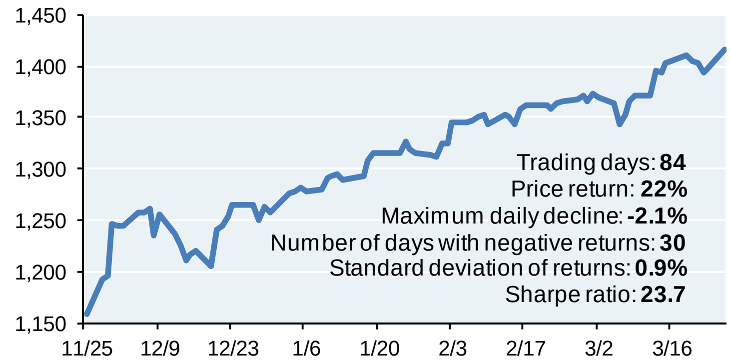
Topics: US recovery; China slowing; Japan Hail Mary pass; European humor; and digital media math

The S&P 500 has gone up in almost a straight line since November 25th, propelled by unlimited ECB lending and some positive US economic surprises. I looked for other periods when the S&P went up like this, with almost no volatility (defined as a rally whose stats match/beat those in the chart). **In the post-war era, there were none**. The last time this kind of rally happened: April 1943, after Germany was first defeated at Stalingrad. History does not rhyme; ninety years ago, money-printing led to calamity in Germany, and eventually, to disaster in Europe. Today, money-printing is designed to save it. Its impact led Mario Monti to declare this week that the European debt crisis was "almost over".

The rally: the shortest distance between two points

S&P 500 Index level, November 25, 2011 to March 26, 2012



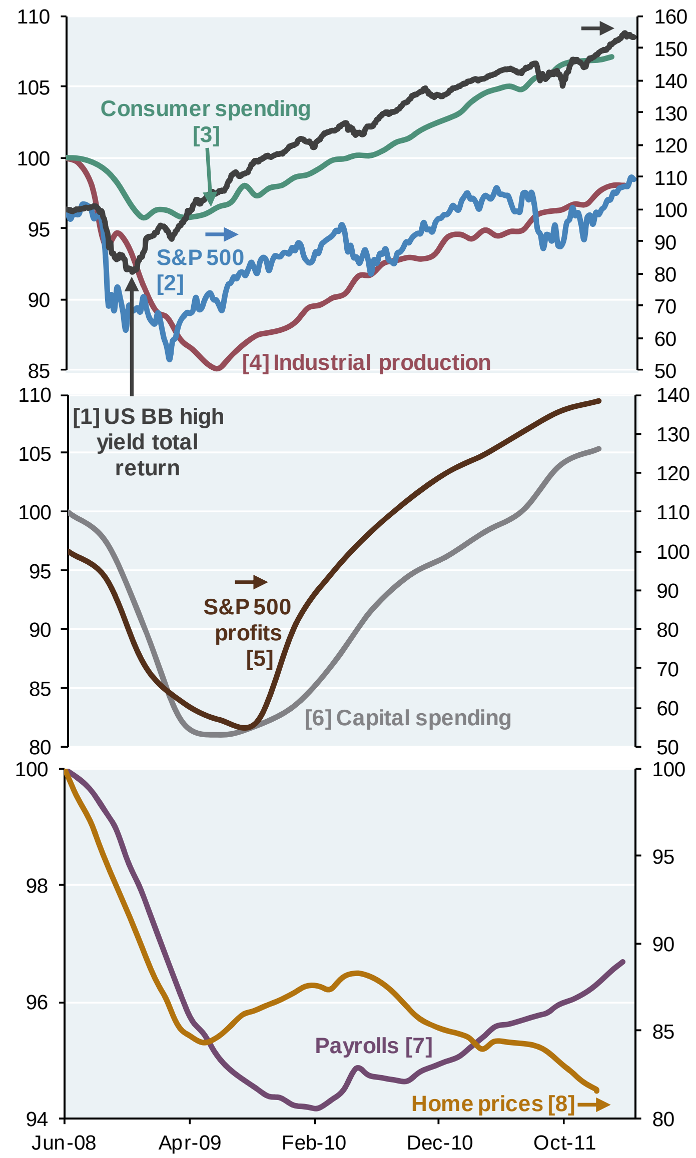
Source: Bloomberg.

In the US, the rally has been sustained by the view that Fed policy is working. A zero-cost-of-money is supposed to create a "**Portfolio Rebalancing Channel (PRC)**"[1]. As shown in the 3 vertical charts, the channel is now playing out presumably as the Fed expected after lowering the cost of money to zero in 2008:

1. A flood of money goes into credit funds, lowering the cost of credit and more importantly, increasing its availability
2. Rising credit and equity markets create a positive wealth effect
3. The wealth effect leads to a rebound in spending, driven by the top 10% who account for ~30% of discretionary spending
4. Industrial production picks up, leading to…
5. A sharp rebound in S&P profits…
6. And a similar rebound in capital spending…
7. Eventually, accumulated profits and demand for goods and services leads to a rebound in payrolls…
8. And eventually, home prices, although this cycle is clearly quite different given the supply overhang

The Portfolio Rebalancing Channel: US version

Index, 6/30/2008 = 100



Source: S&P, FRB, BEA, BLS, J.P. Morgan Securities LLC.

It hasn't worked perfectly, of course. Payroll growth is still too low, home prices haven't rebounded, and trend growth is less than 3%. But there are signs that the job market is improving (e.g., the strongest rate of manufacturing payroll growth in many years, decline in jobless claims). There are also signs that housing is improving (new and existing home sales, building permits), but let's wait until we can assess favorable weather impacts first. The latest round of US economic data has been weaker rather than stronger (the US Economic Surprise index has rolled over sharply).

The Fed committed again this week to keeping its zero cost of money policy in place until the recovery is on stronger footing. Fiscal policy needs to be easy as well, so that it does not get in the way. **What could derail this one-way rally?** Inflation, or a bond market revolt. Core inflation has risen close to its pre-crisis average but shows no signs of accelerating, and wage growth is weak. On fiscal policy and the Federal debt, a combination of the Fed (which bought 66% of net Treasury issuance last year), non-US central banks and US banks appear ready to finance America's Ecuadorean deficits. Will the massive fiscal tightening legislated for 2013 happen if it can be postponed? There are bipartisan proposals[2], but the prospects appear dim. So, the PRC keeps chugging along, until the Fed's job is done, or something breaks.

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[1] See speech by Janet Yellen, Vice Chair of the Board of Governors of the Federal Reserve System, Denver, Colorado, 8 January 2011.
[2] The latest is Cooper-LaTourette (2/3 spending cuts, 1/3 tax increases), modeled off of Bowles-Simpson; defeated in the House 382-38.

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In terms of what could break, while inflation and bond markets look tame, anticipating when imbalances reach a tipping point has been difficult. There was a post-war S&P 500 rally almost as serene as the current one[3]: in March 1987, a few months before monetary imbalances came undone and crashed in October 1987. And before 1943, the prior rally that was this calm and uninterrupted? November 1928, a year before another crash. Admittedly, these are empirical "cheap shots"; a lot of imbalances have been wrung out of the economy since 2007. But it's worth remembering how markets can be wrong, or at least unaware. Recall that last August, the shock which sent the equity market reeling was not Europe, but a downgrade of the US.

As for where we go from here, optimism is in full swing: Institutional money manager surveys and performance of their respective mutual funds relative to the market show that bullishness has reached a new post-recession peak (so has the breadth of insider selling, interestingly). **In terms of fundamentals, equity valuations are not that demanding, whether looking at trailing real earnings yields or forward-looking P/E multiples (see charts).** However, earnings growth will be needed to keep this rally going, and not just from Apple, which has offset 40% of the decline in estimated S&P earnings this year. The pace of global negative earnings revisions appears to have finally slowed, but S&P 500 earnings expectations are high for Q4 2012 (16% y/y growth). To be clear about this, while we are positioned to benefit from the positive developments in equity and credit markets so far this year (particularly in the US), we do not have maximum-risk portfolios in place, in part due to concerns about China and Europe (see below). Please see our March 8 *Eye on the Market* for more details.

Real S&P 500 earnings yield

Earnings yield less core CPI (earnings yield = earnings/price, using 12-month trailing earnings per share before extraordinary items)

Source: Bloomberg, Bureau of Labor Statistics, Empirical Research Partners.

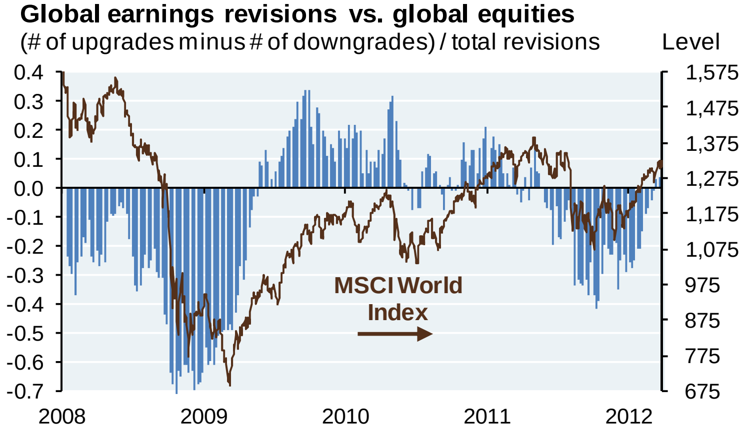
S&P 500 price to earnings multiple

Price to next twelve months operating EPS

Source: IBES, Standard & Poor's.

Global earnings revisions vs. global equities

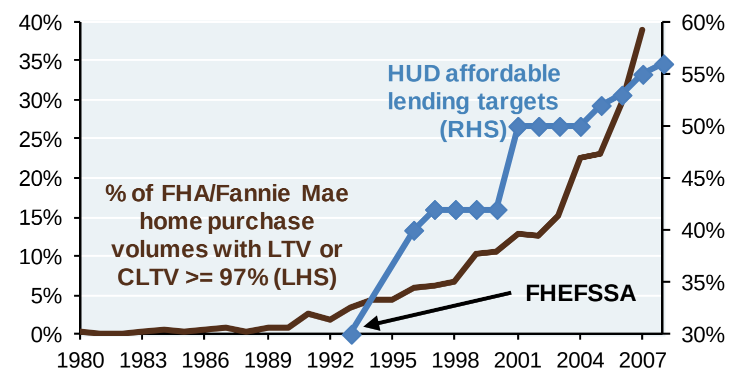
(# of upgrades minus # of downgrades) / total revisions



Source: Citigroup, Bloomberg.

A look back at the origins of the housing crisis

Percent of annual loan volume



Source: FHA, HUD, American Enterprise Institute.

One last point on policy channels. If you believe that investors, households and firms respond to signals like the Portfolio Rebalancing Channel, you may need to accept other consequences of government policy. As shown above, the implosion of Fannie Mae underwriting standards followed explicit requirements by the Department of Housing and Urban Development that GSEs raise the percentage of affordable housing loans to more than 50% of overall lending. This underwriting corrosion then spread to the private sector; never let it be said that the banking industry let an opportunity to make a bad loan pass by. The bottom line is that it seems inconsistent to believe fervently in the power of the PRC and ignore the impact of the HUD.

[3] The March 1987 rally matched most of the statistics of the current one, with the exception of a larger number of negative trading days.

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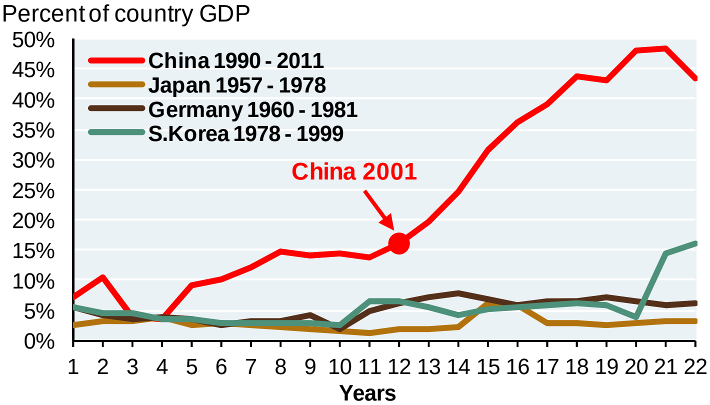
The other PRC: monitoring China's investment boom for signs of a bust

The People's Republic of China has experimented in unprecedented ways with policy and economic channels of their own. As shown below, starting in 2001, China went down a road less traveled by other industrializing countries: massive reserve accumulation (printing money to buy dollars to prevent currency appreciation), and an enormous capital spending boom. China sterilized the monetary expansion, but there were still risks in this approach, chief among them that China kept interest rates artificially low. This in turn led to the capital spending boom shown below. While China needed to catch up to the rest of the world in terms of its capital stock, the pace of capital spending growth was simply staggering. The fear in some circles has always been that too much Chinese capital spending could lead to oversupply, a collapse in profits, a banking sector crisis, etc.

Chinese FX reserve accumulation, in context

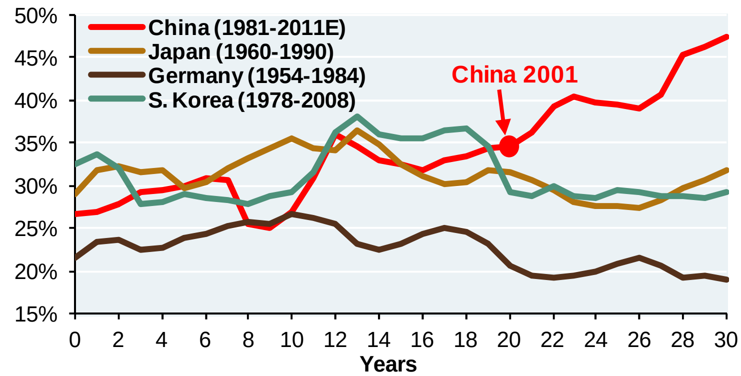
Percent of country GDP



Source: IMF, BEA, The Cabinet Office, China National Bureau of Statistics, BBK, The Bank of Korea, J.P. Morgan Private Bank.

Chinese investment boom, in context

Gross fixed capital formation, percent of country GDP

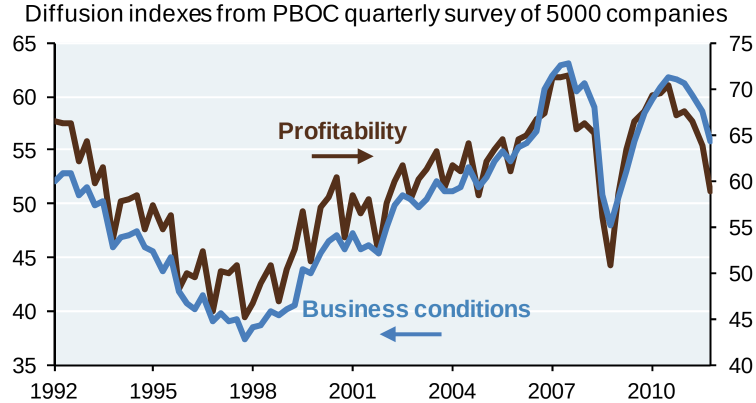


Source: Haver, J.P. Morgan Private Bank.

Well, the latest data on business conditions and profits look grim (see right). It's too soon to tell if this is cyclical (e.g., due to a collapse in demand from Europe), or something more structural. I also don't want to overestimate the possible negative consequences; **after a decline in inflation, China can add monetary stimulus, and has room for fiscal stimulus as well, in contrast to the West.** But there will be adjustments ahead, as the world may have to get used to long-term Chinese growth that is closer to 8% than 10% (1992-2008 avg).

A deterioration in Chinese business conditions

Diffusion indexes from PBOC quarterly survey of 5000 companies



Source: PBOC, ISI Group, Gavekal Research.

Japan: Hail Mary Pass

I am not going to bore you with all the charts and statistics; as most of you know, Japan is not in good shape regarding long-term fundamentals. In fact, we think things are getting so difficult that Japan will have to adopt more aggressive monetary policy in the years ahead; perhaps an explicit inflation target. We have no idea if this will help Japan's economy, but we do think a lot of it would find its way into Japanese equity markets. A few weeks ago, in our aggressive growth accounts, we added some Japanese equity exposure. So far, so good. I do not anticipate that this will be a position we hold for the long term.

Europe: good one, Jorg

ECB lending has slowed the European credit contraction; loans to households and non-financial corporations stopped falling in January and February, and M3 is rising again. But let's not get carried away; the region is still in recession/low growth mode. ECB board member Jorg Asmussen displayed Germany's well-known penchant for humor last week by suggesting that the ECB is planning an *exit* strategy from lending operations to European banks. The more likely reality is that the ECB will do nothing of the kind. Ireland, on the heels of a massive y/y decline in real GNP of -7.1%, wants to defer repayment of a loan to the ECB this year. Spain is likely to need more help rather than less, and both Spain and Italy have rescued their government bond markets courtesy of ECB financing. **By lending against any collateral presented to it at a cost of 1% for 3 years with no questions asked, the ECB was the primary driver of the market turnaround shown on the first page; now they have to live with the consequences, whatever they may be.** A recent paper by economists at UCLA and the University of Osnabrück argues that ECB policy may de-anchor long-term inflation expectations. It doesn't seem like the biggest risk right now, as the periphery suffers from *de*flation. But such risks are not the kind of thing that the ECB or Bundesbank had in mind. Meanwhile, our managers focused on acquiring portfolios of distressed European bank loans say **they have never been busier**.

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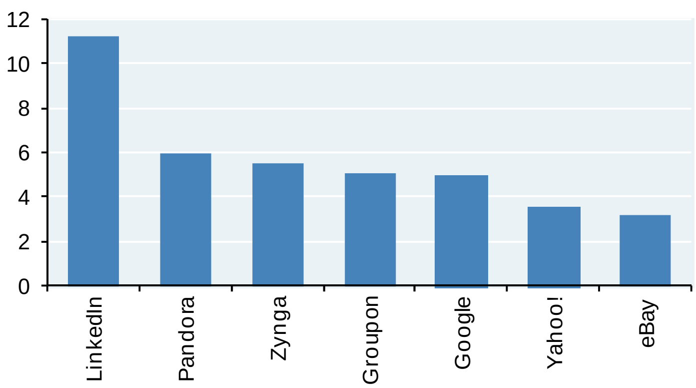
Digital Media Math

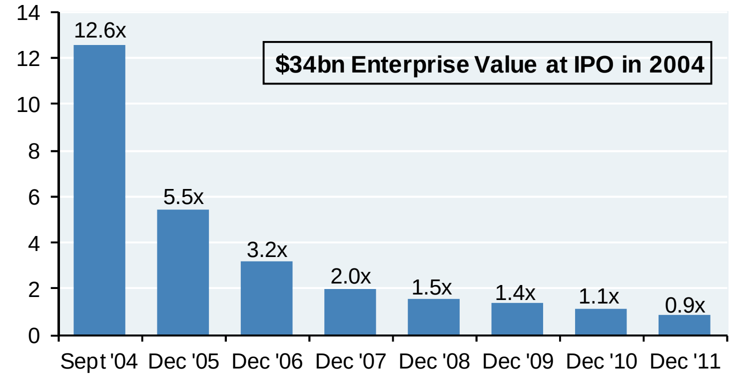
Teenagers have an amazing way of getting things for free, and mine are skilled at using things like Spotify without being one of the company's paid subscribers (the same goes for their other "victims" at Skype, Gmail, Dropbox, Pandora, Hulu, Shutterfly, Angry Birds, etc whose free services they prefer instead). As one illustrative example, when I heard that music streaming company Spotify is looking for pre-IPO capital at a $4 billion valuation, I wondered what assumptions are embedded here and in other digital media companies. By doubling Spotify's current 3m subscribers to 6mm (reasonable, since they have just entered US markets) and using its 2010 financials to estimate annual revenue per subscriber (which includes subscription fees and ad revenues), it would have an enterprise value at ~5x revenues, in line with public comps[4]. In terms of its momentum, Spotify's fans like the fact that it works with more devices, and believe that it has better/easier social media attributes compared to iTunes.

Valuation of public digital media companies
Current enterprise value divided by 2012 estimated revenue



Source: Bloomberg, J.P. Morgan Securities LLC.

Google's IPO valuation ended up being pretty cheap
IPO enterprise value (Q3 '04) divided by trailing 12-month revenues



Source: Public filings.

To be clear, the industry looks at EV to *revenues* since there's not a lot of *income* yet at some of these companies. They are all looking to repeat the Google paradigm, when the network effect makes sky-high pre-IPO valuations look tame once revenues and operating leverage kick in. With 50% annualized growth in revenues and 75% annualized growth in net income since 2003, Google's 2004 IPO enterprise value of $34 billion turned out to be a bargain at 2.0x 2007 revenues. The idea here is not to make an investment recommendation, but to understand what's embedded in market expectations. For some digital media valuations to make sense, companies will need consistent high double-digit revenue and earnings growth. Music streaming companies will need to do this in spite of what a technology Luddite like myself sees as 4 challenges:

- Concerns that they could hold your music library for ransom if/when they raise subscriber prices. A Netflix user would not lose much if they left due to higher prices (you weren't going to watch those movies again anyway), but a music streaming user without digital rights management would lose their cherished music library by leaving. Surveys can support almost any point of view, but for what it's worth, a 2011 eMusic survey found that in the US, 92% prefer owning to streaming, and 78% stream only because it's free to do so.
- Streaming companies don't own content, they distribute other people's content, and could be at risk of music labels changing the pricing dynamics. This is what may have driven Netflix to raise its own prices last year.
- Companies like Apple could adopt a streaming music subscription model, perhaps using iCloud
- Limited barriers to entry other than contract negotiations with music labels, and programming for the software

On the other hand, one of our managers bought Skype a few years ago, and earned a large return on invested capital despite many of the same concerns. The network effect can be very powerful, a topic we reviewed in an October 27, 2009 *Eye on the Market*. **Public digital media company market capitalization has grown by ~$1 trillion over the last 5 years, even as their multiples have contracted by 30%, so there are clearly some paradigm shifts taking place.** We have been doing some pre-IPO investing in digital media, so this is a space we will be watching closely in the years ahead.

Michael Cembalest
Chief Investment Officer

[4] The great thing about 1999-2000 for the digital media industry is that nothing will ever look ridiculously overpriced again. It will be hard to top these price to revenue numbers: Broadcast.com (sold to Yahoo! for 158x), Geocities (sold to Yahoo! for 180x), Excite (sold to @Home for 31x), Netscape (sold to TimeWarner for 13x). Public markets were just as optimistic: eBay (140x) and Yahoo! (195x). Everything else will forever seem tame in comparison.

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ECB	European Central Bank
PRC	Portfolio Rebalancing Channel; also, the People's Republic of China
GSE	Government Sponsored Enterprise
FHA	Federal Housing Authority
HUD	Housing and Urban Development
GNP	Gross National Product
IPO	Initial Public Offering
FHEFSSA	Federal Housing Enterprises Financial Safety and Soundness Act

A Hail Mary pass is a play called in American football when all is lost, and you throw the ball 50-60 yards down the field in the hopes that someone on your team will catch it, even though an incompletion or interception is the more likely result. A 2011 paper from the Theoretical Physics Institute at the University of Minnesota estimates the success rate of a Hail Mary pass at 2%.