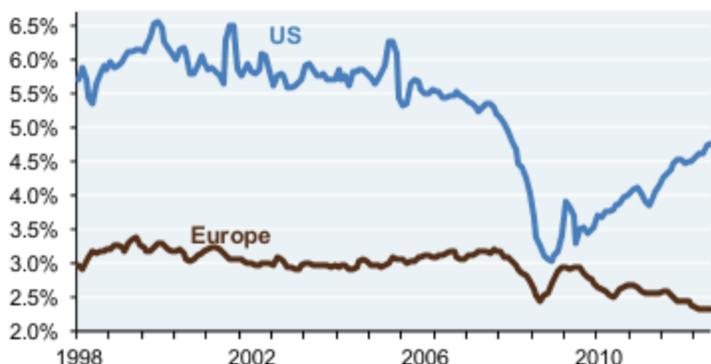


**Fifty Trades of Grey: an illustrated story of investment, temptation, addiction and the cost of money**

Q1 US retail sales were better than expected in January, despite higher tax rates, as the US consumer is still more active than European counterparts (1<sup>st</sup> chart). It's too soon to see the full impact of higher US income and payroll tax rates, but a Q4 jump in real wages, improved household balance sheets and a turnaround in housing may offset part of the headwind. We'll see in a couple of quarters. Meanwhile, in the SOTU address, the President talked about raising revenues. It will be interesting to see where they come from: after the recent tax act, top quintile tax rates are now 5 times higher than the second quintile, up from 2x in 1979 as progressivity increases further (2<sup>nd</sup> chart). Everywhere I go, however, there's a different topic on everyone's minds: **what will happen when the Federal Reserve stops purchasing tens of billions in Treasury and Agency debt every month?** It's possible that with a sufficiently dovish Chairperson replacing Bernanke in 2014 that they will *never* end, and that the US will end up like Ireland, with its Treasury perpetually beholden to its Central Bank; but I don't think so. The autobiographical story below is my view on Fed purchases and their impact on the world of investing.

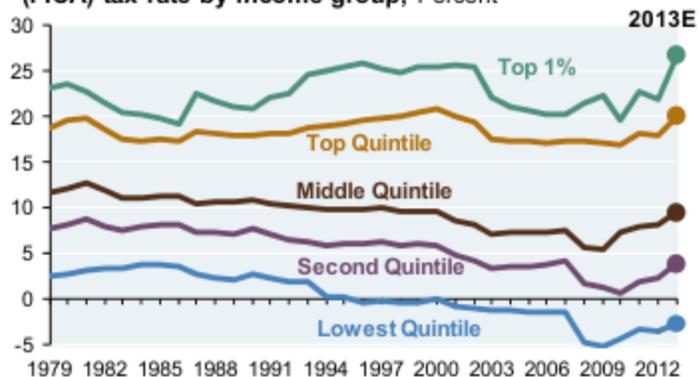
**Auto sales: U-turns and Down-turns**

Percent of total population, 3 month moving average



Source: BEA, Census Bureau, ECB, EuroStat.

**Average federal individual income and social insurance (FICA) tax rate by income group, Percent**



Source: CBO, TPC, JPMAM. Lowest quintile negative due to credits/transfers.

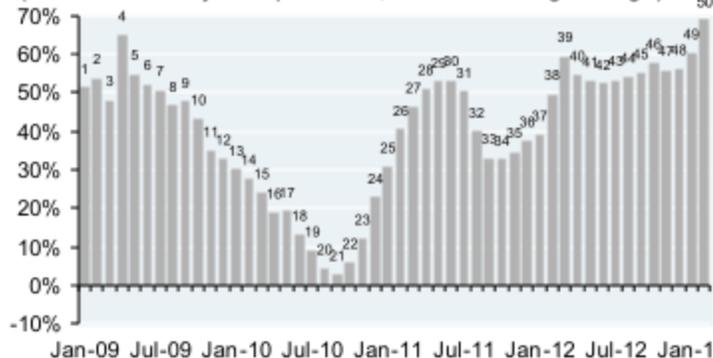
**Fifty Trades of Grey**

"I was always the cautious type. I would wait until other people jumped into a lake to make sure it was deep enough. I have never been on a motorcycle, and have never held or fired a weapon. I once rented a Maserati for a day to see what it was like, and drove under the speed limit the entire time. So, it's not surprising that by the fall of 2007, with mounting problems in housing, over-crowding in hedge fund strategies like statistical arbitrage and very low credit spreads, I got nervous and reduced portfolio risk heading into 2008. The following fall, after the collapse, I imagined a slow and steady approach to reinvesting. It would take time to rebuild confidence after the second 40% equity market decline in a single decade, right? After recessions in 1989 and 1999, you could take your time reinvesting in credit: high yield spreads remained elevated for 3 to 4 years, allowing for a long, relaxed period of risk-taking by investors with the wherewithal to have avoided some of it in the first place.

Then one day in early 2009, everything changed. The Fed Chairman's picture in the paper reminded me of a cross between Sean Connery and King Hussein of Jordan. His message was clear: he was going to shroud the markets in a warm embrace of unbounded, limitless liquidity. It was slow at first, but then appeared everywhere I looked, like an endless, pounding summer rain. The convertible bonds we bought in November 2008, and the commercial real estate-backed securities and leveraged loans we bought the following spring, rose in a passionate revival of credit markets. During the first few months of 2009, you could earn 10% or more on debtor-in-possession financing, and purchase private equity interests from overextended college endowments at steep discounts. But by the late summer, as the leaves turned, these opportunities began to fade as capital came back to credit markets. I held on tight, pulled in a convulsion of rising optimism and the search for yield.

That's ancient history now. For the last fifty months, the Fed has been buying Treasuries and Agencies, \$2.5 trillion in all (measured in 10-year equivalents). As the Fed ravishes the riskless debt markets, its demand now accounts for ~55% of the entire net supply issued by the Treasury, Ginnie Mae, Fannie Mae and Freddie Mac. My relationship with the Fed started to change: with its relentless debt purchases and 0% policy rates, the Fed apparently sees me as a rentier capitalist

**Fifty Trades of Grey: Fed purchases of Treasury and Agency securities, percent of total net supply issued (measured in 10-year equivalents, 6 month moving average)**



Source: Nomura Securities, Morgan Securities, LLC.

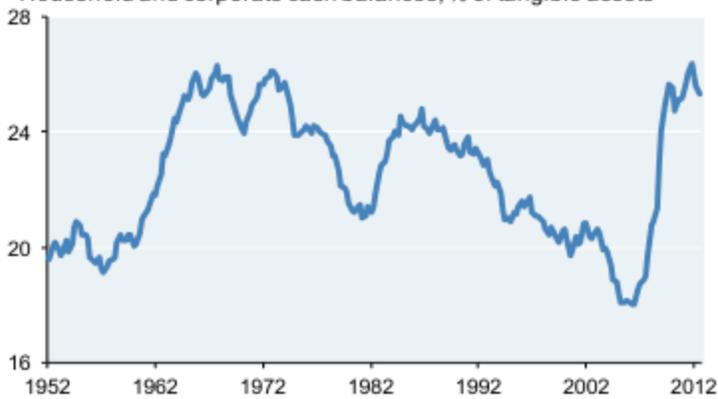


---

*Fifty Trades of Grey: an illustrated story of investment, temptation, addiction and the cost of money*

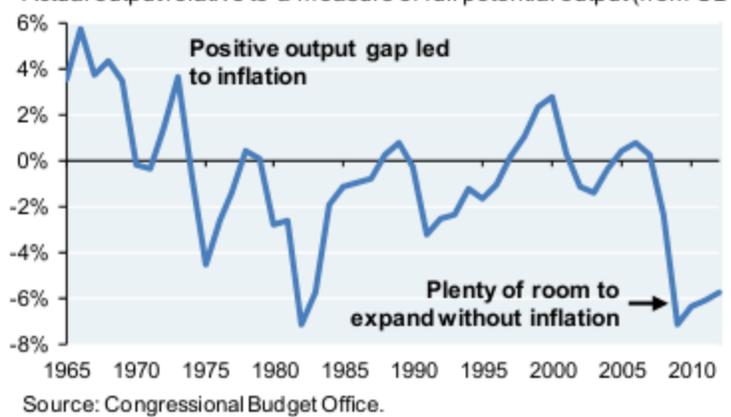
**Lots of cash, everywhere**

Household and corporate cash balances, % of tangible assets



**A proxy for spare capacity: the US output gap**

Actual output relative to a measure of full potential output (from CBO)

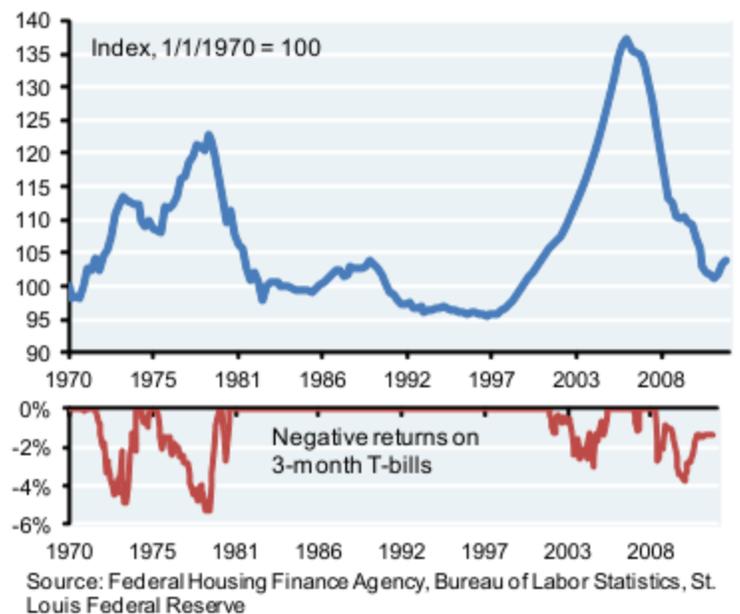


Nevertheless, the end of the affair will come one day, and probably when I am not expecting it. Since the Greenspan-Bernanke era of ultra-low policy rates began, the volatility of equities is even higher than before the creation of the Fed in 1913, when the US was beset by frequent recessions and depressions. So here I remain, trapped in a cycle of market passions that careen from sadness to ecstasy, and then back again. The ecstasy phase has more room to run for now, and we are seeing signs that ██████ activity (Berkshire Hathaway and 3G purchase of Heinz, Comcast purchase of GE assets, Liberty Media purchase of Virgin Global) and share repurchases are picking up, which is generally good for stocks. The Fed is looking for 'substantial' labor market improvement, which means there will probably be another 12 trades of grey before its purchases end. What kind of imbalances will grow during this time? When the Fed stops buying *riskless* securities, we will find out how ready *risky* securities are to stand on their own, and how addicted investors are to Fed support.

**I remember the last time I was in this kind of tangled, complicated relationship.** It was in 2003: the Fed set policy rates at 1%, below the rate of inflation<sup>6</sup>, and set in motion another cycle in which the value of cash was destroyed. Incredibly, investors in US T-bills earned returns below the rate of inflation until September 2005, which was well into the recovery and around the time the housing collapse began. Fed sponsorship of (another) housing boom<sup>7</sup> and the credit markets was great while it lasted, and I thought the affair would never end. But it did end, with sadness and with betrayal: when it came time for the Federal Reserve to warn me about possible consequences of surging home ownership costs, I didn't even get an email, or a salacious text. Instead, I read one day in the newspaper that the subprime issue was 'contained'. Love means never having to say you're sorry."

Michael Cembalest  
██████. Morgan Asset Management

**US home price to rent ratio, and periods of negative real interest rates**



<sup>6</sup> Inflation was at the same level in 2003 as it was in 1997, yet policy rates were 4.5% higher in 1997. This is a point that Stanford's **John Taylor**, a critic of current Fed policy, made last November at the *Centennial Celebration of Milton Friedman* at the University of Chicago.

<sup>7</sup> The Fed had plenty of company: homeowners, banks, mortgage originators and guarantors, broker-dealers, rating agencies, US government-sponsored enterprises, Congress, regulators and of course, the Department of Housing and Urban Development, which by the year 2000, required that 50% of all Fannie/Freddie origination went to affordable housing borrowers, which in turn resulted in a surge in 3% down-payments. There have been a lot of rule changes in the financial system in response: so far, Dodd-Frank is 34% complete and has generated over 11,000 pages of new regulations. On the other hand, half the volume of all home purchase loans from 2009 to 2011 were underwritten by the Federal Housing Administration, Veterans Affairs and the Department of Agriculture with average down-payments of.....3%.

**Fifty Trades of Grey: an illustrated story of investment, temptation, addiction and the cost of money**

BEA	Bureau of Economic Analysis
CMBS	Commercial mortgage backed securities
CLO	Collateralized loan issuance
CBO	Congressional Budget Office
FICA	Federal Insurance Contributions Act
QE	Quantitative easing
SOTU	State of the Union
TPC	Tax Policy Center (Brookings)

*IRS Circular 230 Disclosure: JPMorgan Chase & Co. and its affiliates do not provide tax advice. Accordingly, any discussion of U.S. tax matters contained herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with JPMorgan Chase & Co. of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties. Note that [redacted] Morgan is not a licensed insurance provider.*

*The material contained herein is intended as a general market commentary. Opinions expressed herein are those of Michael Cembalest and may differ from those of other [redacted] Morgan employees and affiliates. This information in no way constitutes [redacted] Morgan research and should not be treated as such. Further, the views expressed herein may differ from that contained in [redacted] Morgan research reports. The above summary/prices/quotes/statistics have been obtained from sources deemed to be reliable, but we do not guarantee their accuracy or completeness, any yield referenced is indicative and subject to change. Past performance is not a guarantee of future results. References to the performance or character of our portfolios generally refer to our Balanced Model Portfolios constructed by [redacted] Morgan. It is a proxy for client performance and may not represent actual transactions or investments in client accounts. The model portfolio can be implemented across brokerage or managed accounts depending on the unique objectives of each client and is serviced through distinct legal entities licensed for specific activities. Bank, trust and investment management services are provided by JP Morgan Chase Bank, [redacted], and its affiliates. Securities are offered through [redacted] Morgan Securities LLC (JPMS), Member NYSE, FINRA and SIPC, and its affiliates globally as local legislation permits. Securities products purchased or sold through JPMS are not insured by the Federal Deposit Insurance Corporation ("FDIC"); are not deposits or other obligations of its bank or thrift affiliates and are not guaranteed by its bank or thrift affiliates; and are subject to investment risks, including possible loss of the principal invested. Not all investment ideas referenced are suitable for all investors. Speak with your [redacted] Morgan Representative concerning your personal situation. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. Private Investments may engage in leveraging and other speculative practices that may increase the risk of investment loss, can be highly illiquid, are not required to provide periodic pricing or valuations to investors and may involve complex tax structures and delays in distributing important tax information. Typically such investment ideas can only be offered to suitable investors through a confidential offering memorandum which fully describes all terms, conditions, and risks. High yield bonds are speculative non-investment grade bonds that have higher risk of default or other adverse credit events which are appropriate for high-risk investors only. Investments in commodities carry greater volatility than investments in traditional securities. There are additional risks associated with international investing and may not be suitable for all investors. This material is distributed with the understanding that [redacted] Morgan is not rendering accounting, legal or tax advice. You should consult with your independent advisors concerning such matters.*

*Bank products and services are offered by JPMorgan Chase Bank, [redacted], and its affiliates. Securities are offered by [redacted] Morgan Securities LLC, member NYSE, FINRA and SIPC, and other affiliates globally as local legislation permits.*

*In the United Kingdom, this material is approved by [redacted] Morgan International Bank Limited (JPMIB) with the registered office located at 25 Bank Street, Canary Wharf, London E14 5JP, registered in England No. 03838766 and is authorised and regulated by the Financial Services Authority. In addition, this material may be distributed by: JPMorgan Chase Bank, [redacted] (JPMCB) Paris branch, which is regulated by the French banking authorities Autorité de Contrôle Prudentiel and Autorité des Marchés Financiers; [redacted] Morgan (Suisse) SA, regulated by the Swiss Financial Market Supervisory Authority; JPMCB Bahrain branch, licensed as a conventional wholesale bank by the Central Bank of Bahrain (for professional clients only); JPMCB Dubai branch, regulated by the Dubai Financial Services Authority.*

*In Hong Kong, this material is distributed by JPMorgan Chase Bank, [redacted] (JPMCB) Hong Kong branch except to recipients having an account at JPMCB Singapore branch and where this material relates to a Collective Investment Scheme (other than private funds such as private equity and hedge funds) in which case it is distributed by [redacted] Morgan Securities (Asia Pacific) Limited (JPMSAPL). Both JPMCB Hong Kong branch and JPMSAPL are regulated by the Hong Kong Monetary Authority.*

*In Singapore, this material is distributed by JPMCB Singapore branch except to recipients having an account at JPMCB Singapore branch and where this material relates to a Collective Investment Scheme (other than private funds such as a private equity and hedge funds) in which case it is distributed by [redacted] Morgan (S.E.A.) Limited (JPMSEAL). Both JPMCB Singapore branch and JPMSEAL are regulated by the Monetary Authority of Singapore.*

*With respect to countries in Latin America, the distribution of this material may be restricted in certain jurisdictions. Receipt of this material does not constitute an offer or solicitation to any person in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it would be unlawful to make such offer or solicitation.*

*Each recipient of this presentation, and each agent thereof, may disclose to any person, without limitation, the US income and franchise tax treatment and tax structure of the transactions described herein and may disclose all materials of any kind (including opinions or other tax analyses) provided to each recipient insofar as the materials relate to a US income or franchise tax strategy provided to such recipient by JPMorgan Chase & Co. and its subsidiaries. Should you have any questions regarding the information contained in this material or about [redacted] Morgan products and services, please contact your [redacted] Morgan private banking representative. Additional information is available upon request. "[redacted] Morgan" is the marketing name for JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide. This material may not be reproduced or circulated without [redacted] Morgan's authority. © 2013 JPMorgan Chase & Co. All rights reserved*

