



The Need for Pro-Growth Corporate Tax Reform

Repatriation and Other Steps to Enhance
Short- and Long-Term Economic Growth



Prepared for the U.S. Chamber of Commerce,
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*These views are mine alone and do not represent the position of the American Action Forum, or the U.S. Chamber of Commerce, which commissioned this study.
This paper draws heavily on "How Reform Of The U.S. Corporate Tax Code Can Create Short- And Long-Term Economic Growth" by myself, Ike Brannon and Elizabeth Lowell.

1. Introduction

A wide variety of policymakers have recognized the need for reform of the corporation income tax, including the Obama Administration¹, the leadership of the Senate Finance Committee² and the House Ways and Means Committee,³ the Simpson-Bowles Commission⁴ and “Gang of Six.”⁵ The U.S. corporate tax rate is one of the highest in the world, and it is becoming increasingly evident that workers, as opposed to consumers or shareholders, bear most of the burden of a high corporate tax.⁶ In addition, the code is too riddled with special exemptions and targeted benefits, and reform would raise the long-run growth potential of the U.S. economy.

Fundamental changes in the corporate tax code are clearly overdue. The last major corporate tax reform took place 25 years ago, when many of today’s U.S.-based, job creating technology, medical, and energy firms were in their infancy, and some did not even exist. For example, Oracle was launched in 1977, Amgen in 1980, Adobe Systems in 1982, Cisco in 1984, Qualcomm in 1985, Office Depot in 1986, and Broadcom in 1991. Recent research indicates that the corporate income tax is to a large extent a “success tax,” falling disproportionately on firms that have higher than the average productivity growth.⁷ Accordingly, one would expect these kinds of firms to be disproportionately affected.

However, not all the issues are long run in nature. There is bipartisan interest in an immediate reform – reduced taxation of repatriated earnings – that would serve as an economic stimulus and a pathway toward deeper reforms. One specific drawback to the U.S. corporate tax code is that it incentivizes U.S.-based businesses to keep foreign profits overseas, which manifests itself in over \$1 trillion of profits currently locked out of the United States; Credit Suisse estimates the number at \$1.3 trillion,⁸ while J.P. Morgan estimates it at \$1.4 trillion.⁹ Moody’s noted in June 2011 that the tech sector alone had more than doubled its cash held abroad since 2006 and could nearly double this amount to \$238 billion over the next three years. As a result U.S. tech companies would hold 79 percent of their cash overseas.¹⁰ Large quantities of undistributed foreign earnings represent a significant opportunity cost to our economy; it is money that could be invested, returned to shareholders, or paid as wages.

A repatriation tax policy is desirable from several perspectives. First, cash that would otherwise be trapped overseas would flow back into the United States. The short-run stimulus provided by those dollars difficult to project with great certainty but would speed the pace of economic recovery; increase GDP by roughly \$360 billion and create approximately 2.9 million new jobs. Second, a reduced tax on repatriated earnings is a step toward a territorial tax system – a system

¹ President Barack Obama: 2011 [State of the Union Address](#), 25 January 2011.

² Applebaum, Binyamin: “Corporate Tax Reform Proves Hard to Change.” [New York Times](#), 27 January 2011.

³ Cohn, Michael: “House Holds Hearing to Compare Tax Reform.” [Accounting Today](#), 25 May 2011.

⁴ “[The Moment of Truth: Report of the National Commission on Fiscal Responsibility and Reform](#),” December 2010.

⁵ See “A Bipartisan Plan to Reduce Our Nation’s Deficits: [Executive Summary](#),” July 2011.

⁶ According to the CBO, labor bears about 70 percent of the corporate tax burden. See Randolph, William C.: “International Burdens of the Corporate Income Tax.” [CBO publication 2006-09](#), August 2006.

⁷ See Gentry, W. and R.G. Hubbard: “Success Taxes, Entrepreneurial Entry, and Innovation.” National Bureau of Economic Research, [NBER Working Paper No. 10551](#), June 2004.

⁸ Zion, David, Amit Varsheny, Nichole Burnap: “Parking Earnings Overseas.” Credit Suisse, 26 April 2011.

⁹ Lee, Thomas J.: “U.S. Equity Strategy Flash.” [J.P. Morgan](#), 27 June 2011.

¹⁰ Savitz, Eric: “U.S. Tech Sector Overseas Cash Could Nearly Double Over 3 Years,” [Forbes](#), 27 June 2011.

with a very low tax on repatriated profits, -- which is already the norm in most Organization for Economic Cooperation and Development (OECD) countries. As shown in Figure 1, twenty-seven of the thirty-four OECD countries have territorial tax systems, with a 95 to 100 percent tax deduction on foreign source dividends. Also, the United States has the highest tax rate of the seven OECD countries that tax worldwide income.

Figure 1: OECD Home Country Method of Tax on Foreign-Source Dividends

Method of Taxation	Countries	Dividend Exemption Percentage	
Territorial Tax Systems			
OECD Countries with Territorial Tax Systems			
Exempt foreign-source dividends from domestic taxation through territorial tax system¹	Australia, Austria, Canada, Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Iceland, Luxembourg, Netherlands, New Zealand, Portugal, Slovak Republic, Spain, Sweden, Switzerland, ² Turkey, United Kingdom	100% exemption	
	Norway	97% exemption	
	Belgium, France, ³ Germany, Italy, Japan, Slovenia	95% exemption	
Worldwide Tax Systems			
OECD Countries with Worldwide Tax Systems			
	Country	2010 Tax Rate⁴	
Worldwide system of taxation with foreign tax credit	Chile	17.00%	0% exemption
	Ireland	12.50%	0% exemption
	Israel	25.00%	0% exemption
	Korea	24.20%	0% exemption
	Mexico	30.00%	0% exemption
	Poland	19.00%	0% exemption
	United States	39.21%	0% exemption

¹ In general, territorial tax treatment providing exemption of foreign-source dividends depends on qualifying criteria (e.g., minimum ownership level, minimum holding period the source country, and/or the source country tax rate).

² The effective exemption may be reduced by up to 5% as a proxy for general and administrative expenses.

³ The exemption percentage is at least 95%, but can be higher.

⁴ Refers to generally applicable tax rate, including surcharges, of combined central and sub-central government taxes.

Source: Business Roundtable, "Roadmap for Growth"

Figure from: Testimony of Robert A. McDonald, Chairman, Fiscal Policy Initiative, Business Roundtable, before the House Committee on Ways and Means, [Hearing on Tax Reform](#), 20 January 2011.

A sensibly designed territorial system would improve U.S. international competitiveness. Finally, the repatriation tax policy would contribute to reducing the corporate tax burden at a time when the high U.S. rate harms economic growth, the amount and quality of U.S. investment, and the wages of U.S. workers.

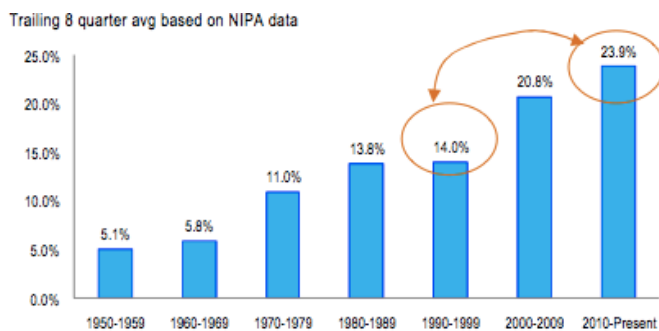
2. Problems Facing the U.S. Corporation Income Tax

2.1 Taxing Repatriations Discourages Investment in the U.S.

The U.S. corporation income tax applies to the worldwide earnings of U.S. headquartered firms, with taxes on foreign subsidiary earnings deferred until those profits are repatriated. This system distorts the international behavior of U.S. firms and has trapped as much as \$1.4 trillion of capital abroad.¹¹ U.S. companies pay U.S. income taxes on income earned both domestically and abroad, although the U.S. allows a foreign tax credit up to the U.S. tax liability for taxes paid to foreign governments. Active income earned in foreign countries is generally only subject to U.S. income tax once it is repatriated, giving an incentive for companies to reinvest earnings anywhere but the U.S., which has the second highest corporate tax rate among OECD countries, as discussed below.

The proportion of income earned abroad has increased significantly in recent years, owing primarily to increasing market opportunities overseas, particularly in emerging economies. The U.S. operates in an increasingly global economic playing field. Cross-border foreign direct investment across all countries has increased from less than 6 percent of world GDP in 1980 to 33 percent in 2009; American companies accounted for 40 percent of world cross-border investment in 1980, and currently account for less than 23 percent.¹² Sales abroad are increasing; overseas sales exceeded domestic sales for both McDonalds and Caterpillar last year.¹³ As shown in Figure 2, the foreign operations of U.S. companies currently account for approximately 24 percent of profits.¹⁴ Ninety-five percent of the world's population lives outside U.S. borders; it makes sense for businesses to expand operations where the future growth in demand is greatest.

Figure 2: Profits from Overseas Operations Growing as % Total Profits



Source: J.P. Morgan and BEA.

Graph from: Lee, Thomas J.: "U.S. Equity Strategy Flash." [J.P. Morgan](#), 27 June 2011.

¹¹ Lee, Thomas J.: "U.S. Equity Strategy Flash." [J.P. Morgan](#), 27 June 2011.

¹² Testimony of Robert A. McDonald, Chairman, Fiscal Policy Initiative, Business Roundtable, before the House Committee on Ways and Means, [Hearing on Tax Reform](#), 20 January 2011.

¹³ Wiseman, Paul: "A boom in corporate profits, a bust in jobs, wages." [Fox5News](#), 22 July 2011.

¹⁴ Lee, Thomas J.: "U.S. Equity Strategy Flash." [J.P. Morgan](#), 27 June 2011.

U.S. companies feel a strong market pull to invest overseas; U.S. tax policy adds yet another incentive to keep profits abroad. While overseas investment by U.S. companies increases profitability and benefits U.S. shareholders, incremental investment overseas is not desirable if it results from unfavorable tax policy and leads to sacrificing attractive domestic investment opportunities.

A variety of studies find that taxes on repatriated income trap money abroad. Fritz Foley, Jay Hartzell, Sheridan Titman, and Gary Twite find that a one standard deviation increase in repatriation tax costs are associated with a 7.9 percent increase in the ratio of cash to net assets. They estimate that the median firm facing an average repatriation burden holds 47 percent of its cash abroad, while the median firm with a below average repatriation tax burden holds 26 percent of its cash abroad, as illustrated in Figure 3.¹⁵ They further conclude that technology companies, other high-growth companies, and those with a high level of spending on research and development are particularly sensitive to the tax costs of repatriation. Industry sectors that must invest continuously in long-term R&D are severely handicapped by the tax costs of repatriation relative to foreign country competitor corporations, many of which profit from generous R&D tax credit incentives and territorial taxation systems.¹⁶

Mihir Desai, Fritz Foley, and James Hines find in a 2001 study that a one percent decrease in the repatriation tax correlates with a one percent increase in repatriated dividend payouts, and that repatriation taxes reduce aggregate dividend payouts by 12.8 percent while generating annual efficiency losses equal to 2.5 percent of dividends.¹⁷ An earlier study by Glenn Hubbard and James Hines in 1990 finds that a one percent decrease in the repatriation tax is correlated with a four percent increase in dividend payouts.¹⁸ Hubbard and Hines also find that taxing repatriated income raises very little revenue but does induce tax-motivated financial transactions and influences the timing of dividend repatriations.

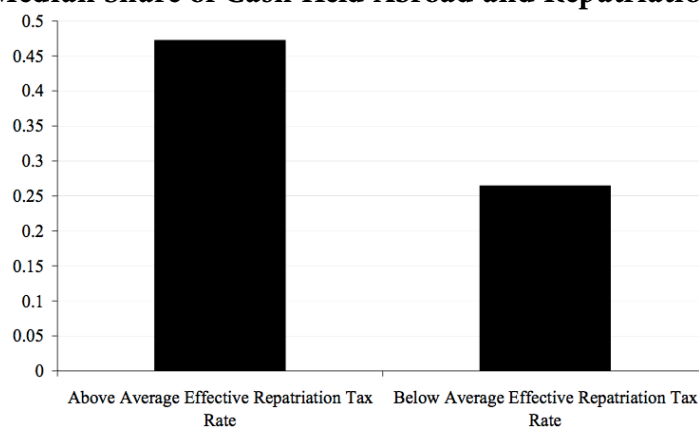
¹⁵ Foley, C. Fritz, Jay Hartzell, Sheridan Titman, and Garry Twite: "Why do Firms hold so much Cash? A Tax-Based Explanation," *Journal of Financial Economics* 86(3), December 2007, p. 579-607.

¹⁶ See, for example a "Science, Technology, and Industry Scoreboard," OECD, December 2009, which ranks the United States 24th of 34 industrialized nations in terms of competitiveness of R&D tax incentives.

¹⁷ Desai, Mihir A., C. Fritz Foley and James R. Hines Jr.: "Repatriation Taxes and Dividend Distortions." National Bureau of Economic Research [Working Paper 8507](#), October 2001.

¹⁸ Hines, James R. and R. Glenn Hubbard: "Coming Home to America: Dividend Repatriations by U.S. Multinationals." National Bureau of Economic Research, Inc., [Taxation in the Global Economy](#), January 1990, p. 161-208.

Figure 3: Median Share of Cash Held Abroad and Repatriation Tax Rates



Graph from: Foley, C. Fritz, Jay Hartzell, Sheridan Titman, and Garry Twite: “Why do Firms hold so much Cash? A Tax-Based Explanation,” [Journal of Financial Economics](#), 86 (3), December 2007, p. 579-607.

Without a reduction in the tax on repatriated earnings, accumulated profits are likely to remain overseas. John Graham, Michelle Hanlon and Terry Shevlin argue that the presumption that trapped profits will eventually return to be taxed ignores the accounting rules that govern such funds.¹⁹ Under generally accepted accounting principles, U.S. multinationals can declare foreign earnings to be “permanently reinvested” overseas, which allows them to avoid accruing the U.S. income tax expense related to these earnings on their financial statements and results in higher reported net incomes. Once this money is declared as having been permanently reinvested, it means that it can only be returned to the U.S. if its status is changed. Such a decision would necessitate *reducing* reported net income, something the authors argue (and empirically demonstrate) that companies hate to do—especially if it also comes with a higher tax bill to boot.

Not only are companies with the highest growth potential encouraged to invest outside of the U.S., but companies are actively discouraged from increasing U.S. investments because of the prohibitive repatriation tax. Another study by John Graham, Michelle Hanlon, and Terry Shevlin uses a survey of senior tax officers from over 400 corporations and finds that 20 percent of these companies reported investing foreign earnings in assets with a lower rate of return than they could have received in the U.S.²⁰ Forty-four percent of companies surveyed indicated that they had raised debt capital in the U.S. to avoid paying the repatriation tax. Because the cost of borrowing is historically low, and companies have large overseas cash reserves to borrow against, the incentives to borrow rather than pay additional taxes are strong.

In addition to affecting the investment decisions of firms already headquartered in the U.S., the U.S. worldwide tax is out of step with its developed-country competitors. When faced with the decision to be headquartered in the U.S. and face a worldwide tax (at a high 35 percent rate) versus the territorial systems of competitors many firms will choose to locate outside the United States. It is no coincidence that the new Deutsche Borse AG/NYSE Euronext group has chosen

¹⁹ Graham, John R., Michelle Hanlon, and Terry Shevlin: “Real Effects of Accounting Rules: Evidence from Multinational Firms’ Investment Location and Profit Repatriation Decisions.” [Journal of Accounting Research](#) 49(1), March 2011.

²⁰ Graham, John R., Michelle Hanlon, and Terry Shevlin: “Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits,” [National Tax Journal](#) 63(4, Part 2), December 2010, p. 1111-1144.

to incorporate outside the United States and further chose the Netherlands, with a corporate tax rate of 25.5 percent, rather than Germany, where it would face a combined 30.2 percent tax rate.²¹

It should similarly come as no surprise that the merger between Anheuser-Busch and Inbev resulted in a change in headquarters from the United States to Belgium. In 1960, seventeen of the world's largest twenty companies were U.S.-headquartered; this number had dwindled to thirteen by 1985, and by 2010 only six of the twenty largest companies were headquartered in the U.S.²² The percentage of Fortune Global 500 companies headquartered outside the G7 countries rose from 16 percent in 2000 to 33 percent in 2009, while the percentage with headquarters in the United States fell from 36 percent in 2000 to 28 percent in 2009.²³

2.2 *The U.S. Statutory Tax Rate is Too High*

The United States currently taxes corporate profits at a rate of 35 percent, although the rate is slightly lower for companies with lower profits and reaches its maximum at profits above \$18.33 million. The 50 states and the District of Columbia also impose a corporate income tax that ranges from just under five percent to twelve percent.²⁴ Some localities also impose a tax on corporate profits as well, which—together with the federal and state tax—combine for a top corporate tax rate of 39.2 percent on profits.²⁵ Of the thirty four countries that comprise the OECD only Japan currently has a higher tax rate—and their government had planned to reduce their rate to 35 percent in mid-year.²⁶ Around the world the U.S. corporate tax rate is exceeded only in a handful of countries, all of which are developing countries that have major extractive industries with significant foreign investment.

Being a high corporate tax locale is a relatively new phenomenon for the United States. In 1986 Congress sharply reduced the top marginal rate from 46 to 34 percent, and it later ticked up to 35 percent in 1993, where it remains.²⁷ Meanwhile, the global trend has been toward sharply lower corporate tax rates: in the last twenty years every single OECD country reduced their tax rates except for the United States.²⁸ Figure 4 below shows how corporate tax rates around the world have gradually fallen over the last three decades. The corporate tax rate in the United States was fairly competitive in 1981, barely stayed competitive in 1995, and by 2010 had become a clear detriment to competitiveness.

²¹ See Van Tartwijk, Maarten: "Why Incorporate in the Netherlands? It's Less Taxing." Wall Street Journal, 15 February 2011; also see Scott Hodge, "Daimler-Chrysler Déjà vu," [Tax Foundation](#), 17 February 2011.

²² Testimony of Robert A. McDonald, Chairman, Fiscal Policy Initiative, Business Roundtable, before the House Committee on Ways and Means, [Hearing on Tax Reform](#), 20 January 2011.

²³ "Growth and Competitiveness in the United States: The Role of its Multinational Companies." [McKinsey&Company](#), June 2010.

²⁴ Padgett, Kail M.: "2011 State Business Tax Climate Index," Background Paper No. 60, [Tax Foundation](#), October 2010.

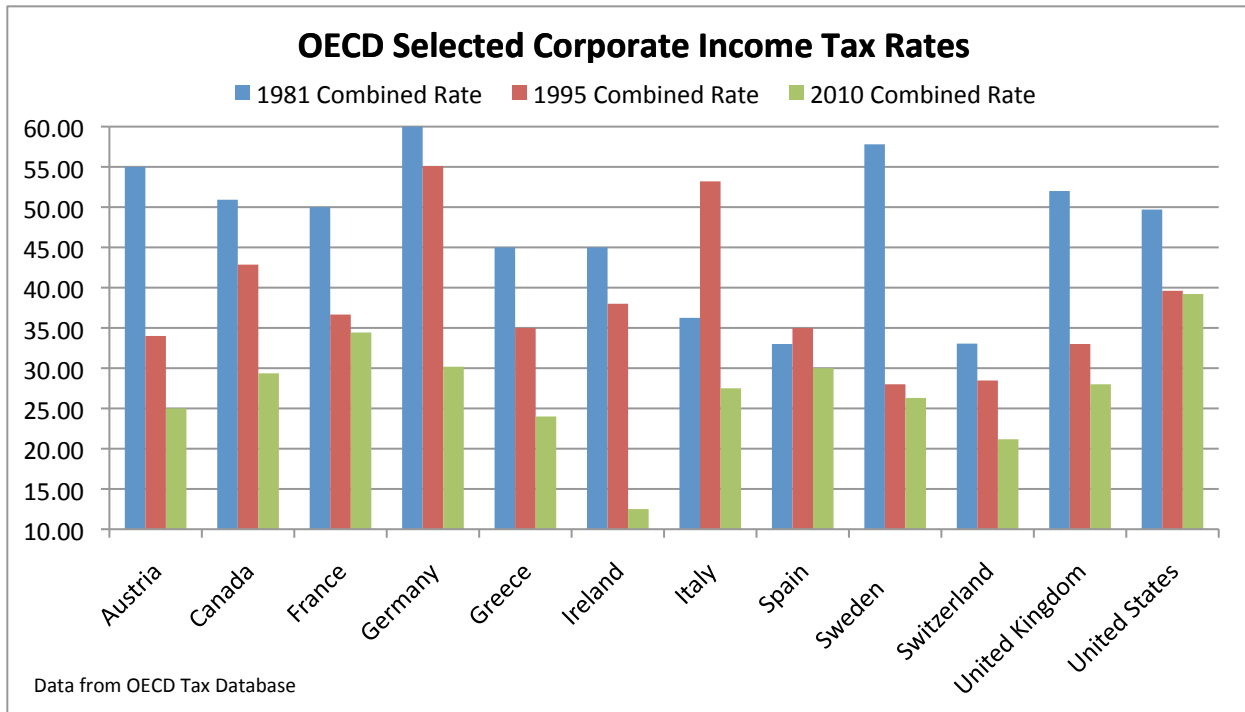
²⁵ Hassett, Kevin and Apurna Mathur: "Report Card on Effective Corporate Tax Rates." [Tax Policy Outlook](#), American Enterprise Institute, February 2011.

²⁶ Japan has subsequently moved to postpone the rate reduction to help pay for disaster relief. See: Tabuchi, Hiroko: "Japan Will Cut Corporate Tax Rate." [New York Times](#), 13 December 2010. See also: "Japan Mulls Consumption Tax Increase to pay for Earthquake Reconstruction." [Yomiuri Shimbun](#), 20 April 2011.

²⁷ "Historical Corporate Top Tax Rates and Bracket." [Tax Policy Center](#), 12 April 2010.

²⁸ "Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century." [United States Treasury](#), December 2007.

Figure 4: Tax Rate Comparison



The bottom line is that the high tax rate is a severe detriment to economic performance. Nobel Laureate Robert Lucas remarked in an interview that reducing or eliminating the corporate income tax was “the largest genuinely free lunch I had seen,”²⁹ and estimated that the U.S. capital stock would be up to 50 percent larger with a more enlightened approach to taxing capital, along with higher productivity, wages, and employment.³⁰

2.3 The U.S. Effective Corporate Tax Rate is Too High

Various pundits and politicians claim that the notion that we are a high-corporate-tax state is mistaken, as the myriad deductions and credits in the tax code allow U.S. companies to escape a significant portion of taxes. For instance, Senator Max Baucus, Chairman of the Senate Finance Committee, remarked at a hearing that

“Some suggest that the U.S. has either the highest or second highest statutory corporate rate in the world, but the effective rate is competitive with other countries. The counter to that is...that people look at the statutory headline rate and psychologically that has an adverse effect.”³¹

²⁹ Lucas, Robert: “Supply Side Economics: An Analytical Review.” *Oxford Economic Papers*, April 1990, p. 293-316.

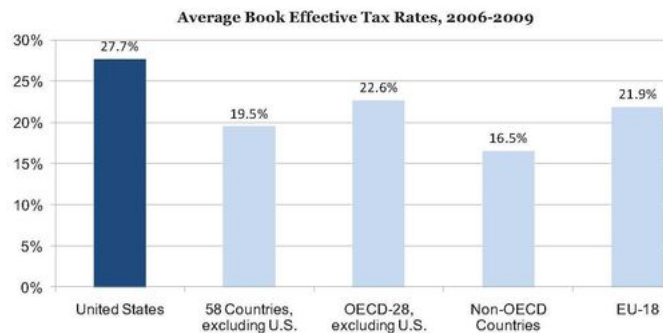
³⁰ Levy, David: “Interview with Robert Lucas.” *The Region*, June 1993.

³¹ Statement by Sen. Baucus given at Senate Finance Committee [Hearing](#) on the Administration’s 2012 Budget, February 2011.

It is true that the corporate tax code in the United States is replete with deductions, credits and exemptions that have the effect of lowering the tax bill for some corporate sectors, but not all sectors. The Joint Committee on Taxation estimates that the lost revenue from the ten largest tax expenditures in the tax code (most of which are part of the individual income tax code) sum to over \$350 billion for the next five years.³²

These opportunities for tax reduction notwithstanding, calculating an effective tax rate facing business reinforces the fact that the United States is a high-corporate-tax country. Figure 5 shows an estimate from PriceWaterhouseCoopers (PwC) of the average book effective tax rates in the United States and the rest of the world. PwC estimates the rate for the U.S. over the 2006-2009 period at 27.7 percent, well above the average of the largest 58 countries of 19.5 percent, the 22.6 percent average of the other OECD members, and the average of the EU nations of 21.9 percent.³³ In short, computing an effective tax rate still leaves the U.S. with a corporate tax rate above that of our major economic partners.³⁴

Figure 5: Tax Rate Trends



Graph from: "Global Effective Tax Rates." [PwC publication](#), 14 April 2011.

A recent Oxford University study analyzing the competitiveness of the UK corporate tax rate ranked the 19 independent G20 countries on different measures of their effective corporate tax; it showed that the United States has the eighteenth highest effective average tax rate, the sixteenth highest effective marginal tax rate, and the eighteenth highest statutory rate. It is illustrative that while the statutory rate in the United States hovers close to 40 percent the UK intends to reduce its corporate tax rate from 28 percent to 23 percent by 2014.³⁵

³² "Background Information on Tax Expenditure Analysis." JCT Publication [JCX-15-11](#), 9 March 2011.

³³ "Global Effective Tax Rates." [PwC publication](#), 14 April 2011.

³⁴ "Corporate Income Tax Rates: International Comparisons." [CBO Publication](#), November 2005.

³⁵ Bilicka, Katarzyna, Michael Devereux and Clemens Fuest: "G20 Corporate tax ranking 2011." [Oxford University Centre for Business Taxation](#), July 2011.

2.4 *The Rise in the Global Economy Makes Corporate Tax Rates More Relevant*

The global trend towards a lower corporate tax rate has coincided with the sharp increase in trade over the past few decades. In 1960, trade represented just six percent of Gross Domestic Product (GDP) of the U.S. Today, total trade in goods and services amounts to more than twenty-five percent of GDP.³⁶ Federal Reserve Chairman Ben Bernanke has pointed out that the emergence of the Indian and Chinese economies, as well as the former communist-bloc countries, implies that the majority of the earth's population is now engaged in the global economy in some way.³⁷

The sharp rise in trade has had important implications for trade. First, the global economy is much more closely integrated than it was previously. The end of most non-market economies of the Eastern Bloc and their subsequent integration into the world economy, the instantaneous transfer of information via the internet, and the steady diminution of transport costs have made the competition for capital, investment, and jobs much more intense than it ever has been. To illustrate the rise in global capital flows consider that from 1987 to 2009 US fixed investment grew from \$10 trillion to \$34 trillion, a healthy 5.5 percent annual increase,³⁸ while U.S. privately-held assets abroad increased twice as fast, from \$1.4 trillion to nearly \$15 trillion, or 11 percent per annum.³⁹ Countries are keen to do what it takes to secure higher economic growth and creating a more hospitable corporate tax environment is one way to attract the investment necessary for growth.

2.5 *The High Tax Rate Hurts U.S. Workers*

The gradual reduction of corporate tax rates across the world is more than just a manifestation of competition for global investment. Over the past few years a wealth of research has emerged suggesting that labor bears most of the burden of capital taxation. While corporations may actually write the check to the government, the economic burden is divided between the consumers, who pay via higher prices; the shareholders, via lower returns to their investment; and the workers, via lower wages.

The Congressional Budget Office (CBO) published a paper estimating that labor bears about 70 percent of the tax burden, mainly by reducing investment—as a result lowering productivity and wages as well.⁴⁰ Roseanne Altshuler, Benjamin Harris and Eric Toder find that the corporate income tax in an open economy raises the cost of capital by much more than it lowers the returns to shareholders—implying that labor bears most of the burden.⁴¹ Apurna Mathur and Kevin Hassett find a strong and significant negative correlation between corporate tax rates and wages,⁴² a result that Mathur and Matthew Jensen suggest is quite robust as well as consistent with the rest of the recent literature that has looked at this issue.⁴³

³⁶ U.S. Department of Commerce, International Trade Administration: Trade.Gov.

³⁷ [Address](#) by the Hon. Ben Bernanke to the Federal Reserve Bank of Kansas City's 13th Annual Symposium at Jackson Hole, Wyoming, August 25th, 2006.

³⁸ Bureau of Economic Analysis, National Economic Accounts, Table 2.1

³⁹ Elena L. Nguyen: "The International Investment Position of the United States at Yearend 2009." [Survey of Current Business](#), July 2010, p. 9-19.

⁴⁰ Randolph, William C.: "International Burdens of the Corporate Income Tax." [CBO publication 2006-09](#), August 2006.

⁴¹ "Capital Income Taxation and Progressivity in a Global Economy." Urban Institute [Publication](#), August 2010.

⁴² Hassett, Kevin and Apurna Mathur: "Taxes and Wages," [AEI Working Paper](#), July 2006.

⁴³ Mathur, Apurna and Matthew Jensen: "Corporate Tax Burden on Labor: Theory and Evidence." [Tax Notes](#), 6 June 2011.

Regardless of the metric used, the U.S. is a high-tax country for corporate investment, and a large part of the burden is borne not by the owners of capital but by workers via lower investment, productivity, and wages.

2.6 *The U.S. Corporate Code Inhibits Economic Growth*

In addition to making U.S. companies less competitive and encouraging them to invest elsewhere, a wealth of recent empirical research also suggests that the high corporate tax rate in the United States serves to increase the user cost of capital, slowing investment, productivity, and with it economic growth. Jens Arnold and Cyrille Schweltnus explain in a 2008 OECD study how corporate taxes affect investment decisions, concluding that the result is a lower rate of return for innovative but risky investments, reducing both innovation and risk-taking.⁴⁴

A variety of recent studies have confirmed an inverse relationship between corporate tax rates and economic growth. For example, a 2009 World Bank study links higher tax rates with lower investment and entrepreneurial activity.⁴⁵ The OECD report by Arnold and Schweltnus estimate that a 10 percent increase in the user cost of capital lowers investment by 7 percent, and from that inferred that lowering the corporate tax rate from 35 to 30 percent would increase annual productivity growth by 0.4 percent per year.⁴⁶ Young Lee and Roger Gordon estimate that a ten percentage point reduction in the corporate tax rate would increase productivity growth by somewhere between 1.1 and 1.8 percentage points. The implication of this research, suggests William Gentry and Glenn Hubbard, is that the corporate income tax is in a very real way a “success tax” that falls disproportionately on firms that have higher than the average productivity growth.⁴⁷

Recent research also suggests that the corporate income tax has a higher cost on the economy than other forms of taxation. Another OECD study, this one by Asa Johansson, Christopher Heady, Jens Arnold, Bert Brys, and Laura Vartia, found that of all ways to generate revenue, corporate taxes have the most harmful effect on economic growth, followed by personal income taxes and then consumption taxes, an ordering echoed elsewhere.⁴⁸ The Joint Committee on Taxation determined in a recent study that while reductions in individual income tax rates may provide the largest short-term economic stimulus, by temporarily increasing income and with it the consumption of goods and services, reductions in corporate taxes have the greatest effect on *long-term growth* by increasing the stock of productive capital, which leads to higher labor productivity.⁴⁹ Given that the Joint Committee generally professes skepticism with regards to the

⁴⁴ Arnold, Jens and Cyrille Schweltnus: “Do corporate taxes reduce productivity and investment at the firm level? Cross-Country evidence from the Amadeus dataset.” OECD Economics Department [Working Paper No. 641](#), September 30, 2008.

⁴⁵ Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Shleifer: “The Effect of Corporate Taxes on Investment and Entrepreneurship.” *American Economic Journal: Macroeconomics*, 2(3): 31–64, July 2010.

⁴⁶ Arnold, Jens and Cyrille Schweltnus: “Do corporate taxes reduce productivity and investment at the firm level? Cross-Country evidence from the Amadeus dataset.” OECD Economics Department [Working Paper No. 641](#), September 30, 2008, cited in: “Corporate Taxes and Economic Growth.” [PwC](#), 1 February 2010.

⁴⁷ See Gentry, W. and R.G. Hubbard: “Success Taxes, Entrepreneurial Entry, and Innovation.” National Bureau of Economic Research, *NBER Working Paper No. 10551*, June 2004.

⁴⁸ Johansson, Asa, Christopher Heady, Jens Arnold, Bert Brys and Laura Vartia: “Tax and Economic Growth.” *OECD Economics Department Working Paper No. 620*, 11 July 2008.

⁴⁹ “Macroeconomic Analysis of Various Proposals to Provide \$500 Billion in Tax Relief.” *Joint Committee on Taxation, JCX-4-05*, 1 March 2005.

dynamic response to tax changes, this is a not-insignificant stance and one that is framed not by ideology but by copious empirical evidence.

3. Repatriation: A Short-term and Temporary Solution

A number of bills have been introduced in Congress (such as H.R. 1834, the “Freedom to Invest Act of 2011”) that would create a short interval during which foreign-sourced profits earned by companies based in the U.S. could be repatriated into the country at a reduced tax rate. The intent of a repatriation tax policy is for companies to return these profits to the country to be used to increase investment, employment, and economic growth in general.

3.1 Evidence from the American Jobs Creation Act

The last repatriation tax policy occurred as the Homeland Investment Act (HIA), part of the American Jobs Creation Act (AJCA) of 2004, which allowed a temporary 85 percent tax deduction on dividends received from foreign subsidiaries for one year, effectively lowering the tax rate on repatriated foreign subsidiary earnings from 35 percent to 5.25 percent. The Act, along with subsequent IRS guidance, approved the use of repatriated funds for hiring and training, infrastructure, research and development, capital investments, and financial stabilization for the purposes of job retention and creation, and disallowed using repatriated funds for executive compensation, dividend payouts, share repurchases, tax payments, and debt instrument purchases.⁵⁰

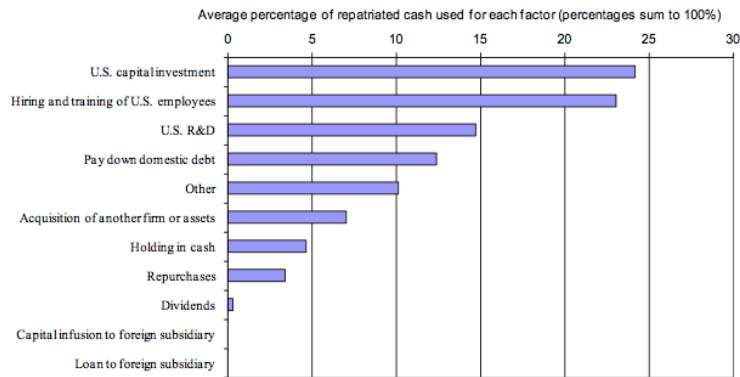
The AJCA certainly increased revenue coming into the U.S.; companies repatriated \$362 billion in 2004 out of an estimated \$804 billion of foreign earnings available for repatriation.⁵¹ However, there is no official report on how the repatriated earnings were actually spent, since the AJCA did not require companies to trace or segregate their use of repatriated funds. In 2008 John R. Graham, Michelle Hanlon, and Terry Shevlin addressed this question in a survey of tax executives at over 400 firms.⁵² They found that 23 percent of repatriated funds went toward job creation, 24 percent toward capital investment, and 12.4 percent to pay down domestic debt, a breakdown that can be seen in Figure 6.

⁵⁰ Blouin, Jennifer and Linda Krull: “Bringing it home: A study of the incentives surrounding the repatriation of foreign earnings under the American Jobs Creation Act of 2004,” July 2008.

⁵¹ Schink, George and Laura Tyson: “A Temporary Reduction in Taxes on Repatriated Profits for the Purpose of Economic Stimulus and Investment in National Priorities.” [Information Technology Industry Council](#), 30 January 2009.

⁵² Graham, John R., Michelle Hanlon, and Terry Shevlin: “Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits.” [National Tax Journal](#) 63(4, Part 2), December 2010, p. 1111-1144.

Figure 6: Uses of Repatriated Cash



Graph from: Graham, John R., Michelle Hanlon, and Terry Shevlin: “Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits,” *National Tax Journal* 63(4, Part 2), December 2010, p. 1111-1144.

The AJCA did not require the use of repatriated funds for incremental investment; firms could use repatriated funds for allowed purposes, and then use freed up cash for other purposes. At some level the difference is merely semantic, since money is completely fungible, but it is relevant as to whether the specifications of the law creating the tax policy were met. Clemons and Kinney suggest that firms did not increase net investment in domestic operations because they lacked domestic growth opportunities.⁵³ Jennifer Blouin and Linda Krull estimate that 20 percent of repatriated funds were used for share repurchases.⁵⁴ Dhammika Dharmapala, Fritz Foley and Kristin Forbes find that the firms that repatriated in 2004 were not financially constrained and that as a result significant funds went toward returning cash to shareholders rather than increased domestic capital expenditures, spending on employment and R&D, or reduced debt levels.⁵⁵ They suggest that a \$1 increase in repatriations were associated with an increase of payouts to shareholders of between \$0.60 and \$0.92. However, payouts to shareholders make capital available to shareholders for investment, consumption or other purposes as the dividends make their way through the economy.

John R. Graham, Michelle Hanlon, and Terry Shevlin argue that freed-up funds rather than repatriated funds were the source for share repurchases.⁵⁶ As shown in Figure 7, their study reveals that paying down domestic debt and repurchasing shares were the most common uses for cash freed by repatriated earnings and note that these results aren’t surprising, given that additional cash doesn’t create new investment opportunities in an efficient market. They do find that a significant amount of repatriated funds went to capital investment, which they argue is evidence that a high tax on repatriated earnings dampens investment. Faulkender and Petersen find that while the average firm that repatriated under the AJCA was not capital constrained and did not

⁵³ Clemens, Roy and Michael R. Kinney: “An Analysis of the Tax Holiday for Repatriation Under the Jobs Act.” Tax Notes Special Report, 25 August 2008.

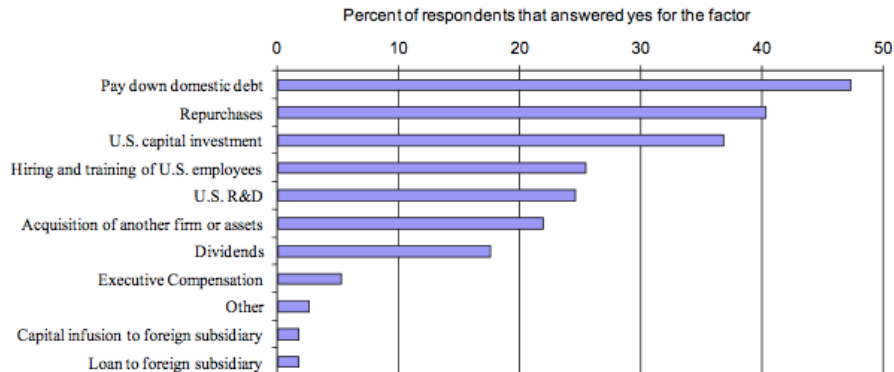
⁵⁴ Blouin, Jennifer and Linda Krull: “Bringing it home: A study of the incentives surrounding the repatriation of foreign earnings under the American Jobs Creation Act of 2004,” July 2008.

⁵⁵ Dharmapala, Dhammika, C. Fritz Foley, and Kristin Forbes: “Watch What I Do, Not What I Say: The Unintended Consequences of the Homeland Investment Act,” April 2010.

⁵⁶ Graham, John R., Michelle Hanlon, and Terry Shevlin: “Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits,” *National Tax Journal* 63(4, Part 2), December 2010, p. 1111-1144.

appreciably increase investment, a subset of firms that were capital-constrained repatriated earnings under the AJCA and significantly increased investment.⁵⁷ It's important to note that the capital market may have approximated an efficient market in 2004, but in the post financial crisis environment there are firms that do face liquidity constraints and have trouble fully accessing capital markets.

Figure 7: Uses of Cash Freed Up by Repatriation



Graph from: Graham, John R., Michelle Hanlon, and Terry Shevlin: "Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits," *National Tax Journal* 63(4, Part 2), December 2010, p. 1111-1144.

Economic assessments of the AJCA offer varied conclusions as to its net economic effect. Shapiro and Mathur find that repatriated funds were used to create or retain over 2.14 million jobs, and generated \$34.5 billion in new federal revenues.⁵⁸ On the other side of the spectrum, Dharmapala, Foley, and Forbes find no increase in domestic investment, employment, or R&D, and emphasize instead increases in share repurchases, and evidence of round tripping.⁵⁹ An important consideration in analyzing the economic effect of a repatriation holiday is the origin of the repatriated cash. Cash that is trapped abroad in foreign-denominated assets benefits the U.S. economy when it returns, regardless of how firms choose to spend it. However, it is conceivable that companies might sell U.S. assets held by foreign subsidiaries in order to repatriate earnings at a lower tax rate. Even in this case, however, repatriated cash would have a net stimulatory effect by increasing aggregate supply (by increasing firm spending on domestic operations) or demand (by returning dividends to shareholders).

⁵⁷ Faulkender, Michael and Mitchell Petersen: "Investment and Capital Constraints: Repatriations Under the American Jobs Creation Act." *NBER Working Papers 15248*, August 2009.

⁵⁸ Shapiro, Robert J., and Aparna Mathur: "Using What We Have to Stimulate the Economy: The Benefits of Temporary Tax Relief for US Corporations to Repatriate Profits Earned by Foreign Subsidiaries." Study supported by the Information Technology Industry Council. Available at www.sonecon.com, January 2009.

⁵⁹ Dharmapala, Dharmika, C. Fritz Foley, and Kristin Forbes: "Watch What I Do, Not What I Say: The Unintended Consequences of the Homeland Investment Act," April 2010.

3.2 Economic Impacts

Once can think of repatriation as a private-sector approach to stimulus. As with government stimulus like the American Recovery and Reinvestment Act (ARRA), cash flows would become available which affected firms would use for hiring, real purchases of investment goods, and research and development. These cash flows would put resources in the hands of families and other companies. (See Figure 6.) Estimates from the Joint Committee on Taxation suggest that unlike the ARRA, which increased the deficit dollar for dollar, a repatriation approach to stimulus would only cost about 16 cents on the dollar.⁶⁰

To the extent that funds are used for direct purchases of goods and services, the stimulus impacts are obvious and direct. As noted above, evidence from the 2004 repatriation policy indicates that a substantial amount went to labor (23 percent) or capital investment (24 percent). The economics of a repatriation holiday parallels those that used to justify government stimulus via infrastructure projects and other direct-purchase programs.

Critics of repatriation focus on the fact that some of the corporations directly affected may choose to undertake financial transactions to retire debt, pay dividends, or repurchase shares. This is presumed to be evidence against the efficacy of the policy. As Figure 6 highlights, this is a logical error in that it does not allow for the pass-through of these funds to other entities that undertake purchases. As the Congressional Budget Office said regarding the job impacts reported by recipients of ARRA money, "...the law's overall effects on employment requires a more comprehensive analysis than can be achieved using the recipients' reports." In the same way, the impact of a repatriation policy is much broader than that measured in the directly-affected firms.

A more comprehensive analysis recognizes that those financial transactions have two effects. First, they put resources in the hands of other economic actors – firms, households, pension plans, investors, etc. – who continue the chain of real purchases and financial transfers. (See Figure 6.) Second, actions like share repurchases raise share values. The improvement in valuations supports household spending and overall demand.

Thus, the ultimate test is not the decisions made by individual firms but rather the overall impact on investment, growth, and jobs. After the passage of repatriation in 2004, the S&P 500 increased 6.5 percent and had gained 15 percent by the end of the next year; GDP growth reached 4.3 percent for 2005.⁶¹ Steven Englander, head of G10 foreign exchange strategy at Citigroup, wrote in a recent research note that "2005 was the only strong growth year in the decade in which U.S. growth was not fed by 'bubble' forces that eventually blew up."⁶²

It is probable that companies most likely to repatriate dividends are also those best-positioned to provide an impetus to the rest of the economy. George Schink and Laura Tyson argue in their research that the companies most likely to repatriate foreign profits tend to pay higher than

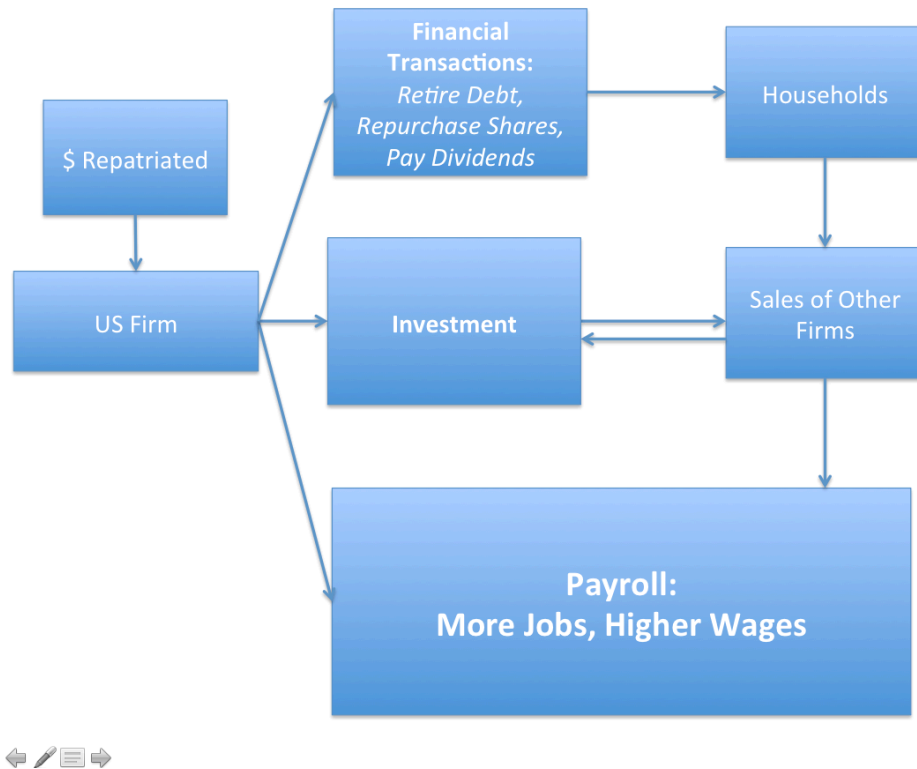
⁶⁰ The Joint Committee on Taxation estimated in April 2011 that a repatriation holiday would bring \$700 billion in repatriated earnings back to the United States, \$200 billion of which would have occurred under present law within a ten year window, and a resulting revenue loss of \$80 billion over ten years. These estimates suggest that each extra dollar repatriated would come at a cost of 16 cents. See: Letter to Honorable Lloyd Doggett, [Joint Committee on Taxation](#), 15 April 2011.

⁶¹ Kumar, Vishesh: "Bring on the Corporate Tax Holiday!" [CNNMoney](#), 25 April 2011.

⁶² Cited in: Kumar, Vishesh: "Bring on the Corporate Tax Holiday!" [CNNMoney](#), 25 April 2011.

average wages and are major investors in research and development; these companies include the most competitive, innovative and successful companies and also happen to be the entities most able to move operations elsewhere to take advantage of beneficial tax climates abroad.⁶³ They also note that in 2006 that U.S. multinationals accounted for over half of total U.S. exports, over three-fourths of total R&D spending by U.S. businesses, and paid wages roughly 17 percent higher than the average for all other private U.S. firms.

Figure 8: Use of Repatriated Earnings



The economic climate during which the repatriation policy is held matters greatly as well. For instance, using repatriated funds to improve the cash flows of U.S. companies can provide significant economic stimulus in a tight credit environment. Schink and Tyson note in their work that companies with liquidity and credit constraints are forced to cut back operations and capital spending, causing lay-offs, reduced supplier purchases, and delays in capital investment projects, all of which intensify an economic downturn.⁶⁴ Similarly, Shapiro and Mathur emphasize that a repatriation holiday has the potential to thaw frozen financial markets.⁶⁵ They argue that allowing multinational corporations to pay down their debt with repatriated funds would have the same effect as direct bank equity infusions such as those provided by the Troubled

⁶³ Schink, George and Laura Tyson: "A Temporary Reduction in Taxes on Repatriated Profits for the Purpose of Economic Stimulus and Investment in National Priorities." [Information Technology Industry Council](#), 30 January 2009.

⁶⁴ Schink, George and Laura Tyson: "A Temporary Reduction in Taxes on Repatriated Profits for the Purpose of Economic Stimulus and Investment in National Priorities." [Information Technology Industry Council](#), 30 January 2009.

⁶⁵ Shapiro, Robert J., and Aparna Mathur: "Using What We Have to Stimulate the Economy: The Benefits of Temporary Tax Relief for US Corporations to Repatriate Profits Earned by Foreign Subsidiaries." Study supported by the Information Technology Industry Council. Available at www.sonecon.com, January 2009.

Asset Relief Program (TARP), and estimate that repeating a repatriation policy could lead to capital flows equaling about 21 percent of the bank capital infusions provided under TARP. The credit market has improved since 2009, but it is far from healthy.

While the various uses of repatriated earnings may each impact the economy differently, it's safe to say that there is no option that does *not* result in some degree of stimulus.

3.3 Likely Impacts of a Future Repatriation Policy

To investigate the likely impact of a future repatriation policy, I conducted an informal poll of U.S. corporations that have potentially large amounts of overseas earnings available for repatriation. The sample of firms contacted has an estimated \$600 billion in overseas earnings. Each firm was asked how much it would repatriate in response to the policy change and what priorities it had for repatriated funds.

Examining the abstract and informal responses from the 10 firms who responded indicated that these firms have an estimated \$85 billion overseas – roughly 15 percent of the total – and collectively anticipated repatriating about \$62 billion. If this constitutes the same fraction of repatriations, it translates to roughly \$470 billion for the sample as a whole. If U.S. multinationals as a whole have \$1 trillion to \$1.5 trillion overseas, it implies a crude range of repatriation between \$800 billion and \$1.2 trillion.⁶⁶

How would these funds be used? Nine of the 10 firms listed new capital investment as either their first or second use of the funds. Among the other uses of funds such as increasing payroll, paying dividends, re-purchasing shares or retiring debt there was no particular dominant theme. It's important to remark that regardless of how the funds are used, they will be spent in the U.S. rather than abroad.

What are the likely impacts of such a policy? To gauge the impact of a future repatriation policy, I build upon the analysis of stimulus by the Congressional Budget Office. As noted earlier, the inflows of repatriated funds are the private sector analogue to the ARRA cash flows that would be used for hiring, purchases of investment goods, and research and development, as well as for financial transactions that put funds in the hands of corporations and American households.

The CBO releases regular reports on the output and employment effects of the ARRA. I use the most recent report to compute the impact of the \$830 billion stimulus in 2009 on GDP and employment in the 4th quarter of 2010.⁶⁷ This provides a “multiplier” for the longer-run impacts per dollar of stimulus. We then use these multipliers to construct impacts from the proposed repatriation policy. CBO's estimates constitute a range, so the implied repatriation impacts constitute a range as well.

⁶⁶ This is a bit higher than the estimate of Allen Sinai; see “Macroeconomics Effects of Reducing the Effective Tax Rate on Repatriated Foreign Subsidiary Earnings in a Credit- and Liquidity-Constrained Environment.” [American Council for Capital Formation](#), 30 January 2009. Note, however, that it is in the range of the \$800 billion estimate from the Joint Committee on Taxation.

⁶⁷ “Estimated Impact of the American Recovery and Reinvestment Act on Employment and Economic Output from January 2011 Through March 2011.” Congressional Budget Office, May 2011.

Table 1

Results Based on CBO Analysis of ARRA

Scenario	Repatriation (billions)	Increased GDP (billions)	Increased Jobs (thousands)
Low	\$800	\$140	1,253
		\$436	3,374
Midpoint	\$1,000	\$175	1,566
		\$545	4,216
High	\$1,500	\$210	1,880
		\$654	5,060

The results are shown in Table 1. As shown in the “Midpoint” scenario in row 3, the CBO analysis implies GDP higher by between \$175 and \$545 billion (corresponding to an increase of between 1 and 4 percent). Similarly, the CBO analysis implies an additional 1.6 million to 4.2 million more Americans at work over the course of 8 quarters of implementation.

As the table indicates, scenarios in which repatriations exceed or fall short of the midpoint scenario generate correspondingly larger or smaller impacts. However, using the midpoint scenario and choosing the middle of the CBO-implied range suggests a rough GDP impact of \$360 billion and the creation of 2.9 million jobs.

A potential criticism of this approach is the notion that the ARRA was structured to have greater direct impacts on aggregate demand. However, in practice, there was little in the way of direct purchases of goods and services, a point emphasized by John Cogan and John Taylor.⁶⁸ Instead, the Act was dominated by financial transfers to households, state-local governments, and firms. These are conceptually similar to the kinds of financial transfers that would result from dividends, share repurchases, and debt retirement, so there is no obvious reason why the two experiments are not conceptually linked.⁶⁹

⁶⁸ Cogan, John F. and John B. Taylor: “What The Government Purchases Multiplier Actually Multiplied In The 2009 Stimulus Package.” Stanford University, January 2011.

⁶⁹ Indeed, in a separate publication Cogan and Taylor further emphasize that the transfers to states likely did not change state spending significantly. Instead, federal transfers permitted lower state borrowing. Thus, again, the ARRA was dominated by financial transfers. See “The Obama Stimulus Impact? Zero.” [*Wall Street Journal*](#), 9 December 2010.

In fact, the CBO-based results may underestimate the potential benefits of repatriation in light of recent studies. For example, a study conducted by J.P. Morgan in June 2011 estimated that as much as \$500 billion to \$1 trillion could be repatriated given approximately \$1.4 trillion in undistributed foreign earnings. It likens repatriating these funds to an “injection of liquidity” to the US financial system and explains that repatriation would reduce equity risk premia, and have a greater stimulative effect than QE2.⁷⁰

A final consideration for the impact of repeating a repatriation policy is its long-term effect on holding U.S. cash abroad. In a 2010 study, Thomas Brennan argues that the AJCA was a short-term success but provided an incentive for companies to retain earnings overseas.⁷¹ While substantial funds returned to the U.S., since then there has been a sharp increase in the rate at which companies hold foreign earnings overseas. This explanation is incomplete, however, since it doesn’t account for the global influences that have increasingly caused companies to avoid investing in the U.S. in favor of investment overseas, such as growing markets abroad coupled with low tax rates. To avoid any possible incentive to hold cash abroad in anticipation of a future holiday, and to have a bigger impact, a repatriation holiday should be done in the context of transitioning to a territorial system entirely. Yet the reality is that without a repatriation holiday, cash will continue to be held abroad, and the U.S. will continue to encourage its own companies to invest elsewhere.

4. Fundamental Reform: A Long-term Solution

The U.S. tax code should be improved to make it appealing to headquarter and invest in the United States, minimize expensive and unproductive tax-planning strategies, improve economic competitiveness, and enhance high-quality jobs. A first step would be to encourage companies to repatriate foreign earnings, with the ultimate goal of moving toward a territorial system of taxation. Lowering the corporate tax rate while scaling back the myriad targeted deductions, credits, and carve-outs currently found in the corporate tax code would increase U.S. competitiveness, stimulate the economy, and introduce a greater degree of simplicity.

⁷⁰ Lee, Thomas J.: “U.S. Equity Strategy Flash.” [J.P. Morgan](#), 27 June 2011.

⁷¹ Brennan, Thomas J.: “What Happens After a Holiday?: Long-Term Effects of the Repatriation Provision of the AJCA.” [Northwestern Journal of Law and Social Policy](#), Volume 5, Spring 2010.