

Growing Risks to the Budget and the Economy.
Testimony of John H. Cochrane before the House Committee on Budget.
September 14 2016

Chairman Price, Ranking Member Van Hollen, and members of the committee: It is an honor to speak to you today.

I am John H. Cochrane. I am a Senior Fellow of the Hoover Institution at Stanford University¹. I speak to you today on my own behalf on not that of any institution with which I am affiliated.

Sclerotic growth is our country's most fundamental economic problem². From 1950 to 2000, our economy grew at 3.6% per year³. Since 2000, it has grown at barely half that rate, 1.8% per year. Even starting at the bottom of the recession in 2009, usually a period of super-fast catch-up growth, it has grown at just over 2% per year. Growth per person fell from 2.3% to 0.9%, and since the recession has been 1.3%.

The CBO long-term budget analysis⁴ looks out 30 years, and forecasts roughly 2% growth. On current trends that is likely an over-estimate, as it presumes we will have no recessions, or that future recessions will not have the permanent effects we have seen of the last several recessions. If we grow at 2%, the economy will expand by 82% in 30 years, almost doubling⁵. But if we can just get back to the

¹ You can find a full CV, a list of all affiliations, and a catalog of written work at <http://faculty.chicagobooth.edu/john.cochrane/index.htm>.

² This testimony summarizes several recent essays. On growth and for an overview, see "Economic Growth." 2016. In John Norton Moore, ed., *The Presidential Debates* Carolina Academic Press p. 65-90.
http://faculty.chicagobooth.edu/john.cochrane/research/papers/cochrane_growth.pdf; "Ending America's Slow-Growth Tailspin." *Wall Street Journal*, May 3 2016.
<http://www.wsj.com/articles/ending-americas-slow-growth-tailspin-1462230818>, and "Ideas for Renewing American Prosperity" *Wall Street Journal* July 4 2014.
<http://online.wsj.com/articles/ideas-for-renewing-american-prosperity-1404777194>.

³ <https://fred.stlouisfed.org/series/GDPCA>, Continuously compounded annual rates of growth. Per capita <https://fred.stlouisfed.org/series/A939RX0Q048SBEA>

⁴ <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51580-LTBO-2.pdf>

⁵ $100 * \exp(30 \times 0.02) = 182$. $100 * \exp(30 * 0.035) = 286$.

3.6% postwar normal growth rate, the economy will expand by 194%, almost tripling instead. We will add the entire current US economic output to the total. In per-person terms, a 1.3% trend gives the average American 48% more income in 30 years. Reverting to the postwar 2.3% average means 99% more income, twice as much. And economic policy was not perfect in the last half of the 20th century. We should be able to do even better.

Restoring sustained, long-term economic growth is the key to just about every economic and budgetary problem we face.

Nowhere else are we talking about doubling or not the average American's income⁶.

Nowhere else are we talking about doubling or not Federal revenues. Long-term Federal revenues depend almost entirely on economic growth. In 1990, the Federal Government raised \$1.6 trillion inflation-adjusted dollars. In 2016, this has doubled to \$3.1 trillion. Wow! Did the government double tax rates? No. The overall federal tax rate stayed almost the same – 18.0% of GDP in 1990, 18.8% of GDP today. *Income* doubled.

Whether deficits and debt balloon, whether we our government can pay for Social Security and health care, defend the country, and fund other goals such as protecting the environment, depend most crucially on economic growth.

Why has growth halved? Some will tell you that the economy is working as well as it can, but we've just run out of new ideas.⁷ A quick tour of the Silicon Valley makes one suspicious of that claim.

Others will bring you novel and untested economic theories: we suffer an ill-defined "secular stagnation" that requires massive borrowing and spending, even wasted spending. The "multiplier" translating government spending to output is not one and a half, and a temporary expedient which can briefly raise the level of income in a depression, but six or more, enough to finance itself by the larger tax revenues which larger output induces – a proposition long derided of the "supply side" – and

⁶ As an example of agreement on the fundamental importance of growth among economists of all political leanings, see Larry Summers, "The Progressive Case for Championing Pro-Growth Policies," 2016.

<http://larrysummers.com/2016/08/08/the-progressive-case-for-championing-pro-growth-policies/>

⁷ For an excellent recent exposition of this view, see Robert J. Gordon, *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War*. Princeton University Press 2016. <http://press.princeton.edu/titles/10544.html>

it can now kick off long-term growth⁸. Like 18th century doctors to whom disease was an imbalance of humors, modern macroeconomic doctors have one diagnosis and remedy for all the complex ills that can befall a modern economy: “demand!”

I’m here to tell you the most plausible answer is simple, clear, sensible, and much more difficult. Our legal and regulatory system is slowly strangling the golden goose of growth. There is no single Big Fix. Each market, industry, law, and agency is screwed up in its own particular way, and needs patient reform.

America is middle aged, out of shape and overweight. One voice says: well, get used to it, buy bigger pants. Another voice says: 10 day miracle detox cleanse! I’m here to tell you that the only reliable answer is good old-fashioned diet and exercise.

Or, a better metaphor perhaps: our economy, legal and regulatory system has become like a hoarder’s house. No, there isn’t a miracle organizer system. We have to patiently clean out every room.

Economic regulation, law and policy all slow growth by their nature. Growth comes from new ideas, new products, new processes, new ways of doing things, and most of these embodied in new companies. And these upend old companies, and displace their workers, both of whom come to Washington pleading that you save them and their jobs. It is a painful process. It is natural that the administration, regulatory agencies, and you, listen and try to protect them. But every time we protect an old company, an old industry, or an old job, from innovation and competition, we slow down growth.

How do we solve this problem and get back to growth? Our national political and economic debate has gotten stale, each side repeating the same base-pleasing talking points, but making no progress persuading the other. Making one or the other points again, or louder, will get us nowhere. I will try, instead, to find policies that think outside of these tired boxes, and that can appeal to all sides of the political spectrum.

Rather than “more government” or “less government,” let’s focus on *fixing* government. We need above all a grand simplification of our economic, legal, and political life, so that government does what it does competently and efficiently.

⁸ An influential example of these views, including self-financing stimulus: J. Bradford DeLong and Lawrence H. Summers, “Fiscal Policy in a Depressed Economy” *Brookings Papers on Economic Activity*. Spring 2012.

<https://www.brookings.edu/bpea-articles/fiscal-policy-in-a-depressed-economy/>.

Interestingly, DeLong and Summers condition their view on interest rates stuck at zero, a cautionary limitation that current stimulus advocates seem to have forgotten.

Regulation: fix the process.

“There’s too much regulation, we’re stifling business. No, there’s too little regulation, businesses are hurting people.” Or so goes the tired argument. Regulation *is* strangling business investment, and especially the formation of new businesses. But the main problem with regulation is *how* it’s done, not *how much*. If we *fix* regulation, the quantity will take care of itself. We can agree on smarter regulation, better regulation, not just “more” or “less” regulation⁹.

Regulation is too discretionary – you can’t read the rules and know what to do, you have to ask for permission granted on regulators’ whim. No wonder that the revolving door revolves faster and faster, oiled by more and more money.

Regulatory decisions take forever. Just deciding on the Keystone Pipeline or California’s high speed train – I pick examples from left and right on purpose – takes longer than it did to build the transcontinental railroad in the 1860s. By hand.

Regulation has lost rule-of-law protections. You often can’t see the evidence, challenge witnesses, or appeal. The agency is cop, prosecutor, judge, jury and executioner all rolled in to one.

Most dangerous of all, regulation and associated legal action are becoming more politicized. Each week brings a new scandal. Last week¹⁰, we learned how the Government shut down ITT tech, but not the well-connected Laureate International. The IRS still targets conservative groups¹¹. The week before, we learned how the company that makes Epi-pens, headed by the daughter of a Senator, got the FDA to block its competitors, Congress to mandate its products, and jacked up the price of an item that costs a few bucks to \$600. This is a bi-partisan danger. For example, presidential candidate Donald Trump has already threatened to use the power of the government against people who donate to opponents’ campaigns¹².

⁹ See “Rule of Law in the Regulatory State.” 2015.
http://faculty.chicagobooth.edu/john.cochrane/research/papers/rule_of_law_and_regulation_essay.pdf

¹⁰ <http://www.wsj.com/articles/the-clinton-for-profit-college-standard-1473204250>

¹¹ <http://www.washingtontimes.com/news/2016/sep/7/irs-refuses-to-abandon-targeting-criteria-used-aga/>

¹² <http://www.usatoday.com/story/news/politics/onpolitics/2016/02/22/trump-ricketts-family-better-careful/80761060/>

America works because you can lose an election, support an unpopular cause, speak out against a policy you disagree with, and this will not bring down the attentions of the IRS, the EPA, the NLRB, the SEC, the CFPB, the DOJ, the FDA, the FTC, the Department of Education, and so forth, who can swiftly put you out of business even if eventually you are proven innocent, or just slow-roll your requests for permissions until you run out of money.

This freedom does not exist in much of the world. The Administrative state is an excellent tool for cementing power. But when people can't afford to lose an election, countries come unglued. Do not let this happen in the US.

Congress can take back its control of the regulatory process. Write no more thousand-page bills with vague authorizations. Fight back hard when agencies exceed their authorization. Insist on objective and retrospective cost benefit analysis. Put in rule-of law protections, including discovery of how agencies make decisions. Insist on strict timelines – if an agency takes more than a year to rule on a request, it's granted.

Health care and finance are the two biggest new regulatory headaches. The ACA and Dodd-Frank aren't working, and are important drags on employment and economic growth. Simple workable alternatives exist. Implement them.

The real health care problem is not how we pay for health care, but the many restrictions on its supply and competition¹³. If hospitals were as competitive as airlines, they would work darn hard to heal us at much lower – and disclosed! – prices. If the FDA did not strangle new medicines and devices, even generics, prices would fall.

Competition is always the best disinfectant, guarantor of good service and low prices. Yet almost all uncompetitive markets in the US are uncompetitive because some law or regulation keeps competitors out.

Rather than guarantee bank debts, and unleash an army of regulators to make sure banks don't risk too much, we should instead insist that banks *get* their money in ways that do not risk crises, primarily issuing equity and long-term debt. Then banks can fail just like other companies, and begin to compete just like other companies¹⁴.

¹³ See "After the ACA: Freeing the market for health care." 2015. In Anup Malani and Michael H. Schill, Eds. *The Future of Healthcare Reform in the United States*, p. 161-201, Chicago: University of Chicago Press.
http://faculty.chicagobooth.edu/john.cochrane/research/papers/after_aca_published.pdf

¹⁴ See "Toward a run-free financial system." 2014. In *Across the Great Divide: New Perspectives on the Financial Crisis*, Martin Neil Baily and John B. Taylor, Editors,

“The planet is dying, control carbon!” “Your crony energy boondoggles and regulations are killing the economy!” Well, that argument is not getting us anywhere, is it? The answer is straightforward: A simple carbon tax *in exchange for* elimination of all the growth-killing, intrusive, cronyist, and ineffective micromanagement. We can continue to argue about the rate of that tax, but it will both reduce more carbon, and increase more growth, than the current ineffective policies – and stagnant debate.

None of these recommendations are ideological or partisan. These are just simple, clean-out-the-junk, workable ways to get our regulatory system to actually work, for its goal of protecting consumers and the environment, at minimal economic and political damage.

Social programs: Fix the incentives.

“Cut spending, or the debt will balloon!” “Raise spending or people will die in the streets!” That’s getting nowhere too. And it ignores central problems.

In many social programs, if you earn an extra dollar, you lose a dollar or more of benefits. Many programs have cliffs, especially in health care and disability, where earning one extra dollar triggers an enormous loss. Even when one program cuts benefits modestly with income, the interaction of many programs makes work impossible¹⁵. No wonder that people become trapped. We need to fix these disincentives. Doing so will help people better. If we fix the incentives, though it may look like we spend more, in the end we will spend less – and encourage economic growth as well as opportunity.

Spend more to spend less. “Spending is out of control! We need to spend less or there will be a debt crisis!” “Oh there you go being heartless again. We need to invest more in programs that help Americans in need.” I feel like I’m at a dinner party hosted by a couple in a bad marriage. This isn’t getting us anywhere.

It is important to limit Federal spending. However, we tend to just limit the appearance of spending by moving the same activities off the books. Off-the-books spending does the same economic damage. Or more.

Stanford: Hoover Institution Press, p. 197-249.

<http://faculty.chicagobooth.edu/john.cochrane/research/papers/across-the-great-divide-ch10.pdf>, and “A Blueprint for Effective Financial Reform.” 2016. In George P. Shultz, ed, *Blueprint for America* Hoover Institution Press, p. 71 - 84.

http://faculty.chicagobooth.edu/john.cochrane/research/papers/george_shultz_blueprint_for_america_ch7.pdf

¹⁵ See Casey Mulligan *The Redistributon Recession*, Oxford University Press 2012.

For example, we allow an income tax deduction for mortgage interest, in order to subsidize homeownership. From an economic point of view, this is exactly the same thing as collecting higher taxes, and then sending checks to homeowners. It *looks* like we're taxing and spending less than we really are. But from an economic growth point of view, it's the same thing.

Actually, it's worse, because it adds unfairness and inefficiency. Suppose a colleague proposes a bill to you: The U.S. Treasury will send checks to homeowners, but high income people get much bigger checks, as will people who borrow a lot, and people who refinance often and take cash out. People with low incomes, who save up to buy houses, or don't refinance, get a lot less. You would say, "You're out of your mind!" But that's exactly what the mortgage interest deduction achieves!

If we were to eliminate the mortgage deduction, and put housing subsidies on budget, where taxpayers can see where their money is going, the resulting homeowner subsidy would surely be a lot smaller, much more progressive, helping lower income people, better targeted at getting people in houses, and less damaging of savings and economic growth. Both Republicans and Democrats should rejoice. Except the headline amount of taxing and spending will increase. Well, spend more to spend less.

We allow a tax deduction for charitable deductions. This is exactly the same thing as taxing more, but then sending checks to non-profits as matching contributions – but much larger checks for contributions from rich people than from poorer people. Then, many "non-profits" spend a lot of money on private jet travel, executive salaries, and political activities. Actual on-budget federal spending, convoluted and inefficient as it is, at least has a modicum of oversight and transparency. If we removed the deduction, but subsidized worthy charities, with transparency and oversight, we'd do a lot more good, and probably overall tax less and spend less. Except the headline amount of taxing and spending might increase. Well, spend more to spend less.

Mandates are the same thing as taxing and spending. Many European countries tax a lot, and then provide services, like health insurance. We mandate that employers provide health insurance. It looks like we're taxing and spending less, but we're not. A health insurance mandate has exactly the same economic effects as a \$15,000 head tax on each employee, financing a \$15,000 health insurance voucher.

Economics pays no heed to budget tricks. Spending too much rhetorical effort on lowering taxes and spending induces our government to such tricks, with the same growth-destroying effects. If you want economic growth, treat every mandate as taxing and spending.

Taxes: break up the argument.

The outlines of tax reform have been plain for a long time: lower marginal rates, broaden the base by getting rid of the massive welter of special deals. But it can't get done. Why not?

When we try to fix taxes¹⁶, we argue about four things at once: 1) What is the right *structure* for a tax code? 2) What is the right *level* of taxes, and therefore, of spending? 3) What activities should the government *subsidize* – home mortgages, charitable contributions, electric cars, and so on? 4) How much should the government *redistribute* income?

Tax reforms fail because we argue about all these together. For example, the Bowles-Simpson commission got to an improvement on the structure of taxes, but then the reform effort fell apart when the Administration wanted more revenue and congressional Republicans less.

I am back at my dysfunctional dinner party. Sometimes, in politics as in marriage, it is wise to bundle issues together, each side accepting a minor loss to ensure what they see as a major gain. You clean up your socks, I'll clean up my makeup. Sometimes, however, we bundle too many issues together, and the result is paralysis, as each side vetoes a package of improvements over a small issue. Then, it's better to work on the issues separately.

So, let's fix taxes by separating these four issues, in four commissions possibly, or better in four completely separate sections of law.

1) *Structure*. Agree on the right structure of the tax code, with its only goal to raise revenue at minimal economic distortion, but *leave the rates blank*.

2) *Rates*. Determine the rates, without touching the structure of the tax code. A good tax code should last decades. Rates may change every year, and likely will be renegotiated every four. But those who want higher or lower rates know they can agree on the structure of the tax code.

3) Separate the *subsidy* code from the tax code. Mortgage interest subsidies? Electric car subsidies? Sure, we'll talk about them, but separately. Then, we don't have to muck up raising revenue for the government with subsidies, and the budgetary and economic impact of subsidies can be evaluated on their own merits

¹⁶ See "Here's what genuine tax reform looks like." *Wall Street Journal*, December 23 2015. <http://www.wsj.com/articles/heres-what-genuine-tax-reform-looks-like-1450828827>

4) Separate the *redistribution* code from the *tax* code. Then we don't muck up raising revenue for the government with income transfers.

The main point is that by separating these four elements of law, each with fundamentally different purposes, we are much more likely to make coherent progress on each. You need not oppose beneficial aspects of an economically efficient tax simplification, say, if you wish to have a greater level of redistribution – well, at least any more than you might oppose any random bill in order to force your way on that issue.

Some thoughts on how each of these might work:

Structure. The economic damage of taxation is entirely about “marginal” rates – if you earn an *extra* dollar, how much do you get to enjoy it, after *all* taxes, federal, state, local, sales, estate, and so forth. Economics has really little to say about how *much* taxes people pay. The economists' ideal is a tax system in which people pay as much as the Government needs – but each *extra* dollar is tax-free. Politics, of course, focuses pretty much on the opposite, how much people pay and ignoring the economically-distorting margins.

Thus, if you ask 100 economists, “now, forget politics for a moment –that's our job – and tell me what the right tax code is, with the only objective being to raise revenue without distorting the economy,” the pretty universal answer will be a consumption tax – with no corporate tax, income tax, tax on savings or rates of return, estates, or anything else, and essentially no deductions. (They will then say “but...” and go on to demand subsidies and income redistribution, at which time you have to assure them too that we'll discuss these separately.)

A massive simplification of the tax code is, in my opinion, as or more important than the rates – and it's something we're more likely to agree on. America's tax code is an obscenely complex cronyist nightmare.

For example, that's why I favor, and you should seriously consider, eliminating the corporate tax. Corporations never pay any taxes. All money they send to the government comes from higher prices, lower wages, or lower returns to shareholders – and mostly the former two. If you tax people who receive corporate profits, rather than collecting taxes from higher prices and lower wages, you will have a more progressive tax system.

But more importantly, if you eliminate the corporate tax, you will eliminate the constant stream of lobbyists in your offices each day asking for special favors.

Far too many businesses are structured around taxes, and far too many smart minds are spending their time devising corporate tax avoidance schemes and lobbying strategies.

A much simpler tax code even with sharply higher rates – but very clear rates, that we all know about and can plan on – may well have less economic distortion than a massively complex code, with high statutory rates, but a welter of complex schemes and deductions that result in lower taxes.

Subsidy code. Tax expenditures – things like deductions for mortgage interest, employer provided health care, charitable contributions, and the \$10,000 credit my wealthy Palo Alto neighbor got from the taxpayers for buying a Tesla -- are estimated at \$1.4 trillion¹⁷, compare with \$3.5 trillion Federal Receipts and \$4 trillion Federal Expenditures.¹⁸ Our Federal Government is really a third larger than it looks.

While the subsidy code could consist of a separate discussion of tax expenditures, it would be far better for the rules of the subsidy code to be: all subsidies must be on budget, where we can all see what's going on.

Redistribution. Even a consumption tax can be as progressive as one wants. One can use the regular income tax code with full deduction of savings and omitting capital income, thus taxing high consumption at higher rates and low consumption at lower rates.

Again, however, it might well be more efficient to integrate income redistribution with social programs. Put it on budget, and send checks to people. Yes, that makes spending look larger, but sending a check is the same thing as giving a tax break. And spending can be more carefully monitored.

Infrastructure

Infrastructure is all the rage¹⁹. America needs infrastructure. Good infrastructure, purchased at minimum cost, that passes objective cost-benefit criteria, built promptly, can help the economy in the long run. Soft infrastructure – a better justice system, for example – matters as much as hard infrastructure – more asphalt.

¹⁷ [https://www.whitehouse.gov/omb/budget/Analytical Perspectives](https://www.whitehouse.gov/omb/budget/Analytical%20Perspectives) Table 14; <http://www.taxpolicycenter.org/briefing-book/what-tax-expenditure-budget>

¹⁸ <https://fred.stlouisfed.org/series/W019RCQ027SBEA>

¹⁹ See “The Clinton Plan's Growth Deficit.” *Wall Street Journal*, August 12 2016. <http://www.wsj.com/articles/the-clinton-plans-growth-deficit-1470957720>. Also, for an excellent and well documented review of these issues, see Edward L. Glaeser, 2016, “If you Build it...” *City Journal*, Summer 2016, <http://www.city-journal.org/html/if-you-build-it-14606.html>

However, there is no case that the halving of America's growth rate in the last 20 years is centrally due to potholes and rusting bridges. Poor infrastructure is not the *cause* of sclerosis, so already one should be wary of infrastructure investment as the central plan to *cure* that sclerosis.

The claim that infrastructure spending will lift the economy out of its doldrums lies on the "multiplier" effect, that any spending, even wasted, is good for the economy. That is a dubious proposition, especially when the task is to raise the economy by tens of trillions, over decades.

Modern infrastructure is built by machines, and not many people; even less people who do not have the specialized skills. A Freeway in California will do little to help employment of a high school dropout in New York, or a middle-aged mortgage broker in New Jersey. Neither knows how to operate a grader.

The problem with infrastructure is not lack of money. President Obama inaugurated a nearly trillion dollar stimulus plan 8 years ago. His Administration found out there are few shovel-ready projects in America today. They're all tied up waiting for historic review, environmental review, and legal challenges.

The problem with infrastructure is a broken *process*. Put a time limit on historic, environmental, and other reviews. Require serious, objective, and retrospective cost-benefit analysis. Repeal Davis-Bacon and other contracting requirements that send costs soaring. If the point is infrastructure it should be infrastructure, not passing money around. You ought to be able to agree on more money in return for assurance that the money is wisely spent.

Debt and deficits

This hearing is also about budgets and debts, which I have left to the end. Yes, our deficits are increasing. Yes, every year the Congressional Budget Office declares our long-term promises unsustainable.

I have not emphasized this problem, though in my opinion it is centrally important, and I think I was invited here to say so.

Recognize that computer simulations with hockey-stick debt, designed to frighten into submission a supporter of what he or she feels is necessary government spending, are as ineffective as computer simulations with hockey-stick temperatures, designed to frighten into submission a supporter of current economic growth and skeptic of draconian energy regulation. Yelling about each, louder, is not going to be productive.

And there are many voices who tell you debt is not a problem. Interest rates are at record lows. Why not borrow more, and worry about paying it back later?

So, let me offer a few out of the box observations, and suggestions that you might agree on.

It is useful to clarify why debt is a problem. The case that large debts will slowly and inexorably push up interest rates, and crowd out investment, is hard to make in this era of ultra-low rates. Debt does place a burden of repayment on our children and grandchildren, but if we have reasonable economic growth they will be wealthier than we are.

The biggest danger that debt poses is a crisis.

Debt crises, like all crises that really threaten an economy and society, do not come with decades of warning. Do not expect slowly rising interest rates to canary the coalmine. Even Greece could borrow at remarkably low rates. Until, one day, it couldn't, with catastrophic results.

The fear for the US is similar. We will have long years of low rates. Until, someday, it is discovered that some books are cooked, and somebody owes a lot of money that they can't pay back, and people start to question debts everywhere.

For example, suppose Chinese debts blow up, and southern Europe as well. Both Europe and China will start selling Treasury debt quickly. Suppose at the same time that student loans, state and local pensions, and state governments are blowing up, along with some large U.S. companies, and banks under deposit insurance. A recession looms, which the US will want to fight with fiscal stimulus. The last crisis occasioned about \$5 trillion of extra borrowing. The next one could double that.

So, the U.S. needs to quickly borrow additional trillions of dollars, while its major customers – foreign central banks – are selling. In addition, the U.S. borrows relatively short term. Each year, the U.S. borrows about \$7 trillion to pay off \$7 trillion of maturing debt, and then more to cover the deficit.

Imagine all this happens 10 years from now, with social security and medicare unresolved and increasing deficits. The CBO is still issuing its annual warnings that our debt is unsustainable. Now, bond investors are willing to lend to the US government so long as they think someone else will lend tomorrow to pay off their loans today. When they suspect that isn't true, they pull back and interest rates spike.

But our large debts leave our fiscal position sensitive to interest rate rises. At 100% debt to GDP ratio, if interest rates rise to just 5%, that means the deficit rises by 5 percentage points of GDP, or approximately \$1 Trillion extra dollars per year. If bond investors were worried about sustainability already, an extra trillion a year of deficits makes it worse. So they demand even higher interest rates. Debt that is easily financed at 1% rates is not sustainable at 5% rates and a catastrophe at 10% rates – if you have a large debt outstanding.

This is a big part of what happened to Greece and nearly happened to Italy. At low interest rates, they are solvent. At high interest rates, they are not.

Debt crises are like an earthquakes. It's always quiet. People laugh at you for worrying. Buying insurance seems like a waste of money. Until it isn't.

So, the way to think about the dangers of debt is not like a predictable problem that comes to us slowly. View the issue as managing a small risk of a catastrophic problem, like a war or pandemic.

The easy answers are straightforward. Sensible reforms to Social Security and Medicare are on the table. Fix the indexing, improve the incentives for older people to keep working. Convert medicare to a premium support policy.

The harder problems are those less recognized. Underfunded pensions, widespread credit guarantees, and explicit or implicit too big to fail guarantees add tinder to the fire. Dry powder and good credit are invaluable.

Above all, undertake a pro-growth economic policy. We grew out of larger debts after World War II; we can do that again.

You can also buy some insurance. Every American household that takes out a mortgage faces the choice: fixed rate, or variable rate? The fixed rate is a little higher. But it can't go up, no matter what happens. The variable rate starts out lower. But if interest rates rise, you might not be able to make the payments, and you might lose the house. That is what happens to countries in a debt crisis.

For the US, this decision is made by the Treasury Department and the Federal Reserve. The Treasury has been gently lengthening the maturity of its borrowings. The Federal Reserve has been neatly undoing that effort.

Both Treasury and Fed need direction from Congress. The Treasury does not regard managing risks to the budget posed by interest rate rises as a central part of its job, and the Fed does not even consider this fact. Congress needs to decide who is in charge of the maturity structure of US debt, and guide the Treasury. I hope that guidance leans towards the fixed rate plan. By issuing long-term debt – I argue in fact for perpetuities, that simply pay a \$1 coupon forever with no fixed roll over date -- and engaging in simple swap transactions that every bank uses to manage interest rate risk, the U.S. can isolate itself from a debt crisis very effectively²⁰. But at least ask that fixed or floating interest rate question and make a decision.

²⁰ For more details see: "A New Structure For U. S. Federal Debt." 2015. In David Wessel, Ed., *The \$13 Trillion Question: Managing the U.S. Government's Debt*, pp. 91-146. Washington DC: Brookings Institution Press.
<https://www.brookings.edu/book/the-13-trillion-question/> and

As I have warned against focusing too much attention on on-budget spending, so let me warn against too much attention on deficits rather than spending. If you focus on debt and deficits, the natural inclination is to raise tax rates. Europe's experience in the last few years argues against "austerity" in the form of sharply higher tax rates, as always adding to the disincentive to hire, invest, or start innovative businesses.

Concluding comments

I have sketched some novel and radical-sounding approaches to restoring robust economic growth. Economic growth, together with commonsense fiscal discipline are keys to solving our budget problems.

This is not pie in the sky. These are simple straightforward steps, none controversial as a matter of economics. And there really is no alternative. Ask of other approaches: Does this at all plausibly diagnose why America's growth rate has fallen in half? Does the cure at all plausibly address the diagnosis? Is the cure based on a reasonable causal channel that you can actually explain to a constituent? Does the cure have a ghost of a chance of having a large enough effect to really make a difference?

You may object that fundamental reform is not "politically feasible." Well, what's "politically feasible" can change fast in this country. This is an exciting time politically. The people are mad as hell, and they're not taking it any more. They are ready for fundamental changes.

Furthermore, it is time for Congress to take the lead. These are properly Congressional matters, and no matter who wins the Presidential election you are unlikely to see leadership in this direction.

Winston Churchill once said that Americans can be trusted to do the right thing after we've tried everything else. Well, we've tried everything else. It's time to prove him right.

http://faculty.chicagobooth.edu/john.cochrane/research/papers/Cochrane_US_Federal_Debt.pdf. For a clear analysis of the problem, that recommends the opposite action – shortening the maturity structure to take advantage of low rates – see Robin Greenwood, Samuel G. Hanson, Joshua S. Rudolph, and Lawrence H. Summers, "The Optimal Maturity of Government Debt" and "Debt Management Conflicts between the U.S. Treasury and the Federal Reserve," also in David Wessel, Ed., *The \$13 Trillion Question: Managing the U.S. Government's Debt* .

