# The US Fiscal Cliff

## The US Fiscal Cliff – When Economists Recklessly Endanger the Economy

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The economic story line throughout 2012 was the terrible, indiscriminate spending cuts and major tax hikes to be visited on the US economy by squabbling politicians. These spending cuts were going to 'kill the economy', and not *via* a relaxing overdose of morphine, but by pushing it over a towering cliff and letting it plunge miles to an excruciating death.

The principal storyteller was Federal Reserve Chairman, Ben Bernanke. On 29 February 2012, Chairman Bernanke testified to Congress that, "Under current law, on 1 January 2013, there's going to be a massive fiscal cliff of large spending cuts and tax increases", Chairman Bernanke told the House Financial Services Committee.

On 7 June 2012, Chairman Bernanke again testified that, "A severe tightening of fiscal policy at the beginning of next year that is built into current law – the so-called fiscal cliff – would, if allowed to occur, pose a significant threat to the recovery".

On 12 December 2012, Chairman Bernanke testified that, "We cannot offset the full impact of the fiscal cliff. It's just too big. I hope it won't happen, but if the fiscal cliff occurs, as I've said many times, I don't think the Fed has the tools to offset that event".

### Coordinating coordination failure

The 'many times' that Chairman Bernanke spoke the words 'fiscal cliff' during the course of 2012, produced an enormous number of repetitions of the term – by the media, politicians, economists, financial analysts, policymakers, commentators, and everyday citizens. It was hard to turn on the radio and not hear about the economy's impending demise.

Given the vast literature on sunspots and coordination failures, the first question one should ask about the fiscal cliff episode is whether Chairman Bernanke engaged in reckless endangerment of the economy?

In this day and age, where every sentence is put through a political filter, let me quickly point out that I raise this question with no animus toward the Fed Chairman. On the contrary, I consider Ben Bernanke a friend, deeply respect his academic contributions, and greatly admire certain aspects of his job performance.

But we economists, including Chairman Bernanke, must admit that we have a very weak handle on what really drives the economy. We have outdated Keynesian models that rely on questionable assumptions about wage and price stickiness. We have highly unrealistic real business cycle models that sweep most economic questions under a productivity shock rug. We have a collection of stories about bubbles and overheated credit markets and irrational actors that we tell as the need for a good tale arises. And we have admittedly highly stylized models of multiple equilibria, but ones that convey a stern warning, to wit: *telling everyone the economy is collapsing can lead the economy to collapse.*

The economy, after all is driven, in the US case, by millions of small and large businesses that have no real idea what each of their fellow companies is planning to do when it comes to retaining workers and hiring new ones. But other firms' existing workers and new hires constitute the current and prospective customers for one's own firm, and the prospect of those customers losing their jobs and, thus, not showing up can promote defensive firing of one's own workers, which, of course, constitute other firms' customers. This individually rational, but col-

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lectively irrational action, then produces the heralded recession.

After the economy has gone down the tubes, those ringing the alarm based on whichever pet theory they worship will be conveniently positioned to say, "See, I told you so. My theory that connected spending cuts and tax hikes to the economy's tanking was right".

Chairman Bernanke's pronouncements of doom, as well as the concomitant piling on of far too many macro economists in and out of government, is reminiscent of the aftermath of Lehman's collapse in 2008, when Chairman Bernanke and then Treasury Secretary Hank Paulson helped spook the economy into hysteria over the next Great Depression. They certainly spooked President Bush, who told Congressional leaders, "This sucker could go down". And they spooked Senator McCain, who temporarily cancelled his Presidential campaign to save the economy. Both of these displays of fear and those of other politicians, media members, commentators, and economists transformed fear into the most important thing to fear.

The press had a field day, Google searches of 'Great Depression' skyrocketed, and employers decided the safe bet was to cut their possible losses by laying off hordes of employees. Over the next 19 months, 8.5 million US workers were shown the door. Had all these workers been terminated on 16 September, the day after Lehman went under, it would have been much clearer that the economy had coordinated on a bad equilibrium. (Full disclosure, coordination failure is my preferred theory of what drives most macroeconomic fluctuations.) Unfortunately, the unemployment occurred over time, permitting macroeconomists to either find data supportive of their favorite models or, at least, prevent coordination failure from being as obvious as I view it to be.

### The hysterical economy

In the case of the fiscal cliff, the hysteria seemed particularly crazy, making the Chairman's endangerment of the economy that much more reckless. After all, at issue was the enactment of the Budget Control Act that had been passed 15 months before it was to be implemented, giving the economy considerable time to adjust. After all, the 'tax hikes' included in the fiscal cliff were reinstatements of tax provisions that had been in place during the 1990s, when the economy performed very well. After all, the 'tax hikes' were disproportionately focused on the rich who knew they were coming and were likely to maintain their spending. After all, the federal discretionary spending cuts entailed, for 2013, a reduction of only 0.6 percent of GDP. After all, federal discretionary spending had been cut by 1 percent of GDP between 2011 and 2012 without killing the economy. After all, the new law would be phased in over 10 years. After all, while official debt would, due to the fiscal cliff legislation, rise more gradually than would otherwise occur, unofficial debt would, as projected by the CBO, continue to grow at leaps and bounds. After all, the economy was no longer in recession, workers weren't demanding outsized wages, and companies weren't jacking up their prices, meaning there was reason to think that the economy could, as needed, shift from spending to saving and investing. After all, the economy had performed just fine in the 1950s when the saving rate reached 15 percent compared to the 2012 rate of just 1 percent, so there was clearly no basis for suggesting the spending every last dollar the economy produces is required to keep it producing. And the list goes on.

Along with the lack of a strong empirical basis for scaring the economy, neither Chairman Bernanke, nor Paul Krugman, nor other harbingers of economic doom provided a clear theory of why restoring taxes to prior levels or modestly cutting some types of spending would be so dangerous.

In any event, the fiscal cliff arrived after a last minute modification of the scheduled tax hikes and some spending provisions. These changes, at most, lowered the 'towering' cliff's height by roughly one third, but presumably leaving it high enough to seriously maim, if no longer completely destroy the economy. But, surprise, surprise, it did neither. First quarter 2013 US GDP growth was 2.4 percent and GDP growth is projected to be decent for the rest of 2013 and all of 2014.

Interestingly, the economy did very poorly in the 4th quarter of 2013, when it grew at only 0.4 percent, down from 3.1 percent in the 3rd quarter. This suggests that it was the fear of an impending recession, not the actual scheduled fiscal policy changes, which mattered. Once Congress passed its bill, on Christmas Eve, everyone was free to again coordi-

nate on good times, even although the actual bill did not greatly reduce the size of the cliff!

Indeed, if the public expected to face, in present value terms, the same taxes no matter when they were going to be raised, the Christmas Eve legislation arguably had no effect on the size of the fiscal cliff because the government's discretionary spending cuts it included were virtually all retained, and the changes in taxes didn't represent a change in anyone's, or many persons', lifetime resources relative to what they expected.

Stated differently, on Christmas Eve everyone declared there was no longer a fiscal cliff even though relatively little or nothing changed with respect to the policy that went into effect the next day. But since everyone was concerned not about the policy *per se,* but about whether everyone else was concerned, the collective decision to pretend the policy was no longer occurring was all it took to turn the economy around.

In short, we have a hysterical economy, and one that policymakers should think many times over about scaring. But the real damage associated with Chairman Bernanke's decision to proclaim throughout the land and to all the inhabitants there of that fiscal tightening was going to push the economy over the cliff has been to give politicians another free pass to avoid enacting responsible fiscal reforms.

**Fiscal child abuse**

The officially orchestrated hue and cry about the fiscal cliff provided a perfect sideshow to distract attention from the politicians' main objective – engaging in yet more fiscal child abuse. Like all budget 'fights' over the last 40 years in which contemporaneous 'adult' generations come up with excuses for far more spending and far less taxes than our children can afford, this pretend battle left the American dream where it found it – down the tubes.

This year's official deficit will, according to the CBO, total 642 billion US dollars, or 4 percent of GDP. That sounds like progress compared with, say, the 2009 deficit of 1.4 trillion US dollars that totaled 10 percent of GDP. But the official deficit measures only the increase in official debt. What it misses is the massive annual increases in our government's unofficial debts.

Take a look at the finances of the next American retiree you encounter. That person is collecting Social Security, Medicare, and Medicaid benefits that will average, this year, over 30,000 US dollars. That person and the 33 million retirees like him have been promised these benefits for the rest of their lives. This is a massive debt that's as real, indeed far more real, and far greater than the 11 trillion US dollars in Treasury bills and bonds held by the public.

Now look at the next baby boomer you see. There are 78 million of these folks. By the time they all demand their promised benefits, the average benefit level will be 40,000 US dollars, in today's dollars. Paying this obligation will cost *3 trillion US dollars per year* – another colossal debt that Uncle Sam has kept off his books.

Now take a peek at the US defense budget. Yes, it's being cut. But the US fully intends to spend more than the next 10 countries combined for the indefinite future. That's an obligation that's also hidden from view in an accounting system that does Charles Ponzi, Jed Shilling, and Bernie Madoff proud.

**The US fiscal gap**

The fiscal gap – the present value difference between *all* projected future spending (including official debt service of the outstanding debt) and *all* projected future taxes – leaves nothing off the books. In 2012, the US fiscal gap was 222 trillion US dollars. That's a big number compared to the 2012 stock of official debt held by the public, which totaled 11 trillion US dollars.

The US fiscal gap is not only massive. It's growing like crazy. In 2011 the US fiscal gap was 211 trillion US dollars. Hence, the one-year growth in the fiscal gap almost exceeded total official federal debt in the hands of the public!

The fiscal gap grew, in large part, because unlike Treasury bonds, future spending commitments, like Social Security benefit commitments to baby boomers, are, in effect, zero coupon bonds that don't pay interest. And the closer one gets to getting paid these

big payments, the larger is the present value of the obligation.

Scaled by GDP, the United States appears to have the largest fiscal gap of any developed country. That should give anyone buying US Treasury bond considerable bonds, but, as an American, let me say, "Be our guest".

The US fiscal gap represents 12 percent of the present value of US GDP. Hence, eliminating it requires annual tax increases or spending cuts totaling 12 percent of annual GDP. For 2013, this means not running a deficit of 4 percent of GDP, but running a surplus of 8 percent of GDP!

Raising 12 percent of GDP *via* tax hikes requires an immediate and permanent 64 percent increase in all federal taxes, or an immediate and permanent 40 percent cut in all federal discretionary spending and transfer payments. Some combination of these awful medicines is also feasible. But no such medicine is evenly remotely being contemplated in the United States. Instead, all the focus is on the official deficit and whether it is too small. And all thanks goes here to Chairman Bernanke and those other economists who continue to discuss fiscal policy using indicators, like the size of the official deficit, that have absolutely no basis in economic theory.

**Economics labeling problem**

How is it that some obligations get recorded as official debt and others do not? Is there an economic rationale for the distinction? The answer is no. Nothing in neoclassical economics tell us whether to label a government receipt as 'borrowing' or 'taxes'. And nothing tells us whether to label a government payment to the public as 'repayment of principal plus interest' or as a 'transfer' payment. This is not surprising. After all, our models don't tell us whether the agents in the models should speak French rather than English when they discuss their economy.

I've been pounding away for decades on the theme that conventional fiscal measures and measures that depend on conventional fiscal measures, including the official debt, deficit, taxes, transfer payments, disposable income, private saving, personal saving, government saving, private wealth, and government wealth, are not economically well defined. Rather they are a reflection of economically arbitrary decisions about how we label government receipts and payments.

I first made this point, in 1984 in a Public Interest article, entitled 'Deficit Delusion'. Discussions of the point appeared as a chapter in my 1987 book with Alan Auerbach, *Dynamic Fiscal Policy*, in an article for Science in 1988, and in my chapter in the 2002 Handbook of Public Economics, volume 4, entitled *Generational Policy*. The broadest treatment of the issue appears in a 2008 paper with Jerry Green, entitled, provocatively, 'On the General Relativity of Fiscal Language'.

And I've written other articles, book, and op eds over the years that assert, in effect, that the fiscal half of national income accounting has no clothes, and that using conventional fiscal measures to assess the sustainability of fiscal policy or its generational implications is no different from driving in Los Angeles with a map of New York.

This is why I find it so galling and depressing that professional economists, including Chairman Bernanke and current and past heads of the Council of Economic Advisors and the National Economic Council, continue to discuss fiscal policy using measures that have nothing intrinsically to tell us about the stance of fiscal policy.

The fiscal gap, on the other hand, as well as generational accounting, provide label-free measures of fiscal policy. Any internally consistent set of fiscal labels will produce the same measure of the fiscal gap, provided the fiscal gap is calculated over the infinite horizon, and the same implied future fiscal burdens on newborns and future generations from maintaining current policy for those now alive.

**Beyond fiscal gap and generational accounting**

This does not make fiscal gap accounting or generational accounting perfect measures of our fiscal future. Both work off the government's intertemporal budget constraint, which must hold along any realized path of the economy. But in a world of uncertainty, which path the economy will take is both unknown and unknowable.

If the economy were characterized by a complete contingent claims market, the government's intertemporal budget would require that the value of state-contingent government purchases of goods and services would equal the value of state-contingent claims on resources from the private sector. In such a world, the state-specific prices at which to value contingent purchases and claims would be clear and one could ask whether, at prevailing state-contingent prices, a given state-contingent policy leaves a gap between the present value cost of the state-contingent policy and the present value of state-contingent claims available to pay for the policy; i.e. one would do fiscal gap and generational accounting with appropriate state-contingent discount rates.

Ignoring future uncertainty and discounting future government cash flows using a fixed, in my own case, 3 percent real, discount rate, is, therefore, questionable. It could, in fact, lead to an understatement of our fiscal gap. Alex Blocker, Steve Ross, and I made this point in a recent NBER working paper. The reason adjusting discount rates for risk could well raise the size of the fiscal gap is because future government's expenditures appear to be safer than future revenues.

Unfortunately, we don't live in a world of complete contingent markets and using arbitrage pricing theory or other asset-pricing modalities to approximate such markets remains a work in progress.

Another approach is to assessing fiscal policy that accommodates incomplete markets is to simulate large scale life-cycle models experiencing macroeconomic shocks to the economy. In a recent paper, Jasmina Hasanhodzic and I simulate a model with 80-periods (adults living from ages 20 to 100) that has aggregate shocks. The model overcomes the curse of dimensionality using a new algorithm by Judd, Maliar, and Maliar (2009 and 2011) that builds on Marcet (1988). The trick is to restrict the model's solution to its ergodic set.

Ours is the first large-scale life-cycle model to be solved with so many periods that doesn't rely on local approximations. So work with such models has just been born. But over time, economists will be able to produce more and more sophisticated versions of the model and use them to perform Monte Carlo simulations that show how fiscal policy affects the distributions of the economy's future paths and the distributions of current and future generations' levels of welfare. Ideally, such models would accommodate shocks that permit the economy to coordinate on bad as well as good times.

How would such models reveal policies that were unsustainable? They'd do so by not behaving. Specifically, they would refuse to converge to a solution. This is the message I and others have learned simulating dynamic life-cycle models without aggregate shocks. If you push their fiscal policies too hard, the convergence algorithms will no longer function. In work with Hans Fehr and Sabine Jokisch (Fehr, Jokisch and Kotlikoff 2008), we found that pushing the US fiscal policy even a tad farther than is now projected precludes finding a solution, at least with our conventional convergence algorithm.

**The responsibility of economists**

Macroeconomists, especially those in high office, need to be very careful not to drink their own Kool Aid. Every macroeconomist seems to know for sure what's the true model. But there is too little supporting evidence to justify such religious attachments to any given set of equations, let alone risk the economy's well being on one's enlightenment.

The one thing macroeconomists should keep front and center is what they don't know, and one of those things they don't know is the degree to which the economy can be talked into bad times. Chairman Bernanke did his level best. He spent all of 2012 playing dice with the economy's equilibrium (and he's been spending the last few years playing even higher stakes poker with the economy's money supply and future inflation rate). But Chairman Bernanke didn't have a major banking failure to support his declaration that the sky was failing in – and all because the government was going to take a mini step to resolving its 222 trillion US dollar fiscal gap. On the other hand, had Congress not acted on Christmas Eve to 'save the day', the Chairman might have succeeded in getting the economy to kill itself. We'll never know.

What the Chairman did was to convince the politicians, who needed no convincing, and the adult US public, which seems not to give a damn for its children, that, yet again, this was no time to engage in fiscal restraint, no matter how modest and insuffi-

cient relatively to the immense fiscal crisis facing the United States.

Truth be told, it is hard to estimate the size of the fiscal tsunami that is about to hit the United States and other rapidly aging developing countries that have spent decades letting their oldsters play take-as-you-go with their youngsters. But we economists, including those in power, should know it's a killer. We should also know that using absolutely meaningless deficit measures to pretend it's not there, or is smaller than it seems to be, or is off in the distant future and can be dealt with later constitutes one thing and one thing only – professional malpractice.

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