razor is the theory that all things being equal, you should stick towards simpler explanations before looking for complicated ones. Using this approach, I will try to answer some questions we have been receiving recently.

Why are some analysts so optimistic about US equity markets in 2011 when US economic data has been weak?

As shown below, there is plenty of optimism about S&P 500 returns this year across securities firm strategists[1]. The simplest explanations: because until recently, negative economic surprises had not affected equities (see 2nd chart); because they believe bad economic data are temporary; because they believe corporate profits will translate into higher employment and capital spending; because it is in their organic make-up to say so; and because as observers rather than money managers, there is less of a cost of being wrong. Our more cautious view acknowledges strong corporate profits, but incorporates 2 things profits are reliant on: [a] all-time lows in relative labor compensation, and large fiscal deficits required to sustain household spending; and [b] emerging economies that are running out of room to keep real policy rates negative to grow (inflation is biting).



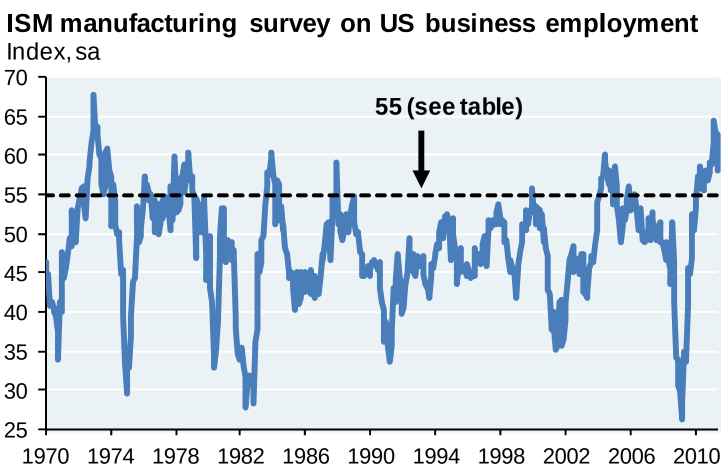
Source: Bloomberg. Targets as of May 3, 2011.



Source: Citigroup, Bloomberg. Past performance not indicative of future results

Why are US payrolls so weak at a time when employment surveys have been close to all-time highs?

Last Friday's report was pretty bad for this point in the cycle (weak job growth; higher unemployment; weak wage growth). It came as a surprise, since as shown below, a business survey of hiring intentions has been elevated. But as shown in the table, a high reading on the ISM employment survey isn't translating into large payroll gains any more. Why might this be? First, to be clear, the ISM survey asks people about the *DIRECTIONALITY* of their hiring intentions, rather than the *NUMBER* of people they plan on hiring. After a massive collapse in employment, it makes sense that many companies are now hiring, but with weak nominal growth, there's no need to hire that many people. So, what does Occam's Razor suggest as a reason for weaker payroll readings? Simply put, over the last decade, US businesses have become more cautious, and more capital intensive. They have also hired more workers abroad (see chart on page 4), but that may not explain why surveys of US hiring intentions have been so far off the mark in predicting payrolls. Either way, payrolls have been the biggest disappointment of 2011.



Source: Institute for Supply Management.

Payroll growth rates when ISM employment survey crosses 55

	Private Sector Payrolls	Total Payrolls
4/30/1972	3.6%	3.5%
2/29/1976	5.0%	4.2%
8/31/1983	6.2%	5.0%
12/31/1987	3.6%	3.6%
12/31/1999	2.8%	2.9%
2/29/2004	2.1%	1.9%
2/28/2010	0.5%	1.1%
Current Trend	2.0%	1.4%

Source: ISM, Bureau of Labor Statistics, J.P. Morgan Private Bank.

[1] The first chart shows S&P forecasts from each firm's equity strategy group. According to S&P, using consensus analyst estimates for each individual stock, the aggregate S&P 500 forecast would be in between the Goldman and Deutsche Bank estimates.

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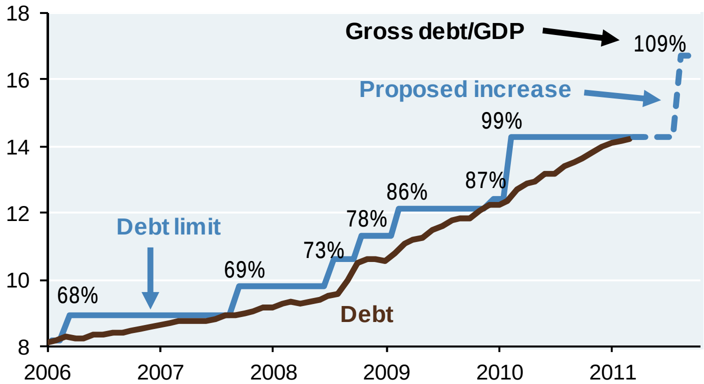
Will the US government raise the Federal debt ceiling?

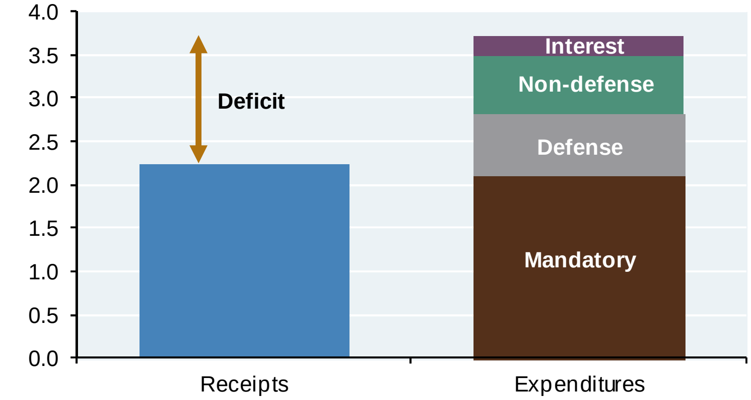
I can understand why some legislators are reluctant to raise the limit: as shown in the first chart, the proposed increase would for the first time raise the debt limit over 100% of GDP on a gross basis (e.g., including intra-governmental debt backing entitlement obligations). Realistically, they have no alternative. The deficit is around $1.5 trillion, so if you don't raise the debt ceiling, you have to cut what you can't borrow, and $1.5 trillion is equal to around half of all government spending. **Occam's Razor suggests they will raise it**, and with only minor quid pro quos in the process. Very little will be resolved this year.

Statutory debt limit and debt subject to limit
Trillions of gross debt, USD



Source: US Department of the Treasury, J.P. Morgan Securities LLC, J.P. Morgan Private Bank.

Breakdown of 2011 budget
USD, trillions



Source: Congresssional Budget Office.

What do you make of the additional European aid for Greece?

In the Aristophanes play ***Lysistrata*** (c. 411 BC), the protagonist convinces all the women of Greece to withhold certain favors from their husbands in exchange for the men declaring an end to the Peloponnesian War. The plan backfires, and leads to even greater conflict between the sexes. **In the latest dealings between Greece and the European Union, the EU is withholding its favors unless Greece makes additional sacrifices. Similarly, it's not clear this will end well.**

The plan entails Greece getting more loans (enough financing to get them through 2014) as long as: Greece privatizes state-owned assets; its banks participate in a voluntarily debt swap *primarily* targeting them; the Greek public sector fires more people; Greece imposes higher taxes on salaried professionals and pensioners, and higher VAT taxes on restaurants and taverns, all in the midst of an economic freefall. **Occam's Razor suggests that this new plan was designed to meet the following over-riding objectives**: avoid losses at the European Central Bank, with its Euro140 billion of exposure to Greece; and continue fiscal transfers from EU taxpayers so as to avoid losses to EU banks, insurance companies and other financial intermediaries. It appears to have very little to do with what might be the best plan of action for Greece itself. Perhaps the EU feels aggrieved over upward Greek GDP restatements in 2007 designed to incorporate the value of Greece's black economy, and subsequent downward revisions to deficit numbers.

How viable are Greece's privatization plans? There are very large numbers thrown around by EU policymakers (in excess of 200 bn). Officially, Greece is targeting 50 bn in privatizations by 2015. **We can only identify 5 bn** in potential proceeds from the sale of government-owned listed shares (see table). For the remainder, we need to take Greece's word regarding valuations. The government's proposed privatizations include airports and ports, raw land, horse racing companies, casinos, motorways, and something called the "Hellenic Football Prognostics Association" (I kid you not). It's hard to make an assessment at this point, other than to note that:

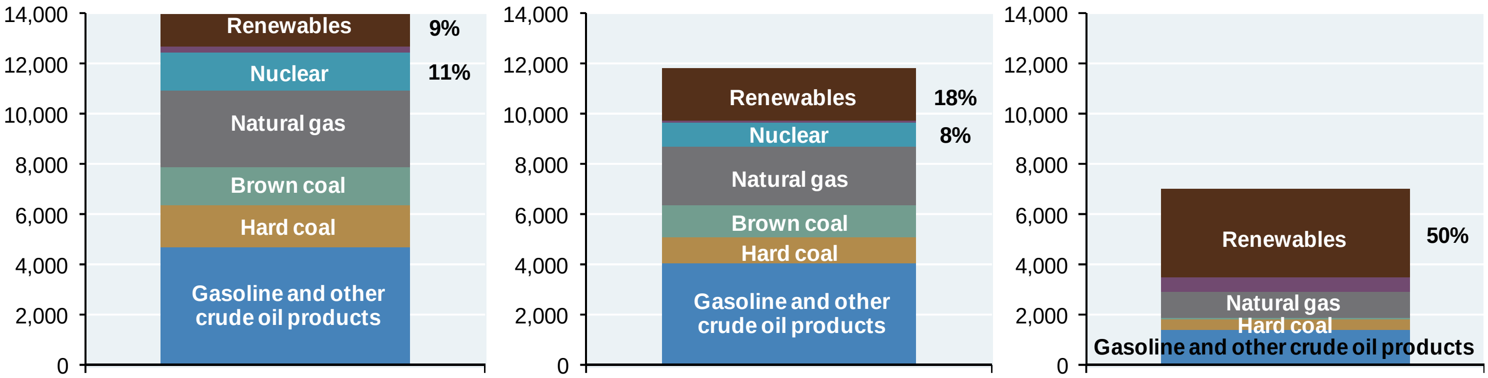
- Greece has sold little to-date other than a partial interest in Hellenic Telecom
- There is no land registry outside major cities, making it difficult to firmly establish legal title. Even within cities, some land is not on the official books, and ownership is disputed by different municipalities
- Real estate may be sold through long-term leases rather than outright ownership
- Privatization of companies reliant on Greek growth/consumption is likely to be priced at severe discounts, given the lack of a viable growth path for the country and its ever-expanding (bordering on preposterous) debt burden

Company (Source: Bloomberg)	Market value of Greek stake
Opap (lottery)	1.3
Public power	1.1
Hellenic Petroleum	0.7
Hellenic Telecom	0.7
Athens Water & Sewage	0.3
Agricultural Bank of Greece	0.3
Piraeus Port Authority	0.3
TT Hellenic Postbank	0.3
Thessaloniki Water & Sewage	0.1
Thessaloniki Port Authority	0.1
Subtotal	5.3

On Friday, protestors took over the Greek finance ministry, called for additional strikes, and took down the European flag. Severe austerity and privatization imposed and run from abroad, coupled with a bailout for Greece's EU lenders, is a potentially volatile mix; Lysistrata's plan may have had a better chance of working as designed. As shown in the Appendix, we sold Greek, Irish, Spanish and Portuguese debt out of our portfolios a long time ago.

<u>What are the investment implications of Merkel's plan to eliminate nuclear and double renewable energy by 2020?</u>
Merkel's proposal doubles renewable electricity production from 17% to 35% by 2020, and eliminates all nuclear power (23% of electricity production in 2010) by 2022. The plan increases renewables from 9% to 18% of primary energy consumption, and as shown below, and to 50% by 2050. A study prepared for the government on the plan's viability assumes large increases in biomass (the largest current renewable source), biofuels, solar, offshore wind and geothermal, as well as a substantial 20% reduction by 2020 in energy consumption (and an astonishing 50% energy consumption decline by 2050).

Current German energy consumption Petajoules | **Proposed energy consumption - 2020** Petajoules | **Proposed energy consumption - 2050** Petajoules



Source: BMWi, AGEB, AGEE - Stat.

Source: Institute of Energy Economics at the University of Cologne (EWI), Institute of Economic Structures Research (GWS), Prognos.

Using Occam's Razor and the experience of other countries, this plan is likely to run into some substantial challenges:

- Wind energy increases in Germany are possible, but realizable costs and efficiencies of offshore wind (salt water and icing damage, maintenance issues, transmission lines) are still uncertain. The US EIA assumes levelized costs for offshore wind that are twice as high as for onshore wind, and in Germany, grid integration from the North to the South will be expensive.
- Germany's focus on solar has always been something of a mystery, given that its solar irradiance is like Seattle, not Los Angeles. For all the discussion of Germany's solar program, **it only makes up 1% of its energy consumption**. While the cost of photovoltaic ("PV") panels is falling, costs of installation, assembly and maintenance are not, lowering productivity gains[2]. According to the EIA, solar power is still the most expensive of renewable technologies on a utility-scale basis.
- Germany's hydropower options are mostly built out, and there are not many high-gradient locations conducive to utility-scale geothermal facilities (e.g., places with magma closer to the surface, like California or Iceland)
- Biomass energy, currently the largest renewable component in Germany, gets harder to grow after using up all the waste wood. As for biofuels, they work best in locations with abundant supplies of energy-dense, self-fertilizing crops like sugar cane, and lots of unplanted land (Brazil); it is much less efficient in places like Germany.

The bottom line is that to meet the targets, Germany will need massive grid infrastructure investment to accommodate wider use of renewable energy, as well as coal and natural gas to bridge the power gap until the plan is economically feasible. Investment opportunities that our energy managers are participating in or evaluating include:

- Self-propelled jack-up vessels that service offshore wind facilities in the North Sea (tower/blade installation, maintenance)
- Companies selling wood pellets that are co-fired with coal, allowing the process to count against carbon emissions limits[3]
- Midstream natural gas assets (transmission and storage of natural gas, electricity generation)
- Customized oil servicing equipment (European highway overpasses are generally lower than US counterparts)
- US coal export logistics companies (mixing, blending, storage, shipping); even Social Democrats in Germany support the completion of the 26 coal-fired power plants in development or under construction
- Water purification technologies for nat gas fracking, particularly if Europe enacts tighter fracking restrictions than the US

[2] From 2000 to 2009, the price of residential photovoltaic systems only declined by 10%, despite a much larger decline in PV cell costs.
[3] Shipping low-density wood pellets to Europe is almost certainly not optimal absent a regulatory and incentive regime to encourage it.

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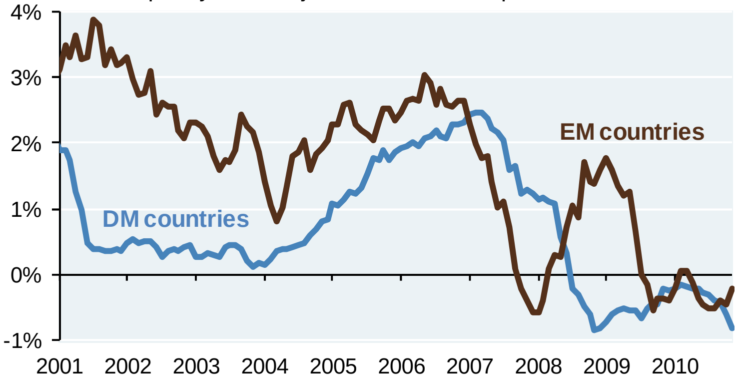
Why are gold prices still going up?

As shown in the chart (left), the real cost of money is very low just about everywhere. This is the simplest Occam's Razor explanation for the increase in gold prices. The other one: as we wrote in June 2010, **gold looks to be under-owned compared to prior periods of economic turmoil**. For example, in 1982, investible gold (above-ground gold excluding gold held by central banks) was 17% of the value of all stocks and bonds, whereas by the end of 2009, this number had reached 4%. This kind of analysis has to make a lot of assumptions, but generally conforms to our broad understanding of gold as a percentage of most institutional and high net worth portfolios. Another data point: even after all the hype, the market cap of gold ETFs is roughly the same as that of Verizon.

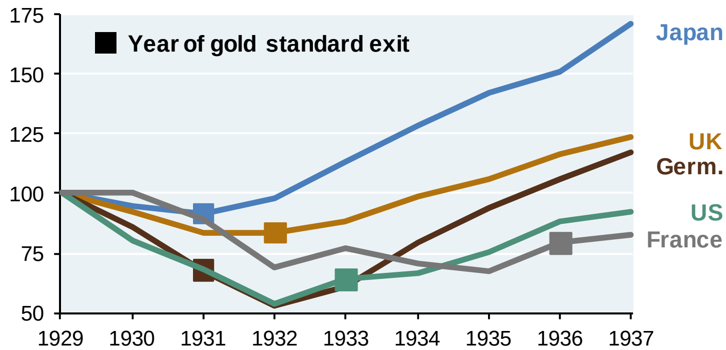
Free money just about everywhere

Central Bank policy rates adjusted for inflation, percent



Source: J.P. Morgan Securities LLC, J.P. Morgan Private Bank. Data as of April 2011.

The earlier a country exited the gold standard, the higher its industrial production - IP Index, 1929 = 100



Source: *"The Origins and Nature of the Great Slump Revisited"*, Barry Eichengreen, Economic History Society, 1992.

It's hard to say for sure, but dysfunctional US debt ceiling and EU peripheral debt discussions may be driving gold prices higher as well, as they portray both regions as out of touch with the realities of their respective problems.

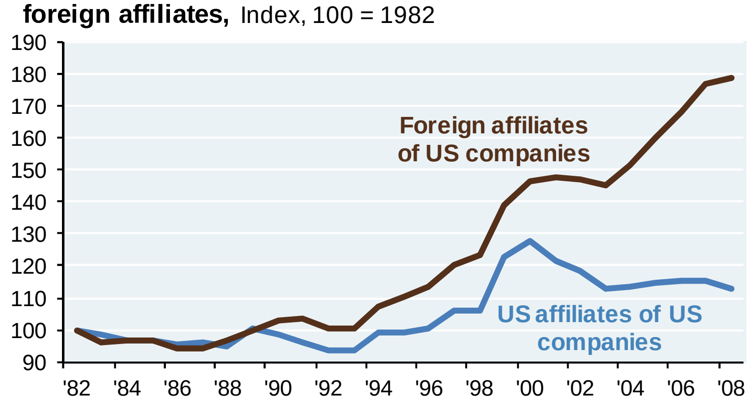
To be clear, **we do not believe that the US is heading towards another gold standard**. Steve Forbes, Jim Grant, Robert Zoellick and others suggest this, but the world has tried it before (more than once), and it didn't work so well. During the 1930's, the earlier a country got *off* the gold standard, the faster its industrial production recovered (see chart). However, if 2011 is another year in which the cost of money is basically free, as we wrote in our 2011 outlook, we expect gold prices to end the year higher rather than lower. When will gold prices retreat for good? When the real cost of money goes back to where it used to be.

Michael Cembalest
Chief Investment Officer

<u>Appendix charts: Globalization and US employment; and a chart on our exit from peripheral European bonds</u>

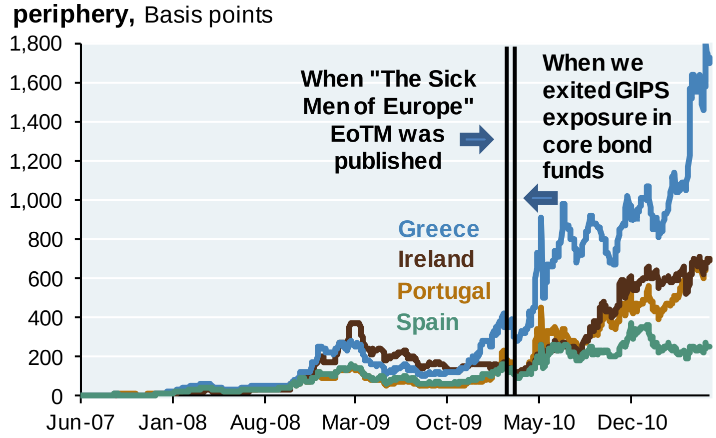
Is globalization a factor that explains low US payroll growth? It's hard to say for sure, but the first chart below does indicate that foreign affiliates of US companies are hiring workers at a much faster pace than US affiliates of US companies are.

Index of employment of US parent companies and their foreign affiliates, Index, 100 = 1982



Source: Bureau of Economic Analysis.

5-year credit default swap spreads for the European periphery, Basis points



Source: Bloomberg.

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BMWi = Federal Ministry of Economics and Technology; AGEB = Working Group on Energy Balances; AGEE-Stat = Working Group on Renewable Energies - Statistics