

**Using What We Have to Stimulate the Economy:  
The Benefits of Temporary Tax Relief for U.S. Corporations  
To Repatriate Profits Earned by Foreign Subsidiaries**

**Robert J. Shapiro and Aparna Mathur**

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# **Using What We Have to Stimulate the Economy: The Benefits of Temporary Tax Relief for U.S. Corporations To Repatriate Profits Earned by Foreign Subsidiaries<sup>1</sup>**

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## **1. Introduction**

As President Obama and the Congress expand the catalog of measures to help stabilize the U.S. financial system and address the accelerating economic decline, a major, untapped resource sits on the balance sheets of the foreign subsidiaries of U.S. multinational corporations. These subsidiaries currently hold up to \$1 trillion in past earnings, largely held in liquid financial instruments, because current U.S. tax law defers U.S. corporate tax on those profits until they are repatriated to their parent companies in the United States. If those earnings were transferred to the parent companies in the United States, they could fund substantial new capital investment and employment, and provide additional liquidity to the strapped U.S. financial system as companies reduce their domestic debt. In principle, the earnings currently held abroad would provide significant economic stimulus and financial market liquidity if a change in government policy could induce U.S. multinationals to promptly repatriate them and use them for those designated purposes.

Economists have studied the current “deferral” provisions for three decades and have concluded that they create strong incentives to retain earnings in foreign countries with lower corporate tax rates than the United States until those earnings can be used to offset U.S. domestic losses. These incentives have increased in recent years as many countries, especially across Europe, have reduced their own corporate tax rates. Economists have also found that lower U.S. taxes on repatriated income can produce potentially large cash inflows to parent companies in the United States. In 2004, the government effectively conducted a natural experiment that tested these propositions, enacting a one-year, 85 percent “dividends received deduction” on repatriated foreign-source earnings, which effectively lowered the U.S. corporate rate on those earnings from 35 percent to 5.25 percent for a limited period. Using new Internal Revenue Service data, we have analyzed the results of that policy and find that it increased inflows of foreign-source earnings by some \$312 billion, including \$252 billion by U.S. manufacturing concerns. Our analysis suggests that the repatriating corporations used \$73 billion of this income or other funds freed up by the new income to create or retain jobs, nearly \$75 billion to finance new capital spending, and nearly \$39 billion to pay down domestic debt. Our analysis estimates that the additional capital spending under the 2004 policy led to long-term wage gains of more than 1 percent in manufacturing and information industries, with smaller gains in other areas. Finally, the temporary tax change produced

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more than \$34 billion in federal revenues, including more than \$16 billion in direct corporate income tax revenues and nearly \$18 billion in personal income tax revenues from the additional jobs and higher wages supported by the reform. These are revenues which otherwise would not be collected, since under the current system corporations hold their foreign-source profits offshore until they can be used to offset domestic losses.

This analysis of the 2004 Act enables us to estimate the economic impact of enacting a comparable, temporary provision in 2008. The results show that this policy would provide substantial economic stimulus for the current recession and significant additional liquidity for the U.S. financial system.

- Based on income data for U.S. multinational corporations, we estimate that such a provision could result in the repatriation of nearly \$421 billion in foreign-source income currently held abroad.
- Manufacturing companies would account for nearly \$340 billion of that total, the largest shares coming from the most globally competitive and profitable sectors.
  - We estimate that repatriated, foreign-source earnings under this policy would total \$133 billion in the pharmaceutical sector, \$46 billion by U.S. computer manufacturers, nearly \$24 billion by U.S. food producers, \$16 billion by American companies in finance, insurance and real estate, and more than \$11 billion by U.S. software makers.
- We project that nearly \$97 billion of the \$421 billion in total repatriated income or funds freed up by that income would go to retaining or creating employment, an estimated \$101 billion would go to new capital spending, and \$52 billion would be used to pay down domestic debt.
- The additional funds used for employment could save or create an estimated 2.6 million jobs, including nearly 2.1 million jobs in manufacturing.
- The additional funds used for capital investments could increase the capital stock of U.S. manufacturing by an estimated 2.1 percent, which we estimate would lead to long-term average wage increases of nearly 1.3 percent.
- The new policy also would produce nearly \$45 billion in new federal revenues, including more than \$22 billion in direct corporate tax revenues on the repatriated funds and another \$22 billion in personal income tax revenues on the additional wage income stimulated by the job creation and job retention and by wage increases associated with the additional capital investments.
- We further estimate that the temporary tax preference could produce or free up an estimated \$52 billion used to reduce the domestic debt of companies

repatriating foreign-source income, including more than \$42 billion by U.S. manufacturing companies.

- This infusion of new capital into the U.S. financial system would be equivalent to 21 percent of the \$250 billion provided for bank equity infusions under the Treasury Department's TARP program in 2008, or 26 percent of the \$200 billion provided in 2008 by the Federal Reserve's Term Asset Backed Security Loan Facility program.

We acknowledge an important caveat to our estimates – namely, the economy is seriously depressed at this time, compared to 2004-2005. While these conditions should not affect the volume of foreign earnings repatriated, fewer of those funds might be used for capital spending or employment, and more could go to paying down domestic debt. Much of the impact on capital spending and employment also would be likely to occur in 2010. Nevertheless, the stimulus effects would be substantial. The analysis shows that a temporary policy of reducing the tax on profits held abroad by foreign subsidiaries of U.S. firms can play a meaningful role in helping to stabilize and restore employment, capital spending and wages, and provide additional liquidity to the U.S. financial system.

## **II. Background**

### *The Taxation of Foreign-Earned Corporate Profits*

The United States follows a worldwide system of corporate taxation, under which U.S. persons and firms are liable for tax on all income, regardless of where it is earned. U.S. multinational corporations, therefore, are subject to the 35 percent U.S. corporate tax rate on the earnings of their foreign-based subsidiaries, but with two important caveats. First, to avoid double taxation, taxpayers can claim a foreign tax credit for corporate income taxes paid to foreign governments, offsetting U.S. tax liability. For example, an American corporation which earns \$100 in a foreign country with a 10 percent tax rate would pay \$10 to that foreign government, reducing its U.S. tax liability from \$35 on \$100 to \$25. If the foreign income tax rate exceeds the U.S. rate, “dividend” payments from a U.S. company's foreign subsidiary, representing the parent company's foreign-earned income, trigger no additional U.S. income tax liability; and the U.S. taxpayer can apply the difference to its U.S. tax liability on other foreign income. Taxpayers whose total foreign income tax payments exceed their U.S. income tax liability also can apply their excess foreign tax credits to reduce their U.S. income tax liability on foreign source income from the two previous years or the following five years.<sup>2</sup>

Under the second pertinent feature of the U.S. worldwide corporate tax system, U.S. multinational corporations (or individuals) can defer their U.S. tax liability on certain of their foreign-earned profits until those profits are transferred to the U.S. parent company in the form of dividends. This deferral is available only on the active business profits earned by American-owned foreign affiliates which are separately incorporated as subsidiaries in foreign countries. The profits of unincorporated foreign businesses such as

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<sup>2</sup>Mihir Desai, C. Fritz Foley and James R. Hines (2001), “Repatriation Taxes and Dividend Distortions,” NBER Working Paper 8507.

American-owned branches in other countries are not eligible for this deferral, nor are interest, rental, and royalty income received in foreign countries.<sup>3</sup>

*The Economic Consequences of Deferral: A Review of the Evidence*

These provisions for tax deferral on active business income earned by foreign subsidiaries raise several important questions about their economic significance. Here, we focus on the critical question of whether the possibility of this tax deferral reduces repatriation of foreign-earned income and potential U.S. domestic investment, job creation and wage increases which could follow from the use of that income in the United States. These issues are especially pertinent today, if capital inflows from a temporary reduction in the tax on repatriated earnings, of the type applied in 2004 and 2005, could stimulate investment and job creation in the current recession and increase the capital resources of U.S. lending institutions constrained by the financial crisis.

The early theoretical work on this question by leading researchers such as Mervyn King (current Governor of the Bank of England), Alan Auerbach and David Bradford, established, unsurprisingly, that deferral does affect the dividend payout or repatriation decisions of multinational firms, under what came to be called the “trapped equity” view of dividend taxation.<sup>4</sup> Subsequent analysis found that taxes on repatriated income represent additional costs for mature subsidiaries that finance their investments from their retained earnings and affect the parent company’s market valuation, especially if the tax rate on repatriated income or incidence of excess foreign tax credits changes over time.<sup>5</sup>

Since that early work, other researchers, including R. Glenn Hubbard, former chairman of the President’s Council of Economic Advisors, have examined the sensitivity of those decisions to those tax costs.<sup>6</sup> They found initially that a 1 percent decrease in the tax on repatriated income is associated with a 4 percent increase in dividend payouts, suggesting that tax considerations are important determinants of the timing of dividend repatriations. Other researchers have further refined this analysis, first by distinguishing

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<sup>3</sup> Subpart F provisions of the U.S. tax code, enacted in 1962 to discourage U.S. firms from accumulating tax-deferred income in subsidiaries located in offshore “tax havens,” represent exceptions to the deferral provisions. Under Subpart F, certain foreign-source income is subject to U.S. tax whether or not it is repatriated, including income whose geographical source is thought to be easily manipulated, as well as income from passive investments (interest, rents, royalties, and dividends from unrelated corporations). In general, income from active business operations calls outside the scope of Subpart F and is eligible for deferral. See “Tax Exemption for Repatriated Earnings: Proposals and Analysis,” Congressional Research Service, 2006).

<sup>4</sup> King, Mervyn A., *Public Policy and the Corporation* (London: Chapman and Hall, 1977); Auerbach, Alan J., “Wealth Maximization and the Cost of Capital,” *Quarterly Journal of Economics*, August 1979, 93 (3), 433-446.; and Bradford, David F., “The Incidence and Allocation Effects of a Tax on Corporate Distributions,” *Journal of Public Economics*, February 1981, 15 (1), 1-22.

<sup>5</sup> Hartman, David G., “Tax Policy and Foreign Direct Investment,” *Journal of Public Economics*, February 1985, 26 (1), 107-121.

<sup>6</sup> Hines, James R., Jr. and R. Glenn Hubbard, “Coming Home to America: Dividend Repatriations by U.S. Multinationals,” in Assaf Razin and Joel Slemrod, eds., *Taxation in the Global Economy* (Chicago: University of Chicago Press, 1990), 161-200.

between permanent and temporary changes in the tax on repatriated income.<sup>7</sup> They concluded that only temporary tax changes influence these decisions; and while their limited data set reduced the certainty of their finding, subsequent research supports the earlier conclusion.<sup>8</sup> Recent research using a large panel of the foreign affiliates of U.S. firms over a 15-year period (1982-1997) confirmed the sensitivity of repatriation to taxes, although to a lesser degree than the earlier analysis: They found that a 1 percent increase in repatriation taxes produces a 1 percent reduction in dividend or repatriated earnings.<sup>9</sup> Finally, the latest research in this area explains the high levels of cash held abroad by foreign subsidiaries by pointing to the tax cost on repatriated earnings.<sup>10</sup>

These findings and the complexity of the current arrangements for taxing U.S. multinationals has prompted renewed interest in the system of territorial taxation used by many other countries, in which dividends received from foreign affiliates are exempt from domestic income tax. One analysis suggests that this change would actually raise U.S. revenues, as current revenues are minimal and changes in expense allocations under a dividend exemption would more than offset any losses<sup>11</sup> and on the margins shift investment by U.S. multinationals from low-tax countries to the United States.<sup>12</sup>

Three decades of research in this area has produced a broad consensus that lower taxes on repatriated income can lead to large cash inflows from foreign subsidiaries to parent companies. The consequences of such increased cash flows can be analyzed using a natural experiment: In 2004, the U.S. Government enacted the American Jobs Creation Act temporarily reducing the corporate tax rate on repatriated earnings from 35 percent to 5.25 percent. Below, we assess the impact of that reduction on the American economy.

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<sup>7</sup> Altshuler, Rosanne, T. Scott Newlon and William C. Randolph, "Do Repatriation Taxes Matter? Evidence from the Tax Returns of U.S. Multinationals," in Martin Feldstein, James R. Hines Jr., and R. Glenn Hubbard, eds., *The Effects of Taxation on Multinational Corporations* (Chicago: University of Chicago Press, 1995), 253-272.

<sup>8</sup> Grubert, Harry, "Taxes and the Division of Foreign Operating Income Among Royalties, Interest, Dividends and Retained Earnings," *Journal of Public Economics*, May 1998, 68 (2), 269-290., Grubert, Harry and John Mutti, *Taxing International Business Income: Dividend Exemption versus the Current System* (Washington D.C.: American Enterprise Institute, 2001). James Hines and Henry Grubert also offer evidence that alternatives to dividends, such as interest and royalty payments, also respond the tax costs associated with repatriation, although Grubert in a separate study also found somewhat anomalously that levels of retained earnings are insensitive to tax costs. This evidence is consistent with Grubert's view that repatriation taxes do not affect net investment by subsidiaries, because firms can use alternatives to dividends to repatriate foreign-source income. Hines, James R., Jr., "Credit and Deferral as International Investment Incentives," *Journal of Public Economics*, October 1994, 55 (2), 323-347. Hines, James R., Jr., "Taxes, Technology Transfer, and the R&D Activities of Multinational Firms," in Martin Feldstein, James R. Hines Jr., and R. Glenn Hubbard, eds. *The Effects of Taxation on Multinational Corporations* (Chicago: University of Chicago Press, 1995), 225-248.

<sup>9</sup> Desai, Foley and Hines, 2001. This implies that repatriation taxes reduce aggregate dividend payouts by 12.8 percent, and in the process generate annual efficiency losses equal to 2.5 percent of dividends.

<sup>10</sup> C. Fritz Foley, Jay C. Hartzell, Sheridan Titman, Garry Twite (2007), "Why Do Firms Hold So Much Cash? A Tax Based Explanation," NBER Working Paper No. 12649.

<sup>11</sup> Grubert, Harry, "Dividend Exemption and Tax Revenue," working paper, Department of the Treasury, 2001.

<sup>12</sup> Altshuler, Rosanne and Harry Grubert, "Where Will They Go if We Go Territorial? Dividend Exemption and the Location Decisions of U.S. Multinational Corporations," Working paper, Rutgers University, 2001.

### III. The Terms and Record of the American Jobs Creation Act of 2004

President George Bush signed the American Jobs Creation Act on October 22, 2004, providing under Section 965(a) of the Internal Revenue Code that U.S. multinationals could claim for one taxable year a 85 percent “dividend received deduction” or DRD on certain cash earnings received from its foreign subsidiaries (covering dividends paid to U.S. shareholders of “controlled foreign corporations” or CFC’s).<sup>13</sup> This provision reduced the applicable U.S. corporate tax on repatriated earnings from 35 to 5.25 percent (15 percent of the normal 35 percent corporate income tax rate). Most important, dividends eligible for the lower tax rate had to be reinvested in the United States. A company’s eligible dividends also were limited to the greater of \$500 million or the amount declared in a parent company’s financial statement as permanently invested outside the U.S.<sup>14</sup> The eligible dividends further were limited to the excess of the dividends received in the relevant year over its annual average dividends during three of the previous five years (disregarding the highest and lowest years). The amount of eligible dividends also was reduced by any increase in a foreign subsidiary’s “related-party indebtedness,” so a parent company could not repatriate funds from a subsidiary under the temporary tax treatment and then lend funds back to that subsidiary.

The reinvestment plan for repatriated earnings taxed at the temporary, 5.25 percent rate had to be approved by the parent company’s Board of Directors, and describe the specific, anticipated investments in the U.S., with dollar amounts, the time period over which those investments would be made, and factors beyond the taxpayer’s control which might affect its ability to complete the investments. Further, the IRS provided lists of permitted and disallowed uses of the funds. The permitted uses included hiring, training and other compensation for workers in the U.S.; infrastructure, capital investments and R&D in the U.S.; financial steps supporting job retention and job creation, including repayment of debts and pension plan funding; acquisitions of certain interests in other businesses; advertising and marketing expenditures in the U.S.; and purchases of intangible property in the U.S. The purposes disallowed included executive compensation; inter-company distributions, obligations, and transactions; dividends and other distributions to stockholders; stock redemptions; passive investments in other companies; debt instruments; and tax payments. However, the Act did not require companies to trace or segregate the repatriated funds, which were fungible with other resources. The Act also did not require that the funds represent incremental increases in allowed spending: IRS Notice 2005-10 stated that “provided a sufficient amount of funds is properly invested in the United States pursuant to the domestic reinvestment plan . . . the fact that other non-permitted investments are made during the period covered by such plan generally will not affect the eligibility of the dividend under section 965.”<sup>15</sup>

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<sup>13</sup> Companies could elect to apply the DRD to either the last taxable year beginning before October 22, 2004 or the first taxable year beginning in the one-year period starting October 22, 2004. See IRS Notice 2005-10 for the definition of cash dividends (dividends defined in which IRC Sections qualify).

<sup>14</sup> If the parent company disclosed only tax attributable to its earnings permanently invested abroad, the deduction was limited to the amount of that tax divided by 35 percent. The applicable financial statement is the most recently audited statement certified on or before June 30, 2003 as being prepared in accordance with GAAP, and if the taxpayer is required to file with the SEC did so file on or before June 30, 2003.

<sup>15</sup> Section 4.05

The Act stimulated very large repatriations of foreign-held earnings. In 2005, a report by the American Shareholders Association found that within one year of the passage of the Act, a sample of 91 companies repatriated nearly \$191 billion, including repatriations of \$36.9 billion by Pfizer, \$14.5 billion by Hewlett Packard, \$11 billion by Johnson and Johnson, \$10 billion by Dupont, \$9.4 billion by Schering Plough, and \$8 billion by IBM.<sup>16</sup> In early 2008, the IRS released data on the repatriation of cash dividends from 2004 to 2006, by selected industry groups, showing that 843 firms repatriated \$312.3 billion in dividend qualified for the tax reduction, including \$252.3 billion by 465 manufacturing firms. The following table uses those data to show the distribution of these repatriated dividends, by the industry of the parent corporation.

**Table 1: Tax-Preferred Repatriated Dividends, Tax Years 2004-2006,  
By the Industry of the Parent Corporation, \$ billions**

<b>Industry</b>	<b>Dividends</b>
<b>All Industries</b>	\$312.32
<b>Manufacturing</b>	252.25
Food Manufacturing	17.64
Paper Manufacturing	6.19
Chemical Manufacturing	120.20
<i>Basic Chemical Manufacturing</i>	4.80
<i>Pharmaceutical and Medicine Manufacturing</i>	98.78
Plastic and Rubber Products Manufacturing	0.80
Primary Metal Manufacturing	0.48
Fabricated Metal Product Manufacturing	4.81
Machinery Manufacturing	5.35
Computer and Electronic Equipment Manufacturing	57.49
<i>Computer and Peripheral Equipment Manufacturing</i>	34.20
<i>Semiconductor and Electronic Component Manufacturing</i>	13.57
Electrical Equipment, Appliance and Component Manufacturing	4.10
Transportation Equipment Manufacturing	10.24
<b>Wholesale and Retail Trade</b>	12.86
Wholesale trade, Durable Goods	4.64
Wholesale trade, Nondurable Goods	3.91
Retail Trade	4.31
<b>Transportation and Warehousing</b>	0.92
<b>Information</b>	13.20
Software Publishers	826
<b>Finance, Insurance, Real Estate, Rental and Leasing</b>	11.92
Insurance carriers and Related Activities	2.74
<b>Professional, Scientific and Technical Services</b>	2.74
<b>Management of Companies and Enterprises</b>	7.02
<b>Other Services and Industries</b>	11.41

<sup>16</sup> <http://www.atr.org/content/pdf/2005/aug/081905asa-repat.pdf>

These data show that manufacturing firms accounted for the largest repatriated dividends, followed distantly by non-manufacturing information industry companies, wholesale and retail trade firms, and companies in finance, insurance, real estate, and rental and leasing. Among manufacturing, pharmaceutical and computer and electronic equipment makers accounted for \$156.3 billion in repatriated earnings, or 50 percent of all repatriations and 62 percent of manufacturing repatriations. The incidence of use of the Act also varied considerably across industries: An August 2006 analysis found, for example, that all of the nine largest pharmaceutical companies repatriated earnings under the Act, compared to 21 of the nation's 40 largest high-technology companies.<sup>17</sup>

Despite the large funds repatriated under the 2004 Act and their variation across industries, there has been no systematic analysis of the use of those funds or the impact on jobs, investment and the economy. In the following sections, we present that analysis.

### *The Uses of Repatriated Funds*

The stated goal of the Act was to encourage repatriation of funds to enhance job growth and investment in the United States. To assess the Act's success, we allocated the repatriated funds to various uses such as worker hiring and training, capital investment, and other uses. While no organization, including the IRS, has collected data designed to explore these questions, a 2008 survey by John Graham, Michelle Hanlon and Terry Shevlin asked tax executives at more than 400 large corporations with foreign tax earnings to report how their firms used their one-time dividend relief under the Act.<sup>18</sup> The survey found that more than 60 percent of repatriated funds came from foreign-held cash holdings, a finding consistent with other research showing that multinationals hold large cash balances overseas to avoid the U.S. tax. The survey showed that when the government sharply reduced the tax rate on these funds, the firms repatriated much of those funds to the US. The survey found further that the companies reported using those funds in ways generally consistent with the uses permitted by Congress, including capital investment, hiring and training of U.S employees and research and development, all in the United States. The executives also reported that using domestically-held funds "freed up" by the inflows of repatriated funds enabled them to pay down domestic debt and repurchase shares, consistent with the view from efficient market theory that additional cash does not create new investment opportunities. This finding sheds new light on the results reported by Blouin and Krull (2008) that firms repatriating funds under the 2004 Act conducted share repurchases, which is not a congressionally-permitted use of those

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<sup>17</sup> Martin Sullivan, *Tax Notes*, Volume 112, Number 7, August 14, 2006, pp. 556-559.

<sup>18</sup> John R. Graham, Michelle Hanlon and Terry Shevlin (2008), "Barriers to Mobility: The Lock-Out Effects of U.S. Taxation of Worldwide Corporate Profits," [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1316576](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1316576). Data on these issues are difficult to obtain without the use of a survey. For example, most financial statement data are worldwide and not provided by geographic segments (under the current accounting rules). As a result, activities in the U.S. versus foreign jurisdictions cannot be easily discerned (e.g., did firms shift investment from foreign jurisdictions to the U.S.?). In addition, the AJCA did not require the specific tracing of funds nor that the spending of the funds be incremental spending on "permitted uses." Thus, because cash is fungible, archival data cannot delineate between what the repatriated funds were used for and what the cash "freed up" by the repatriated funds was used for.

funds. The more detailed survey data reveal that generally the firms used the repatriated funds for permitted purposes and then used “freed-up” cash to repurchase shares.

The survey disaggregated its results across 18 industry groups, with 39 percent of responses coming from manufacturing, 14 percent from holding companies, 7 percent from professional, scientific, and technical services, and nearly 6 percent from wholesale trade. The survey’s large sample and broad spectrum allow us to use its results to allocate the dividend data to different uses.

The analysis finds that, on average, 24 percent of the repatriated dividends went to new capital investments in the United States, 23 percent to hiring and training American employees, 14.7 percent to U.S. research and development, and 12.4 percent to pay down domestic debt. An average of ten percent of the repatriated funds were used for other purposes described by the respondents, including U.S. advertising and marketing, U.S. non-executive compensation, and qualified benefit plan contributions. In addition, on average, seven percent of the funds were used for acquisitions, and 4.6 percent were still held in cash at the end of 2006. In contrast to several other analyses that did not use direct data<sup>19</sup>, the survey found little evidence of significant repatriated funds being used to repurchase shares: On average 3.4 percent went to repurchase shares, and 0.3 percent to pay dividends.<sup>20</sup>

We use these survey responses to estimate the funds directed to various uses, by industry (Table 3, below). We estimate that companies taking advantage of the tax preferences in the 2004 Act to repatriate foreign-held earnings used \$71.8 billion of those repatriated earnings or other income freed-up by the repatriated funds to create or retain jobs, nearly \$75.0 billion for additional capital investments, \$938 million for dividends to their shareholders, and \$38.7 billion to reduce their own debts.

**Table 2: Uses of Funds Repatriated Under the 2004 Act, By Industry, \$ millions**

	<b>Job Creation</b>	<b>Capital Investment</b>	<b>Domestic Dividends</b>	<b>Pay Down Domestic debt</b>
<b>Share of Funds</b>	<b>23%</b>	<b>24%</b>	<b>0.3%</b>	<b>12.4%</b>
<b>Manufacturing</b>	<b>58,018</b>	<b>\$60,540</b>	<b>\$757</b>	<b>\$31,279</b>
Food Manufacturing	4,057	4,233	53	2,187
Paper Manufacturing	1,423	1,485	19	767
Chemical Manufacturing	27,647	28,849	361	14,905
<i>Basic Chemical</i>	1,105	1,153	15	596
<i>Pharmaceutical &amp; Medicine</i>	22,720	23,707	296	12,249
Plastic & Rubber Products	183	191	2.4	99

<sup>19</sup> Blouin and Krull (2008) and Clemons and Kinney (2008); the conclusions of Brennan (2006), however, were consistent with the later survey.

<sup>20</sup> Blouin, Jennifer and Linda Krull. 2008. “Bringing it Home: A Study of the Incentives Surrounding the Repatriation of Foreign Earnings Under the American Jobs Creation Act of 2004.” Working paper, University of Pennsylvania., Clemons, Roy and Michael R. Kinney. 2008. “The Who, Why, and What of the One-Time Tax Holiday for Repatriations Provided by the American Jobs Creation Act of 2004.” Working paper, Texas A&M University., Brennan, Thomas. 2006. “Coming Home: Cash-Flow and Market Response to Repatriation.” Working paper, Drexel University School of Law.

Primary Metal	110	115	1.4	59
Fabricated Metal Product	1,106	1,154	14	596
Machinery	1,231	1,285	16	664
Computer & Elec. Equipment	13,222	13,797	172	7,128
<i>Computer &amp; Peripheral Equipment</i>	7,866	8,208	103	4,241
<i>Semiconductor &amp; Electronic Equipment</i>	3,121	3,257	41	1,683
Electrical Equipment, Appliance & Component	943	984	12	508
Transportation Equipment	2,356	2,458	31	1,270
<b>Wholesale and Retail Trade</b>	<b>2,958</b>	<b>3,087</b>	<b>39</b>	<b>1,595</b>
Wholesale trade, Durables	1,068	1,114	14	576
Wholesale trade, Nondurables	899	939	12	485
Retail Trade	991	1,034	13	534
<b>Transportation &amp; Warehousing</b>	<b>211</b>	<b>220</b>	<b>2.8</b>	<b>114</b>
<b>Information</b>	<b>3,037</b>	<b>3,169</b>	<b>40</b>	<b>1,637</b>
Software Publishers	1,899	1,982	25	1,024
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>2,741</b>	<b>2,860</b>	<b>36</b>	<b>1,478</b>
Insurance & Related Activities	630	657	8.2	340
<b>Professional, Scientific &amp; Technical Services</b>	<b>630</b>	<b>658</b>	<b>8.2</b>	<b>340</b>
<b>Management of Enterprises</b>	<b>1,615</b>	<b>1,686</b>	<b>21</b>	<b>871</b>
<b>Other Services and Industries</b>	<b>2,625</b>	<b>2,739</b>	<b>34</b>	<b>1,415</b>
<b>TOTAL</b>	<b>\$71,835</b>	<b>\$74,959</b>	<b>\$937</b>	<b>\$38,729</b>

Again, the funds used to pay down domestic debt and pay domestic dividends to shareholders represent funds “freed up” by the inflows of repatriated cash from uses permitted under the 2004 Act. We include them to help assess the economic consequences of the policy, since both may have stimulus effects: Paying down domestic debt infuse fresh liquidity into the financial system, and dividend payments boost family incomes and consumption.

### *Employment Effects*

Using these data, we can estimate the impact on job creation of a temporary, lower tax rate on repatriated funds, by industry. Since we know the amount of funds used for employment purposes, by industry, we can divide the total funds used for this purpose by the average annual wage, by industry. For this purpose we use the average annual wages reported by the Bureau of Labor Statistics for 2004.<sup>21</sup> This assumes that the injection of new capital resulting in higher demand for labor does not immediately lead to rising wage rates; since to the degree that wages rose, the demand for labor would be muted. This assumption is reasonable for at least the short term. Further, the additional funds spent on employment could also represent wages for jobs which would have been eliminated, but for the infusion of repatriated funds. For both reasons, these estimates represent an upper bound on the employment effects.

<sup>21</sup> Bureau of Labor Statistics, [http://www.bls.gov/oes/current/naics2\\_31-33.htm](http://www.bls.gov/oes/current/naics2_31-33.htm). We use 2004 wages, set prior to the enactment of the 2004 Act, to ensure that they are exogenous to any wage changes which may have been induced by the capital inflows under the Act.

**Table 3: Employment Effects of Repatriated Funds Under the 2004 Act**

	<b>Average Annual Wage</b>	<b>Job Creation or Retention</b>
<b>Manufacturing</b>	<b>\$34,241</b>	<b>1,694,372</b>
Food Manufacturing	26,497	153,100
Paper Manufacturing	39,215	36,284
Chemical Manufacturing	42,626	648,585
<i>Basic Chemical</i>	53,873	20,507
<i>Pharmaceutical &amp; Medicine</i>	46,383	489,820
Plastic & Rubber Products	30,683	5,969
Primary Metal	41,589	2,648
Fabricated Metal Product	32,698	33,832
Machinery	36,371	33,851
Computer & Electronic Equipment	36,290	364,339
<i>Computer &amp; Peripheral Equipment</i>	43,713	179,944
<i>Semiconductor &amp; Electronic Component</i>	33,987	91,830
Electrical Equipment, Appliance & Component	31,564	29,880
Transportation Equipment	47,453	49,647
<b>Wholesale and Retail Trade</b>	<b>28,857</b>	<b>102,504</b>
Wholesale trade, Durables	36,496	29,261
Wholesale trade, Nondurables	30,775	29,226
Retail Trade	19,299	51,328
<b>Transportation &amp; Warehousing</b>	<b>31,971</b>	<b>6,605</b>
<b>Information</b>	<b>40,417</b>	<b>75,130</b>
Software Publishers	69,782	27,213
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>29,620</b>	<b>92,524</b>
Insurance & Related Activities	39,309	16,021
<b>Professional, Scientific &amp; Technical Services</b>	<b>31,073</b>	<b>20,281</b>
<b>Management of Companies</b>	<b>42,785</b>	<b>37,758</b>
<b>Other Services and Industries</b>	<b>22,679</b>	<b>115,747</b>
<b>TOTAL</b>	<b>\$32,705</b>	<b>2,144,921</b>

The analysis shows that temporary tax relief for funds repatriated under the 2004 Act had large employment effects. Across all industries, the funds were used to create or retain more than 2.14 million jobs, including nearly 1.7 million jobs in manufacturing. The largest jobs effects, by industry, were seen in manufacturers of pharmaceuticals and of computer and electronic equipment.

*Effects on Capital Investment and Wages*

The survey found that nearly 24 percent of the funds repatriated under the 2004 Act went to capital investments. Capital investment *per se* directly expands GDP and leads to greater output of other goods and services and higher labor demand. Capital investment also has long-term effects on worker productivity and wages. To estimate the effects on wages, we first calculate the sensitivity or elasticity of wages with respect to capital investment, using Bureau of Labor Statistics (BLS) measures, by industry, of

gross investment, multifactor productivity, and wage changes.<sup>22</sup> Unfortunately, BLS does not provide investment data for some sub-sectors, including basic chemical and pharmaceutical and medicine manufacturing, computer and peripheral equipment manufacturing, semiconductor and other electronic component manufacturing, wholesale trade in durable and nondurable goods, and software publishing. For each of these sub-sectors, we assign the elasticity of the larger industry under which they are classified. For instance, we assign the elasticity for chemical manufacturing to its two sub-sectors.

To estimate these elasticities, we first calculate the percentage change in the capital stock of each industry or sub-sector from 2004 to 2006 (new investment) as a result of the reported infusion of new capital by industry under the 2004 Act. To estimate changes in capital stock for subsectors without the pertinent data, we allocate the total sector's change in capital stock to sub-sectors using the sub sector's share of the total sector's employment. We then multiply the elasticity of wages with respect to investment by the percentage change in the capital stock to estimate the percentage change in wages associated with the new investment. This calculation uses the basic formula for estimating elasticity, shown below:

$$\varepsilon_{wages,investment} = \frac{\% \text{ change in wages (w)}}{\% \text{ change in investment(I)}}$$

Table 4, below, shows the results. The analysis finds that the additional capital investment supported by funds repatriated under the 2004 Act had positive effects on wages in nearly every sector. Across manufacturing, the effects of the Act on investment should raise wages an additional 1.0 percent over time, including estimated long-term wage gains of 12.5 percent in pharmaceuticals, 10.6 percent in software, and 6.7 percent in both computer and peripheral manufacturing, and electrical equipment, appliances and components manufacturing. These four sub-sectors all have high elasticities of wages, with respect to investment, and together accounted for more than 44 percent of all repatriated funds.

**Table 4: Estimated Wages Effects of Additional Capital Investment Financed by Funds Repatriated under the 2004 Act**

Industry	$\varepsilon$	Capital Stock 2004, \$ billion	Percent Increase in Investment from Repatriated Funds, 2004-2006	Percent Increase in Wages
<b>Manufacturing</b>	0.60	3,549.0	1.71%	1.03%
Food	0.91	370.0	1.14%	1.04%
Paper	-0.96	109.0	1.36%	-1.31%
Chemicals	0.73	411.9	7.00%	5.14%
<i>Basic Chemical</i>	0.73	70.1	1.64%	1.21%
<i>Pharmaceutical &amp;</i>	0.73	138.9	17.06%	12.52%

<sup>22</sup> . For most industries, BLS reports capital investment and wage data from 1987 to 2006, while providing on data from 1990 onward for some other industries. We use as much data as available for each industry to calculate its elasticity of wages with respect to investment. This elasticity is calculated using average wage and investment levels.

<i>Medicine</i>				
Plastic and Rubber Products	0.78	125.8	0.15%	0.12%
Primary Metals	3.41	217.7	0.05%	0.18%
Fabricated Metal Products	0.67	230.8	0.50%	0.33%
Machinery	0.34	286.5	0.45%	0.15%
Computer & Electronic Equipment	0.64	496.2	2.78%	1.78%
<i>Computer &amp; Peripheral Equipment Manufacturing</i>	0.64	78.8	10.42%	6.66%
<i>Semiconductor &amp; Electronic Component</i>	0.64	173.8	1.87%	1.20%
Electrical Equipment, Appliance & Components	6.40	93.5	1.05%	6.74%
Transportation Equipment	0.55	408.4	0.60%	0.33%
<b>Wholesale and Retail trade</b>	0.39	3,051.6	0.10%	0.04%
Wholesale trade, Durables	0.31	614.2	0.18%	0.06%
Wholesale trade, Nondurables	0.31	407.6	0.23%	0.07%
Retail Trade	0.53	2,029.8	0.05%	0.03%
<b>Transportation, Warehousing</b>	0.31	1,352.0	0.02%	0.00%
<b>Information</b>	0.27	62.5	5.07%	1.36%
Software Publishers	0.27	5.0	39.50%	10.59%
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	0.56	6,426.7	0.04%	0.02%
Insurance Carriers & Related Activities	0.56	1,777.7	0.04%	0.02%
<b>Professional, Scientific &amp; Technical Services</b>	0.26	324.0	0.20%	0.05%
<b>Management of Enterprises</b>	0.49	592.3	0.28%	0.14%
<b>Other Services and Industries</b>	0.30	2,174.5	0.13%	0.04%

Paper manufacturing is the only sub-sector that has a negative elasticity of wages with respect to investment: Wages have actually fallen even as investment has increased. This may reflect the sub-sector's generally poor profits arising from the sharp weakening in global paper prices since 2001.<sup>23</sup>

#### *Effects on Federal Tax Revenues*

The flows of additional repatriated funds under the 2004 Act also generated revenues directly, even at the reduced tax rate, as well as revenues indirectly from activities sustained by the new capital inflows. We calculate the direct tax revenues by multiplying the effective tax rate of 5.25 percent (15 percent of the normal 25 percent corporate rate) by the funds repatriated in each industry. We further estimate the indirect tax revenues based on wage income from new job creation or retention and, for the longer-term, on further wage gains derived from normal productivity growth associated with the increases in capital spending. The revenue estimates for these indirect effects assume a 25 percent tax rate, since the average wages for all of the industries covered here fall within the range of \$32,000 to \$78,000 covered by the 25 percent tax bracket.<sup>24</sup>

<sup>23</sup> For further analysis of the paper industry, see [www.fpl.fs.fed.us/documnts/pdf2003/incc03a.pdf](http://www.fpl.fs.fed.us/documnts/pdf2003/incc03a.pdf).

<sup>24</sup> [http://www.moneychimp.com/features/tax\\_brackets.htm](http://www.moneychimp.com/features/tax_brackets.htm)

Further, we also estimate indirect effects from higher dividend payments to shareholders, taxed at a 15 percent rate.<sup>25</sup> We consider these revenues to be additional revenues which were collected due to the 2004 Act, since virtually of the earnings repatriated under the Act would otherwise have remained invested abroad. Some of those earnings might have been repatriated at some point to offset domestic losses, but under those conditions they also would not have generated revenues for the federal government.

The following table, Table 5, presents these revenues estimates, by industry. We estimate that the activities arising from the 2004 Act generated some \$34.5 billion in new federal revenues, including \$16.4 billion in direct federal revenues on the repatriated funds; \$17.6 billion from additional wages earned through job creation and retention, and wage gains associated with the additional capital investment, and \$140.5 million collected on additional shareholder dividends. As expected the largest revenues came from the companies, workers and shareholders of the pharmaceutical and computer and peripheral equipment sectors.

**Table 5: Estimated Federal Revenue Effects from the Repatriation of Funds, Job Creation, and Productivity Increases Related to the 2004 Act (\$ millions)**

Industry	New Corporate Tax Revenues	Tax on New Wage Income	Tax on New Shareholder Dividends
<b>Manufacturing</b>	\$13,243.2	\$14,504.5	\$113.5
Food	926.0	1,014.2	7.9
Paper	324.8	355.7	2.8
Chemical	6,310.6	6,911.6	54.1
<i>Basic Chemical Manufacturing</i>	252.2	276.2	2.2
<i>Pharmaceutical &amp; Medicine</i>	5,186.0	5,679.9	44.5
Plastic and Rubber Products	41.8	45.8	358.4
Primary Metal	25.1	27.5	21.5
Fabricated Metal Products	252.5	276.6	2.2
Machinery	281.0	307.8	2.4
Computer & Electronic Equipment	3,018.1	3,305.5	25.7
<i>Computer and Peripheral Equipment</i>	1,795.5	1,966.5	15.4
<i>Semiconductor &amp; Electronic Component</i>	712.4	780.3	6.1
Electrical Equipment, Appliance & Components	215.3	235.8	1.8
Transportation Equipment Manufacturing	537.8	589.0	4.6
<b>Wholesale and Retail trade</b>	675.2	739.5	5.8
Wholesale trade, Durable Goods	243.8	267.0	2.1
Wholesale trade, Nondurable Goods	205.3	224.9	1.8
Retail Trade	226.1	247.6	1.9
<b>Transportation &amp; Warehousing</b>	48.2	52.8	0.4
<b>Information</b>	693.1	759.1	5.9
Software Publishers	433.5	474.7	3.7
<b>Finance, Insurance, Real Estate, Rental</b>	625.6	685.1	5.4

<sup>25</sup> <http://taxes.about.com/od/taxglossary/g/dividends.htm>

<b>&amp; Leasing</b>			
Insurance carriers and Related Activities	143.8	157.5	1.2
<b>Professional, Scientific &amp; Technical Services</b>	143.9	157.6	1.2
<b>Management of Enterprises</b>	368.7	403.9	3.2
<b>Other Services and Industries</b>	599.2	656.3	5.1
<b>TOTAL</b>	<b>\$16,397.1</b>	<b>\$17,958.7</b>	<b>\$140.5</b>

#### *Effects on Financial Market Credit Flows*

We noted earlier that the repatriation of funds under the 21004 Act provided or freed up funds which multinationals used to reduce their domestic debt. The estimated amounts are provided above, in the last column of Table 2. This activity effectively expands the resources of their lenders, principally financial institutions. Such capital infusions to the credit markets would be particularly beneficial today, increasing liquidity and easing current, constrained credit conditions.

#### **IV. The Economic Impact of Temporary, Tax-Preferred Repatriation in 2009**

Our analysis of the economic effects of the repatriation of foreign-source earnings under the 2004 Act enables us to estimate the benefits of enacting a temporary tax preference for such repatriation under our current economic conditions. The results show that such a policy would have significant stimulative effects on the economy and could help ease the current credit constraints impairing the prospects of economic recovery.

This analysis begins by estimating the total taxable income of U.S.-owned foreign subsidiaries (“controlled foreign corporations” or CFC’s) which potentially could be repatriated in 2009, if Congress enacts legislation on the same lines adopted in 2004. IRS Tax Statistics provide data on the income and assets of the 7,500 largest CFCs, each with total assets of \$500 million or more, for the years 1988-2002, as well as data on the total pre-tax income of all CFC’s in 2004.<sup>26</sup> We use these data to estimate the total income of CFC’s for the years 2005-2009, calculating the average annual growth rate of income by the 7,500 largest CFCs and applying this growth rate of nearly 7 percent per-year to the 2004 income data for all CFC’s. The following table shows the results of these projections for all CFC’s, for the years 2005-2009.

**Table 6: Estimated Income of U.S.-owned Foreign Subsidiaries, 2005-2009**

<b>Year</b>	<b>Total Income</b>
2004 (actual)	\$432,572,980,597
2005	\$462,019,904,857
2006	\$493,471,395,716
2007	\$527,063,911,815

<sup>26</sup> The Internal Revenue Service does not issue data on the total income permanently invested abroad by foreign subsidiaries of U.S. companies. Therefore, we use repatriated dividends under the 2004 Act as a share of total taxable income to estimate the volume of dividends that could be potentially repatriated.

2008	\$562,943,201,062
2009	\$601,264,932,997

To estimate the potential volume of funds repatriated under a new, temporary policy similar to the 2004 Act, we note that under that Act, repatriations were equivalent to nearly 70 percent of the total income of CFC's. We apply that relationship to the projected earnings of CFC's in 2009 and estimate that a new, temporary tax preference for repatriated earnings would attract nearly \$420.9 billion in 2009, compared to \$312.4 repatriated under the 2004 Act. The following table distributes this total across industries and sub-sectors, applying the distribution which occurred under the 2004 Act.

**Table 7: Projected Distribution of Repatriated Earnings, 2009**

<b>Industry</b>	<b>Share</b>	<b>Repatriations</b>
<b>All Industries</b>	<b>1.00</b>	<b>\$420,885,453,098</b>
<b>Manufacturing</b>	<b>0.81</b>	<b>\$339,931,366,887</b>
Food	0.06	\$23,768,139,248
Paper	0.02	\$8,336,862,046
Chemical	0.38	\$161,983,649,523
<i>Basic Chemical Manufacturing</i>	0.02	\$6,472,809,151
<i>Pharmaceutical and Medicine</i>	0.32	\$133,115,937,498
Plastic and Rubber Products	0.00	\$1,073,166,752
Primary Metal	0.00	\$645,211,483
Fabricated Metal Product	0.02	\$6,481,546,952
Machinery	0.02	\$7,213,735,188
Computer & Electronic Equipment	0.18	\$77,468,639,926
<i>Computer &amp; Peripheral Equipment</i>	0.11	\$46,086,702,718
<i>Semiconductor &amp; Electronic Components</i>	0.04	\$18,286,549,393
Electrical Equipment, Appliance & Components	0.01	\$5,525,849,636
Transportation Equipment Manufacturing	0.03	\$13,803,463,980
<b>Wholesale and Retail trade</b>	<b>0.04</b>	<b>\$17,330,595,969</b>
Wholesale trade, Durable Goods	0.01	\$6,256,901,004
Wholesale trade, Nondurable Goods	0.01	\$5,269,837,879
Retail Trade	0.01	\$5,803,857,085
<b>Transportation &amp; Warehousing</b>	<b>0.00</b>	<b>\$1,237,297,123</b>
<b>Information</b>	<b>0.04</b>	<b>\$17,791,262,722</b>
Software Publishers	0.03	\$11,126,182,997
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>0.04</b>	<b>\$16,056,987,887</b>
Insurance Carriers and Related Activities	0.01	\$3,689,937,041
<b>Professional, Scientific and Technical Services</b>	<b>0.01</b>	<b>\$3,692,367,669</b>
<b>Management of Enterprises</b>	<b>0.02</b>	<b>\$9,465,180,978</b>
<b>Other Services and Industries</b>	<b>0.02</b>	<b>\$15,380,393,862</b>

As expected, repatriation of foreign-earned profits would be concentrated in those sectors in which the United States dominates fast-growing global markets, especially pharmaceuticals and computer and peripheral equipment manufacturing, followed by software, finance, and corporate management services.

*The Likely Uses of the Projected Repatriated Funds*

We can apply the results of the survey of tax executives on their use of funds repatriated under the 2004 to the estimated distribution of repatriated funds under a similar preference in 2009, in order to project the potential job creation or retention, wage growth, investment and credit infusions if Congress were to enact a temporary, tax-preference for repatriation comparable to the one it enacted in 2004. The results presented in Table 9, below: Of \$420.9 billion in estimated repatriated, foreign-source earnings, we calculate that nearly \$97 billion would be targeted as new funds for job creation or retention, and more than \$101 billion would go to new capital spending. These findings point to significant potential for stimulus effects from this policy. This initial analysis also suggests that more than \$52 billion would go to new capital infusions for the financial system, at a time of very stringent and damaging credit constraints. These projections, however, are derived from a period, in the middle of this decade, when economic conditions for capital spending and job creation were much more favorable. These estimates, therefore, provide an upper bound of these effects. This time, more of the repatriated earnings might be used this time to pay down domestic debt, injecting more liquidity into the financial system. Nevertheless, there is no doubt that the infusion of new funds as a result of repatriation would still have significant stimulus effects.

**Table 8: Projected Uses of Repatriated Funds, 2009, By Industry, \$ millions**

	<b>Job Creation</b>	<b>Capital Investment</b>	<b>Domestic Dividends</b>	<b>Pay Down Domestic debt</b>
<b>Share of Funds</b>	<b>23%</b>	<b>24%</b>	<b>0.3%</b>	<b>12.4%</b>
<b>Manufacturing</b>	<b>\$78,184.2</b>	<b>\$81,583.5</b>	<b>\$1,019.8</b>	<b>\$42,151.5</b>
Food Manufacturing	5,466.7	5,704.4	71.3	2,947.3
Paper Manufacturing	1,917.5	2,000.8	25.0	1,033.8
Chemical Manufacturing	37,256.2	38,876.1	486.0	20,086.0
<i>Basic Chemical</i>	1,488.7	1,553.5	19.4	802.7
<i>Pharmaceutical &amp; Medicine</i>	30,616.7	31,947.8	399.3	16,506.4
Plastic & Rubber Products	246.8	257.6	3.2	133.1
Primary Metal	148.4	154.9	1.9	80.0
Fabricated Metal Product	1,490.8	1,555.6	19.4	803.7
Machinery	1,659.2	1,731.3	21.6	894.5
Computer & Elec. Equipment	17,817.8	18,592.5	232.4	9,606.1
<i>Computer &amp; Peripheral Equipment</i>	10,599.9	11,060.8	138.3	5,714.8
<i>Semiconductor &amp; Elec. Equipment</i>	4,205.9	4,388.8	54.9	2,267.5
Electrical Equipment, Appliance & Components	1,270.9	1,326.2	16.6	685.2
Transportation Equipment	3,174.8	3,312.8	41.4	1,711.6
<b>Wholesale and Retail Trade</b>	<b>3,986.0</b>	<b>4,159.3</b>	<b>52.0</b>	<b>2,149.0</b>
Wholesale trade, Durables	1,439.1	1,501.7	18.8	775.9
Wholesale trade, Nondurables	1,212.1	1,264.8	15.8	653.5
Retail Trade	1,334.9	1,392.9	17.4	719.7
<b>Transportation &amp; Warehousing</b>	<b>284.6</b>	<b>297.0</b>	<b>3.7</b>	<b>153.4</b>
<b>Information</b>	<b>4,092.0</b>	<b>4,269.9</b>	<b>53.4</b>	<b>2,206.1</b>
Software Publishers	2,559.0	2,670.3	33.4	1,379.6
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>3,693.1</b>	<b>3,853.7</b>	<b>48.2</b>	<b>1,991.1</b>

Insurance & Related Activities	848.7	885.6	11.1	457.6
<b>Professional, Scientific &amp; Technical Services</b>	<b>849.2</b>	<b>886.2</b>	<b>11.1</b>	<b>457.9</b>
<b>Management of Enterprises</b>	<b>2,177.0</b>	<b>2,271.6</b>	<b>28.4</b>	<b>1,173.7</b>
<b>Other Services and Industries</b>	<b>3,537.5</b>	<b>3,691.3</b>	<b>46.1</b>	<b>1,907.2</b>
<b>TOTAL</b>	<b>\$96,803.6</b>	<b>\$101,012.55</b>	<b>\$1,262.7</b>	<b>\$52,189.9</b>

### Employment Effects

To calculate the potential effects of this policy on jobs, we first estimate the average annual wage in 2009 for different industries. As noted earlier, the BLS provides annual wage data by industries from 1987 to 2006, as we assume linear growth rate since then to average wages by industry in 2009. On this basis, we distribute the additional funds allocated to employment, based on the 2004 survey, taking account of average wages: We estimate that if this policy were adopted in 2009, it would lead to the retention or creation of nearly 2.6 million jobs. Much of these effects would likely be seen in 2010, as the economy begins to recover from the current recession. As noted above, the depth of the current downturn also could lead to less job retention or creation than seen under the 2004 Act. Nevertheless, the job effects would almost certainly be very substantial.

**Table 9: Projected Employment Effects of Repatriated Funds Under a 2009 Act**

Industry	Average Annual Wage	Job Creation or Retention
<b>Manufacturing</b>	<b>\$37,925</b>	<b>2,061,551</b>
Food	29,375	186,099
Paper	42,731	44,873
Chemicals	46,388	803,138
<i>Basic Chemicals</i>	57,826	25,745
<i>Pharmaceutical &amp; Medicine</i>	50,681	604,108
Plastic & Rubber Products	33,477	7,373
Primary Metal	45,948	3,230
Fabricated Metal Product	36,393	40,963
Machinery	39,594	41,905
Computer & Electronic Equipment	41,054	434,006
<i>Computer &amp; Peripheral Equipment</i>	49,844	212,662
<i>Semiconductor &amp; Electronic Component</i>	38,846	108,270
Electrical Equipment, Appliance & Component	34,821	36,499
Transportation Equipment	52,676	60,271
<b>Wholesale and Retail Trade</b>	<b>32,821</b>	<b>121,447</b>
Wholesale trade, Durables	41,932	34,319
Wholesale trade, Nondurables	34,859	34,771
Retail Trade	21,673	61,592
<b>Transportation &amp; Warehousing</b>	<b>34,069</b>	<b>8,353</b>
<b>Information</b>	<b>46,200</b>	<b>88,572</b>
Software Publishers	83,087	30,799
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>34,237</b>	<b>107,868</b>
Insurance & Related Activities	34,237	24,788
<b>Professional, Scientific &amp; Technical Services</b>	<b>35,460</b>	<b>23,949</b>

<b>Management of Companies</b>	<b>50,210</b>	<b>43,358</b>
<b>Other Services and Industries</b>	<b>25,564</b>	<b>138,375</b>
<b>TOTAL</b>	<b>\$37,061</b>	<b>2,593,473</b>

This analysis shows that manufacturing would account for the largest job gains – or job retentions, compared to job losses in the absence of this policy – with pharmaceutical, computer, semiconductor and electronics makers accounting for more than half of these jobs effects across manufacturing and some 40 percent of all jobs effects across the economy. Significant positive job effects are also projected for food manufacturing, retail trade, and information companies, including software.

*Effects on Capital Investment and Wage Gains*

To estimate the potential wage gains from enacting a repatriation tax preference in early 2009 similar to the policy adopted in 2004, we begin with our calculation that some \$101 billion of an estimated \$421 billion in repatriated foreign-source earnings would be targeted to additional capital investment. Given current economic conditions, we could expect much of this effect to occur in 2010 rather than 2009. Using the long-term elasticity of wage gains to capital investment used for the analysis of the 2004 Act (listed, by industry, in Table 4, above), we also can project the overall wage gains expected over the long term as the policy expands capital investment and worker productivity accordingly grows. To complete this analysis, we use historical data to project, by industry, both wage levels and capital stock in 2009. As noted earlier, in cases in which the data do not disaggregate the capital stock or investment levels by some sub-sectors, we adjust the values for the overall industry based on the sub-sector’s employment share of that industry, and assume the same elasticity for all sub-sectors in the industry.

This analysis suggests that providing the tax preference for repatriated earnings would raise average wages by 1.26 percent in manufacturing. The greatest wage gains would come in sub-sectors with large earnings held abroad subject to repatriation, high capital spending, and high sensitivity or elasticity of wages to capital investment. These terms especially describe intellectual-property intensive activities with fast-growing global markets, such as pharmaceutical production, computer manufacturing, and software.

**Table 10: Estimated Long-Term Wages Effects of Additional Capital Investment Financed by Funds Repatriated Under a 2009 Tax Preference**

<b>Industry</b>	<b>Projected Capital Stock 2009 (\$ billion)</b>	<b>Percent Increase in Capital Stock</b>	<b>Percent Increase in Wages</b>
<b>Manufacturing</b>	<b>\$3,886.0</b>	<b>2.10%</b>	<b>1.26%</b>
Food	399.6	1.43	1.30
Paper	118.4	1.69	-1.62
Chemicals	454.8	8.55	6.27
<i>Basic Chemical</i>	77.4	2.01	1.47
<i>Pharmaceutical &amp; Medicine</i>	153.4	20.82	15.28

Plastic and Rubber Products	140.8	0.18	0.14
Primary Metals	225.9	0.07	0.23
Fabricated Metal Products	251.2	0.62	0.41
Machinery	322.8	0.54	0.18
Computer & Electronic Equipment	571.5	3.25	2.08
<i>Computer &amp; Peripheral Equipment</i>	85.8	12.90	8.25
<i>Semiconductor &amp; Electronic Components</i>	200.1	2.19	1.40
Electrical Equipment, Appliance & Components	101.7	1.30	8.35
Transportation Equipment	446.8	0.74	0.41
<b>Wholesale and Retail Trade</b>	<b>1,772.0</b>	<b>0.23</b>	<b>0.09</b>
Wholesale trade, Durables	687.9	0.18	0.06
Wholesale trade, Nondurables	456.7	0.31	0.10
Retail Trade	2,223.0	0.01	0.01
<b>Transportation, Warehousing Information</b>	<b>1,429.3</b>	<b>0.30</b>	<b>0.09</b>
Software Publishers	5.4	71.96	19.30
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>7,025.8</b>	<b>0.01</b>	<b>0.01</b>
Insurance Carriers & Related Activities	1,943.4	0.05	0.03
<b>Professional, Scientific &amp; Technical Services</b>	<b>361.5</b>	<b>0.63</b>	<b>0.16</b>
<b>Management of Enterprises</b>	<b>647.3</b>	<b>0.28</b>	<b>0.14</b>
<b>Other Services and Industries</b>	<b>2,427.8</b>	<b>0.15</b>	<b>0.05</b>

### *Effects on Federal Revenues*

The estimated \$421 billion in funds repatriated under a reprise of the 2004 Act would generate very substantial revenues, mainly from the reduced corporate tax on those funds, federal income tax on the additional wage income stimulated by the job creation and retention and wage increases associated with the additional capital investments, and federal tax on additional dividends issued by companies repatriating their foreign-source income. As in our analysis of the revenue implications of the 2004 Act, we assume here a 5.25 percent corporate tax on the repatriated earnings, a 25 percent income tax rate on the additional wage income (since the average wage in all industries and sub-sectors falls within the 25 percent tax bracket), and the current 15 percent tax rate on dividend income.

The analysis finds that this policy should generate an additional \$46.5 billion in federal revenues, including \$22.1 billion in additional corporate tax revenues, \$24.2 billion in additional income tax revenues, and nearly \$190 million in additional federal tax on dividend income. It is noteworthy that it also should generate several tens of billions of dollars in additional state and local revenues, which are not covered by this report. As noted earlier with regard to the revenues collected under the 2004 Act, nearly all of these estimated revenues should represent *additional* revenues which the government otherwise would *not* collect: Under current law, the vast majority of earnings held abroad remain so, unless they are repatriated to offset domestic losses.

**Table 11: Estimated Federal Revenues from the Repatriation of Funds, Job Creation or Retention, and Productivity Increases Related to a Tax Preference for Repatriation (\$ millions)**

Industry	New Federal Corporate Tax Revenues	Federal Tax on New Wage Income	Tax on New Shareholder Dividends
<b>Manufacturing</b>	<b>\$17,846.4</b>	<b>\$19,546.1</b>	<b>\$153.0</b>
Food	1,247.8	1,366.7	10.7
Paper	437.7	479.4	3.8
Chemical	8,504.1	9,314.1	72.9
<i>Basic Chemical Manufacturing</i>	339.8	372.2	2.9
<i>Pharmaceutical &amp; Medicine</i>	6,988.6	7,654.2	59.9
Plastic and Rubber Products	56.3	61.7	0.5
Primary Metal	33.9	37.1	0.3
Fabricated Metal Products	340.3	372.7	2.9
Machinery	378.7	414.8	3.2
Computer & Electronic Equipment	4,067.1	4,454.4	34.9
<i>Computer and Peripheral Equipment</i>	2,419.6	2,650.0	20.7
<i>Semiconductor &amp; Electronic Component</i>	960.0	1,051.5	8.3
Electrical Equipment, Appliance & Components	290.1	317.7	2.5
Transportation Equipment Manufacturing	724.7	794.0	6.2
<b>Wholesale and Retail Trade</b>	<b>909.9</b>	<b>996.5</b>	<b>7.8</b>
Wholesale trade, Durable Goods	328.5	359.8	2.8
Wholesale trade, Nondurable Goods	276.7	303.0	2.4
Retail Trade	304.7	333.7	2.6
<b>Transportation &amp; Warehousing</b>	<b>65.0</b>	<b>71.1</b>	<b>0.6</b>
<b>Information</b>	<b>934.0</b>	<b>1,023.0</b>	<b>8.0</b>
Software Publishers	584.1	639.8	5.0
<b>Finance, Insurance, Real Estate, Rental &amp; Leasing</b>	<b>843.0</b>	<b>923.3</b>	<b>7.2</b>
Insurance Carriers and Related Activities	193.7	212.2	1.7
<b>Professional, Scientific &amp; Technical Services</b>	<b>193.9</b>	<b>212.3</b>	<b>1.7</b>
<b>Management of Enterprises</b>	<b>496.9</b>	<b>544.3</b>	<b>4.3</b>
<b>Other Services and Industries</b>	<b>807.5</b>	<b>884.4</b>	<b>6.9</b>
<b>TOTAL</b>	<b>\$22,096.5</b>	<b>\$24,200.9</b>	<b>\$189.4</b>

*Effects on Financial Market Credit Flows*

The survey of the tax executives of U.S. multinationals found that some 12.4 percent of the foreign-source earnings repatriated under the terms of the 2004 Act was directly used or freed up funds for those corporations to reduce their domestic debt. This activity would provide substantial capital infusions to current credit markets, increasing liquidity and easing the present, constrained credit conditions. Applying this analysis to the estimated repatriations under a similar policy in 2009, we project that U.S. multinationals would use some \$52.2 billion of the estimated \$421 billion in newly repatriated funds to reduce their domestic debt. The following table provides a breakdown by industry and sub-sectors of the use of these funds for domestic debt

reduction. It is also noteworthy that these estimates may be conservative: Given the dismal, overall U.S. economic outlook for 2009, many corporations may use relatively more of those funds for debt reduction and relatively fewer for capital investments or job creation. Even at the lower, estimated levels, the policy could have significant positive effects for U.S. capital markets.

**Table 12: Repatriation in 2009 and Financial Market Infusions:  
Estimated Funds Used to Reduce Corporations' Domestic Debt, \$ millions**

<b>Industry</b>	<b>Debt Reduction</b>
<b>Manufacturing</b>	<b>\$42,151.5</b>
Food	2,947.2
Paper	1,033.8
Chemicals	20,086.0
<i>Basic Chemical</i>	802.6
<i>Pharmaceutical and Medicine</i>	16,506.4
Plastic and Rubber Products	133.1
Primary Metal	80.0
Fabricated Metal Products	803.7
Machinery	894.5
Computer and Electronic Equipment	9,606.1
<i>Computer and Peripheral Equipment</i>	5,714.8
<i>Semiconductor and Electronic Component</i>	2,267.5
Electrical Equipment, Appliance and Component	685.2
Transportation Equipment Manufacturing	1,711.6
<b>Wholesale and Retail Trade</b>	<b>2,149.0</b>
Wholesale trade, Durable Goods	775.9
Wholesale trade, Nondurable Goods	653.5
Retail Trade	719.7
<b>Transportation and Warehousing</b>	<b>153.4</b>
<b>Information</b>	<b>2,206.1</b>
Software Publishers	1,379.7
<b>Finance, Insurance, Real Estate, Rental and Leasing</b>	<b>1,991.1</b>
Insurance carriers and Related Activities	457.6
<b>Professional, Scientific and Technical Services</b>	<b>457.9</b>
<b>Management of Companies and Enterprises</b>	<b>1,173.7</b>
<b>Other Services and Industries</b>	<b>1,907.2</b>
<b>TOTAL</b>	<b>\$52,190.0</b>

To put in perspective these additional capital infusions for U.S. lenders to multinational corporations, and their potential to help mitigate the adverse effects of the current financial market crisis, we can compare them to existing efforts to address this crisis. For example, the Federal Reserve recently initiated a new program, the Term Asset Backed Securities Loan Facility program, to help meet credit needs of consumers and small businesses.<sup>27</sup> Under this program, the Federal Reserve Bank of New York will provide \$200 billion in one-year loans. The estimated capital flows to financial

<sup>27</sup> <http://www.federalreserve.gov/newsevents/press/monetary/monetary20081125a1.pdf>.

institutions arising from a new, temporary tax preference on repatriated foreign-source earnings would be equal to 26.1 percent of the funds available under the new Federal Reserve program. This result suggests that the repatriation policy would not only improve bank balance sheets and help consumers, but also supplement the government's current efforts to stabilize and restart the credit markets.

Similarly, the government's central effort to address the financial crisis, the Troubled Asset Relief Program (TARP) with potentially \$700 billion in bailout funds, allocated about \$250 billion for bank equity infusions in 2008. The rationale for TARP is to stabilize bank capital ratios at levels which will allow banks to increase lending to businesses, consumers and among themselves, instead of hoarding their cash to cushion themselves against possible, additional losses from troubled assets. U.S. multi-national corporations paying down their own domestic debt, using a share of funds repatriated under the policy examined here, would have the same effect. The estimated capital flows to financial institutions arising from this dynamic would equal nearly 21 percent of the bank capital infusions provided under TARP, providing a substantial supplement to the federal efforts to resolve the current financial market freeze.

## **V. Conclusion**

In this analysis, we have evaluated the economic effects of the 2004 American Jobs Creation Act, which provided one-year of favorable tax treatment for repatriated profits from foreign subsidiaries of U.S. corporations. Using newly-released data from the Internal Revenue Service on repatriated earnings by industry under this program, we examined the range of stimulus-related effects, including significant positive effects on employment, domestic capital spending and wages associated with the use of repatriated profits for purposes assigned under the legislation, as well as significant revenue gains for the federal government.

This report extends this analysis to estimate the effects of a comparable one-year policy in 2009. We conclude that a one-year policy of taxing repatriated foreign-source profits at a 5.25 percent rate, as in 2004-2005, would have substantial stimulative effects on the current recession and expand capital flows in the currently-constrained financial system. We estimate that such a policy would result in the repatriation of nearly \$421 billion in foreign-source income held abroad, including nearly \$340 billion repatriated by U.S. manufacturers. Under the permitted purposes of the 2004 Act, this policy in 2009 would result in an additional \$97 billion for job creation or retention, \$101 billion for new capital spending, and \$52 billion to pay down domestic debt. The additional funds used for employment could create or save an estimated 2.6 million jobs, and the additional funds used for capital investments could lead to long-term average wage increases of nearly 1.3 percent. The policy could produce more than \$22 billion in direct corporate tax revenues and another \$22 billion in individual income tax revenues on wage income stimulated by the job creation and job retention and by the wage increases associated with the additional capital spending. We further estimate that the policy could produce or free up \$52 billion used to reduce the domestic debt of companies repatriating foreign-source income, providing an infusion of new capital into the financial system

equivalent to 21 percent of the \$250 billion provided in 2008 for bank equity infusions under the current TARP program.

This analysis shows that a temporary policy of sharply reducing the tax on profits held abroad by foreign subsidiaries of U.S. companies can play a meaningful role in stabilizing and restoring U.S. employment, capital spending and wages in the current deep recession, and provide additional liquidity to the U.S. financial system.

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