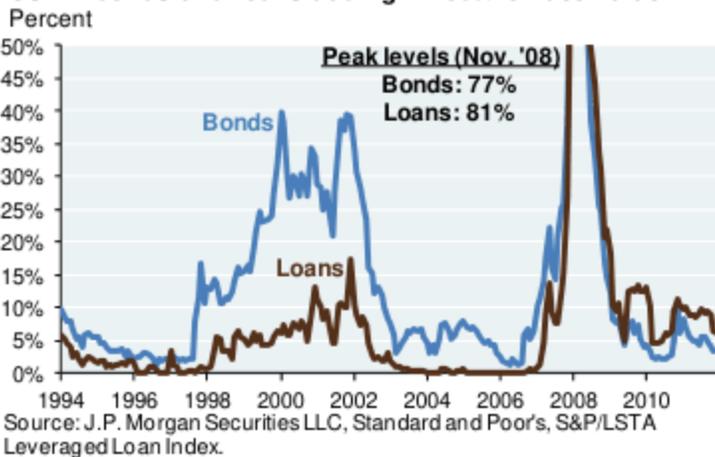


A case-dependent Thanksgiving for investors: credit, portfolio investing, cash, Congress, Iran and your blood pressure

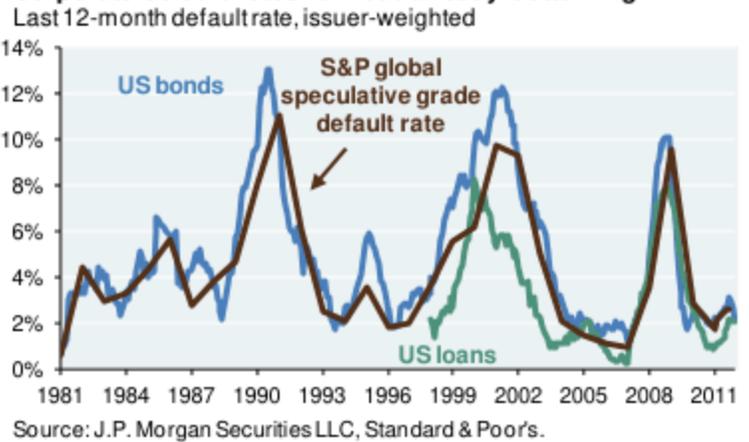
Be thankful for the Fed, if you invest in credit

You should be thankful for the Federal Reserve if you invest in credit. By reducing rates to zero, the Fed unleashed a wave of interest in a variety of credit products: high grade bonds, high yield, leveraged loans, municipals, asset-backed securities, mezzanine debt, other private credit and distressed debt. So far this year, distressed debt is at or near the top of the hedge fund total return tables I have seen; as shown in the 1st chart, the universe of high yield bonds and loans trading below a dollar price of 80 has declined again as the rising tide in credit has lifted all boats. Among the distressed debt winners in 2012: recoveries after liquidation (Lehman, MF Global); converted equity stakes obtained during a Chapter 11 reorg (Capmark, Delphi); and debt gains after a restructuring that avoided bankruptcy (Realty, Clear Channel, MGM). Corporate cash flow is generally in good shape, so the rally in spreads seems reasonable. In addition, the “quality” of the new issue market has been stable (20%-30% of all high yield issuance was rated B- or lower in 2011 and 2012, compared to 40%-60% during the credit bubble). However, given the rally in spreads, it looks like investors are in for carry instead of capital gains. In addition, while global and US default rates are low, they have already bottomed (2nd chart), and are expected to tick up by 0.5% or so in 2013. As a result, while we have been aggressive advocates of credit positions since the fall of 2008, return expectations have come down.

US HY bonds and loans trading <= 80% of face value



Corporate default rates low but already bottoming



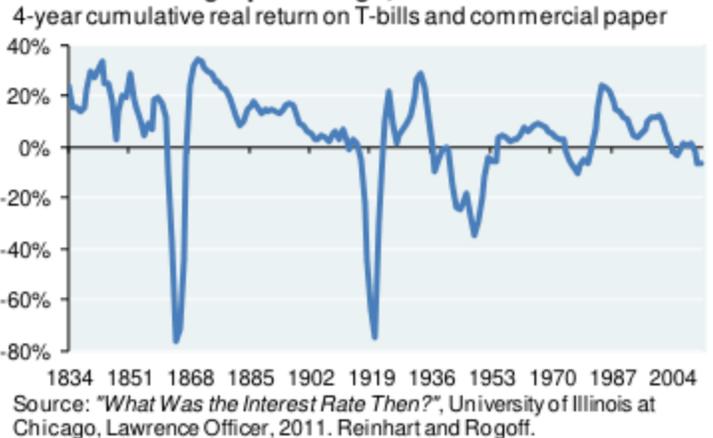
Be thankful for a long-term investment approach during the crisis; and that this cash-trashing era is not that bad (yet)

It hasn't been easy, but many portfolios that stuck to a balanced approach survived the crisis, and generated returns in excess of inflation. The 1st chart below shows a balanced portfolio comprised of various indices, rebalanced either quarterly or not at all. Owning enough duration in the wake of the crisis turned out to be critical, given the collapse in interest rates. Among the steps one might have taken to improve returns further: own less European or Japanese equities and more US or EM equities; and have a higher allocation to precious metals, which clobbered everything else. On cash: it is now presumed worthless given the level of rates. To be sure, cash has been losing purchasing power for 4 years running. However, **in the scheme of historical cash-trashing, this latest episode is not that bad.** As shown, there have been times when inflation completely destroyed the value of cash (Civil War, WWI, WWII and 1970's). In that context, losing 5%-10% purchasing power on cash over the last 4 years isn't that bad. However, it would be brave to even guess the *year* in which policy interest rates set by the Fed will rise again.

A balanced portfolio during and after the storm



As cash-trashing episodes go, this one is mild

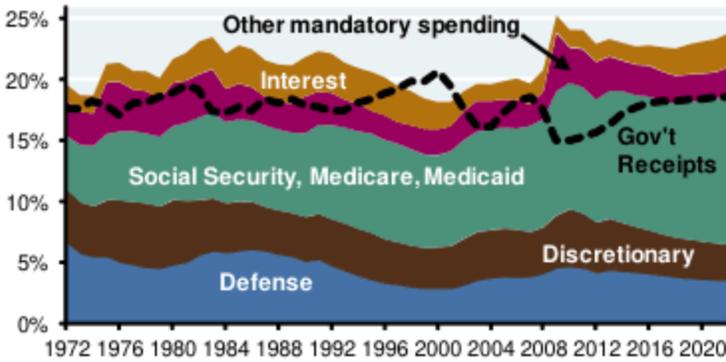


A case-dependent Thanksgiving for investors: credit, portfolio investing, cash, Congress, Iran and your blood pressure

Be thankful if you are not a member of the US Congress in the next 10 years...

...since you would have to figure this out whether you like it or not. Social Security, Medicare and Medicaid spending are gradually crowding out the kind of discretionary spending that help shape a country's future: energy, education at all levels, teacher and worker retraining, and ground and air transportation infrastructure. The table to the right of the chart below shows the OMB's estimated dollar amount for each category in 2017 relative to its historical peak. These declines are measured in nominal dollars, so in real terms the declines are even worse. Legislators could of course decide to raise taxes on the wealthy to pay for it all. However, to reduce the deficit to 3% by 2022 and not touch any of these expenditures, it would take a plan that raises (through tax rate increases and deduction curtailment) four times more revenue than the plan the President proposed to Congress last year. And then after 2022, entitlement spending accelerates again. This is the Boiling Frog problem that lay inside the budget projections. They don't call it the third rail of American politics for nothing.

The Boiling Frog
Percent of GDP



Source: CBO, OMB, J.P. Morgan Asset Management.

The crowding out of discretionary spending

| Category | Estimated 2017 level vs. historical peak |
|--------------------------------|--|
| Energy | 33% |
| Education | 69% |
| Teacher and worker retraining | 86% |
| Transportation infrastructure: | |
| Ground transportation | 4% |
| Air transportation | 9% |

Be thankful if you sit down for Thanksgiving a year from now, and the issue below has not yet erupted into conflict

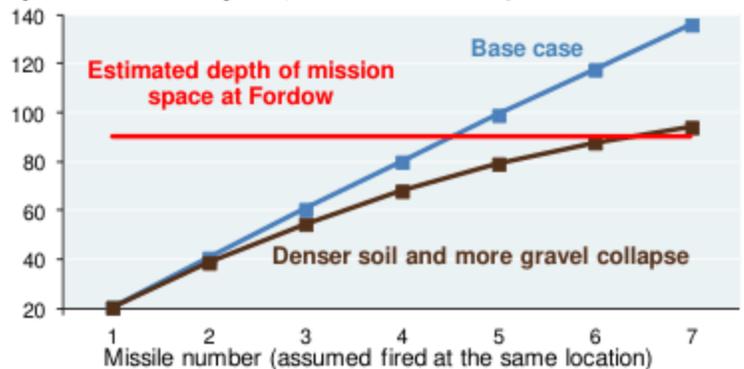
Despite crippling sanctions that appear to be causing substantial economic damage in Iran, such sanctions have not slowed the pace of uranium enrichment. If anything, the pace appears to be accelerating now that new facilities are on-line. As Henry Kissinger wrote last week, "once the requisite amount of fissile material has been produced, constructing and equipping a warhead is a relatively short and technologically straightforward process, almost certainly impossible to detect in a timely fashion". Over the last few months, almost all of our contacts in Washington have told us the same thing, which is that the US defense establishment has little interest in military confrontation with Iran, and has doubts about its effectiveness¹ were it to happen, even with the use of massive ordnance penetration bombs. But this issue could clearly take on a life of its own.

Iranian enrichment marches on despite crippling sanctions, 19.75% enriched uranium stockpile (kg)



Source: International Atomic Energy Agency, Bipartisan Policy Center.

Estimated penetration depth of massive ordnance penetration weapons, Cumulative meters penetrated



Source: Columbia University School of International and Public Affairs.

¹ The most powerful conventional weapon in the US arsenal is the Massive Ordnance Penetration device (MOP), a 30,000 pound bomb with 5,000 pounds of explosives. It travels at twice the speed of sound, and is designed to penetrate rock and concrete before detonating. However, it might require 4 MOPs, dropped in succession by B-2s in the same exact spot, to destroy Fordow. That's the base case that Austin Long at Columbia University walked me through (see bio in notes). His Fordow calculations are a function of soil hardness/density, the MOP's mass and impact velocity, its cone shape, and the percentage of each penetration that collapses back in as "spoil", blocking the hole created by previous weapons. Higher soil density and gravel collapse estimates could require 2-3 more MOPs, as indicated in the chart.

A case-dependent Thanksgiving for investors: credit, portfolio investing, cash, Congress, Iran and your blood pressure

Home for the Holidays

The holiday season is approaching, which some people describe as being more stressful than it sounds given family dynamics. Here's something to help you get through it: evidence that forgiveness is good for your health. People who demonstrate high scores on a Forgiving Personality Inventory measure and an Acts of Forgiveness scale also show considerably less stress, measured by the product of one's heart rate and systolic blood pressure. The evidence is from a study in which participants were asked to talk about instances of family betrayal involving a relative. Their physiological measurements were taken at different times during the interview, and are plotted in the chart.

Have a good start to the holiday season.

Michael Cembalest
J.P. Morgan Asset Management

Notes. Austin Long is an Assistant Professor at the School of International and Public Affairs and a Member of the Arnold A. Saltzman Institute of War and Peace Studies at Columbia University. Long previously worked at the RAND Corporation where he authored reports for the Carnegie Corporation, Marine Corps Intelligence Activity, and the Office of the Secretary of Defense. While at RAND, he was an analyst and adviser to Multinational Force Iraq's Task Force 134/Detention Operations and the I Marine Expeditionary Force. In 2011 he was an analyst and adviser to Combined Forces Special Operations Component Command Afghanistan.

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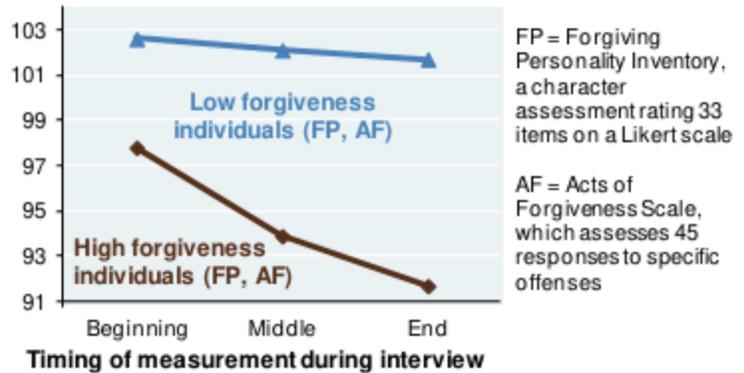
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Product of heart rate and blood pressure



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