**Testimony submitted to the U.S. House Committee on Ways and Means and the U.S. Senate Committee on Finance, hearing on "Tax Reform and the Tax Treatment of Debt and Equity," July 13, 2011 (embargoed until 9am).**

Submitted by Simon Johnson, Ronald Kurtz Professor of Entrepreneurship, MIT Sloan School of Management; Senior Fellow, Peterson Institute for International Economics; co-founder of http://BaselineScenario.com; member of the CBO's Panel of Economic Advisers; and member of the FDIC's Systemic Resolution Advisory Committee.[1]

## Main Points

1) The US tax code creates a "debt bias" that encourages borrowing by households, the nonfinancial sector, and financial firms. Primarily because interest payments can be deducted as an expense when calculating taxes, homeowners borrow more relative to house prices, and firms finance themselves relatively more with debt and relatively less with equity.[2]
2) A high degree of leverage – more debt relative to assets – increases the upside return to equity when asset prices. But it also exacerbates the downside losses for equity when asset prices fall. This is true for firms and banks; it is also true for households – as many American families unfortunately discovered when house prices fell.
3) There is no evidence that a change in the tax code, or in its implementation and interpretation, played a major role in sparking the financial crisis of 2007-09. The incentives towards higher leverage for individuals and firms have largely been in place for decades.
4) However, the high leverage of households – and the risks this implied – clearly played a role in the dynamics of the crisis. The economy is growing slowly now, in part, because households are not finished "deleveraging", i.e., they are spending less and saving more in order to pay down their debts.
5) US nonfinancial firms were not particularly highly leveraged on average before the crisis. Relatively few of them were central to the housing/banking boom and bust, although there certainly has been considerable collateral damage – including for the small business sector, which is now reluctant to borrow and to hire.
6) The major tax-induced debt bias issue arising from the crisis is with regard to the financial sector. During the run-up to 2008, banks and other financial firms found ways to greatly increase their leverage (so debt increased relative to equity), including by moving assets "off-balance sheet" and through being allowed to set their own "risk-weights" for the purposes of calculating capital requirements.[3]
7) Banks and other financial firms create an externality – managers do not take into account the effect that the failure of their bank would have on other banks and the rest of the economy.[4]

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[1] This testimony draws on joint work with James Kwak and Peter Boone. Our updates and detailed policy assessments are available at http://BaselineScenario.com. The views expressed here are personal and not those of any other organization.

[2] The extent of tax-induced debt bias for firms depends on the tax treatment of investors and some other details – and not all nonfinancial firms choose to be leveraged – but the general statement holds.

[3] See Simon Johnson and James Kwak, *13 Bankers*, Chapter 5.

[4] In the United States, bankruptcy costs for the nonfinancial sector are generally small. The FDIC resolution process for small and medium sized banks is well-run and does not usually have large social

For highly leveraged banks that are large relative to the economy, the negative spillover effects on the rest of the economy are potentially very big.

8) Changes in the financial sector over the past two decades have created a new order of magnitude for system risk with negative macroeconomic implications in the United States.
9) To see the just fiscal impact of the finance-induced recession, consider changes in the CBO's baseline projections over time. In January 2008, the CBO projected that total government debt in private hands—the best measure of what the government owes—would fall to $5.1 trillion by 2018 (23% of GDP). As of January 2010, the CBO projected that over the next eight years debt will rise to $13.7 trillion (over 65% of GDP)—a difference of $8.6 trillion.
10) Most of this fiscal damage is not due to the Troubled Assets Relief Program – and definitely not due to the part of that program which injected capital into failing banks. Of the change in CBO baseline, 57% is due to decreased tax revenues resulting from the financial crisis and recession; 17% is due to increases in discretionary spending, some of it the stimulus package necessitated by the financial crisis (and because the "automatic stabilizers" in the United States are relatively weak); and another 14% is due to increased interest payments on the debt – because we now have more debt.[5]
11) In effect, a financial system with dangerously low capital levels – hence prone to major collapses – creates a nontransparent contingent liability for the federal budget in the United States. It also damages the nonfinancial sector both directly – when there is a credit crunch, followed by a deep recession – and indirectly through creating a future tax liability.
12) Despite reform efforts since the crisis, including the Dodd-Frank legislation, big banks today still create major structural system risks.[6] Neil Barofsky, the Special Inspector General for the Troubled Assets Relief Program (TARP) summarized the situation well in his January 2011 report, emphasizing: "perhaps TARP's most significant legacy, the moral hazard and potentially disastrous consequences associated with the continued existence of financial institutions that are 'too big to fail.'"
13) As a result of the boom and the crisis, the remaining big financial firms became bigger and remain very powerful politically. The U.S. six largest bank holding companies currently have assets valued at just over 63 percent of GDP (end of Q4, 2010). This is up from around 55% of GDP before the crisis (e.g., 2006) and no more than 17% of GDP in 1995. With assets ranging from around $800 billion to nearly $2.5 trillion, these bank holding companies are widely perceived by the market as "too big to fail," meaning that they are implicitly backed by the full faith and credit of the US government. They can borrow more cheaply

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costs. And some kinds of financial firms can restructure their debts without big negative impact on the economy (e.g., the recent case of CIT Group). But the failure of large financial institutions can be very disruptive – as the experience of Lehman Brothers shows.

[5] See also the May 2010 edition of the IMF's cross-country fiscal monitor for comparable data from other industrialized countries, http://www.imf.org/external/pubs/ft/fm/2010/fm1001.pdf. The box on debt dynamics shows that mostly these are due to the recession; fiscal stimulus only accounts for 1/10 of the increase in debt in advanced G20 countries. Table 4 in that report compares support by the government for the financial sector across leading countries; the US provided more capital injection (as a percent of GDP) but lower guarantees relative to Europe.

[6] Andrew Haldane (Bank of England) and Anat Admati (Stanford University) both refer to system risk in this context as a form of pollution, i.e., a negative social spillover that should be discouraged by regulation and/or taxation.

than their competitors and hence become larger. The IMF and others have estimated this funding at advantage at around 50 basis points (half of a percentage point).

14) In public statements, top executives in these very large banks discuss their plans for further global expansion – presumably increasing their assets further while continuing to be highly leveraged. This is highly dangerous for society, particularly as there is no way to manage an orderly resolution process if a global megabank were to fail – there is no current or likely future cross-border agreement on bank resolution, including how various kinds of creditors would be treated.

15) In terms of policy priorities:

a. A reasonable goal would be to reduce the incentives for households to overleverage. The mortgage interest deduction could reasonably be phased out over 20 years, or it could be severely limited when there is little equity in the house. Home ownership would still be favored by the tax code, but homeowners would be encouraged to build up equity rather than borrow so heavily.[7]

b. Tax neutrality for the nonfinancial sector is also a sensible goal for longer-run reform, so that debt and equity are treated the same way for tax purposes. The deductibility of interest could be limited or there could be a deduction for payments to equity holders, in the form of an "allowance for corporate equity".[8]

c. The tax-induced debt bias in the financial sector has gone too far; neutrality between debt and equity would be a great improvement over the current situation. Given the externalities involved for the financial sector, there is a strong case for actively discouraging debt relative to equity financing, for example by taxing firms that are "thinly capitalized".[9] A steeply progressive tax on bank leverage would serve a similar purpose.[10]

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[7] Compared to other industrialized countries, the US stands out in terms of the extent to which it encourages households to leverage for house purchases. See, for example, Figure 1 on p.21 of International Monetary Fund, "Debt Bias and Other Distortions: Crisis-Related Issues in Tax Policy," 2009, http://www.imf.org/external/np/pp/eng/2009/061209.pdf.

[8] See Ruud de Mooij, "Tax Baises to Debt Finance: Assessing the Problem, Finding Solutions," International Monetary Fund, Staff Discussion Note, May 2011, http://www.imf.org/external/pubs/ft/sdn/2011/sdn1111.pdf. Abolishing the corporate income tax is less appealing, particularly as an increasing number of investors are tax-exempt, including pension funds and foreigners (such as sovereign wealth funds).

[9] Leveraged Buyouts can potentially contribute to system risk and a "thin capitalization" tax would address this.

[10] See Michael Keen, "The Taxation and Regulation of Banks," International Monetary Fund, mimeo, March 2011, http://www.law.nyu.edu/ecm_dlv2/groups/public/@nyu_law_website__academics__colloquia__tax_policy/documents/documents/ecm_pro_067915.pdf. There is useful background analysis in "Financial Sector Taxation: The IMF's Report to the G-20 and Background Material," http://www.imf.org/external/np/seminars/eng/2010/paris/pdf/090110.pdf.

**Further Financial Sector Considerations: Why Regulation Is Not Enough**

Thinking about debt bias in the financial sector is closely related to the debate on capital requirements for banks.

Capital is not something banks "hold" but rather refers to how they fund their loans – i.e., capital is on the liability side, not the asset side, of a bank's balance sheet.[11] Less capital means that loans made by banks are funded with more debt relative to equity. This puts the banks in greater danger of default. In contrast, more equity capital implies more safety – and less risk – for both the equity and the debt issued by the bank.

In principle, capital levels in the US banking system could be increased by regulation. But in practice such measures are unlikely to be sufficient. Partly this is because capital requirements are largely set in the international Basel process negotiations, where the lowest common denominator prevails.[12]

There is nothing in the Basel III accord on capital requirements – concluded in fall 2010 – that should be considered encouraging. Independent analysts have established beyond a reasonable doubt that substantially raising capital requirements would not be costly from a social point of view (see the work of Anat Admati of Stanford University and her colleagues).[13]

Arguments that equity is "expensive" for banks are either incorrect or self-serving. From a broader social perspective, banks and anyone else providing credit should be financed with relatively more equity and less debt. This would not reduce the availability and growth of credit – rather it would ensure that financial institutions have sufficient "loss-absorbing" capital on their balance sheets. This is what we need for sustainable growth and job creation.

In a free market system – without government guarantees – financial institutions fund themselves with a relatively large amount of equity (30 percent of total assets is not uncommon), because they need a strong buffer against losses. Investors are not willing to fund a bank that is prone to collapse.

But in a system with deposit insurance (and other forms of potential government protection for creditors), the downside risk for one class of investors – retail depositors – is limited or zero. This encourages banks and other financial firms to fund themselves with more debt relative to equity, which means little capital relative to total assets. This increases the upside payoff to equity – i.e., for a given return on assets, the return on equity is higher when things go well. But it also increases the downside returns on equity, creating more volatility and a higher probability that the bank will become insolvent – perhaps with major negative effects on the rest of the economy. Bank executives are paid primarily based on the return on equity, unadjusted for risk.

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[11] "Holding capital" is a common phrase that is completely misleading and often causes confusion in the debate – making people think that capital is an asset, rather than a liability.

[12] Credible reports indicate that in the Basel III negotiations, France, Germany, and Japan all wanted lower capital requirements than did the United States.

[13] Anat Admati, Peter DeMarzo, Martin Hellwig, and Paul Pfleiderer, "Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Expensive," http://www.gsb.stanford.edu/news/research/admati.etal.html.

In effect, big firms in modern financial systems receive a great deal of government-backed implicit insurance, without having to pay for the privilege. This is not only unfair to the nonfinancial sector and to everyone else in the economy, it is also very dangerous – we are subsidizing exactly the kind of behavior (excessively high leverage) that we should seek to discourage.

Rather than requiring banks become small enough, simple enough, or unimportant enough to fail, the Dodd-Frank Act gave regulators new resolution authority to protect the financial system from a collapsing financial institution in a crisis, hoping that fear of being "resolved" would be enough to deter financial institutions from taking excessive risks in the first place. While this is better than nothing, it is highly improbable that authority granted to U.S. regulators over U.S. institutions will be sufficient if a major global bank with subsidiaries in many countries is about to fail.

Dodd-Frank also gives regulators new preemptive weapons they can use against big banks, if they so choose. These include the ability to force banks to draw up plausible "living wills" and to shrink if these wills indicate an unacceptable risk to the financial system. But whether those weapons will ever be used remains a big question mark.

Taxing excessive leverage in the financial sector would be a sensible complement to capital regulation. There is generally no convergence in corporate tax systems across countries so – unlike with real or imagined constraints in the Basel III negotiations – we can set policy that makes sense for the United States.[14]

A number of European countries have already introduced new taxes on financial institutions – including the UK, for which the base is liabilities other than Tier 1 capital, insured deposits, and some other items.[15] The rate in the UK will initially be 0.04 percent, rising to 0.07 percent – which is definitely on the low side, if the goal is to tax away any "too big to fail" funding advantage.

Any such tax could go into general revenue and, if the goal is revenue neutrality, could reasonably be used to lower the effective corporate income tax for the nonfinancial sector – for example, by compensating for revenue lost due to the adoption of an allowance for corporate equity in the nonfinancial sector.

Financial crises have major negative consequences for the nonfinancial sector and imposing ad hoc penalties on the financial sector after any crisis is not workable – that is often the moment when banks are least able to pay. Encouraging less reliance on debt by the nonfinancial sector is one way to reduce the vulnerability of the real economy to future financial crises. But the top priority should be taxing excessive leverage in the financial sector.

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[14] In addition, taxation can reasonably target high leverage, i.e., excessive debt relative to total assets, which is really what causes systemic risk "pollution". The Basel process has instead pursued risk-weighted capital, which turns out to be a potentially misleading concept – for example, many European banks currently look fine in terms of their tier one capital, but only because they have a low or zero risk-weight on bonds issued by their own governments (which now prove to be very risky).

[15] See Michael Keen, "Rethinking the Taxation of the Financial Sector," International Monetary Fund, mimeo, October 2010, http://cesifo.oxfordjournals.org/content/57/1/1.abstract.