

The Revenue Implications of Temporary Tax Relief For Repatriated Foreign Earnings: An Analysis of the Joint Tax Committee's Revenue Estimates

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Executive Summary

This study evaluates the Joint Tax Committee's (JCT) approach and results for estimating the revenue effects of the Homeland Investment Act (HIA) of 2004, which provided a temporary 85 percent deduction under the U.S. corporate tax for certain qualified earnings of foreign subsidiaries repatriated to their U.S. parent companies. We also evaluate the revenue effects of current proposals to provide another one-year tax preference for repatriated earnings, on the same general terms as the 2004 Act. We find that the JCT's approach has been flawed conceptually and its estimates of significant revenue losses are incorrect.

- In 2004, the JCT estimated that the HIA would cost U.S. taxpayers \$3.3 billion over 10 years, relative to its baseline (current law without the provision). This year, the JCT similarly estimated that the same provision enacted in 2011 would cost U.S. taxpayers \$78.7 billion over 10 years, compared to its current baseline.
- These projected revenue losses largely reflect two assumptions by JCT staff: First, the temporary tax preference would induce U.S. multinationals companies (MNCs) to shift the timing of their planned repatriations, so as to bring back funds in 2004-2005 or 2011-2012 which otherwise they would have brought back later at a higher tax. Therefore, the JCT assumes a sharp increase in repatriations during the periods of the tax preference, followed by sharp declines in later years relative to their earlier trend.
- New IRS data support the first assumption repatriations did rise sharply in 2004-2005, sufficiently to produce revenues gains in those years, despite the lower tax rate. However, IRS data also show that repatriations in 2007 and 2008 did *not* fall below trend as the JCT predicted, but actually accelerated relative to their previous trend. Therefore, the predicted revenue losses in later years have not occurred.
- Second, the revenue losses predicted by the JCT assume that the prospect of tax relief for repatriated earnings in the future would induce MNCs to alter their corporate behavior and organization so that more of their earnings would come from foreign markets.
- JCT has offered no evidence for this assumption, nor have independent analyses found that the expectation of this tax preference altered corporate behavior and structure in this way. High levels of foreign direct investments by U.S. MNCs began at least 15 years before the 2004 Act, in order to build global production networks that could serve global markets. There is no evidence that this process accelerated after the 2004 passage of HIA.

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- Based on current data and knowledge, including actual repatriations under the 2004 Act, repatriations in the early out-years of the JCT's 10-year revenue estimate, and the actual trend growth rate of repatriations, we can generate new revenue estimates.
- By replicating the JCT estimating process to the extent possible and using the new data in place of the flawed JCT assumptions, we estimate that the HIA will produce revenue gains of \$23.5 billion over 10 years, compared to the JCT's estimate of a \$3.3 billion revenue cost over 10 years.
- Similarly, we estimate that a reprise of the HIA enacted in 2011 would produce an \$8.7 billion revenue gain over 10 years, compared to the recent JCT estimate of a 10-year billion revenue cost of \$78.7 billion.

I. Introduction and Summary of Results

The taxation of foreign income earned by U.S. multinational companies (MNCs) has two basic elements. First, these firms can defer U.S. corporate tax on the earnings of their foreign subsidiaries until those earnings are repatriated to the U.S. parent company, usually in the form of dividends.² Second, when the U.S. parent company does repatriate foreign earnings, it can claim a tax credit for the foreign taxes already paid (or deemed paid) on that income. As a result, the maximum tax liability on this foreign-source income of U.S. companies cannot exceed the taxes that would have been paid if the income had been generated inside the United States, which currently is 35 percent.

Congress is currently considering proposals to provide a temporary, sharp reduction in the U.S. corporate tax rate on those foreign-source earnings.³ These proposals would reinstate for one year the basic provisions of the Homeland Investment Act (HIA), enacted as part of the American Jobs Creation Act (AJCA) in 2004. To minimize the lock-out effect that discourages U.S. multinationals from deploying these earnings in the United States and to provide those corporations with low-cost resources to expand their domestic workforces and investment, the legislation would offer U.S.-based multinationals a one-time deduction of up to 85 percent for "extraordinary dividends" paid by controlled foreign corporations (CFCs) to their U.S. parent companies, subject to certain limitations. With a U.S. corporate tax rate of 35 percent, the legislation would apply a 5.25 percent rate to qualified foreign earnings, before taking account of foreign tax credits for taxes paid on the earnings to countries where they were earned.⁴

The effectiveness of the 2004 Act in promoting job creation and physical and intangible investments is a matter of debate among economists, which we describe later. A similar debate has arisen over the likely economic effects of the current proposal. Economic conditions today differ in certain ways from those in 2004-2005, and we do not analyze here the impact of the

² Certain exceptions apply. For instance, subpart F income of CFCs is considered a deemed dividend and is subject to immediate taxation.

³ See http://www.opencongress.org/bill/112-h1834/show; http://bilbray.house.gov/H R 1036.pdf.

⁴ 15 percent of the qualifying dividends would be taxed at the 35% corporate rate: $0.35 \times (1 - 0.85) = 0.0525$.

policy on employment and investment under current conditions. Instead, the focus of this analysis is the likely revenue consequences of reinstating the provisions of HIA.

Prior to the enactment of the 2004 Act, the Joint Committee on Taxation (JCT) estimated that the provision would cost U.S. taxpayers \$3.3 billion over ten years. In March 2011, Representative Lloyd Doggett asked the JCT to estimate the revenue effects of applying the same policy for one year, covering the taxpayer's first taxable year after December 31, 2011. On April 15, 2011, the JCT estimated that this policy would cost the Treasury \$78.7 billion over ten years (FYs 2011-2021). Using public materials, including recent IRS data on repatriated foreign earnings following the 2004 Act and an analysis of the JCT estimating procedures used in 2004 proposal published by JCT's chief of staff (Edward Kleinbard) and a JCT senior economist (Patrick Driessen) in *Tax Notes*, we conclude firtst that 1) The HIA will generate an estimated \$23.6 billion revenue gain over 10 years, rather than a \$3.3 billion revenue lossthe proposal, if enacted, would more likely produce revenue gains, which we estimate at \$8.7 billion over ten years, than the \$78.7 billion revenue cost projected by JCT.

The JCT's projected revenue losses largely reflect the Committee staff's assumptions that the 2004 Act would, first, significantly alter the timing of repatriations and, second, change corporate behavior and organization so as to shift more earnings to foreign markets in the expectation that Congress eventually would approve a subsequent period of lower taxes on repatriated income. Later data, as we will note immediately below, contradicts the first assumption. As to the second assumption, the JCT has never provided evidence for its validity, but rather simply attributed \$1 billion in foregone revenues to this factor in its 2004 estimate for HIA. Given the U.S. Senate's failure in 2009 to approve a second round of the temporary tax preference, such expectations in the current period would seem unlikely on their face.

Moreover, with emerging economies accounting for a majority of global growth for at least the last decade, U.S. multinational companies have been investing at significant rates in foreign operations in order to serve these fast-growing global markets. In fact, U.S. companies have maintained large-scale foreign direct investments for more than a generation. This trend did not originate with the HIA, and its effects should properly be part of the JCT's revenue baseline and therefore not affect the revenue estimate for HIA or its reprise in 2011. It also would be very difficult to disentangle any evidence of the behavioral changes projected by JCT from the responses by multinationals to certain disincentives for domestic U.S. investment arising from either economic conditions or other aspects of the U.S. corporate tax. This may help explain why the JCT could offer no evidence for its \$1 billion estimate for this effect in 2004 and why it did not publicly specify any number for this effect in its 2011 estimate.

Direct evidence can be brought bear, however, on the JCT's first assumption in 2004, which held that the Act would induce U.S. multinationals to increase the foreign earnings they repatriated under the HIA's temporary preferential rate, mainly by using earnings which

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⁵ Kleinbard and Driessen (2008).

⁶ The JCT also suggests that some revenue might be derived from taxing shareholder dividends or share buy-backs funded by foreign earnings repatriated under the temporary tax preference. Economists do not agree about whether multinationals used funds repatriated under the HIA for those purposes, which the HIA barred. Greater shareholder dividends and share buy-backs also could occur using funds freed up by the influx of repatriated earnings. If such effects did occur, they would have been modest. Since there are no data confirming or tracking such effects, we do not include them in our analysis of either HIA or its proposed reprise.

otherwise they would have repatriated in later years at the ordinary U.S. corporate tax rate. The short-term increase in repatriations would be sufficient to increase revenues for two years, since otherwise the earnings represented by the increase would remain abroad, untaxed by the U.S. Treasury. However, if the Act's main effect was to alter timing, bringing forward to the temporary period of lower taxes foreign earnings which otherwise would have been repatriated in later, higher tax years, the tax change would reduce overall revenues. In fact, the JCT projected substantial declines in repatriations in the out-years following the 2004 Act, producing \$3.3 billion lower revenues over the ten years following its enactment than if the Act were not in place. The JCT's revenue estimate for a policy of reprising those provisions in 2011 adopted the same assumption, with a resulting \$78.7 billion estimated revenue cost over the ten years.

New data from the IRS do not support the JCT's central assumption about the time-shifting of repatriations and the revenue estimate based largely on it. Those data show that, as expected, multinationals repatriated abnormally-high levels of foreign-source income at the temporary preferential tax rate in FYs 2004-2005, as intended under the Act and as is intended under proposals to temporarily reinstate those provisions. To the degree that these high levels reflected earnings that otherwise would have stayed abroad, the Act actually produced revenue increases relative to the baseline, and would *not* have been followed in subsequent years by lower than normal repatriations. To the degree that the higher repatriations reflected earnings that otherwise would have been brought back later at a higher tax rate, it would have produced revenue losses as those high-repatriation years were followed by much lower than normal repatriations in subsequent years. In fact, the latest IRS data show that once the 2004-2006 preferential rate expired, repatriations in 2007 and 2008 did not decline, as expected by the JCT, but returned to their trend growth rate before the 2004 Act or even accelerated. As a result, the out-year revenue losses expected by the JCT would not have materialized.

We cannot fully duplicate the JCT's revenue-estimating process. However, we can replicate much of the process by introducing assumptions about future repatriation levels consistent with the latest IRS data. After doing so, we estimate that the HIA will produce a revenue gain of \$23.5 billion over ten years, compared to the JCT's prediction of a \$3.3 billion revenue loss. If a reprise of the 2004 Act were enacted reinstating the 5.25 percent preferential tax rate (before foreign tax credits) for qualified repatriations in FY 2011 and FY 2012, the results would include a temporary increase in repatriations and the revenues collected on the increased repatriations, as expected by the JCT. Some of the higher repatriations would be offset by reduced revenues from the temporary lower tax rate, compared to current law. However, if repatriation behavior in subsequent years follows the pattern seen in the 2007 and 2008 IRS data, revenues in the out-years would not decline, relative to current law. By projecting the continued growth of repatriations at the actual rates in the initial out-years following the temporary tax reduction in the HIA, we find that a reinstatement of the HIA'S provisions for FYs 2011 and 2012 would increase revenues by an estimated \$8.7 billion over the years FYs 2011-2021.

II. The JCT Revenue Estimate for the Homeland Investment Act

To understand and evaluate the JCT's revenue estimates for the 2004 Act and its reprise in FY 2011, we begin by analyzing both the provisions of the 2004 Act and the assumptions adopted by the JCT to estimate its revenue consequences.

Provisions of the Homeland Investment Act of 2004

The 2004 Act included a number of technical restrictions on the nature or source of the foreign-source income eligible for the preferential rate upon repatriation. Generally speaking, dividends qualified for preferential treatment under the 2004 Act had to exceed the average dividend received from the parent company's CFCs over the five tax years ending prior to July 1, 2003.8 These qualified dividends were further limited to the greater of \$500 million or the earnings "permanently reinvested" outside the United States, according to the MNC's most recently audited financial statement. Earnings repatriated at the preferential rate also had to be used for certain, specified domestic reinvestment uses, including hiring new employees or training existing staff, increases in employee salaries or benefits (excluding executives), research and development within the United States, investments in infrastructure, intangible property and other capital investments, certain types of debt repayment, advertising or marketing, and the acquisition of business entities, including foreign entities. The funds could not be used for executive compensation, intercompany transactions, shareholder distributions. redemptions, portfolio investments, local, state or federal tax payments, and purchases of Treasury bills, municipal or corporate bonds. However, as long as corporations used funds equivalent to those repatriated under the preferential rate, they could spend as much as they chose on anything else, including the uses barred for funds brought back under the Act. Finally, companies could not use the dividend deduction to eliminate all of their taxable income. ¹⁰

Economists continue to debate whether the 2004 Act increased employment or investments in its other permitted purposes. For example, one study used modeling techniques to infer that the data were most consistent with firms increasing their spending on shareholder

⁷ For example, eligible income included section 302 and section 304 redemptions of stocks, section 316 dividends, and cash from inbound liquidations considered a dividend under the provisions of 367(b). However, other funds treated as dividends under section 367, as well as section 1248 dividends, subpart F income from the earnings and profits of CFCs, and previously taxed income (PTI), were not eligible. Redmiles (2008).

⁸ The base period dividends included distribution of PTI under subpart F, dividends of property, and section 956 distributions. To compute the average, the maximum and minimum annual dividends were discarded, and the remaining 3 tax years were averaged. Taxpayers were also required to reduce qualifying dividends by any increase in their CFC debt to related persons. This requirement prevented taxpayers from loaning funds to their CFCs and including the payments in their cash dividends. An exception existed for banks and securities dealers and for intercompany trade payables

⁹ There is a considerable literature studying the effect of repatriations and repatriation taxes on firm incentives and behavior. For example, Hines and Hubbard (1990) analyze 1984 tax return data and report that a one percent decrease in the repatriation tax is associated with a four percent increase in dividend payments by foreign subsidiaries. Further, Desai et al. (2001) use Bureau of Economic Analysis (BEA) data on dividend repatriations to conclude that repatriations are sensitive to repatriation taxes.. They infer from their data that repatriation taxes reduce aggregate dividend payouts by 12.8 percent. In addition, Foley et al. (2007) hypothesize that the repatriation tax cost help explain why firms hold significant amounts of cash, an empirical observation previously explained by the existence of transaction costs and precautionary motives: Firms that face higher repatriation tax burdens hold higher levels of cash, hold the cash abroad, and hold the cash in affiliates that would trigger high tax costs when repatriated.

¹⁰ Technically, the HIA stipulated that the taxable income of a multinational using the HIA could not be less than the non-deductible portion of the qualified dividends it claimed.

payouts, which was not a permitted purpose.¹¹ Similarly, other researchers found evidence of large increases in stock repurchases by firms using the 2004 Act, also not a permitted purpose.¹² However, a third study surveyed tax executives in firms claiming the deduction; and drawing on this direct evidence, the researchers concluded that firms did use their repatriated funds to hire or train U.S. employees, and expand capital investments and domestic R&D, as required.¹³ The most recent published analysis found similarly that firms that were financially constrained in 2004 and 2005 used their repatriated funds to expand their domestic investments.¹⁴

Actual Repatriations under the HIA

As expected, the 2004 Act substantially increased the volume of repatriated foreign earnings in the first two years, as reported in the IRS Statistics of Income. One study of these flows found that 843 multinational companies claimed preferential tax treatment for foreign-source earnings repatriated in this period; and these MNCs collectively repatriated nearly \$362 billion, of which \$312 billion qualified for the deduction. The distribution of these deductions across industries broadly reflects the distribution of foreign earnings across industries — with more than 80 percent coming from manufacturing firms and 50 percent coming from the two U.S. sectors with the largest global market shares, pharmaceuticals/medicines, and computers and electronic equipment. However, some differences across industries may reflect differences in the share of earnings and profits normally held abroad, the ability to extract those earnings within the allotted time frame, and the availability of foreign versus domestic investment opportunities. For a complete breakdown of repatriations by industry, FYs 2004-2006, see Appendix, Table A-1.

The Terms of the JCT Revenue Estimate for the HIA

The \$312 billion in funds repatriated under the HIA, taxed at the 5.25 percent tax rate, would suggest that the Act generated revenues of \$16.4 billion (312 x 0.525 = 16.38). However, a revenue estimate involves much more complex calculations, based on how much revenue would be generated in the absence of this policy change and assessments about how the policy change would alter economic behavior. The JCT provided the following revenue estimate for the HIA during its consideration by Congress in 2004:

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¹¹ Dharmapala, Foley and Forbes (2008).

¹² Clemons and Kinney (2008).

¹³Graham, Hanlon and Shevlin (2008). The contrary findings can be reconciled through the fungibility of corporate funds, as noted by Graham *et. al*: Some funds which otherwise would have gone to job creation and domestic investments could be used for shareholder payouts and like, once the newly-repatriated funds took care of jobs and investments.

¹⁴ Faulkender and Peterson (2011).

http://www.irs.gov/taxstats/bustaxstats/article/0,,id=180693,00.html.

¹⁶ Redmiles (2008). 85.5 percent of these deductions were claimed in 2005, with 7.7 percent claimed in 2004 and 6.8 percent in 2006.

¹⁷ Blouin, Jennifer and Linda Krull (2006). The pharmaceutical industry tends to have more cash on hand than other industries, due to high profit margins and minimal capital spending. Overall, about 86 percent of cash dividends qualified for the deduction. The percentage for the pharmaceutical and medicine manufacturing industry was noticeably higher, at 94 percent.

Table 1: 2004 JCT Estimates of Revenue Effects of the HIA (\$ billions)¹⁸

Fiscal	Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Rever Char		\$2.8	- \$2.1	- \$1.3	- \$0.8	- \$0.6	- \$0.4	- \$0.3	- \$0.3	- \$0.2	-\$ 0.2	- \$3.3

This estimate shows that the JCT expected the HIA to increase repatriations sufficiently to produce nearly \$3 billion in additional revenues in FY 2005 after accounting for the revenue costs of the lower tax rate on repatriations that would have occurred in that year without the change. However, JCT projected that the one-year revenue increase would be followed by nine years of lower revenues than under the baseline, reflecting the shift of repatriated funds from those years to 2004-2005.

The most comprehensive exegesis of the JCT revenue estimate, as noted earlier, is the 2008 analysis published by the JCT's Kleinbard and Driessen. To create the revenue estimate above, the JCT first built a baseline of estimated revenues from all foreign-source corporate income under the law prevailing before the HIA, based on tax return data on repatriations and the foreign tax credits claimed against the U.S. taxes on those repatriated dividends.¹⁹ We infer that JCT staff estimated that in a typical year, the residual U.S. corporate income tax on all reported foreign source income would range from \$10 billion to \$20 billion.²⁰ An estimated \$2 billion of those annual taxes were collected on repatriations from low-tax foreign countries, producing the highest U.S. tax burdens upon their repatriation. Consequently, most income earned in low-tax countries is held abroad as income "permanently reinvested," which provided one of the parameters for the 2004 Act. Firms generally repatriate such income only when the parent company has a compelling reason such as financial distress or a major acquisition. The bulk of repatriations and the source of most of the revenues are earnings from high-tax nations, which carry large foreign tax credits.²¹

The JCT's estimate of the revenues that would be collected under the HIA relied on its staff's subjective views of the planning and investment strategies of U.S. multinationals and the role ascribed to foreign-source income in those plans, as well as the historic data on repatriations and foreign-tax credits under then-current law. Based on its views and that evidence, the JCT estimated that under HIA, U.S. companies would repatriate approximately \$235 billion. JCT divided these aggregate earnings into three pools. Pool number one, amounting to an estimated \$30 billion per-year, represented foreign earnings that U.S., multinationals would have repatriated in any case. Therefore, the U.S. tax on this income would be significantly lower under the HIA than under the baseline. The second pool represented repatriations from relatively

The JCT provides little data or detailed explanation for its revenue cost of \$3.3 billion. Using JCT data, our analysis suggests a revenue gain of \$8.2 billion under HIA, with baseline revenues over 10 years totaling about \$20 billion. However, this would suggest that the JCT's revenue estimate for HIA would be greater than \$3.3 billion.

¹⁸ Joint Committee on Taxation (2004).

¹⁹ Kleinbard and Driessen (2008)..

Under the rules for constructing the baseline, the JCT staff had to assume that the "active finance exception" to subpart F, which was scheduled to expire in 2006, would expire as scheduled. As a result, the baseline projected significant repatriations by multinational financial services firms prior to 2006, in order to take advantage of the lower tax rates and avoid the harsher rules that would be in place after 2006.

²² Note, revenue-estimating conventions do not permit the JCT to discount future tax revenues.

low-tax countries which otherwise would have occurred sometime over the ten-year revenue-estimating period, but which MNCs would now accelerate into the FYs 2004-2006 period in order to take advantage of the temporary lower tax rate. The JCT staff estimated that those dividends would total around \$75 billion over the ten year window. This pool also was seen as a revenue loser, since this income would otherwise have been repatriated in later years at higher tax rates. The third pool were the "permanently reinvested earnings" which, but for the HIA, would have remained abroad. This pool, which JCT staff estimated at \$130 billion over the forecasting period, would earn higher revenues under the 2004 Act than under normal tax rules.

The JCT estimate also relied on several additional assumptions, all of which tended to reduce the projected, initial revenue gains or increase the projected revenue losses in later years. The most important assumption held that pushing forward repatriations which might have occurred in later years would ultimately reduce the volume of repatriations in later years, regardless of the capital needs of the parent companies in those later years. As we will see, this critical assumption proved to be incorrect. In addition, the JCT staff assumed that the 2004 ACT would not affect the economy's total labor supply and investment levels. The JCT model, therefore, assumed for revenue-estimating purposes that the intended benefits of the Act would not be realized, or at a minimum would not affect revenues. The JCT's modeling also ignored the time value of money, so that corporate revenues collected in 2005 were valued the same as revenues collected in 2015. The use of a standard discount rate would have reduced the weight of the projected revenue costs in later years, relative to the revenue gains in the first years. Finally, the JCT assumed that MNCs would employ certain tax-planning approaches which would enable them to effectively pay less than the 5.25 percent on their repatriations (before foreign tax credits), which also reduced the projected revenues.

The JCT Revenue Estimate

The JCT's final revenue estimate was derived by calculating the difference between the projected taxes collected under the baseline and the projected taxes collected under HIA. For the first two of three tranches of foreign-source earnings defined by the JCT, the only difference was the lower tax rate under HIA than under existing law – the pool of repatriations that would have occurred in 2004-2005 regardless of the tax change, and the pool of repatriations from low-tax jurisdictions that would have occurred in later years regardless of the tax change and which therefore were accelerated into 2004-2005. Therefore, the JCT estimating process inevitably found that revenues from these two tranches of foreign earnings would fall, relative to current law. Only the third tranche of foreign-source earnings, the funds that otherwise would not have been repatriated at all, could generate revenue gains. For these earnings, the JCT staff estimated that the effective tax rate would be 3.65 percent rather than 5.25 percent, after taking account of foreign tax credits used to offset the taxes paid on the 15 percent of repatriated dividends not eligible for the HIA deduction.

The JCT also posited that the passage of HIA would create an expectation among taxpayers that Congress would enact another temporary preferential rate for repatriations in the future. Therefore, the estimate also assumes that the HIA would lead some multinationals to invest more offshore than they would have otherwise and to retain more foreign-source earnings offshore, all in the expectation of a second round of HIA. While the JCT cites no evidence to

support such a change in behavior, its estimate includes another \$1 billion in revenue losses over ten years to reflect this assumed change.

The net effect of these assumptions and procedures was the estimate of a net \$3.3 billion revenue cost for HIA, including revenue gains in the first year and revenue losses in each of the succeeding nine years. (Table 1, above)

III. A Critical Analysis of the JCT Revenue Estimate for the HIA Proposal

In this section, we explore further the assumptions and procedures used by the JCT to estimate the revenues for the HIA proposal. Again, while we cannot duplicate the large scale, dynamic modeling employed by bodies such as the JCT and the Congressional Budget Office (CBO), we can apply historical and current data to evaluate the soundness of the JCT's assumptions and projections, in hindsight. We find that JCT's projections were significantly flawed, chiefly because some of its assumptions proved to be incorrect.

Comparing the JCT's Revenue Scores with Actual Revenues

There is no doubt that the assumptions and procedures used by the JCT did not properly capture the dynamics involved in repatriations during the period of HIA and the following two years (the latest data available). The JCT forecast total repatriations of \$235 billion for the period FYs 2004-2008 by companies using HIA. In fact, actual repatriations totaled nearly \$687 billion, including \$312 billion brought back under the preferential rate. (Table 2, below) As a result, JCT's expectation of \$12.3 billion (before tax credits) in total implicit revenues collected on repatriated earnings over this period (\$235 billion x 0.0525) hugely underestimated actual implicit revenues of \$147.4 billion (also before foreign tax credits). The baseline revenues for this period were \$89.8 billion, before tax credits. As a result the JCT expectation of a difference of - \$77.5 billion between baseline revenues (\$89.8 billion) and revenues under HIA (\$12.3 billion) was off by \$135.1 billion from the actual difference of \$57.6 billion between baseline revenues (\$89.8 billion) and implicit revenues under HIA (\$147.4 billion).

Table 2: Revenue Expectations of the JCT for HIA and Actual Implicit Revenues, Before Foreign Tax Credits, FYs 2004-2008 (\$ billions)²⁴

	Revenues, Baseline	Repatriations	Implicit Revenues with HIA	Revenue Difference from Baseline
JCT Score	\$89.8	\$235.0	\$12.3	- \$77.5
Actual Data	\$89.8	\$686.6	\$147.4	\$57.6

The large difference between the revenues projected by the JCT and the implicit revenues -- revenues due at the given tax rates of 5.25 percent for repatriated earnings subject to the HIA and 35 percent for non-HIA eligible repatriated earnings, all before foreign tax credits -- reflects in part the huge gap between the volume of foreign-source earnings actually repatriated over this

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²³ We compare JCT's forecast of foreign source earnings repatriated under HIA (\$235 billion) with total repatriations for the period FYs 2004-2008 (\$687 billion) as well as repatriations under the preferential rate (\$312 billion), because JCT assumed negligible repatriations in the years following the expiration of the lower rate.

²⁴ Authors calculations, based in long-term growth rate of repatriations and 35 percent corporate tax rate.

period (\$686.6 billion) and the volume of repatriations expected by the JCT (\$235.0 billion). This difference, in turn, reflects in part the JCT's serious underestimation of the foreign earnings repatriated under the HIA in FYs 2004-2005, as well as the foreign earnings repatriated in those outside the terms and tax preference of the HIA. (Table 3, below) An equally large part of the difference, however, reflects the JCT's underestimation of the foreign earnings that would be repatriated after HIA expired. The JCT expected repatriations to decline sharply in FYs 2006-2008 (and beyond) as MNCs shifted repatriations planned for those later years into the FY 2004-2005 time frame of HIA. This shifting of repatriations from later high-tax years to the two low-tax years of the HIA generated all of the JCT's projected revenue losses, relative to its baseline.

IRS data show that this expected decline in post-HIA repatriations did not occur: After 2004-2005, repatriations returned to the upward trend seen in the years preceding the enactment of the HIA. (Table 3, below) Note, most of the HIA repatriations occurred in 2005, but under the terms of the Act, some could be claimed in FY 2004 and some in FY 2006. The bulk of the non-HIA repatriations in the FYs 2004-2006 period occurred in FYs 2004 and 2006.

Table 3: Repatriations and Implicit Revenues, Before Foreign Tax Credits, FYs 2004-008 (\$ millions)²⁵

Fiscal Year	Repatriations	Implicit Revenues
2004-2006 (HIA Repatriations (5.25% rate)	\$312,324.6	\$16,397.0
2004-2006 (Non-HIA Repatriations (35% rate)	\$181.451.7	\$63,508.1
2007 (35% rate)	\$88,309.6	\$30,908.4
2008 (35% rate)	\$104,536.2	\$36,587.7
Total FYs 2004-2008	\$686,622.0	\$147,401.1

The data for FYs 2007 and 2008 clearly contradict the JCT expectation that repatriations would decline from baseline projections in the post-HIA years. In fact, repatriations actually accelerated after the expiration of HIA, compared to their trend before its enactment. We collected IRS data on repatriations for the period 1994-2008 to establish whether repatriations prior to the 2004 Act followed a, predictable pattern. The data include the tax returns of all active U.S. multinational corporations for this period, including a separate entry for "dividends received from foreign corporations". These data allow us to construct an estimate of average repatriations prior to HIA, as well as the potential tax revenues from these repatriations, net of foreign tax credits. To test the predictive ability of these data for 2007 and 2008, we examined

²⁵ IRS *Statistics of Income* and authors' calculations.

²⁶ http://www.irs.gov/taxstats/article/0,,id=170692,00.html.

Note that dividends received may include a small proportion of portfolio investments, and not just income repatriated from CFCs to the parent company. For example, for 2004 and 2006 (the only two years for which these data are available), the IRS reports dividend repatriations from the CFC's to their U.S. parents that were approximately 85 percent of the total repatriations shown here. Of course, the two tables are based on different subsamples of returns, so it is hard to compare the numbers from the two tables. In general, we believe that the bulk of the repatriations are dividends paid from foreign subsidiaries. Our numbers do change if we allow repatriations to be only 85 percent of the values shown here. However, the overall result that the HIA yielded positive revenues does not go away even if we make that assumption.

two periods prior to HIA: 1994-2003, the full decade before the 2004 Act, and 1994-2001, ending with the first year of reduced repatriations from the 2001 economic downturn.

Table 3, below, shows that repatriations increased steadily from \$30.3 billion in 1994 to \$64.9 billion in 1999, dipped modestly in 2000 to \$60.2 billion, and then fell significantly from 2001 to 2003, reflecting the recession and subsequent slow growth. Between 2004 and 2006, the period in which firms could elect to repatriate under the low tax rate, repatriations showed a sharp increase. Firms brought back \$363 billion during FYs 2004-2006 using the HIA, of which \$312 billion actually qualified for the deduction. In FY 2005, alone, U.S. firms repatriated \$363 billion in foreign source earnings, including dividends brought back both under the terms of the HIA and dividends repatriated under ordinary tax law. Hence, the period of the HIA marked a clear break in trend from previous periods. (Therefore, these numbers include total repatriations, including those ineligible for the HIA.) Table 3 shows that repatriations grew at an annual rate of 4.5 percent from 1994 to 2003 and by 7.3 percent per-year from 1994 to 2001.

Table 3: Actual Repatriations, FYs 1994-2008, and Expected Repatriations, FYs 2002-2014, Based on Growth Rates for 1994-2003 and 1994-2001 (\$ millions)³⁰

Fiscal Year	Repatriated Dividends	Expected Repatriations based on 4.5% annual growth (1994-2003)	Expected Repatriations based on 7.3% annual growth (1994-2001)
1994	\$30,322.4		
1995	\$35,418.1		
1996	\$46,245.1		
1997	\$51,009.3		
1998	\$49,232.9		
1999	\$64,905.4		
2000	\$60,203.4		
2001	\$49,997.7		
2002	\$45,580.6		
2003	\$44,921.5		
2004	\$58,411.0	\$46,926.7	\$61,948.4
2005	\$361,945.3	\$49,021.4	\$66,536.0
2006	\$72,420.0	\$51,209.6	\$71,463.3
2007	\$88,309.6	\$53,495.5	\$76,755.6
2008	\$104,536.2	\$55,883.4	\$82,439.7
2009	NA	\$58,378.0	\$88,544.8
2010	NA	\$60,983.8	\$95,102.0
2010	NA	\$63,706.0	\$102,144.9
2012	NA	\$66,550.0	\$109,709.2
2013	NA	\$69,520.3	\$117,833.8
2014	NA	\$72,623.5	\$126,560.0

²⁸ The NBER business cycle dating committee dated the start of the recession in March 2001, which explains this

decline in dividend repatriations.

²⁹ The repatriation numbers shown here are higher than those we reported in Table 1, which was specific to IRS analysis of the 843 firms that repatriated to take advantage of the HIA tax rates. Table 3 shows all repatriations, whether or not firms qualified for the low rates under the HIA.

³⁰ IRS, *Statistics of Income*, and authors' calculations.

These calculations also provide a prediction of repatriations in later years, assuming that those repatriations would not fall sharply in 2007 and beyond as the JCT had predicted. In fact, the latest IRS data show that they grew at an even faster rate than they had before the enactment of the HIA: The IRS reports that repatriations increased from \$72.4 billion in 2006 to \$88.3 billion in 2007 and \$104.5 billion in 2008, compared to our forecast of \$53.9 billion in 2007 and \$60.9 billion in 2008under 4.5 percent annual growth, and to \$76.8 billion in 2007 and \$82.4 billion in 2008 under the forecast of 7.3 percent annual growth. Using the 7.3 percent annual growth rate as our reference, we find that actual repatriations were 13.1 percent greater in 2007 and 21.1 percent greater in 2008 than the trend established before the 2004 Act. By contrast, the JCT revenue estimate concluded that in every period after 2005 or 2006, there would be revenue losses relative to the baseline from multinationals having shifted repatriations planned for later years to the 2004-2006 window provided by the HIA. The new data also suggest that repatriations will continue to increase through the JCT's estimating period for HIA. the data for 2007 and 2008, we might expect those repatriations to continue to increase even faster, but for the global recession of 2008-2009 and slow growth in 2010 and 2011.

If we exclude 2001 from our calculation of the average annual growth of repatriations, and include only 1994-2000, the average growth rate is 12.1 percent. This trend would forecast repatriations of more than \$100 billion in both 2007 and 2008. Therefore, the actual repatriations show that the real trend lies between the trends for 1994-2001 (7.3 percent annual growth) and 1994-2000 (12.1 percent annual growth). Whatever the precise long-term growth rate of repatriations, they are exceeding the growth rates of the pre-2001 recession period. If these trends continue, the JCT's projected revenue losses from the HIA will never occur.

Actual Revenues and the Use of Foreign Tax Credits

To evaluate the JCT revenue estimate for the HIA more directly, we have to calculate the implicit revenues derived by multiplying repatriations by the appropriate tax rate -- 35 percent for repatriations that did not qualify for the HIA and 5.25 percent for repatriations that did so qualify. Next, we adjust those calculations for foreign tax credits. Finally, we compare those revenue estimates net of foreign tax credits with estimated baseline revenues. As we will see, these calculations suggest that net revenues from repatriations for the estimating period FYs 2004-2014 will total an estimated \$49.8 billion, compared to estimated baseline revenues of \$26.3 billion, for a net revenue gain of \$23.5 billion over the ten-year period. By contrast, the JCT forecast a net revenue loss of \$3.3 billion.

While the JCT modeling of its revenue baseline is not entirely transparent, we assume it draws on the maximum data available. To forecast the volume of baseline repatriations, assuming there were no HIA, we therefore first calculate the average annual growth rate of repatriations over the preceding period. To be conservative, we will use the average growth rate for 1994-2003, 4.5 percent per-year. Our projections of the implicit revenues (before foreign tax credits) based on projected repatriations also should generally match the numbers derived by the JCT. Our estimate of baseline revenues before foreign tax credits suggests they would have averaged about \$17.2 billion per-year over the three-year period, FYs 2004 to 2006, and would

have continued to increase from FY 2007 to FY 2014. This reconstruction of baseline repatriations and implicit revenues, before foreign tax credits, is provided in Table 4, below.

Table 4. Projected Repatriations and Implicit Revenues, 2004-2014 Using 1994-2004 Average Growth Rate and Without the HIA (\$ millions)

Year	Expected Repatriations Based on 4.5 percent annual growth	Implicit Revenues (Before Tax Credits) Based on a 35 Percent Tax Rate
2004	\$46,926.7	\$16,424.4
2005	\$49,021.4	\$17,157.5
2006	\$51,209.6	\$17,923.4
2007	\$53,495.5	\$18,723.4
2008	\$55,883.4	\$19,559.2
2009	\$58,378.0	\$20,432.3
2010	\$60,983.8	\$21,344.3
2010	\$63,706.0	\$22,297.1
2012	\$66,550.0	\$23,292.4
2013	\$69,520.3	\$24,332.1
2014	\$72,623.5	\$25,418.2

The JCT revenue estimate for HIA assumed that almost all of the revenues over the tenyear forecasting period would be collected on earnings from low-tax countries and during the period of the temporary 5.25 percent preferential tax rate, as MNCs brought forward to 2004-2006 period earnings that might have been repatriated later. Therefore, all qualifying dividends would be taxed at 5.25 percent. Under HIA, MNCs could claim foreign tax credits only for 15 percent of their qualified dividend income plus any other ineligible repatriated earnings. The JCT revenue estimate for HIA projected \$235 billion in qualified dividends during 2004-2006, with no qualified dividends in later years. At a tax rate of 5.25 percent before tax credits, this would yield \$12.3 billion in baseline revenues for 2004-2006, and losses in subsequent years since most of those revenues were assumed to have been brought forward from repatriations that would have occurred in those subsequent years.

As already noted in Table 2, above, actual repatriations were much higher: \$312.6 billion in qualified dividends subject to HIA in FYs 2004-2006, another \$181.5 billion in non-qualified dividends not subject to HIA in those same years, plus normal repatriations of a \$88.3 billion in FY 2007 and \$104.5 billion in FY 2008. All told, these dividends over FYs 2004-2008 would have generated \$147.4 billion in implicit revenues, before foreign tax credits. That came to \$57.6 billion more than the JCT's estimate of \$89.8 billion in baseline revenues (without HIA and before foreign tax credits), as compared to the JCT's estimate of an implicit revenue loss of \$77.5 billion (before foreign tax credits).

Foreign Tax Credits

As noted now many times, U.S. corporations can claim a tax credit equal to the amount of foreign taxes paid on dividends repatriated to the parent company, so as to avoid double taxation. The theoretical maximum U.S. tax owed on repatriated earnings, therefore, is 35

percent (if untaxed in the country where they were earned), and the ability to claim this credit creates an incentive for firms to repatriate earnings mainly from subsidiaries located in high tax locations, thereby generating the largest foreign tax credits. Therefore, the actual tax revenues collected from repatriated dividends may be much lower than the implicit revenues: The foreign tax credits claimed on repatriated earnings since 2000 have ranged from \$41.1 billion in 2001 more than \$100 billion in 2008. (See Appendix, Table A-2, for a breakdown of foreign tax credits by year, 1994-2008) HIA disallowed foreign tax credits on the foreign earnings eligible for the 85 percent deduction, which in effect reduced the size of foreign tax credits claimed against income brought back at the preferential rate to 15 percent of the foreign taxes paid on that income.

A simple way to estimate the revenue from dividend repatriations, taking account of foreign tax credits, would be to multiply the volume of repatriations by 35 percent and deduct the foreign tax credits listed in Table A-2, after segregating repatriations brought back under HIA and multiplying those repatriations by 5.25 percent. However, the foreign tax credits claimed in each year except 2005 actually *exceed* the implicit revenues before foreign tax credits from the repatriations reported for those years, which would imply zero aggregate revenues. (See Appendix, Table A-3, for implicit revenues and foreign tax credits, by year, FYs 1994-2008) These aggregate data, however, give an incomplete picture. While firms may be able to lower their taxes on repatriated dividends significantly by repatriating from high-tax jurisdictions, such a tax strategy is not available to all firms or at all times. Therefore, to determine the actual effective tax rate on repatriated dividends – the U.S. taxes owed after foreign tax credits -- we draw on studies that focus specifically on this issue.

Research by Harry Grubert, a senior economist at the Treasury Department, found that the majority of firms, but not all, face negative effective tax rates on their repatriations (i.e. owe no U.S. corporate tax). That explains why dividend repatriation in 2000 resulted in tax revenues of only some \$1.3 billion. It further suggests that tax revenues from repatriated income come from dividends earned mainly in comparatively low-tax countries, and are received by parent companies without excess foreign tax credits from high-tax jurisdictions. Two recent studies have estimated that the effective tax burden on repatriations from low-tax countries, after tax credits, averaged about 3.3 percent. The broadest academic study used BEA data on multinationals covering the years 1999 to 2004 and found that the average effective tax rate on repatriated foreign incomes was an estimated 10.26 percent.

In either case, the use of foreign tax credits clearly and sharply reduces the revenues collected on repatriated foreign-source income, with or without HIA. For our calculations, we assume that the effective tax rate on repatriations not eligible for the preferential rate under HIA, after foreign tax credits, is 10.26 percent. This estimated tax rate may be too high, but it is the

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http://www.irs.gov/taxstats/article/0,,id=170692,00.html.

Foreign tax credits as reported by the IRS include credits for taxes paid on royalties and interest income, which is separate from the dividend income paid by subsidiaries to their parent companies; but the vast bulk of the credits do involve dividend repatriations. In 2007, \$U.S. companies paid or were deemed to have paid an estimated \$99 billion in foreign taxes, of which an estimated \$53 billion was related to dividend income.

³³ Grubert (2005)

³⁴ Grubert and Altshuler (2008); Grubert and Mutti (2001).

³⁵ Blouin *et. al.* (2009),

result reported by the best academic analysis currently available. Using our projections of baseline repatriations, this value produce baseline revenues projections for the years FYs 2004 to 2014 averaging about \$6 billion per-year. (See Appendix, Table A-4 for these calculations, by year) This tax rate also suggests that over the decade preceding the enactment of HIA, 1994-2003, tax revenues from repatriations averaged \$3 billion to \$4 billion. The JCT reports that tax collections averaged about \$2 billion per-year from pre-HIA repatriations from low-tax countries, which makes our numbers somewhat higher than the JCT. If we used an effective tax rate falling between the 10.26 percent estimate and the more conservative 3.3 percent estimate for repatriations not eligible for a preferential rate, the numbers would agree. For example, analysis by PricewaterhouseCoopers suggests that the effective tax rate on repatriations in FY 2004 was 8.1 percent, although it is unclear what share of those dividends qualified for the preferential rate under HIA.

The JCT staff assumed an effective tax rate on qualifying dividends under HIA of 3.65 percent -- after the 85 percent deduction and the foreign tax credits on the remaining 15 percent. Therefore, based on the JCT's forecast of \$235 billion in qualified dividends under the HIA, they estimated revenues approaching \$8.2 billion from the Act. Since this estimate was less than their forecast of baseline revenues without HIA, the JCT concluded that the HIA would lose \$3.3 billion in revenues over 10 years.³⁶

Finally, we establish how close the JCT estimate came to actual revenues. We can calculate the revenues after foreign tax credits collected on repatriated dividends during the HIA period and the subsequent two years, as follows. MNCs could not claim foreign tax credits against the qualified repatriated earnings, so the tax revenues from that portion of repatriated income is unchanged from the implicit revenues presented earlier, corrected for the JCT's underestimation of their dimensions (\$235 billion forecast by JCT, compared to \$312 billion Based on the academic literature, the average tax rate on qualifying dividends, after foreign tax credits on the taxable 15 percent, was 3.65 percent.³⁷ Further, full foreign tax credits were allowed against the nondeductible portion of repatriated income. For dividends not qualifying for HIA treatment which were repatriated during the 2004-2006, as well as for repatriated earnings in 2007 and 2008, we use the 10.26 percent tax rate from the academic literature to calculate the revenues from these foreign-earnings, after foreign tax credits. Moreover, IRS data showed that repatriated earnings in 2007 and 2008 did not decline as the JCT had assumed and predicted, but actually accelerated relative to their pre-HIA trend. The results are presented in Table 5, below.

Table 5: Tax Revenues from Repatriated Foreign Earnings, Net of Foreign Tax Credits, Based on Actual Data, FYs 2004-2008 (\$ millions)

Fiscal Year and Type of Dividends	Repatriations	Revenues After Foreign Tax Credits
Dividends Under HIA, 2004-2006	\$312,324.6	\$11,399.9 (3.65% rate)

³⁶It is not clear how the JCT derived its revenue cost of \$3.3 billion. Our calculations using JCT data produce a revenue estimate of \$8.2 billion under HIA, and baseline revenues over 10 years would total about \$20 billion. Therefore, the JCT's projected revenue cost for HIA would seem to be greater than the \$3.3 billion reported. ³⁷ Redmiles (2008).

Non-Qualifying Dividends, 2004-2006	\$181,451.7	\$18,616.9 (10.26% rate)
Normal Dividends, 2007	\$88,309.6	\$9,060.6 (10.26% rate)
Normal Dividends, 2008	\$104,536.2	\$10,725.4 (10.26% rate)
Totals	\$686,622.0	\$49,802.8

Based on actual repatriation data, the estimated revenues collected under HIA and the subsequent two years came to \$49.8 billion, compared to the projected baseline revenues for this period of \$26.3 billion. Therefore, the JCT revenue estimate for HIA over the first five years (FYs 2004-2008) was incorrect in both sign and dimensions.

IV. The Revenue Estimates for a Reprise of HIA in 2011-2012

In April 2011, Representative Lloyd Doggett asked the JCT to provide a revenue estimate for two proposals, including one that would reinstate the provisions of HIA as applied to repatriations occurring in a company's first taxable year after December 31, 2011: An elective, temporary, 85 percent deduction for certain dividends received from controlled foreign corporations. The JCT offered the following ten-year revenue estimate covering FYs 2011-2021.

Table 6: JCT Revenue Estimate for a Reprise of HIA, FYs 2011-2021 (\$ billions) 38

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2011-2021
\$3.4	\$12.5	\$9.6	-\$12.8	-\$13.5	-\$14.1	-\$14.1	-\$13.4	-\$12.7	-\$12.2	-\$11.7	- \$78.7

The assumptions underlying the new JCT revenue estimate are generally the same as those adopted by the JCT for its 2004 revenue assessment of HIA. In particular, the JCT continues to assume that MNCs would bring forward to 2011 and 2012 repatriations planned for later years, and that would result in negligible repatriations in the years following the temporary tax preference. This assumption is captured by the JCT's assumed "acceleration effect" as income that would have been repatriated in the out-years is brought forward for repatriation during the period of the temporary tax preference. Without this assumed effect, which the JCT states explicitly, the Committee's estimated revenue losses would have been much smaller. As we established with respect to the HIA, however, repatriations rose significantly in the period of the tax preference (FYs 2004-2006). In addition, repatriations in subsequent years, far from falling, actually accelerated in 2007 and 2008 relative to their pre-HIA trend. The large increase in repatriations in response to the tax incentive appear to have come from funds held abroad which firms had not planned to repatriate, producing a revenue increase. Furthermore, the provision, far from inducing revenue losses in later years, was followed by continuing growth in revenues. As a result, the overall revenue results of HIA were significantly positive.

There is one notable difference regarding the JCT's two baselines: The 2011 JCT estimate assumes that U.S. multinationals will repatriate more foreign-source income than in earlier periods, based on domestic needs and the growth in CFC income. This may reflect the JCT's assumption in 2004 that the HIA would create the expectation of another temporary tax preference for repatriated profits, which in turn would induce multinationals to shift more of

³⁸ http://doggett.house.gov/images/pdf/jct_repatriation_score.pdf

 $[\]overline{Ibid}$.

their operations abroad so that more of their profits would be generated there. As noted earlier, the JCT provides no evidence of such an effect, nor are there data or independent analyses that support this JCT assumption. It is true that the recent decades of strong growth by developing nations have led to much greater foreign direct investment by U.S. multinational companies, mainly to serve fast-growing foreign markets. This trend began many years before the HIA, and its effects on repatriation should be part of the JCT's revenue baseline, and therefore not affect the revenue estimate for the temporary tax preference. Further, if the JCT's assumed behavioral changes in response to the HIA have occurred at all, the effects would be very difficult to distinguish from responses by the same companies to various disincentives for domestic U.S. investment, arising from other parts of the U.S. tax code or economic conditions. Finally, deferral provisions in place for nearly a century already insulate most of the foreign earnings of U.S. MNCs from the U.S. corporate tax until those earnings are actually repatriated.

There is also a reference to possible revenues derived from taxing shareholder dividends or share repurchases financed by foreign earnings brought back under the temporary tax preference. The HIA barred the use of qualified dividends for these purposes, and economists do not agree about whether multinationals nonetheless used funds repatriated under the HIA in this way. However, since money is fungible, MNCs could use domestic funds freed up by an influx of the tax-preferred repatriated earnings to fund moiré shareholder dividends and share repurchases. At the same time, if this effect did occur under HIA, it would have had only modest revenue effects.

Since the JCT does not provide a basis for accounting for this effect or for its larger behavioral assumption, and as there also are no data confirming or tracking such effects and behavioral changes, we focus here on the impact of the larger, acceleration effect. Here, we apply a similar critical analysis to the revenue estimate for the current proposal. While our earlier analysis could rely on actual data for 2004-2006 and for 2007 and 2008, there are no data to directly refute or validate the JCT assumptions used to price a reprise of HIA in FYs 2011-2012. Instead, we apply the lessons provided by the actual data for FYs 2004-2008.

As our starting point, we use data on the share of permanently-reinvested earnings (PRE) that potentially could be repatriated under a reprise of HIA. The JCT estimate of repatriations appears to begin as well with the volume of accumulated foreign earnings as captured by PRE data: The JCT report notes that the level of repatriations will be considerably higher in 2011 and 2012 than in 2004 and 2005, because U.S. multinationals have built up a larger stock of such permanently-reinvested earnings. While precise data on foreign-source earnings remaining abroad is unavailable, most estimates range from \$700 billion to more than \$1 trillion. For example, PricewaterhouseCoopers in July 2010 used a sample of 841 multinationals to estimate that their accumulated PRE was about \$1.15 trillion at the end of 2009. The JCT revenue estimate relies on a different, 2009 analysis which held that these earnings would grow to more than \$700 billion by the end of 2010. Table 7, below, presents our forecast of qualified repatriations under a reprise of HIA in FYs 2011-2012. To be conservative, we adopt the JCT \$700 billion estimate of PRE and apply the 86 percent share of PRE repatriated under the HIA in FYs 2004-2006. This produces an estimate of \$604.5 billion in foreign earnings that would be

⁴⁰ PricewaterhouseCoopers (2010).

⁴¹ Sheppard and Sullivan (2009).

repatriated in FYs 2011-2012 under a renewed HIA.⁴² Next, we apply the estimated 3.65 percent tax rate for qualified dividends repatriated, after foreign tax credits, to forecast of nearly \$22.1 billion in revenues likely to be generated in FYs 2011-2012 from these qualified repatriations.⁴³

For our estimate of out-year revenues, we apply our analysis of the out-year revenues from HIA, including the evidence that repatriations at a minimum revert to their trend growth rate in the subsequent years. In fact, we found that repatriations in FYs 2007 and 2008 exceeded the pre-HIA trend, but here we adopt two more conservative assumptions. First, we assume that repatriations will merely return to their trend growth rate rather than continue to accelerate. Further, we adopt the lower pre-trend growth rate of 4.5 percent annual growth, which reflected the economic slowdown in 2001-2003, to recognize the current period of slow growth. Using these assumptions, we estimate repatriations for the remainder of the revenue-estimating period, FYs 2013-2021. Finally, we apply the residual U.S. corporate tax rate for these repatriations, 10.26 percent, for the post FY 2011 HIA period. The results – estimated repatriations and revenues for FYs 2011-2021 under a reprise of HIA -- are provided in Table 7, below.

Table 7: Estimated Repatriations and Revenues under a Reprise of HIA, FYs 2011-2012 (\$ millions)

Fiscal Year	Projected Repatriations	Projected Revenues
2011-2012 (3.65% tax rate)	\$604,529.9	\$22,065.3
2013 (10.26% tax rate)	\$69,520.3	\$7,132.8
2014 (10.26% tax rate)	\$72,623.5	\$7,451.2
2015 (10.26% tax rate)	\$75,865.3	\$7,783.8
2016 (10.26% tax rate)	\$79,251.7	\$8,131.2
2017 (10.26% tax rate)	\$82,789.4	\$8,494.2
2018 (10.26% tax rate)	\$86,484.9	\$8,873.4
2019 (10.26% tax rate)	\$90,345.4	\$9,269.4
2020 (10.26% tax rate)	\$94,378.2	\$9,683.2
2021(10.26% tax rate)	\$98,591.0	\$10,115.4
Total	\$1,354,379.7	\$98,999.9

These calculations show that if the repatriation behavior of multinational companies after a second HIA-style tax program follows their initial behavior after the original HIA program, tax revenues would total about \$99 billion over the ten-year period. Next, to see whether the second HIA program would likely gain or lose revenues on net, we compare these projected revenues with baseline revenues in the absence of an HIA-type policy. We construct this baseline by applying the same assumptions about the trend growth rate repatriations, 4.5 percent per-year, and the average effective tax rate on those repatriations, 10.26 percent, that we applied to the post-HIA type program, to the entire forecasting period of FY 2011-2021. Table 8, below, presents these estimates.

⁴³ Note that this analysis does not include other repatriations that do not take advantage of the tax holiday. If we included those, our estimate of revenues would be even higher. However, since there is no reasonable way of projecting those repatriations, we exclude them from this analysis.

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⁴² The JCT may assume a slightly higher volume of repatriations under the preferential deduction, which would assume a higher percentage of PRE repatriated than in2004-2006. We cannot be certain, because, unfortunately, the JCT does not make those numbers public, where they could be examined and debated openly.

Table 8: Estimated Baseline Repatriations and Revenues, FYs 2011-2021 (\$ millions)

Fiscal	Projected	Projected
Year	Repatriations	Revenues
2011	\$63,706.0	\$6,536.2
2012	\$66,549.7	\$6,828.0
2013	\$69,520.3	\$7,132.8
2014	\$72,623.5	\$7,451.2
2015	\$75,865.3	\$7,783.8
2016	\$79,251.7	\$8,131.2
2017	\$82,789.4	\$8,494.2
2018	\$86,484.9	\$8,873.4
2019	\$90,345.4	\$9,269.4
2020	\$94,378.2	\$9,683.2
2021	\$98,591.0	\$10,115.4
Total	\$880,105.4	\$90,298.8

This analysis suggests that far from the ten-year, \$78.7 billion revenue cost projected by the JCT, a reprise of the HIA would likely raise revenues relative to the baseline. Our estimate is a revenue increase of \$8.7 billion over ten years, based on 4.5 percent annual growth in repatriations and effective tax rates of 3.65 percent on qualified dividends and 10.26 percent on normal repatriations. The math is now straightforward: \$98.999 billion - \$90.299 billion = \$8.7 billion

Our analysis and projection have certain limitations. In particular, we cannot forecast with confidence domestic or global economic conditions over the next two years, much less over the next ten years. We also cannot predict how other tax policies might change in the United States and other nations, including corporate rates, over the next two or ten years. However, the same uncertainties apply to the JCT's estimates of repatriations and revenues under both scenarios. Moreover, we are very confident about the central difference between the JCT's revenue estimate and our own: The JCT forecasts that at some point in FY 2014 and for the following years in the estimating period, revenues under an HIA-type policy would turn negative relative to baseline revenues, because the JCT assumes that repatriations would fall to negligible levels. If this were to occur, of course, a reprise of the HIA would lose revenues as the JCT has predicted. However, there is no empirical basis for this assumption and view: Again, following the FYs 2004-2006 period of HIA, IRS data show that repatriations, at a minimum, returned to their long-term trend growth rate in FYs 2007 and 2008. In fact, the growth rate of repatriations appears to have accelerated modestly in FYs 2007 and 2008, relative to the long-term, pre-HIA trend. If even the more conservative pattern were sustained following a reprise of HIA, we should expect a modest revenue gain rather than the large revenue loss forecast by the JCT.

We note that our projected revenue gains under the original HIA, at \$23.5 billion, appear to be greater than the projected \$8.7 billion revenue gain from a reprise of HIA in FYs 2011-2012, despite much higher expected repatriations in the later period. In part, this reflects changes

in the JCT baseline used in the Committee's recent estimate, reflecting the JCT's estimate of higher rates and levels of repatriations under normal law than were assumed in 2004.⁴⁴ More important, our \$8.7 billion in revenue gains, relative to the baseline, all occur in FYs 2011-2012. After that point, and consistent with the latest IRS data but unlike the JCT, we do not assume or forecast revenue losses in subsequent years. Instead, we forecast a return to normal or baseline levels of repatriations for the rest of the forecasting period (FYs 2013-2020). By contrast, the JCT forecasts that those would be the years when its estimated \$78.7 billion revenue loss would occur. Finally, while our projected revenue gain is nominally greater for the original HIA, at \$23.5 billion, than for its reprise at \$8.7 billion, the difference between our estimates and the JCT's forecasts is greater under a reprised HIA than under the original policy: Under a new HIA, the difference between our estimated revenue gains of \$8.7 billion and the JCT's estimated revenue loss of \$78.7 billion is \$87.4 billion, compared to a \$26.8 billion difference between our estimated \$23.5 billion in revenue gains for the original HIA and the JCT's forecast of a \$3.3 billion revenue loss.

The Revenues Estimates and Recent Economic Studies of Multinational Companies

The JCT approach assumes that repatriations expand or contract mainly in response to tax rates. This view is implicit in its modeling of HIA as well as its recent projections for a reprise of the 2004 policy. This view of the power of tax rates is especially evident in the JCT's assumption that companies would respond to the temporary lower tax rate by bringing forward to the period of the tax preference most or all of the repatriations which otherwise would have occurred later. As a result, JCT forecasts that the policy would disrupt the normal course of repatriations, driving post-HIA repatriations to levels far below those of the baseline forecast. As noted now many times, the repatriation data for FYs 2007 and 2008 did not correspond even remotely to the JCT forecast. In addition, the JCT's view is at variance with recent evidence and analysis about how multinational corporations operate more generally.

For example, a 2006 study examined the determinants of the repatriation practices of U.S. multinational firms.⁴⁵ The study found that while tax considerations influence these repatriations, tax minimization does not explain a significant share of actual firm-level repatriation policies and behavior. Comparing the repatriation behavior of firms subject to sharply different taxes on those repatriations, the authors found only modest differences. In fact, some firms incur avoidable tax penalties by simultaneously repatriating dividends and investing in new equity in the same subsidiaries. In turns out that financial considerations can be more paramount than taxes: Parent companies that need cash to fund domestic investments or to pay dividends to their shareholders use repatriations to draw on the resources of their foreign affiliates. This finding is reinforced by subsequent research which found, as noted earlier, that firms which were already capital-constrained used HIA to repatriate funds to support planned domestic investments.46

⁴⁶ Faulkender and Petersen (2011).

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⁴⁴ The JCT predicted much a smaller PRE base for the 2004 proposal, establishing a lower baseline. The PRE base predicted for the second round is much larger, however, raising the baseline. ⁴⁵ Desai, Foley, Hines (2006).

The proposition that financially-constrained parent companies with profitable domestic investment opportunities will sometimes finance those capital expenditures by drawing on the accumulated earnings of their foreign affiliates, even when it involves avoidable tax costs, can be tested. Technically, this involves measuring the extent to which the repatriated dividend policies of heavily-leveraged firms in industries with high values of "Tobin's q" differ from the repatriated dividend policies of other firms. Tobin's q measures the ratio between the market value and replacement value of the same physical asset or investment, and industries with high values of Tobin's q have large incentives to undertake new investment. The evidence indicates that firms with significant domestic cash needs arising from a combination of attractive domestic investment opportunities (Tobin's q) and high degrees of leverage repatriate cash from their foreign affiliates to meet these needs. In short, the expected returns from investments can trump tax incentives, producing much of the significant repatriations in the post-HIA period seen in the IRS data.

Other evidence suggests that these repatriations are also driven by complementarities in the economic activities of U.S. parent companies and their foreign subsidiaries. A seminal 2008 analysis of the investment behavior of U.S. multinationals found that the foreign and domestic activities of U.S. multinational companies are correlated positively.⁴⁷ Increases in investment and employment in a MNC's foreign subsidiaries are associated with increases in domestic investment and employment by the parent company. As a result, we should expect higher repatriations by a MNC when investment and employment by its foreign subsidiaries expand, in order to help finance the accompanying domestic expansions by the parent company. This result would be especially pronounced if the costs of domestic credit for the U.S. parent company are relatively high. This dynamic was also identified in an earlier, 2005 study by the same authors, which focused specifically on the foreign capital expenditures and domestic capital spending of U.S. multinational companies.⁴⁸ Finally, other research has highlighted additional, non-tax related factors that also influence dividend repatriations. ⁴⁹ For instance, if a high growth rate in a foreign economy is accompanied by strong performance and high earnings by the foreign affiliates of an MNC, agency considerations may drive the U.S. parent company to restrict the cash flow available to the managers of the subsidiaries, resulting in higher dividend repatriations. This effect has been directly observed in multinationals headquartered in the United Kingdom.

A review of recent economic research and evidence, therefore, shows that many factors in addition to tax policies – and especially in addition to temporary tax deductions reductions – influence dividend repatriations by multinational companies. The JCT's crucial conclusion that repatriations would fall drastically following the HIA or following its reprise in the present period, because the average effective tax rate would rise from the temporary 3.65 percent to some 10.26 percent, is refuted by economic analysis and theory, as well as the data.

⁴⁷ Desai, Foley, Hines (2009).

⁴⁸ Desai, Foley, Hines (2005).

⁴⁹ Lehmann and Ashoka Mody (2006). See also, Lehman, Alexander and Ashoka Mody (2004). *International Dividend Repatriations, Issues* 2004 -2005,

http://books.google.com/books?id=21xxemX8Mf8C&pg=PA12&lpg=PA12&dq=what+influences+dividend+repatriations?&source=bl&ots=xTn5Q5wK6Y&sig=XKdrDZhKf1JEcDwxiY_ZX4ryXKM&hl=en&ei=llowTvHzLoT20gHspM2HAw&sa=X&oi=bookresult&ct=result&resnum=2&ved=0CCEQ6AEwAQ#v=onepage&q=what%20influences%20dividend%20repatriations%3F&f=false.

V. Conclusion

This analysis has strived to establish whether the JCT's revenue estimates for the Homeland Investment Act of 2004 and the proposal to reinstate its provisions for two years in 2011-2012 are accurate. We found that the Committee misjudged the scale and character of the foreign earnings repatriated under the HIA and, more important the scale and nature of the foreign earnings repatriated in subsequent years, after HIA's expiration. The JCT predicted that the foreign earnings repatriated under HIA would come substantially from foreign earnings which multinational companies would have repatriated in later years. As a result, the Committee predicted a sharp drop in repatriations after the Act expired, producing substantial revenue losses. Instead, IRS data for FY 2007 and 2008 showed that repatriations in those years, after the expiration of HIA, continued to grow, compared to repatriations in the years preceding the enactment of HIA. In fact, there is evidence that the growth of repatriations actually accelerated after HIA expired, again relative to their growth rate in the years before HIA. Recent research and analysis of the repatriation and investment behavior of multinational companies can help explain why the JCT erred in both the sign and dimensions of the revenue consequences of the HIA: While MNCs took significant advantage of the temporary low tax rate under HIA to repatriate several hundred billion dollars in foreign earnings, as expected and intended under the HIA, they continued to repatriate substantial foreign earnings in subsequent years at normal tax rates to meet their investment needs, even exceeding projected levels based on pre-HIA trends in repatriations. As a result, we estimate that the HIA will not cost U.S. taxpayers \$3.3 billion over ten years, relative to the baseline, as the JCT predicted. Rather, we estimate HIA will result in a ten-year revenue gain of some \$23.5 billion.

We applied the same analysis to the recent JCT revenue estimate a reprise of the provisions of terms of HIA in 2011 and 2012. Using the same logic which the Committee's revenue estimators applied to the 2004 proposal, the JCT has projected that a second round of a temporary lower tax rate on repatriated foreign earnings would reduce revenues by \$78.7 billion over ten years, compared to the baseline. We estimated repatriations under such a second round of HIA and in the following eight years, using projections based on the latest IRS data, and come to a very different conclusion. We estimate that a second round of the provisions and terms of HIA would produce revenue gains of \$8.7 billion over ten years.

Economic conditions in the United States and foreign markets have a significant effect on such revenue estimates; and given the economic upheavals of recent years, those conditions are impossible to predict with any confidence. Therefore, one cannot ascribe great certainty to either the JCT's revenue estimates or those developed in this study. However, recent data and analysis of the behavior of multinational corporations establishes with substantial certainty that the basic approach adopted by the JCT to estimate the revenue losses under HIA and its proposed reprise is fundamentally flawed. Evidence and analysis strongly suggest that both HIA and a reprise in 2011 and 2012 would ultimately increase federal revenues, relative to the baseline of taking no new action.

Appendix

Table A-1: Repatriations by Major and Minor Industry, FYs 2004-2006, \$ thousands⁵⁰

Industry	Qualified Dividends	Share of Qualifying Dividends
All industries	312,324,610	1.00
Manufacturing	252,251,369	0.81
Food manufacturing	17,637,518	0.06
Paper	6,186,498	0.02
Chemicals	120,202,492	0.38
Basic chemicals	4,803,249	0.02
Pharmaceuticals and medicines	98,780,756	0.32
Plastics and rubber products	796,360	0.00
Primary metal	478,789	0.00
Fabricated metal products	4,809,733	0.02
Machinery	5,353,065	0.02
Computer and electronic equipment	57,486,812	0.18
Computer & peripheral equipment	34,199,356	0.11
Semiconductor and, electronic components	13,569,819	0.04
Electrical equipment, appliance, and components	4,100,543	0.01
Transportation equipment	10,243,076	0.03
Wholesale and retail trade	12,860,439	0.04
Wholesale trade, durable goods.	4,643,031	0.01
Wholesale trade, nondurable goods	3,910,565	0.01
Retail trade	4,306,843	0.01
Transportation and warehousing	918,156	0.00
Information	13,202,284	0.04
Software publishers	8,256,358	0.03
Finance, insurance, real estate, rental, leasing	11,915,338	0.04
Insurance carriers and related activities	2,738,175	0.01
Professional, scientific and technical services	2,739,979	0.01
Management of companies and enterprises	7,023,785	0.02
Other services	5,567,914	0.02
All other industries	5,845,347	0.02

 $^{^{50}}$ The numbers are taken directly from the IRS *Statistics of Income*, and the sub-categories do not necessarily add up to the larger industry category.

Table A-2: Foreign Tax Credits Claimed, FYs 1994-2008 (\$ millions)⁵¹

Fiscal Year	Foreign Tax Credits Claimed
1994	\$25,401.3
1995	\$30,420.3
1996	\$40,243.8
1997	\$42,199.6
1998	\$37,396.5
1999	\$38,390.0
2000	\$48,506.0
2001	\$41,063,2
2002	\$42,021.5
2003	\$50,033.6
2004	\$56,872.2
2005	\$82,051.2
2006	\$78,183.5
2007	\$86,579.9
2008	\$100,433.7

Table A-3: Implicit Revenues from Repatriations and Foreign Tax Credits Claimed for those Repatriations, FYs 1994-2008, (\$ millions)

Fiscal Year	Revenues from Repatriations at Appropriate Rate (35% or 5.25%)	Foreign Tax Credits
1994	\$10,612.8	\$25,401.4
1995	\$12,396.3	\$30,420.3
1996	\$16,185.8	\$40,243.8
1997	\$17,853.3	\$42,199.6
1998	\$17,231.5	\$37,396,5
1999	\$22,716.9	\$38,390.0
2000	\$21,071.2	\$48,505.8
2001	\$17,499.2	\$41,063.2
2002	\$15,953.2	\$42,021.5
2003	\$15,722.5	\$50,033.6
2004	\$20,443.9	\$56,872.2
2005	\$127,031.0	\$82,051.2
2006	\$25,347.0	\$78,183.5
2007	\$30,908.4	\$86,579.9
2008	\$36,587.7	\$100,433.7

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⁵¹ IRS Statistics of Income, http://www.irs.gov/taxstats/article/0,.id=170692,00.html.

Table A-4: Projected Revenues Net of Foreign Tax Credits, From Baseline Repatriations, FYs 2004-2014 (\$ millions)

Fiscal Years	Projected Baseline Repatriations (without HIA)	Projected Tax Revenues, Net of Foreign Tax Credits, Assumed Effective Tax Rate of 10.26%
2004	\$46,926.7	\$4,814.7
2005	\$49,021.4	\$5,029.6
2006	\$51,209.6	\$5,254.1
2007	\$53,495.5	\$5,488.6
2008	\$55,883.4	\$5,733.6
2009	\$58,378.0	\$5,989.6
2010	\$60,983.8	\$6,256.9
2011	\$63,706.0	\$6,536.2
2012	\$66,549.7	\$6,828.0
2013	\$69,520.3	\$7,132.8
2014	\$72,623.5	\$7,451.2

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