DECISION ECONOMICS, INC.
Information for Decisions™

Economic Studies Series

December 11, 2008

Contents

Tables

New York • London • Boston

Economic Studies Series #66

Previous DE Economic Studies Series can be viewed at:
www.decisioneconomicsinc.com

Macroeconomic Effects of Reducing the Effective Tax Rate on Repatriated Foreign Subsidiary Earnings in a Credit- and Liquidity-Constrained Environment

by Allen Sinai*

This study examines the macroeconomic effects of a policy for repatriating U.S. foreign subsidiary earnings residing outside the country not presently used by U.S.-based businesses for spending, hiring, credit, or strengthening corporate balance sheets. Any public policy that can provide increased funds to credit- and liquidity-constrained businesses would cushion the current economic downturn and provide funding to those who might otherwise find it difficult, or too costly, to obtain credit or short-term funding from banks or through the capital markets.

The policy considered is one that was used in the American Jobs Creation Act (AJCA) of 2004 which temporarily provided an 85% dividends-received-deduction on qualifying repatriated funds, or an effective tax rate on foreign subsidiary earnings (FSE) of 5.25%, instead of the 35% U.S. corporate income tax rate, if companies repatriated the corporate profits residing abroad, permanently or otherwise. What finally showed up as the AJCA was a version of a policy first proposed in 2002, then in the Homeland Investment Act (HIA) and Invest in the USA Act, both introduced in 2003.

In the current credit- and liquidity-constrained environment, legislation that would essentially provide the same dividends-received-deduction as the AJCA likely would induce companies to repatriate funds as was done then. Evidence on the AJCA generally has been positive for its effects on the economy and for corporations who repatriated funds.

* Chief Global Economist and President, Decision Economics, Inc. (DE); New York, London, Boston. The assistance of Chip Curran at DE is gratefully acknowledged. The comments and suggestions of Margo Thorning and Pinar Cebi Wilber, American Council for Capital Formation (ACCF); Robert Hoffman, Oracle, Inc.; W. Michael Phipps, Eli Lilly & Co.; and Peter Merrill, PricewaterhouseCoopers (PwC) are noted with thanks. The financial support of the American Council for Capital Formation (www.accf.org) for this project is acknowledged.

A principal motivation for the AJCA was to provide funds for creating jobs. It did some of that but also found other uses (Table 1) such as capital spending, R&D outlays, improved corporate liquidity and strengthened balance sheets.[1] In the current situation, although jobs creation remains an objective, the repatriation of foreign subsidiary earnings would serve a possibly more important use by providing additional sources of funds to companies who might have problems obtaining finance through normal channels. The funds obtained could possibly mitigate some of the funding currently being provided by American taxpayers, either through the Treasury or Federal Reserve.

Table 1
Use of AJCA Repatriated Funds—End of Tax Year 2006

Use of Cash	**Percent (%)**
U.S. Capital Investment	24
Hiring and Training of U.S. Employees	23
U.S. R&D	15
Pay Down of Domestic Debt	13
Other	10
Acquisition of Another Firm or Assets	7
Holding in Cash	5
Repurchase of Shares	3
Dividends Rec'd.	*
Capital Infusion to Foreign Subsidiary	*
Loan to Foreign Subsidiary	*
Total	100

*Less than 1 percent.

Source: J. Graham, M. Hanlon, T. Shevlin, "Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits," Fig. 2, p. 35, October 27, 2008.

The odds that sizeable numbers of jobs would be created soon from repatriation are not high, given the bleak prospect for the U.S. and global economies going forward. Companies tend to hire most when future prospects for sales and earnings are bright. Currently, pessimism and gloom about future economic activity abounds and businesses are in the middle of major cutbacks in employment to squeeze down costs. The repatriation of funds can help create jobs, or prevent job losses, but initially probably not much in such an environment.

[1] A significant number of jobs likely were created by the AJCA, as hiring and training was one of the conditions for obtaining dividends-received-deductions; the mechanism for repatriation. One survey of 111 companies who repatriated some of the earnings permanently reinvested abroad shows that 23% of the funds were used for Hiring and Training; see Table 1. No definitive study has been made on the number of jobs actually created, however.

However, the release of funds to companies from repatriation could well serve to supplement, or substitute for, credit as cash flow would be increased. This would limit the effects of the ongoing credit crunch and the difficulty of raising funds through such sources as commercial paper, bonds and stock, and, in the extreme, having to seek funds from the federal government. Liquidity would become available to rebuild and support nonfinancial corporate balance sheets. Once the economic cycle turned more favorable, the improved financial condition of nonfinancial corporations would help set the stage for increased spending, hiring, and stimulus to the real economy.

The study examines the quantitative effects of once again establishing the dividends-received-deduction for qualifying corporations starting in, or retroactive to, January 2009, simulating the policy in a large-scale structural macroeconometric model of the U.S. economy, the Sinai-Boston (SB) Model.

Data from the IRS studied and compiled by PricewaterhouseCoopers (PwC) are used to estimate the earnings and accumulated profits of U.S. foreign subsidiaries potentially available as a source of repatriated funds.

These earnings currently provide little, or no, tax revenue to the U.S. Treasury, residing abroad where they are invested, permanently or temporarily, mostly in cash but also in some other investments. Companies do not wish to bring the funds to the U.S. because of the 35% corporate tax rate that would be applied; from a company point-of-view a punitive rate compared with the returns earned on these funds and lower foreign corporate profits tax rates in many other countries. So, the retained earnings of many foreign subsidiaries get permanently reinvested outside the United States.

A one-time qualified dividends-received-deduction on repatriated foreign subsidiary earnings in 2004 to 2006 induced companies to bring back sizeable amounts of funds and to make use of them in a variety of ways (Table 1). The benefits from repatriation at an effective 5.25% tax rate apparently far exceeded the costs, opportunity or otherwise.

In a credit- and liquidity-constrained environment, odds are that companies would use this device to bring funds to the U.S., easing the crunch in credit for participating corporations and providing an alternative to the usual sources of funds obtained from capital markets or commercial banks where, in many cases, the costs are higher, or funds simply not available. The seizing-up of funding and credit within and outside the financial system in the current circumstance has created considerable financial and economic distress with top-rated corporations unable to obtain funds from banks or the capital markets, e.g., through issues of commercial paper, secured or unsecured, and now with even the Federal Reserve having to provide funds to publicly-held corporations through a facility that purchases short-term asset-backed commercial paper.

The SB Model is a full-blown large-scale macroeconometric model of the U.S. economy and financial system and captures, more than other models, the flows-of-

funds, credit, borrowing, and balance sheet effects of measures like the AJCA. A full elaboration and integration of real and financial uses and sources of funds by corporations and the interrelations between finance, cash flow and real economic activity that actually exist, but are not included in most approaches, is the framework used.

The main result of the quantitative work is that temporarily reinstating the dividends-received-deduction for repatriated foreign subsidiary earnings leads to significantly higher corporate cash flow, a considerable and significant increase in real economic activity, increased capital expenditures including R&D, improved business financial conditions, and more jobs at nonfinancial corporations and also at financial institutions. This occurs at little or no cost to the U.S. Treasury. Indeed, the study indicates that from this program the Treasury would receive funds it would not otherwise get, approximately 5-1/4% of the dividends from foreign subsidiaries that are received, that is repatriated funds which qualify, and that additional tax receipts would be generated from the resulting increases in economic activity for personal income, corporate profits, capital gains, social security and excise taxes.[2]

Contrary to some policies designed to stimulate economic activity, advantages to repatriation of foreign subsidiary earnings are the relieving of credit restraint or the providing of an alternative source of funds given the tight credit conditions that currently exist, the enhancing of nonfinancial corporate liquidity in a liquidity-constrained environment, and the providing of economic stimulus to capital formation and jobs creation in a difficult and recessionary economy. Yet another benefit is that the federal budget deficit could actually improve because tax receipts not otherwise flowing into the U.S. Treasury would flow in on the repatriation of nontaxed funds and from the additional tax receipts induced by increased economic activity.

Easing A Liquidity Crunch and Stimulating Corporate Spending in a Recession

The U.S. economy is in recession, probably the longest and deepest since the recessions of 1973-75 and 1981-82, with a chance of something worse. A global recession also is reality, the worst since the early 1980s.

---

[2] The issue of whether a gain or loss of tax receipts occurs at the federal level turns on the length of the program, assumptions on what future repatriations might be under no program, the administrative costs, and whether revenues are estimated on a static—ex-ante; or dynamic, ex-post, basis. The Joint Committee on Taxation (JCT) scored the AJCA as a net loser of tax revenue, using static estimates and assuming that less repatriation would occur after the AJCA finished. But positive feedback effects on tax receipts from increased economic activity were not, and are not, used in the JCT methodology. Considerable controversy exits over the validity of ex-ante estimates as the sole representation for the effects of a change in tax policy. Many argue that tax receipts ex-post, or after positive feedback effects, from a tax stimulus should be included in net revenues lost, or gained, calculations. JCT methodology and other assumptions made about economic behavior under the AJCA are discussed in Kleinbard and Driessen (2008).

The process leading to the U.S. economic downturn began several years ago with a collapse in housing after an outsized and excessive housing boom, then a bust, and the bursting of a housing asset price bubble, both of which continue now. The housing downturn and declining housing prices caused the subprime real estate loans of numerous financial institutions to default and started a contraction in the values of mortgage derivative securities and structured investment products, ultimately secured by the asset values of real estate collateral. Declines in the value of residential real estate and in the stock market reduced the real net worth of American consumers and is one of many negative fundamentals now surrounding consumption.

The recession currently is centered around a substantial cyclical and probably secular decline in the levels and growth of consumer spending. With declining sales, profits and cash flow for American businesses as a consequence, major cutbacks are in-train for production, inventories, jobs, and in capital spending. The jobs losses and a rising unemployment rate, in turn, bring less consumption, less sales, more reductions in business profits and in business spending, as well as worsening financial conditions for households and corporations. The global recession, in part occurring from reductions in the exports and trade of non-U.S. countries as a consequence of the U.S. downturn, will reduce the growth of U.S. exports and prolong the U.S. economic weakness.

The housing downturn and declining residential real estate prices caused a huge tranche of subprime and ALT-A mortgage loans to go sour and started a contraction in the values of mortgage derivative securities and structured investment products on the books of financial institutions that owned them and money managers that acquired and held them. Financial institutions, who made these subprime loans and invented the mortgage derivative securities and innovative financial products based on rising real estate prices, suffered large losses. The balance sheets of numerous financial institutions contracted, especially investment banking/brokerage firms. The transactions and fee-based businesses of "bank-like" financial intermediaries, such as investment banking/brokerage firms, private equity companies, venture capital companies, hedge funds, and off-balance sheet entities of commercial banks, all tumbled. These businesses had become huge in amount and volume, in part from unregulated and unsupervised derivative instruments that credit agencies had rated AAA and that had been sold to investors everywhere—all depending on rising housing prices for increased valuations. The developers and sellers of these instruments, the new financial intermediaries, also were essentially unregulated and unsupervised. Very little transparency existed in these businesses, for the derivative instruments, mortgage loans, and nonbank financial intermediaries.

The leverage for many of the institutions was so high (over 30 times for investment banks/brokerage) that huge losses were registered; also for numerous banks (on off-balance sheet entities) and nonbank intermediaries. A credit crunch

then occurred within the financial system, failure fallout of financial institutions and some companies, and a credit crunch to outside borrowers. Contractions in balance sheets highly levered by debt raised in the capital markets in one form or another and losses led to increased capital needs for financial institutions—and, of course, falling stock prices. The boom and bubbles in housing, mortgages, credit, debt and in financial services was, and is, over. The depression in financial services and implosion of credit has also negatively affected many other economies as well as creating a credit and liquidity-constrained U.S. economy.

With a financial crisis—huge declines in asset prices, large contractions in the balance sheets and numbers of U.S. and global financial intermediaries, and an implosion of credit—an even more serious and potentially severe economic downturn is indicated. A credit crunch within and outside the financial system overlays the economic downturn and intensifies it. The recession itself feeds increased credit risk, the contraction of credit, and intensifies the credit crunch. This loop is not easy to break!

The Program, Amounts, and a Brief Look at the American Jobs Creation Act (AJCA) of 2004

The AJCA was used by a significant number of companies, about 850, according to the Internal Revenue Service (IRS), with some $360 billion repatriated into the U.S. corporate sector out of $809 billion available at the end of 2004. Surveys and analysis of the impacts indicate a wide range of uses for the funds, including some for jobs creation and training (see Table 1).

Recently, PricewaterhouseCoopers (PwC) estimated the amounts of the permanently reinvested earnings (PRE) residing abroad for a sample of U.S. business corporations.[3] Table 2 shows the accumulated untaxed earnings and profits of U.S. foreign subsidiaries as of 2005, according to the IRS and as estimated by DE. Also provided are the permanently reinvested earnings (PRE) from 2006 to 2007 as disclosed by companies in the Form 10K required by the Securities and Exchange Commission (SEC), estimated AJCA repatriations, and the numbers of companies involved. What might be available as of 2008 is estimated by DE.

The Table shows the number of firms in the PwC assessment and dividends that could be repatriated based on the 2004 AJCA experience. $655 billion is the estimate of "qualified" dividends, i.e., average amounts in excess of the base amount ($565 billion) that would qualify for the 85% dividends-received-deduction. Applying the same ratio of funds repatriated to PRE as in 2005 and the

[3] Memo from PwC, "Permanently Reinvested Foreign Earnings of U.S. Corporations," October 30, 2008 and PwC Draft, August 12, 2008.

same conditions for qualifying produced $565 billion as the funds that would be repatriated to companies through legislation similar to the AJCA.[4]

Table 2
Program—Temporary 85% Dividends-Received-Deduction or 5.25% Effective Tax Rate on Repatriated Foreign Subsidiary Earnings (FSE)— Currently Available and from America Jobs Creation Act (AJCA)*

Item	Years 2008E	2007	2006	2005
IRS Data (Companies with AJCA Repatriations)				
U.S. Cos. Claiming Sect. 965 Div. Rec'd. Deducts.				
Number of Cos.	843	NA	NA	843
Dividends ($ Bils.)	655	NA	NA	362
Qualified Dividends ($ Bils.)	565	NA	NA	312
All Controlled Foreign Subsids.				
Accum. Untaxed Earnings & Profits ($ Bils.)[1]	1456.2	1576.5E	1174.6E	804
Form 10Ks (SEC)[2]				
With PRE Disclosure				
Number of Cos.	NA	707	750	828
PRE ($ Bils.)	NA	958	742	558
With AJCA Repatriation				
Number of Cos.	NA	307	318	351
PRE ($ Bils.)	NA	639	480	353

[1] For tax years ending after June 30 and before July 1 of the indicated year.

[2] For 2006, FYs ending between 10/1/2005 and 9/30/2006. For 2006 and 2007, most recent two fiscal years before ending July 1, 2008.

*Based on historical information from the IRS; SEC Form 10K; PwC surveys and calculations, July 2008.

E—DE estimates.

PRE—Permanently Reinvested Earnings

Sources: PricewaterhouseCoopers (PwC); IRS.

Since U.S. multinational corporations increasingly earn a larger portion of profits from overseas activities through foreign subsidiaries, it is reasonable to expect a larger pool of accumulated untaxed earnings and profits and thus greater PRE. This tendency has grown as the global economy has become more interrelated in production, sales, distribution, and in sourcing materials and labor

[4] 2008 estimates are based on SEC Form 10K filings for a sample of 828 companies who used the AJCA repatriation program in 2004-05 and 2005-06. Other estimates are based on extrapolations, surveys, and academic work analyzed by PwC.

for much of what is produced and where technology has made it easier for flows of goods, services, information, and finance to move anywhere in the world where there are opportunities, and at great speed.

DE estimates that in 2007 about 38% of sales for companies in the S&P500 were directly, or indirectly, derived from non-U.S. activities, accounting for approximately 31% of aggregate S&P500 profits. The proportions vary depending upon the S&P500 industry. These global penetration ratios are far higher than historically. More-and-more U.S. companies and industries have tilted business toward non-U.S. uses.[5]

Earnings at foreign subsidiaries of U.S.-based multinationals may be taxed at the corporate rates of the country where the company resides, or may not be taxed at all. But, where taxed, given that the corporate income tax rate in the United States is higher than in many other countries, such rates generally are lower than what would be paid if the foreign subsidiary earnings were repatriated. A practice of many multinational companies, in actuality and reported in surveys, is to keep retained earnings overseas rather than return the profits "home" where a punitive corporate income tax rate would be applied. This is standard business practice in-line with attempting to maximize shareholder value. The permanently reinvested earnings is typically held in cash and equivalent, but can be invested for other purposes ranging from reductions of foreign debt to liquidity needs to other selected investments.

Although the returns on these investments can be very small, in aftertax terms, relative to what might be earned aftertax in the United States they generally are higher. Thus, U.S. multinational companies have left an increasing pool of foreign subsidiary earnings outside the United States rather than repatriating and paying the U.S. tax. In order to stimulate the economy and create jobs, the AJCA permitted a one-time deduction of dividends received from foreign subsidiaries with the qualifying dividends subject to a number of conditions set in the legislation. These included jobs creation, capital spending and R&D, among others.

The one-time effective tax rate turned out to be 5.25%, far below the 35% statutory corporate income tax rate. As might be expected, the result was a sizeable repatriation of permanently reinvested earnings (PRE) through payment of dividends to the parent company. In applying, corporations had to fill out forms describing how the funds would be used in keeping with the guidelines for qualifying.

The data of Table 1 and papers by Graham, Hanlon, and Shevlin (2008) indicate that the tax reduction was received favorably by a number of companies, mainly large companies. There was a wide dispersion of funds for business outlays of all

[5] John J. Blank, "U.S. Industries Contemplate A Global Slowdown," *Sector & Industry Equity Allocation Comments,* Decision Economics, Inc., November 5, 2008, pp. 4-6.

kinds and use of the released funds in financial management, particularly to enhance balance sheets. While all the results are not fully known, it does appear that the AJCA had salutary effects.

Macroeconomic Effects of a Reduction in the Effective Tax Rate on Repatriated Foreign Earnings—2009 to 2013

Using the SB Quarterly Large-Scale Macroeconometric Model of the U.S. Economy, the macroeconomic effects on the U.S. economy and the financial condition of nonfinancial companies from an 85% dividends-received-deduction on qualifying dividends if U.S. foreign subsidiaries was estimated and assessed.

The repatriation of funds through changes in dividends received and in the dividends qualifying were treated as exogenous, operating through nonfinancial corporations as new cash flow and producing taxes paid to the federal government for companies who qualified.

The SB model analysis was conducted over a five-year horizon, 2009-to-2013. The estimate of repatriated funds (Table 2, $565 billion) and tax payments to the IRS of 5.25% of $565 billion were used as exogenous inputs to the simulation.

The *net* cash flow into the participating companies, essentially assumed to be all nonfinancial corporations, was $535.3 billion, and tax receipts (corporate) initially paid to the government $29.7 billion.[6] This was all in calendar year 2009, with lags over the year as corporations applied and were qualified.

In the SB Model, a scenario where there is a one-time increase of cash flow relative to what might otherwise have occurred treats the extra cash flow as new funds for nonfinancial corporations, i.e., as a new source of funds. Uses of the funds then occur, ranging from expenditures on new plant and equipment to new jobs to the placement of some funds in financial assets, typically deposits, to the paying down of short-term debt, e.g., bank loans or commercial paper; to less issuance of new long-term debt; some dividends paid; the financing of inventories; or as additions to corporate equity, i.e., corporate net worth.

Increased spending on plant and equipment, especially for equipment, the creation of new jobs, greater R&D spending, improvements in the financial condition, or balance sheets, of companies lead to increased real GDP, rising incomes, and higher profits. This induces consumption and personal savings, as not all the additional income is spent. More imports occur as a leakage from spending in the U.S., but this helps the exports of numerous non-U.S. countries. Some increase in demands for financing additional business spending are generated. Stronger business balance sheets reduce the credit risk of nonfinancial corporations and lenders are more willing to provide financing. The cash flow

[6] This is not technically correct, since not all corporations accumulate earnings abroad and for those that do, some may not repatriate. To this extent, some overstatement of the results could be argued. Countering this, however, is the actual tally from the AJCA and those companies that participated as revealed in the Form 10ks, which were a sizeable number.

injection provides an inexpensive source of liquidity to firms and there are fewer issues of relatively expensive long-term debt. Long-term corporate interest rates move lower as a result and the cost-of-capital declines.

The increase of real economic growth and in the level of real GDP also generate higher business profits and, along with lower long-term interest rates, lead to higher stock prices, increased household wealth, some increased consumption, higher real GDP and then a higher rate of business fixed investment, partially financed by the original increase of cash flow but also from the additional funds generated by the increased profits of a stronger economy.

With some lags, jobs increase, worker incomes move higher, and consumer spending and savings occur that otherwise would have not. R&D spending also rises for those businesses that are so oriented, both from the stronger economy and the increased liquidity available to finance such spending.

Some of the effects occur with delays, just as happens in the real economy—a delay in recognition of more funds becoming available, from the gestation and planning of what to do with the funds, delay because of time in applying and implementation, and then delays from the lagged effects in economic behavior that occur.

This is particularly so for jobs creation, which if initial economic conditions are not good, does not occur as quickly nor to the extent possible than if there were better initial conditions. But, later on, with a stronger financial position for nonfinancial corporations and the increased sales and profits that are induced, jobs creation picks up.[7]

Table 3 shows the simulated macroeconomic effects of the program over the years 2009-2013 and the average per year from the changes—all relative to a Baseline path. Monetary policy was held unchanged, i.e., the federal funds rate was kept constant at Baseline levels through the addition of nonborrowed reserves to the banking system.

The results from simulating the effects of the program show increased real economic growth and economic activity, a considerable rise in business capital spending, more R&D spending, a better stock market, increased incomes and greater household net worth. In turn, increases in disposable income and household wealth help induce more consumption spending.

The financial position of nonfinancial corporations is considerably enhanced as the increase of cash flow gets used not only for increased capital spending, jobs and R&D, but also for improving corporate financial conditions. The parameters that define the financial risk of the nonfinancial corporate sector also are improved.

Finally, federal government tax receipts rise, in part because of the original allocation of funds to the federal government from an effective 5.25% tax rate

[7] The analysis assumes that none of the additional funds repatriated in 2009 would have been repatriated in 2010-2018 under present law and that there would have been no suppression of dividends due to taxpayers who might decide to wait for another tax reduction on repatriated earnings.

Table 3
Macroeconomic Effects of a Temporary 85% Dividends-Received-Deduction on Repatriated Earnings at an Effective 5.25% Rate—2009-2013*
(Changes Relative to Baseline, Unless Otherwise Indicated)

			Years			Avg.
Item	**2009**	**2010**	**2011**	**2012**	**2013**	**2009-2013**
Economy						
Real GDP (Pctg. Chg.)	0.1	0.8	-0.2	-0.3	-0.2	0.1
Real GDP ($ 00' Bils.)	12.6	109.5	92.3	56.7	36.7	61.6
Consumption ($ 00' Bils.)	11.3	45.6	63.8	65.6	56.5	48.6
Business Capital Spending ($ 00' Bils.)	3.1	95.0	96.8	53.4	33.6	56.4
Net Exports ($ 00' Bils.)	-3.1	-36.2	-71.1	-62.6	-49.0	-44.4
R&D ($ 00' Bils.)	5.3	14.7	10.7	3.4	1.4	7.1
Inflation						
Consumer Price Index (%)	unch	0.04	0.12	0.08	0.07	0.10
Consumption Deflator Ex-Food & Energy (%)	unch	0.03	0.08	0.07	0.04	0.04
Jobs and Unemployment						
Nonfarm Payroll (Mils. of Persons)	0.093	0.511	0.614	0.482	0.125	0.365
Unemployment Rate (%)	unch	-0.4	-0.5	-0.2	-0.1	-0.2
Financial						
Interest Rates (%)						
3 Mo. CP.	-0.25	0.03	unch	0.01	-0.01	-0.04
3 Mo. Treas.	-0.03	unch	-0.01	0.01	-0.00	-0.01
AAA-Equiv. Corp.	-0.19	-0.46	-0.66	-0.41	-0.09	-0.36
10-Yr. U.S. Treas.	-0.07	-0.10	-0.18	-0.38	-0.32	-0.21
Stock Market						
S&P500 EPS ($/Share)	0.29	2.15	2.34	2.30	2.48	1.91
S&P500 Index (Pct. Chg. from Baseline)	1.8	5.1	10.9	10.7	7.1	7.1
Dollar vs.						
Yen	0.1	0.9	0.8	-0.3	-0.7	0.2
Euro	0.1	4.2	7.3	4.5	0.6	3.3
Financial Position (Nonfin. Corps.)						
Cash Flow ($ Bils.)	545.5	18.0	31.4	33.9	42.1	134.2
Capex/Cash Flow (Ratio, Pctg. Pts.)	-39.4	10.8	2.5	-0.6	-4.2	-6.2
"Quick" Ratio (Pctg. Pts.)	8.5	15.5	5.3	-.8	-1.5	5.4
Interest Charges/Cash Flow (Ratio, Pctg. Pts.)	-20.0	-2.4	-4.9	-6.4	-7.8	-8.3
Borrowing ($ Bils.)	-54.5	-30.5	3.7	12.4	23.8	-9.0
Debt/Equity (Ratio, Pctg. Pts.)	-2.2	-2.4	-1.9	-1.6	-1.6	-6.3
Fed'l. Govt. Budget						
Unified Budge Deficit (-)/Surplus (+)	35.4	38.9	62.0	54.4	47.3	47.6
Tax Receipts ($ Bils., NIPA)	33.7	21.3	27.8	29.4	25.7	27.6
Corporate	32.0	10.6	9.8	8.0	6.5	13.4
Personal	0.9	5.5	9.4	12.4	12.1	8.1
Cap. Gains	0.3	2.5	6.6	9.2	8.6	5.5
Other	0.8	5.2	8.6	8.9	7.1	6.1

*Simulations with the Sinai-Boston (SB) Large-Scale Macroeconometric Model of the U.S. Economy. Monetary policy is held unchanged; federal funds rate unchanged from the Baseline.

The results of econometric model simulations should properly be noted as approximate, in this work derived from a stochastic interactive dynamic large-scale macroeconometric model. As such, a wide distribution of outcomes is possible. Any given econometric model simulation result is only one of those outcomes, presumably near the center of the distribution of the probability distribution of all possible outcomes. Thus, ranges should be thought of rather than precise point estimates, with any particular episode, or simulation, a single outcome in the range and not necessarily precise in its potential accuracy. Also, simulations of econometric models are based on the model structure of history so that any change in structure in the recent past, or future, not captured in the sample history of the econometric model can make the results less precise, less valid, or even invalid.

applied to funds otherwise untaxed, but also because of increased corporate profits, personal income, capital gains, social security and excise tax receipts. The federal government budget deficit is reduced as a result.

Some details:

• *Economy*—real economic growth rises only little in the initial year, but is up sharply in Year II, by 0.8 percentage points compared with the Baseline. Then, because of the one-time nature of the program real economic growth falls somewhat below the Baseline. The increase in real GDP compared with the Baseline averages near $62 billion per year over five years.

• *Business Capital Spending and R&D*—the increased real economic growth and gains in the level of real economic activity stem mostly from increased business capital spending and consumption, but is somewhat offset by a decline in real net exports. Leakages to imports occur out of the increased spending. R&D spending is up by approximately $7 billion per annum over 2009-2013.

Since the program is oriented toward nonfinancial corporations and directly enhances business cash flow, a prime determinant of capital spending, it is not surprising to see strong gains in business capital spending and the higher R&D spending. Consumption spending increases as a consequence of the increased economic activity, jobs creation, higher disposable income, and gains in household wealth. The rise in consumption is secondary to the increased business spending on capital goods, employment and R&D, however.

• *Jobs*—nonfarm payroll jobs, essentially a measure of hiring and jobs creation by business, show a small gain of 93,000 persons in 2009 and then larger increases in subsequent years, peaking at 614,000 in 2001 relative to the Baseline. The jobs gains lag the increases in capital spending and in real GDP but do reflect some use of the increased cash flow from repatriation. The lags are to be expected given that much of the initial funds flows to nonfinancial corporations are used first to shore up corporate finances and balance sheets. The strengthened financial position of the nonfinancial corporate sector, in turn, helps support the later hiring.

• *Inflation and Unemployment*—a stronger economy raises prices somewhat, but not very much, with the overall CPI up 0.1 percentage point per annum from 2009 to 2013. "Core" inflation, measured by the Consumption Price Deflator Ex-Food and Energy, is essentially unchanged.

The combination of enhanced liquidity, an improved financial position, and gains in capital spending help improve productivity growth and potential output. As one result, the unemployment rate, which is unchanged in the first year, is 0.5 percentage points lower by Year III, and declines 0.2 percentage points per year from 2009 to 2013.

• *Credit, Liquidity, and the Financial Position of Nonfinancial Corporations*—the financial position of nonfinancial corporations improves significantly as the initial sizeable injection of cash flow is used to reduce short- and long-term borrowing and outstanding debt. Interest rate charges relative to cash flow decline, indicating an improved financial condition for business. The "quick" ratio of

financial assets-to-liabilities improves by 20 percentage points in Year I as much of the extra cash flow is placed in financial assets before being used for capital spending, R&D, and the creation, for saving, of jobs. The yields on short-term commercial paper and long-term corporate bonds decline because of increased corporate liquidity and a lower volume of corporate debt issues. The interest charges on debt relative to cash flow remain below Baseline levels throughout the five-year period.

Table 4
Revenue Effects of a Temporary 85% Dividends-Received-Deduction on Repatriated Foreign Subsidiary Earnings*
(Changes Relative to Baseline, Unless Otherwise Indicated)

Item	Years 2009	2010	2011	2012	2013	Avg. 2009-2013
Unified Budget (+) Deficit/(-) Surplus ($ Bils.)	35.4	38.9	62.0	54.4	47.3	47.6
Total Receipts-Unified Budget ($ Bils.)	33.8	21.4	28.4	30.0	26.1	27.9
NIPA Budget Deficit (-) Surplus ($ Bils.)	35.3	21.4	28.4	30.0	26.1	27.9
Tax Receipts ($ Bils., NIPA)	33.7	21.3	27.8	29.4	25.7	27.6
Corporate	32.0	10.6	9.8	8.0	6.5	13.4
Personal	0.9	5.5	9.4	12.4	12.1	8.1
Cap. Gains (Pers. & Corp.)	0.3	2.5	6.6	9.2	8.6	5.5
Other (Soc. Sec. & Excise)	0.8	5.2	8.6	8.9	7.1	6.1
Government Outlays ($ Bils., NIPA)	-1.6	-17.5	-33.6	-24.5	-21.2	-19.7
Federal ($ Bils., NIPA)	0.0	0.1	0.8	1.7	2.5	1.0
Govt. Transfer ($ Bils, NIPA)	-0.3	-13.6	-26.1	-6.6	6.4	-8.0
State & Local ($ 00' Bils.)	0.4	2.2	2.7	0.9	-1.6	0.9
Ex-Ante Revenue Cost or Gain ($ Bils.)	29.7	0.0	0.0	0.0	0.0	5.9
Ex-Post Tax Receipts ($ Bils.)	33.7	21.4	28.4	30.0	26.1	27.9

*Decision Economics, Inc. (DE) and simulations with the Sinai-Boston (SB) Large-Scale Macroeconometric Model of the U.S. Economy. Monetary policy unchanged with the federal funds rate held at Baseline levels.

The results of econometric model simulations should properly be noted as approximate, in this work derived from a stochastic interactive dynamic large-scale macroeconometric model. As such, a wide distribution of outcomes is possible. Any given econometric model simulation result is only one of those outcomes, presumably near the center of the distribution of the probability distribution of all possible outcomes. Thus, ranges should be thought of rather than precise point estimates, with any particular episode, or simulation, a single outcome in the range and not necessarily precise in its potential accuracy. Also, simulations of econometric models are based on the model structure of history so that any change in structure in the recent past, or future, not captured in the sample history of the econometric model can make the results less precise, less valid, or even invalid.

• *Interest Rates and the Stock Market*—interest rates related to the nonfinancial corporate sector tend to decline as a consequence of the increased cash flow. Fewer issues of commercial paper and long-term bonds are necessary, reducing the supply of nonfinancial corporate paper and reducing yields. The reductions in the cost-of-financing for external funds help to lower net interest charges relative to cash flow and improve the nonfinancial corporate balance sheet. The reductions of interest rates lower the weighted average cost of debt-and-equity and raise the discounted present value of future earnings. Earnings, and expected earnings, rise, and combined with lower corporate interest rates bring a reduction in capital costs. This raises stock prices and increases the net worth of households and stock issues to finance new and existing businesses.

• *Federal Government Budget*—the program provides net gains, ex-post, to the federal government budget, reducing the budget deficit by $47.6 billion per year between 2009 and 2013, a welcome improvement given rising U.S. federal government deficits and increased debt-to-GDP ratios. A cyclically-depressed economy, increased government spending, and rising structural budget deficits are offset to some extent by the tax receipts generated from the repatriation of funds.

The initial improvement in the federal budget deficit stems from the gains in tax receipts on the otherwise untaxed funds that are repatriated. Thereafter, increases in tax receipts, relative to the Baseline, arise from the higher levels of economic activity that produce higher corporate profits, personal income, capital gains, social security and other tax receipts. Tax revenues are higher by $27.6 billion per annum over the five years.[8]

The Financial Position of Nonfinancial Corporations Before-and-After an 85% Dividend-Received-Deduction for Repatriated Foreign Subsidiary Earnings

The initial gain in cash flow from a one-time 85% dividends-received-deduction on repatriated foreign subsidiary earnings is a sizeable $545.6 billion, with increases thereafter from increased growth of real GDP and higher levels of real economic activity that generate additional profits and cash flow.

Table 5 shows the sources and uses of funds generated from the one-time repatriation of foreign subsidiary earnings.

In the first year, domestic cash flow, relative to Baseline, is up $545.6 billion and initially is mostly placed in financial assets, $296.8 billion. Debt, both short- and long-term, is reduced by $54.5 billion. Subsequently, domestic cash flow continues to increase from the stronger economy, the resulting increased sales and profits, and additional cash flow after some additional dividends are paid-out.

[8] Under the AJCA, the average net-of-foreign tax credit, U.S. tax and repatriations was 3.65% (not 5.25%). The present analysis uses the higher figure (5.25%) to calculate the revenue effects. The impact of allowing foreign tax credits against qualified dividends is not included.

Table 5
Financial, Flows-of-Funds, Credit, and Balance Sheet Effects of a Temporary 85% Dividends-Received-Deduction and Effective 5.25% Tax Rate on Repatriated Foreign Subsidiary Earnings (FSE)*
(Changes Relative to Baseline, Unless Otherwise Indicated)

Item	Years 2009	2010	2011	2012	2013	Avg. 2009-2013
Sources of Funds						
Total Funds Raised ($ Bils.)	491.1	-4.9	44.3	59.3	73.5	132.7
Domestic Cash Flow ($ Bils.)	545.6	23.3	29.4	33.4	40.2	134.4
Physical Assets						
Plant & Equipment	2.3	72.7	77.7	45.3	30.0	45.6
Financial Assets ($ Bils.)	296.8	274.8	49.8	-8.8	-23.3	117.9
Liabilities						
Debt						
Total External Funds ($ Bils.)	-54.5	-28.3	14.8	26.0	33.0	-1.8
Short-Term Liabilities ($ Bils.)	-15.4	12.6	39.4	46.3	47.6	26.1
Long-Term Liabilities ($ Bils.)	-39.2	-40.8	-24.6	-20.3	-14.3	-27.8
Financial Position of Nonfinancial Corporations						
Cash Flow % of Funds Raised (Ratio, Pctg. Pts.)	5.7	0.3	0.3	0.3	0.3	1.38
Plt. Equip. & Inven./Dom. Cash Flow (Ratio, Pctg. Pts)	-39.4	9.8	2.5	-1.2	-4.5	-6.6
"Quick" Ratio (Pctg. Pts.)	16.1	12.1	0.5	-1.9	-2.3	4.9
ST Debt/Liabilities (Ratio, Pctg. Pts.)	-0.2	0.2	0.5	0.5	0.5	0.3
LTD/Liabilities (Ratio, Pctg. Pts.)	-0.6	-0.5	-0.3	-0.2	-0.2	-0.4
Interest Charges/Cash Flow (Ratio, Pctg. Pts.)	-20.0	-2.7	-3.8	-5.3	-6.8	-7.7
Liabilities/Net Worth (Ratio, Pctg. Pts.)	-2.2	-2.4	-1.9	-1.5	-1.5	-1.9

*Simulations with the Sinai-Boston (SB) Large-Scale Macroeconometric Model of the U.S. Economy. Monetary policy unchanged, with the federal funds rate at Baseline levels.

The results of econometric model simulations should properly be noted as approximate, in this work derived from a stochastic interactive dynamic large-scale macroeconometric model. As such, a wide distribution of outcomes is possible. Any given econometric model simulation result is only one of those outcomes, presumably near the center of the distribution of the probability distribution of all possible outcomes. Thus, ranges should be thought of rather than precise point estimates, with any particular episode, or simulation, a single outcome in the range and not necessarily precise in its potential accuracy. Also, simulations of econometric models are based on the model structure of history so that any change in structure in the recent past, or future, not captured in the sample history of the econometric model can make the results less precise, less valid, or even invalid.

Over the five years of the model simulation, nonfinancial corporate cash flow is higher by $134.4 billion per year.

The principal use of this new source of funds, after initial depositing of a large portion in financial assets, is for spending on plant and equipment. To a much

lesser extent, funds are used for R&D. Funds also are used for hiring and training, as was the case with the AJCA.

The financial position of nonfinancial corporations shows a significant improvement.

Cash flow as a percent of funds raised goes up 5.7 percentage points in 2009. The ratio of capital expenditures-to-domestic cash flow falls by 39.4 percentage points. The quick ratio of financial assets-to-liabilities is higher by 16.1 percentage points. The "Coverage" ratio, interest charges relative to cash flow, shows a decline of 20 percentage points. The debt-to-equity ratio falls by 2.2 percentage points, a reduction in leverage. In subsequent years, similar improvements generally occur except in a few instances where stock-adjustment mechanisms operate to produce small reversals.

The improvement in the financial condition of nonfinancial corporations and reduction in the sector's financial risk positively affects the U.S. economy through increased capital spending and less costly borrowing, higher production and increased jobs, and the effects of lower interest rates from less demand for funds by nonfinancial corporations.

Concluding Perspectives

All-in-all, repatriation of foreign subsidiaries' funds via a program similar to the American Jobs Creation Act (AJCA) of 2004 that allows an 85% dividends-received-deduction provides a lift to the U.S. business sector and significantly improves the financial position of nonfinancial corporations. The program works through providing an exogenous increase in business cash flow and then through the uses of the new cash flow for capital spending, R&D, jobs, and strengthening corporate balance sheets. The overall economy gains in growth, jobs, and a lower unemployment rate as a result.

Increased liquidity, less need for credit, and much greater cash flow to nonfinancial corporations stimulate business capital spending and capital formation, R&D, and hiring to raise the growth and levels of real economic activity. This comes at the cost of only a slight increase for inflation. The federal government budget deficit actually improves, benefiting from the taxation of funds that would otherwise be untaxed and left abroad and from increased tax receipts because of a stronger economy.

Depending upon assumptions made with regard to repatriated funds later in the period, there may be no estimated cost to the federal government of the program, with net, ex-post new higher tax receipts and a lower budget deficit than otherwise from the stronger economy.

Essentially repeating the AJCA in the current context of a credit- and liquidity-constrained environment appears to be a "win-win" event for all, the exception being those countries from which U.S. funds are repatriated. The other cost, which is arguable, is the possibility of creating an incentive to keep earnings abroad, awaiting another one-time tax break for repatriation.

This cost would appear to be minimal compared with the benefit of repatriation to the economy and businesses in the credit- and liquidity-constrained situation that currently exists.

References

Blank, John J., "U.S. Industries Contemplate a Global Slowdown," *Sector & Industry Equity Allocation Comments,* Decision Economics, Inc., October 28, 2008, pp. 4-6.

Graham, John R.; Hanlon, Michelle; Shevlin, Terry; "Executive Summary: Results from the Tax Effects of Corporate Decisionmaking Survey," December 10, 2007.

Graham, John R.; Hanlon, Michelle; Shevlin, Terry; "Barriers to Mobility: The Lockout Effect of U.S. Taxation of Worldwide Corporate Profits," Manuscript, October 27, 2008.

Kleinbard, Edward D. and Driessen, Patrick, "A Review Estimate Case Study: The Repatriation Holiday Revisited," *Tax Notes,* September 22, 2008, pp. 1191-1207.

Sinai, Allen, "Macroeconomic Effects of a Temporary Reduction in the Tax Rate on Repatriation of Foreign Subsidiary Earnings," *ACCF Special Report*, October 21, 2003.