

**The Economic Benefits of Provisions Allowing U.S. Multinational
Companies to Defer U.S. Corporate Tax on their Foreign Earnings
And the Costs to the U.S. Economy of Repealing Deferral**

Robert J. Shapiro and Aparna Mathur

June 2009

SONECON 

Executive Summary

For years, some politicians have proposed to increase the tax burden on the profits earned by American companies outside the United States, and Congress is now considering legislation that would sharply limit the “deferral” rules that protect U.S. businesses from bearing much higher tax burdens on their earnings abroad than their foreign competitors. Economic research has established, however, that in the global networks of America’s international companies, these foreign investments and jobs do *not* cut into investment and jobs at home, but rather *increase* them. As a result, the current proposal to substantially restrict “deferral” would end up reducing American jobs and investment and could impair our economic recovery.

This study analyzes the economic effects of repealing the deferral rules that have governed the way we tax the foreign earnings of U.S. companies since the advent of the corporate income tax in 1913. The administration proposal would not repeal deferral completely, but it does move significantly in that direction. The results will be same – making U.S. companies less competitive in global markets and costing American jobs.

Repealing deferral would lead to the following negative effects for the U.S. economy:

- It would cost at least 159,000 jobs or \$7.3 billion in payments to workers, the equivalent of all the health care workers in Colorado. Under certain conditions, ending deferral could affect as many as 2.2 million jobs, or nearly one of every 60 American workers.
- Investments in the United States in plant, equipment and property could fall by as much as \$84.2 billion.
- Those who believe that repealing or sharply limiting deferral would generate large tax revenues would be sorely disappointed, since the large job losses, wage cuts and lower investments would reduce tax revenues.

This analysis is based on new economic research that establishes that most of the investments and sales by the foreign subsidiaries of U.S. companies are driven by the fast-growing size of those foreign markets and the development of efficient global production and distribution networks to serve them. Applying the very high, U.S. corporate tax rates to worldwide income, which currently is deferred from tax until it is paid directly to the U.S. parent company, would leave our own companies at a severe competitive disadvantage, since the vast majority of their foreign competitors are based in countries with “territorial” tax systems that never tax business profits earned outside the home country.

Recent research has shown that the foreign and domestic investments, jobs and general operations of U.S. companies complement each other. From 1989 to 2004,

increases in the total assets, sales and investments in property, plant and equipment by foreign affiliates of U.S. companies were consistently accompanied by increases in those same categories at the parent companies in the United States. These linkages are especially strong in manufacturing, mining, wholesale and retail trade, and for all industries considered together.

The close linkages between these foreign and domestic investments and job creation mean that while reducing or repealing deferral may be tempting politically, it would produce significant, negative economic consequences. The policy goal of changing the deferral is ostensibly to make the United States a more desirable place for investment and job creation, but such changes would have the opposite effect of reducing domestic investment and job creation.

The Administration and the Congress should take this opportunity to conduct a serious review of the tax code and identify broad reforms that take account of the actual dynamics of the global economy and the need to support the integrated operations and international competitiveness of American companies.

**The Economic Benefits of Provisions Allowing U.S. Multinational Companies to
Defer U.S. Corporate Tax on Their Foreign Earnings
and the Costs to the U.S. Economy of Repealing Deferral¹**

Robert J. Shapiro and Aparna Mathur

1. Introduction

The U.S. Congress is currently considering proposals to end or sharply restrict the ability of American-based multinational companies to defer U.S. corporate tax on the earnings of their foreign-based and foreign-incorporated subsidiaries or affiliates, until they transfer the earnings to the parent companies in the United States. As a matter of tax theory, the advocates of repeal sometimes defend their position by claiming that the change simply would tax multinationals on their actual earnings. However, U.S. tax law has long held that persons, including corporations, can be taxed only on income they actually receive. The central, economic case presented by advocates of repeal is that the provision for tax “deferral” encourages U.S. companies to set up foreign operations, which in turn shift investment, jobs and wages from the United States to other countries. This claim is challenged and largely refuted by recent economic research which shows that U.S. multinational companies invest abroad primarily to serve foreign markets; and in the global business networks created by these companies, U.S. domestic and foreign-based operations complement each other. As a result, researchers have found that as investment, jobs and wages rise in the foreign-based affiliates of U.S. multinational companies, investment, jobs and wages in the U.S. parent companies generally increase as well, and along predictable paths.

The principal reason lies in the character of global business networks, in which the parent companies provide many critical goods and services for their foreign subsidiaries including the production of complex intermediate goods, management, financial, legal and accounting services, and advertising and branding goods and services. Repealing deferral would sharply reduce the demand for these services, dampening investment, jobs and wages within the United States. It also would force the foreign operations of U.S. multinational companies to operate abroad at a substantial competitive disadvantage, based on fundamental differences between the U.S. “worldwide” tax system and the “territorial” tax systems used by most other countries. U.S.-based corporations are taxed on their worldwide earnings at a 35 percent corporate rate, the highest national corporate tax of the member nations of the Organization for Economic Cooperation and Development (OECD). Most other nations tax companies within their borders only on the profits they earn within their borders, and at lower rates than the United States. U.S. multinational companies receive U.S. tax credits for the taxes they pay to other countries; but without deferral, they would have to pay the difference

¹ The research for this study was supported by the Technology CEO Council. The views and analysis are solely those of the authors.

between the 35 percent U.S. tax and the taxes which they and their foreign competitors pay to foreign governments. This additional burden ranges from 0.5 to 26.5 percentage-points and averages more than 10 percentage-points. Imposing this burden on the foreign operations of U.S. companies will create a very large competitive disadvantage, further reducing demand for the goods and services produced by U.S.-based parent companies and dampening investment, jobs and wages within the United States.

In this study, we analyze these dynamics and estimate the economic effects of repealing deferral. First, we review previous economic studies in this area. Economists 30 and 40 years ago documented the development of what is called “horizontal” foreign direct investment (FDI), where a multinational replicates its domestic operations in foreign markets to avoid large transportation-related costs and high tariffs and low quotas. As these costs have declined over the last generation, economists have found that “vertical” FDI now predominates, in which the domestic and foreign investments and operations of multinational corporations (MNCs) work together and complement each other. The common finding of these studies is that the production of MNCs is increasingly integrated through global networks, and their foreign investments and operations do not substitute for domestic investments and operations. A new and highly influential study by Harvard Business School Professor Mihir Desai and two colleagues tested these findings using data on the foreign and domestic operations of American MNCs over the last generation. The data show that increases in foreign investments, jobs and wages by U.S. MNCs were strongly accompanied by rising investment, jobs and wages in the parent companies’ U.S. operations.

Economic research also has established not only that most sales by foreign subsidiaries of U.S. multinationals occur in their home markets, but also that nearly 77 percent of those sales occur in other developed countries, where labor costs also are relatively high. This suggests, as other research has established, that the foreign-based operations of U.S. MNCs are driven mainly by market size, the development of efficient global production and distribution networks, and the high corporate tax rates applied in the United States compared to the territorial-based tax systems in most other countries.

Next, we use the findings which now establish that the foreign and domestic investments and operations of U.S. multinationals complement each other to estimate the likely effects of the repeal of deferral. Our principal results include:

- From 1989 to 2004, increases in the assets, sales and investments in property, plant equipment by foreign affiliates of U.S. MNCs were consistently accompanied by increases in those categories at the parent companies in the United States. These linkages are especially strong in manufacturing, mining, wholesale and retail trade, and for all industries considered together.
- Over the same period, higher compensation at foreign affiliates consistently was accompanied by higher compensation at the parent companies, especially in manufacturing, wholesale and retail trade, professional services, construction, finance, and all sectors considered together.

- Increases in jobs at foreign affiliates also were generally accompanied by job increases at the parent companies, especially in wholesale and retail trade, accommodation and food services, mining, and all sectors considered together. Manufacturing was an exception: Over this period, manufacturing employment contracted in the United States -- as it did in many other countries, including the major European nations with territorial-based tax systems and consequently no provisions for deferral. Most economists attribute these developments to rapid productivity advances driven by technological changes and, especially in the United States, to domestic outsourcing of many services.

We then used 2004 data on every sector and sub-sector in the U.S. economy to estimate the effects of repealing deferral. We calculated the reduction in the post-tax earnings of the foreign affiliates of U.S. MNCs; we then estimated how those reductions would affect investment in property, plant and equipment (PPE), other assets, and compensation at those foreign affiliates; and finally we projected how those reductions would affect investments in PPE, other assets, jobs and wages at their parent companies. We found that if deferral had been repealed in 2004, it would have produced the following results:

- The post-tax earnings of foreign affiliates of U.S. MNCs would have been reduced by \$57.2 billion, including \$21.4 billion given up by subsidiaries of U.S. manufacturers, \$9.4 billion by affiliates of U.S. financial institutions and insurers, and \$14.2 billion by affiliates of U.S. management companies.
- We estimate that these cuts in earnings in 2004 would have led foreign affiliates to cut their PPE investments by \$8.2 billion, their compensation costs by \$5.1 billion, and their investments in other assets by \$43.9 billion.
- These reductions would have led to corresponding reductions by U.S. parent companies: We estimate that those reductions by foreign affiliates would have led U.S. parent companies to reduce their compensation costs by \$3.8 billion, the equivalent of nearly 92,000 jobs, including nearly 30,000 jobs in manufacturing and 23,000 jobs in finance and insurance.
- We further found repeal of deferral in 2004 would have led U.S. based parent companies to cut their domestic PPE investment by \$3.9 billion and investments in other assets by \$21.6 billion, including cuts by U.S. manufacturers of \$1.3 billion for domestic PPE and \$13.8 billion for other assets.

Next, we estimate the economic effects of repealing deferral this year.

- We calculate that repealing deferral in 2009 would reduce the post-tax earnings of the foreign subsidiaries of U.S. companies by nearly \$103 billion, including reductions of \$36.9 billion for U.S. manufacturers, \$23.1 billion for

whole trade businesses, \$17.3 billion for financial companies and insurers, and \$7.8 billion for information-related corporations.

- These reductions in earnings would lead to cuts by these subsidiaries of \$14.3 billion for investments in PPE, \$6.9 billion that normally would go for wages and jobs, and \$81.7 billion for building other assets.
- Those cuts by foreign subsidiaries would have large effects on the global networks of U.S. companies, and we estimate that they would lead to reductions by U.S. parent companies of \$10.4 billion that would otherwise have gone to U.S. investments in PPE, \$7.3 billion for wages or the equivalent of 159,000 jobs, and \$42.4 billion for investments in other assets.
- The largest cutbacks by parent companies in the United States would fall on manufacturing, including cuts of \$1.8 billion in PPE investments, almost 36,000 jobs or the equivalent of \$1.7 billion for wages, and \$19.6 billion for investments in other assets.

The distribution of these cutbacks used above is based on data regarding how foreign affiliates use their earnings over the long-term. Under our current economic conditions, these companies could respond to a sharp fall in post-tax earnings in a variety of ways. For example, they might dramatically cut investments in PPE or respond largely by cutting jobs. Therefore, we also estimate the impact of repealing deferral on investment, jobs and wages assuming that the subsidiaries focus all of their cutbacks on each of the uses. We then apply the relationships between changes in foreign and domestic investment, foreign and domestic employment, and investments in foreign and domestic other assets to calculate the upper bound of the potential domestic effects in each category if deferral is repealed.

- If all of the reductions in foreign, post-tax earnings led to job cuts abroad, it could lead to cuts in wages and other compensation in the United States totaling \$107.3 billion or the equivalent of 2.2 million jobs, including 702,000 manufacturing jobs.
- If all of the reductions in the post-tax earnings of foreign affiliates led to cutbacks in their investments in PPE, it could reduce PPE investments by their parents companies in the United States by as much as \$84.2 billion, including \$14.5 billion by U.S. manufacturers.
- If all of the reductions in foreign, post-tax earnings led to cuts in investments by those affiliates in other assets, it could lead to cuts in investments other than PPE in the United States of as much as \$53.3 billion, including \$23.9 billion by U.S. manufacturers.

We further find that repealing deferral could involve significant other costs for the American economy. The substantially higher tax burden U.S. multinationals would face

following the repeal of deferral would substantially increase the costs of tax planning and compliance for multinationals, further reducing their resources for investment and jobs. More important, the higher effective tax rate would directly affect the market value of U.S. multinationals and their competitiveness in foreign markets, especially since most other nations use territorial-based tax systems that do not tax the foreign-source earnings of their own multinational companies. As a result, some U.S. MNCs would likely reconfigure their ownership structures and become foreign-based companies, as happened when the U.S. international shipping industry lost deferral from 1986 to 2004. Finally, the repeal of deferral could expand the use of international tax havens by U.S. companies. Some of those which respond by “inverting” their corporate structure, so a foreign subsidiary becomes the parent company and the U.S. parent company becomes a foreign subsidiary, will carry out their reincorporation in a foreign tax haven such as Bermuda, the Cayman Islands, Luxembourg or Switzerland.

This analysis is based on the complete repeal of deferral and does not directly cover the impact of the administration’s recent, international tax proposals. It does not bear at all on reforms that would target the abusive use of tax havens by individuals, which are unrelated to the international competitiveness of American businesses. However, it may bear on the proposal to withhold deferral for foreign-source earnings shifted from one foreign subsidiary to another located in a tax haven. Without examining the variety of affiliate arrangements involving countries considered tax-havens, transfers to such countries can and often do serve entirely legitimate business purposes. Therefore, this provision would likely raise the effective tax burden on foreign earnings with some adverse effects.

The clearest problem arises from a proposal to bar U.S. multinational companies from deducting headquarter costs in the United States that support their offshore investments, until the earnings from those investments are repatriated and taxed. (Costs for research and development would be exempt from this new limitation.) While we have not analyzed the precise consequences of this proposal, the basic logic and findings of our analysis suggest strongly that it would reduce domestic investment and job creation by U.S. multinationals. It necessarily would substantially reduce the post-tax earnings of foreign affiliates, leading to cutbacks in their investments and jobs which, in turn, would lead to reductions in investment and jobs by U.S. multinationals in their American operations. It also would significantly increase the costs to maintain the global operations of U.S. multinationals, reducing the efficiency of their networks and their global competitiveness. Rather than advance the stated goal of the proposal, to provide new incentives to create jobs and investment at home, the proposal very likely would lead to significant cuts in U.S. employment and domestic investment.

The proposal appears to rely on the assumption that the investments and jobs created by U.S. companies abroad lead to less investment and fewer jobs at home, a view now effectively rebutted by recent economic evidence and analysis. Ultimately, the proposals do not address or solve the fundamental problem of the U.S. international tax arrangements: We continue to apply high rates of taxation to the worldwide income of

U.S. companies, in a global economy in which most other nations tax only the income earned in their country and at significantly lower rates than we do.

II. The Role of Deferral in Worldwide and Territorial Tax Systems

Nations tax the income earned in other countries by their citizens and corporations in a variety of ways, and their choices can significantly affect both government revenues and the way those corporations conduct their international operations, the impact of those operations on their domestic economies, and the revenues their government collects. Most broadly, nations have adopted either a “territorial” tax system which taxes people and companies only on what they earn within the nation’s territory, or a “worldwide” tax system that taxes citizens and companies on their worldwide income. The territorial tax approach is generally consistent with an economic principle of “capital import neutrality (CIN),” in which multinational companies bear the same tax burden as their foreign competitors operating in the same markets. The worldwide approach is consistent with the economic principle of “capital export neutrality (CEN),” in which a company’s earnings are taxed at the same rate regardless of where they are earned. To maintain this latter principle, the United States taxes a U.S. company’s foreign-source earnings at the U.S. 35 percent corporate tax rate. Any company “created or organized in United States or under the law of the United States or of any State”² is subject to U.S. tax on their worldwide income.³

The worldwide coverage of the U.S. corporate tax potentially exposes income earned by U.S. companies abroad to double taxation, since they are usually liable for both the U.S. residence-based tax and the source-based tax applied by the foreign country where the income is earned.⁴ To avoid the adverse effects such double taxation, the United States qualifies its tax on foreign-source profits in three ways.⁵

First, since 1918, the United States has granted American taxpayers a credit against their U.S. tax liability for taxes paid to foreign countries.⁶ The foreign tax credit is available both for foreign taxes paid directly by a U.S. taxpayer and a proportionate

² I.R.C. § 7701(a)(4). Unless otherwise indicated, all references herein to “I.R.C.” and to the “Code” are to the Internal Revenue Code of 1986, as amended.

³ See I.R.C. § 11 (imposing tax on the taxable income of both domestic and foreign corporations); I.R.C. § 882 (limiting definition of taxable income for foreign corporations to income derived from U.S. sources and income effectively connected with the conduct of a trade or business within the United States).

⁴ See *supra* note 21. In contrast to the U.S. approach, some countries use *only* source-based, “territorial” or “exemption” taxation. Such jurisdictions generally do not tax income received by their residents from foreign sources. Since shifts by Japan and the United Kingdom, a majority of the member nations of the OECD use territorial-based taxation. (See National Foreign Trade Council (1999). The NFTC Foreign Income Project. “International Tax Policy for the 21st Century, Part One: A Reconsideration of Subpart F 103, Tables 6-1). Moreover, most all of the important trading partners of the United States have adopted territorial systems, including Canada, the Netherlands, France, and Germany, as well as Japan and the United Kingdom. The notable exceptions are China, Russia and Mexico. See Hugh J.A., and Arnold B.J. (2004). *Comparative Income Taxation: A Structural Analysis*. Kluwer/Aspen, 372-76, 382-83.

⁵ For further details, see Boise, C.M. (2006). “Breaking Open Offshore Piggybanks: Deferral and the Utility of Amnesty.” Case Research Paper Series in Legal Studies, Working Paper 06-18.

⁶ I.R.C. § 901.

share of the taxes paid by a foreign corporation in which the U.S. taxpayer owns ten percent or more of the stock.⁷ For instance, if a foreign country taxes profits earned there at a rate lower than the 35 percent U.S. corporate rate—say, the 16 percent rate applied in Germany--the foreign tax credit will leave the U.S. corporation with a 19 percent tax on the foreign-source earnings already subject to the 16 percent foreign tax. If a foreign country's tax rate were 35 percent, the same as the American rate, the corporation would owe no residual U.S. tax after applying the foreign tax credit. If a foreign jurisdiction taxes the earnings at a higher rate than the United States, the U.S. foreign tax credit is capped at the U.S. rate to avoid subsidizing higher tax rates in foreign countries.⁸ However, foreign taxes paid that exceed what qualifies for a credit in a given year can be applied to tax liabilities in the preceding two years or any of the five following years.⁹

Since the United States established a modern corporate tax in 1913, the system also has included a deferral provision, so that the owners of U.S. companies are not liable for U.S. tax on all of most of their foreign-source earnings until they receive those earnings through some form of distribution. In practice, U.S. multinational corporations (MNCs) can defer the U.S. tax on the business profits earned by their “controlled foreign corporations” (CFCs) until those profits are transferred to the parent company in the form of a dividend.¹⁰

In effect, the deferral provisions make the American corporate tax system a hybrid of the strict worldwide and territorial tax approaches.¹¹ Most U.S. administrations have tried to take account of the principles underlying both approaches. For example, the Kennedy administration's program applied U.S. corporate tax to the foreign earnings of American-based MNCs operating in other developed countries while maintaining deferral on foreign income earned actively through the conduct of a business and providing new investment tax credits and accelerated depreciation allowances to encourage investment and production in the United States. Since 1962, however, deferral has not applied to income received from passive investments in either financial instruments or other portfolio investments.

Deferral also reflects a basic principle of U.S. tax law: Foreign subsidiaries have the legal status of foreign corporations beyond U.S. tax jurisdiction, just as U.S. subsidiaries of BMW, Sony or other foreign-based companies incorporated in the United States have the legal status of American companies.¹² In principle, therefore, the U.S. parent company cannot be liable for U.S. tax on the earnings of its legally foreign subsidiaries unless and until they distribute their profits to the parent company in the United States, usually through dividends.¹³ Again, this deferral is available only for the active business profits of American-owned foreign affiliates separately incorporated in

⁷ I.R.C. § 902.

⁸ I.R.C. § 904(a).

⁹ I.R.C. § 904(c).

¹⁰ NFTC(2008)

¹¹ See for example, Office of Tax Policy, Department of Treasury (December 2000). *The Deferral of Income Earned Through U.S. Controlled Foreign Corporations*.

¹² I.R.C. § 882.

¹³ See I.R.C. § 61(a)(3), (7) and Boise (2007)

foreign countries. The profits of unincorporated foreign businesses, such as U.S.-owned branch banks in other countries, do not qualify for deferral.

To illustrate, an American-owned subsidiary earns \$400 in a foreign country with a 20 percent corporate tax rate, such as Turkey or Hungary. The subsidiary pays \$80 in corporate taxes to the foreign country (20 percent of \$400), reinvests \$220 of its profits in its own foreign operations, and remits \$100 in dividends to its parent company. The American parent company pays U.S. taxes on the \$100 in dividends it received, or \$35 at the current 35 percent corporate rate, offset in part by a \$20 foreign tax credit for the foreign taxes its subsidiary paid on that \$100.¹⁴ The parent company is not required to pay U.S. taxes on the \$220 which its wholly-owned and foreign-incorporated subsidiary earned abroad and then retained or reinvested abroad. If the subsidiary pays a dividend of \$220 to the U.S. parent in a subsequent year, the U.S. company would then be required to pay a 35 percent tax on the \$220, less the foreign tax credit on that amount.¹⁵

Deferral has other limits. The provision applies only to CFCs, which are foreign-incorporated entities owned at least 50 percent by American corporations holding stakes of at least 10 percent each. Under Subpart F of U.S. law, some of the foreign income of CFCs is “deemed distributed” and therefore currently taxable by the United States, even if has not been repatriated as dividend payments to American parent firms.¹⁶ These exceptions to deferral include not only income from passive investments, such as interest and dividends earned on financial instruments, but also “foreign base company income” generated by as U.S. company using a foreign affiliate as a conduit for certain types of international transactions, foreign-source income invested in U.S. property or used offshore to insure risks in the United States, and earnings used to bribe foreign officials.¹⁷

Here, we evaluate the impact on the American economy if Congress were to repeal these deferral provisions. The adverse and substantial nature of these effects reflects both the increasing significance of globalization in the operations of U.S. companies and the increasing competition they face in global markets from European, Asian and other companies. Moreover, this competition and the U.S. worldwide system

¹⁴ If the parent firm does not have excess foreign tax credits (see footnote 14), it is eligible to claim a foreign tax credit of \$25, representing the product of foreign taxes paid by its subsidiary and the subsidiary’s ratio of dividends to after-tax profits [$\$80 \times (\$100/\$320) = \25].

¹⁵ Hines (1999)

¹⁶ Taxpayers whose foreign tax payments exceed the foreign tax credit limit are said to have “excess foreign tax credits,” and taxpayers whose foreign tax payments are less than their foreign tax credit limits are said to have “deficit foreign tax credits.” In practice, the calculation of the foreign tax credit limit entails additional complications, notably that total worldwide foreign income is used to calculate the foreign tax credit limit. A taxpayer then has excess foreign tax credits if the sum of worldwide foreign income tax payments exceeds this limit, Desai, M, A., and Hines, J. R. Jr. (1999) “‘Basket’ Cases: Tax Incentives and International Joint Venture Participation by American Multinational Firms.” *Journal of Public Economics* 71(3).

¹⁷ A final set of qualifications to the U.S. worldwide tax approach arises from an extensive network of bilateral tax treaties, under which the United States cedes all or part of its tax jurisdiction over the foreign or non-U.S. business income earned by foreign companies resident in the United States, in favor of the source-based system used by treaty partners. Reuven S. Avi-Yonah, *et. al.*, *U.S. International Taxation*, 3 (2d ed. 2005).

of taxation have also affected the tax policies of many other countries, which in recent years have reduced their corporate tax rates. Today, the United States applies the highest national corporate tax rate in the OECD and the second highest total corporate tax burden, just behind Japan -- and Japan is considering reducing its corporate tax. These falling corporate tax rates in other countries increase the significance of deferral, since without deferral, American companies would face much higher tax burdens on the income earned in foreign markets than their competitors operating in the same markets. To the degree that these differences affect the capacity of American companies to participate fully in growing overseas markets, their foreign competitors may gain permanent advantages.

To properly evaluate the impact of deferral and its possible repeal or limitation, we will analyze the impact of the provision on the U.S. economy and American workers, and its role in promoting the establishment of global networks by U.S. companies. We find that these networks change the impact of the foreign investments and activities of U.S. corporations, in ways which ultimately increase U.S. domestic investment and jobs. We will examine the claims that deferral promotes the transfer of U.S. jobs abroad, which we and others find to be largely baseless. We also analyze and estimate the costs of repealing deferral under our current economic conditions, and find that its repeal would result in large-scale job losses or wage cuts, especially in manufacturing and finance, and reduced domestic investment. Finally, we will discuss the potential impact of repealing deferral on tax planning and compliance costs, the ownership structure of U.S. companies, and tax haven activity. We conclude that repealing deferral while maintaining the current, U.S. worldwide tax system with a high corporate tax could significantly damage the American economy and the global networks of U.S. multinational corporations.

III. The Economic Impact of Deferral: A Review of the Literature

Much of the public debate over deferral involves broad concerns about the impact on American jobs, investment and growth of the rapidly increasing foreign activities of U.S. companies. These concerns usually reflect the view that the foreign investments of American MNCs effectively reduce or substitute for their domestic investments. This notion generally informs proposals to raise revenues by repealing or attenuating the current deferral provisions, including proposals in the administration's recent budget.¹⁸ A review of the economics literature, however, indicates that this view is incorrect, and the associated concerns about domestic investment and jobs are unfounded.

Recent evidence and analysis suggests strongly that the foreign and domestic investments of U.S. multinational corporations complement each other rather than substitute for each other. The substitution view ultimately rests on an assumption that a MNC's total worldwide production is roughly fixed, and that since foreign and domestic labor, equipment and other factors of production are conditional substitutes for each other, additional foreign production necessarily means less domestic production. If this

¹⁸ Vaughan, M. (28 February, 2009). "President Takes Aim at Foreign Profits." *Wall Street Journal*, <http://online.wsj.com/article/SB123566551506583891.html>.

view were correct, the foreign and domestic investment and employment levels of these companies should be correlated negatively.

This view does not take account of the impact of globalization on the operations of MNCs and the growth of developing nation markets. To begin, globalization has reduced the prominence of what economists call “horizontal FDI,” where a MNC replicates its domestic operations in a foreign country in order to avoid or reduce large, trade-related costs, such as tariffs and costly transport.¹⁹ Over the last generation, however, those trade-related costs have fallen sharply, while technological advances have enabled multinationals to deconstruct their production process and distribute its parts globally. These changes have increased the prominence of “vertical FDI,” in which domestic and foreign investments and operations work together and complement each other. Under the view that stresses vertical FDI, multinationals expand their foreign activities to take advantage of differences in factor prices across economies.²⁰ The headquarter operations of these firms, including R&D, financing, corporate strategy, marketing and advertising, depend on physical and human capital; while their production activities are labor-intensive, especially manual labor. The cost of these factors differs across countries, and firms invest abroad to locate their production in countries with low manual-labor costs while maintaining their headquarters activities at home or in other advanced countries where skilled labor is more broadly available.

As we will see, the evidence suggests that under either approach, the basic assumption underlying concerns about foreign investment and production substituting for domestic investment and production is incorrect: A MNC’s total financial resources and production are not fixed at any point in time, but rather respond to profit opportunities both at home and overseas, which in turn are influenced by growth rates, market size and other economic factors. As a result, the foreign and domestic investments of MNCs interact through their foreign and domestic production; and in the global networks of modern multinational firms, investment in a foreign market often stimulates demand for goods and services produced by the parent company in the United States. In this new, economic context, increases in foreign direct investments by MNCs can raise the returns of their domestic production, stimulating jobs, investment and output at home.

The data confirm that the basic relationship and roles of the U.S. and global economies correspond to this new understanding. The volume of American FDI and its share of all cross-border capital flows both have risen steadily. This FDI has linked U.S. product and financial markets to those in dozens of other countries, through large-scale transfers of technologies and other physical capital, financial capital, and entire business organizations. The integration of these markets, in turn, has integrated national labor markets in ways which both stimulate and dampen job creation in the United States. In some cases, including Dow Chemical, Ford and General Motors, American multinationals have replicated their U.S. production operations in Latin America, Asia

¹⁹ See Markusen (1984), *op. cit.*; Horstmann and Markusen (1987, 1992), *op. cit.*; and Markusen and Venables (1998, 2000), *op. cit.*

²⁰ See Helpman (1984), *op. cit.*; and Helpman and Krugman (1985), *op. cit.* This view is related to models of foreign outsourcing, in which the vertical separation of production occurs *without* multinationals.

and Europe in order to serve those foreign markets. In contrast, Intel has distributed its semiconductor production across many economies, maintaining R&D facilities in the United States, wafer fabrication plants in Ireland and Israel, and microchip-assembly operations in Costa Rica and the Philippines; while IBM operates wholesale-trade outlets in many foreign markets which carry out little manufacturing, but rather import and distribute goods produced in the United States and Asia.

Moreover, a recent study by Harvard University Professor Desai Hines and two colleagues shows that this distribution of operations by U.S. multinationals stimulates investment and jobs in the United States.²¹ Using data on the foreign and domestic operations of American multinational firms from 1982 to 2004, they found that a 10 percent increase in these firms' foreign investments was associated with a nearly 2.6 percent increase in domestic investment. Further, a 10 percent increase in the wages and other compensation paid to foreign workers was associated with a 3.7 percent increase in the wages and other compensation paid to American employees. They also found that increased foreign activity by American MNCs is associated with both higher exports by the U.S. parent companies to their foreign affiliates and greater domestic spending by the parent on research and development. For example, foreign operations may provide valuable inputs at low costs for domestic operations, and thereby expand them, or foreign subsidiaries may make extensive use of factors produced in the United States – both tangible and intangible property – stimulating the demand for them and their production at home. In short, the evidence shows strong, positive correlations between domestic and foreign investment and jobs by American multinational companies. If the view that foreign investment and jobs substitute for American investment and jobs were correct, these correlations would have been negative.

These findings confirm the results of some previous studies of the impact of foreign operations, and refute the conclusions of others. One study by Martin Feldstein analyzed decades-long averages of aggregate FDI and aggregate domestic investment in OECD economies and reported that direct investment abroad reduced domestic investment. The study's data from the 1960s and 1970s, however, could not capture the major expansion in globalization of the last generation, and the analysis aggregated all of the OECD countries, including those with large numbers of global networked companies and those without such companies. Other studies from the early and mid-1990s produced different results. Devereux and Freeman (1995), for example, analyzed bilateral flows of investment between seven OECD countries and found no evidence of substitution or tradeoffs between domestic and foreign investment; and Blonigen (2001) found that foreign production by multinationals complemented exports in some instances and substituted for them in others. These and other studies of the period left open the question of how foreign operations precisely affect the domestic activities of multinational firms.²²

²¹Desai, M. A., Foley, C. F., and Hines, J. R. Jr. (2005a). "Foreign Direct Investment and the Domestic Capital Stock." *American Economic Review Papers and Proceedings* 95(2), 33-38.

²² Several studies, including Brainard and Riker (1997), Riker and Brainard (1997), Slaughter (2000), Feenstra and Hanson (1996, 1999) and Harrison and McMillan (2004) have emphasized the link between foreign activities and domestic wages and employment. Additionally, Blonigen and Wilson (1999)

Much of the more recent theoretical and empirical work has focused on the reasons why multinationals carry out FDI.²³ Three influential studies -- Hummels, Ishii and Yi (2001), Yi (2003), and Hanson, Mataloni and Slaughter (2005) -- emphasize the impact of specialization and globalization on the foreign expansion of multinational firms. Their common finding, that the production of multinationals is increasingly integrated through global networks, affirms much of the findings of Desai and his co-authors. Moreover, their results contradict the view that the increased foreign activities of American MNCs come at a cost of reduced domestic activity, and therefore also contradict the case that a higher tax burden on foreign business income would stimulate demand for domestic production and jobs.²⁴ The weight of the evidence of all of these studies is that increased foreign investment does not reduce U.S. domestic economic activity – and, in many respects, increases it.

The data show, for example, that the expansion of foreign operations has spurred U.S. exports. One recent study found that inputs exported from the United States to affiliates in Canada and Mexico account for more than 30 percent of those affiliates’ sales in those markets.²⁵ These activities are generally concentrated in industries in which different aspects of production entail clear divisions between highly-skilled and less-skilled activities. The ability to deconstruct production into stages that involve relatively greater capital, technology and skills, compared to those requiring relatively more less-skilled labor, is particularly prominent in manufacturing and agriculture. Accordingly, the study found that U.S. exports accounted for more than 20 percent of all worldwide sales by foreign affiliates of U.S. firms that produce electronics and transportation equipment, two fast-growing manufacturing industries in the 1990s. The following table, Table 1, below, shows total goods exports by U.S. parent companies to their foreign affiliates in 2004, by industry. These exports to foreign subsidiaries accounted for nearly 20 percent of some \$817 billion in total U.S. goods exports in 2004.

Table 1: U.S. Exports by Parent Companies to Foreign Affiliates, By Non-Service Sector and Sub-Sector, 2004 (\$ million)

Industry	Exports
Mining	\$824
Utilities	71
Manufacturing	150,715

investigate the role of demand by multinational firms in determining variations in the measured substitutability of foreign and domestic goods.

²³ Investments are often characterized as being vertical or horizontal. The horizontal FDI view represents FDI as the replication of capacity in multiple locations in response to factors such as trade costs, as in Markusen (1984, 2002). The vertical FDI view represents FDI as the geographic distribution of production globally in response to the opportunities afforded by different markets, as in Helpman (1984). Antràs (2003), Antràs and Helpman (2004), Desai, Foley and Hines (2004), Helpman, Melitz and Yeaple (2004) and Feenstra and Hanson (2005) analyze the determinants of alternative foreign production arrangements.

²⁴ The standard international tax theory was developed in Musgrave (1969) and Horst (1980), and reviewed by Gordon and Hines (2002).

²⁵ Hanson, G. H., Mataloni R., and Slaughter, M.J. (2005). "Vertical Production Networks in Multinational Firms." *Review of Economics and Statistics* 87, 664-678.

Food	6,286
Beverages and tobacco products	448
Textiles, apparel, and leather products	376
Wood products	264
Paper	3,753
Printing and related support activities	124
Chemicals	28,566
Plastics and rubber products	2,342
Nonmetallic mineral products	504
Primary and fabricated metals	4,479
Machinery	11,231
Computers and electronic products	28,930
Electrical equipment, appliances, components	3510
Transportation equipment	50,974
Furniture and related products	258
Wholesale trade	7,853
Information	456
Total	\$159,919

Recent studies also have found that the foreign affiliates of U.S. multinationals target most of their sales to the foreign markets where they are located or other foreign markets, not to the U.S. market where they would compete with domestic producers.²⁶ The data also show that most of the sales by the foreign subsidiaries of U.S. multinational companies occur in other developed nations: In 1998, OECD countries accounted for 76.6 percent of all sales by foreign affiliates of U.S. firms.²⁷

Relative tax burdens also affect where U.S. multinationals locate their foreign operations. Currently, the United States has the highest national corporate tax rate in the OECD and the second highest overall corporate tax rate, just behind Japan.²⁸ The

²⁶ Hanson, G.H., Mataloni, R., and Slaughter, M. J. (2005). "Vertical Production Networks in Multinational Firms." *Review of Economics and Statistics* 87, 664-678. Affiliates in larger, high-tax countries mainly sell into the foreign markets where they are located, while affiliates in smaller, lower tax countries target most of their sales to export markets in the same region.

²⁷ Hanson, Mataloni and Slaughter (2001). Recent analysis also has found that U.S. parents in manufacturing serve each foreign market either through their affiliates that produce the goods locally or through wholesale trade affiliates that resell goods produced elsewhere. Multinationals appear to face a decision between production-oriented and distribution-oriented FDI. The deferral provisions can drive U.S. multinationals to locate their production-oriented affiliates in some countries and their distribution-oriented affiliates in other countries. The reason is that foreign-source earnings from manufacturing qualify for deferral as active business income, while much of the income from sales by wholesale-trade affiliates is considered "passive" income that does not qualify for deferral. To avoid the prospect of income from manufacturing operations being lumped together with income from wholesale-trade activities and therefore subject to immediate tax, U.S multinationals distribute these activities to separate subsidiaries and usually in different countries. This is especially the case for subsidiaries in low-tax countries, where the loss of deferral would be most costly.

²⁸ NFTC (2008)

following table, Table 2, shows the national, corporate tax rates for OECD countries in 2007.²⁹

Table 2: National Corporate Tax Rates, Selected OECD Countries, 2007

Country	National Corporate Tax Rate
United States	35.0%
France	34.4%
Belgium	34.0%
Australia	30.0%
Japan	30.0%
Spain	30.0%
Mexico	28.0%
Norway	28.0%
Sweden	28.0%
United Kingdom	28.0%
Italy	27.5%
Finland	26.0%
Netherlands	25.5%
Austria	25.0%
Denmark	25.0%
Korea	25.0%
Portugal	25.0%
Hungary	20.0%
Turkey	20.0%
Canada	19.5%
Poland	19.0%
Germany	15.8%
Ireland	12.5%
Switzerland	8.5%

Numerous studies have examined how these tax rates affect incentives for U.S. firms to locate investments abroad, and they generally find that firms locate investment to maximize their after-tax rates of return.³⁰ Research suggests that these tax differences also affect how parent companies finance their foreign affiliates and the transfer prices used in transactions between these parties, which may contribute to the appeal of locating FDI in lower-tax countries.³¹ This evidence suggests that tax deferral may be a

²⁹ Organization for Economic Co-operation and Development (2008). "Taxation of Corporate and Capital Income," <http://www.oecd.org/dataoecd/26/56/33717459.xls>.

³⁰ See for example, Hartman (1984) *op. cit.*; Boskin and Gale (1987) *op. cit.*; Newlon (1987), *op. cit.*; Young (1988), *op. cit.*; Slemrod (1990), *op. cit.*; and Swenson (1994), *op. cit.* Cross-sectional studies of the location of outbound investment and the incentives facing different investors also report consistently that tax burden have significant effects on these decisions. See Grubert and Mutti (1991), *op. cit.*; Harris (1993), *op. cit.*; Hines and Rice (1994), *op. cit.*; Hines (1996), *op. cit.*; Devereux and Griffith (1998), *op. cit.*; and Desai and Hines (1999), *op. cit.*

³¹ See Hines (1997, 1999), *op. cit.*, for interpretive surveys of this evidence and of the FDI literature.

significant factor influencing the location of multinational operations abroad. In particular, the absence of the ability to defer U.S. tax on foreign-source earnings until they are transferred to the parent company in the United States could result in fewer firms investing abroad or fewer firms registered in the U.S., and both of these outcomes could adversely affect American consumers and workers. An end to deferral would reduce the after-tax return of foreign operations, leaving them less competitive with their foreign counterparts, which in turn would impair the international networks of U.S. multinationals and, as we will see, reduce production, jobs and wages in their U.S. operations.

IV. Linkages between the Domestic and Foreign Activities of Parent Companies and Foreign Affiliates, 2004

While the case for deferral in tax theory rests on the principle that the parent companies of multinational corporations, like everyone else, should be taxed only on earnings they actually receive, the economic case rests on the proposition that the foreign investments and operations of U.S. multinational corporations tend to enhance the value, sales, investments, jobs and wages of the domestic U.S. parent companies. Here, we test this proposition by analyzing the linkages between the growth in the sales, assets, investments, jobs and wages of these parent companies and their foreign affiliates. To conduct this analysis, we first use data from the Bureau of Economic Analysis (BEA) benchmark “Survey of U.S. Direct Investment Abroad” conducted in 1982, 1989, 1994, 1999 and 2004, and disaggregated by industry.³² Two caveats: The BEA shifted its industry classification system from SIC to NAICS in the late 1990s, and we can match the SIC and NAICS categories only for broad industry classes. In the other analyses in this study that rely on the recent, NAICS data, we also disaggregate to sub-sectors. We also begin with 1989 rather than 1982, because the 1982 data were not available in electronic format

This analysis provides our first hard evidence that the common fears that the foreign investments of U.S. multinational corporations displace investment, jobs and wages in the United States are unwarranted. To explore this issue, we first analyze growth in the sales, investment and value of the parent companies and foreign affiliates over the extended period of 1989-2004, to establish long-term trends and correlations. (We express these growth rates in proportional rather than percentage terms, calculated as $(Y_t - Y_{t-1})/Y_{t-1}$.)

The results of the first analysis, in Table 3, below, show a strong link between the growth in the total assets, sales and investments in property, plant and equipment (PPE) of the parent companies and the foreign affiliates of U.S. multinational corporations. The correlations between these variables for the parent companies and foreign affiliates are especially strong for manufacturing, mining, wholesale trade and retail trade, and also extremely high and positive for all industries together. While the strong positive

³² Bureau of Economic Analysis. Operations of Multinational Corporations, <http://www.bea.gov/international/index.htm#omc>. We begin with 1989 rather than 1982, because the 1982 data are not available in electronic format.

correlations do not establish whether greater foreign investment and operations leads to greater investment and operations at home, or vice versa, they do show that growth in foreign sales, value and investment is closely associated with increases in domestic sales, assets and investment, and not, as often feared, with reductions in these areas.

Table 3: Growth in Total Assets, Sales and Property, Plant and Equipment (PPE) of Parent Companies and Foreign Affiliates of U.S. Multinational Firms, 1989-2004

Industries	Assets		Sales		PPE	
	Parent	Affiliate	Parent	Affiliate	Parent	Affiliate
Mining	24.89	22.53	12.23	16.54	24.52	16.21
Utilities	0.84	12.92	0.33	5.50	0.56	12.20
Manufacturing	1.63	2.42	1.08	1.77	0.69	1.65
Wholesale Trade	5.34	4.04	2.23	2.94	3.67	1.72
Finance and Insurance	3.19	7.07	0.83	3.03	2.15	1.16
Professional, Scientific, and Technical Services	1.23	2.90	1.10	1.90	-0.32	0.00
Agriculture, Forestry, Fishing	3.99	1.36	7.60	1.09	5.68	0.95
Construction	1.43	1.83	0.46	1.02	-0.54	0.91
Retail Trade	1.32	3.91	2.89	3.17	3.09	2.94
Transportation, Warehousing	1.16	8.69	0.53	-	1.03	9.40
Real Estate, Rental, Leasing	5.52	14.31	3.39	12.57	4.62	8.82
Accommodation, Food Services	6.20	12.31	6.39	11.99	3.44	8.15
Correlation Coefficient	0.75		0.68		0.62	

The data also reveal links between the long-term growth of jobs and wages at the parent companies and their foreign affiliates (Table 4, below). Most sectors show gains in both jobs and compensation for both parent companies and foreign affiliates over the 1989 – 2004 period, including mining, wholesale trade, retail trade, real estate and accommodations and food services. The correlations for all sectors are positive, although their magnitude is smaller than for the linkages in sales, value and investment. In manufacturing, while the correlation was positive and strong for compensation growth at parent companies and their foreign subsidiaries, the correlation was negative for job gains. These correlations do not establish causality, so these results cannot be said to support the view that foreign investment is connected to losses in U.S. manufacturing jobs. Many studies, however, have analyzed why the United States lost so many manufacturing jobs over this period. A 2004 study by the Congressional Budget Office, for example, pointed to a decline in consumer demand leading to a shift towards services, increased use of temporary and contractual workers rather than full-time employees, and productivity improvements which enabled firms to produce more output with fewer workers.³³ The strong growth in sales and compensation in manufacturing over this period, at both parent companies and their foreign affiliates, does point to the strong productivity gains in U.S. manufacturing throughout this period as a factor in job losses.

³³ <http://www.cbo.gov/doc.cfm?index=5078&type=0>.

Table 4: Growth in Total Employment and Compensation for Parent Companies and Foreign Affiliates of U.S. Multinational Firms, By Sectors, 1989-2004

Industries	Employment		Compensation	
	Parent	Affiliate	Parent	Affiliate
Mining	4.44	1.09	10.22	4.08
Utilities	-0.74	-	-0.52	-
Manufacturing	-0.25	0.19	0.37	0.73
Wholesale Trade	1.19	0.42	3.31	1.16
Finance and Insurance	-0.02	0.69	1.61	3.04
Professional, Scientific, and Technical Services	-0.41	0.09	0.93	1.89
Agriculture, Forestry, Fishing	6.33	-0.28	5.72	0.57
Construction	-0.38	-0.39	0.29	0.24
Retail Trade	0.67	0.40	1.56	1.37
Transportation, Warehousing	-0.09	3.36	0.43	4.82
Real Estate, Rental, Leasing	2.60	6.68	3.77	7.14
Accommodation, Food Services	3.66	11.39	5.58	9.55
Correlation Coefficient	0.29		0.37	

Numerous factors which are not directly related to the economic relationships between parent companies and foreign affiliates also contribute to their long-term trends in sales, assets, investment, compensation and jobs. For example, macroeconomic conditions in the home market and/or abroad, including changes in consumer demand, GDP growth rates, trade openness, and government export and investment policies, can affect these trends. To identify the specific effects of foreign investment and activity on domestic production and operations, we will have to control for other factors. In that effort, we now analyze a scenario in which Congress repeals deferral and all foreign income earned by U.S. multinationals is taxed at the U.S. corporate tax rate in the year in which it was earned, first in 2004 and then in 2009, focusing on its impact on foreign activities and the relationship of those effect to domestic operations.

V. The Impact on Foreign Profits of Repeal of Deferral, 2004

The initial effect of repealing deferral would be a substantial reduction in the post-tax profits of U.S. multinational companies. To estimate the dimensions of this effect for different industries, we use the most recent data on the income and taxes paid by parent companies and controlled foreign corporations (CFCs) – their foreign affiliates or subsidiaries – from the Internal Revenue Service (IRS) “Statistics of Income” for 2004.³⁴ The IRS survey also includes data on the earnings and profits of CFCs before and after their corporate taxes were paid to foreign governments on the income earned in their jurisdictions. The IRS data also are disaggregated into industry sub-sectors, which

³⁴ Congressional Budget Office (2004). “What Accounts for the Decline in Manufacturing?” <http://www.irs.gov/taxstats/bustaxstats/article/0,,id=96282,00.html>.

enable us to match these data with BEA data by industry sub-sector on assets, sales, investment, jobs and compensation.

The data show that the foreign subsidiaries of U.S. multinationals pay substantial taxes to the foreign governments where they are located, and for which they receive tax credits on their U.S. corporate taxes when the underlying income is transferred to the U.S. parent company liable for U.S. taxes (Table 5, below). These foreign tax burdens vary substantially across industries and sub-sectors, ranging from 11 percent for management services and 18 percent for finance and overall manufacturing, to 34 percent for mining and 40 percent for internet service providers. The lower the foreign tax burden on CFCs, the greater the impact that ending deferral will have on U.S. multinationals. (Telecommunications appears in these data as an outlier, with negative post-tax earnings.)

Table 5 also shows the first-order impact of ending deferral, in the reduction in the post-tax earnings of these foreign companies if they were subject to an immediate 35 percent corporate tax rate. Based on the earnings reported in 2004, the foreign subsidiaries and affiliates of U.S. manufacturing companies would have faced additional taxes totaling \$21.4 billion, including nearly \$9.0 billion in additional taxes for U.S. pharmaceutical and other chemical-related companies, and a tax increase of \$3.9 billion for computer and electronics manufacturers. Among the major service industries, U.S. management consultancy multinationals would have borne an additional tax bill of nearly \$14.2 billion, and financial service multinationals would pay \$9.4 billion in additional U.S. taxes. In virtually every case, the end of deferral would directly and substantially reduce the post-tax profits or earnings of the foreign subsidiaries owned by U.S. multinationals. All told, the repeal of deferral would have reduced the post-tax earnings of the foreign subsidiaries of U.S. multinational companies by \$57.2 billion

Table 5: Projected Impact on Post-Tax Earnings of Foreign Affiliates of U.S. Companies from Repealing Deferral, \$ million, 2004

Industrial Sector and Sub-Sector	Pretax Earnings	Post-tax Earnings	Average Tax Rate	Projected Post-tax Earnings after Repeal of Deferral	Reduction in Post-tax Earnings after Repeal of Deferral
Mining	\$27,556.70	\$18,214.10	34%	\$17,911.80	- \$302.20
Utilities	4,894.90	4,264.90	13	3,181.70	-1,083.10
Construction	1,303.10	944.90	27	847.00	-97.80
Manufacturing	123,843.10	101,904.00	18	80,498.00	-21,405.50
Food	6,562.50	5,059.70	23	4,265.60	-794.10
Beverage and tobacco	12,176.60	10,296.50	15	7,914.80	-2,381.80
Textile mills and products	221.50	165.80	25	144.00	-21.80
Wood products	495.70	342.80	31	322.20	-20.00

Paper	2,491.00	1,858.20	25	1,619.20	-239.00
Petroleum and coal products	8,149.00	5,912.90	27	5,296.80	-616.10
Chemicals	40,880.30	35,557.40	13	26,572.20	-8,985.30
Plastics and rubber products	2,673.70	1,938.00	28	1,737.90	-200.00
Nonmetallic mineral product	3,426.80	2,938.40	14	2,227.40	-711.00
Primary metal	2,682.80	2,220.60	17	1,743.80	-476.80
Fabricated metal products	2,731.50	2,082.10	24	1,775.50	-306.60
Machinery	3,413.20	2,486.80	27	2,218.60	-268.20
Computer and electronic products	16,941.20	14,974.30	12	11,011.80	-3,962.50
Electric equipment, appliances, and components	4,807.80	4,000.70	17	3,125.10	-875.60
Furniture and related products	72.10	43.60	40	46.90	3.00
Transportation Equipment	6,661.30	4,976.00	25	4,329.90	-646.20
Miscellaneous	8,583.90	6,321.80	26	5,579.50	-742.20
Wholesale trade	37,916.80	30,438.90	20	24,645.90	-5,793.00
Retail trade	11,650.20	7,918.20	32	7,572.60	-345.60
Transportation and warehousing	2,920.60	2,492.20	15	1,898.40	-593.80
Information	8,073.60	5,823.80	28	5,247.90	-575.90
Publishing industries	4,350.90	3,490.80	20	2,828.10	-662.70
Motion picture and sound recording	1,861.20	1,332.20	28	1,209.90	-122.40
Broadcasting (except internet)	613.20	537.60	12	398.60	-139.10
Telecommunications	308.80	-165.60	54	200.70	366.30
Internet providers, web portals, and data processing	401.70	239.80	40	261.10	21.00
Finance and insurance	54,283.40	44,652.70	18	35,284.20	-9,368.50
Real estate and rental and leasing	3,586.60	2,751.10	23	2,331.30	-419.90
Professional, scientific, and technical services	21,611.40	16,995.10	21	14,047.40	-2,947.70
Architectural, engineering, and related services	551.00	426.40	23	358.10	-68.30
Computer system design and related services	12,916.50	10,399.80	19	8,395.70	-2,004.10
Management, scientific, and technical consulting services	1,079.60	863.60	20	701.80	-161.90
Advertising and related services	1,812.40	1,243.00	31	1,178.10	-65.00
Management of enterprises	59,388.80	52,757.90	11	38,602.70	-14,155.20
Health care and social assistance	294.30	218.70	26	191.30	-27.38
Accommodation and food services	1,492.80	1,006.20	33	970.30	-35.90
Total	\$358,816.3	\$290,382.1	23%	\$233,230.5	-\$57,151.48

VI. The Impact of the Repeal of Deferral on the Foreign and Domestic Activities of U.S. Multinational Companies, 2004

As the repeal of deferral reduces the post-tax profits available to CFCs, those reductions would have directly affected their operations, for example by reducing their

ability to reinvest, hire more workers, pay higher wages, and otherwise expand their activities. The critical issue is how these constraints on foreign-based affiliates may affect the domestic, U.S. investment, employment and sales of the American parent companies.

To estimate how this reduction in investment by foreign subsidiaries would affect U.S. domestic investment, jobs and wages by their parent companies, we use the relationships (elasticity estimates) derived by the recent study described earlier by Harvard Professor Desai *et. al.* (2008). As noted earlier, that study found that the growth rates of these factors in parent companies and their foreign affiliates are highly and positively correlated. However, to estimate the causal effect of higher or lower foreign investment on domestic investment, other conditions that could contribute to or influence the observed correlation also have to be taken account of. In a rigorous analysis using affiliate- and parent-level data on net property, plant and equipment, sales, employment and compensation, collected in the BEA “Benchmark Surveys of U.S. Direct Investment Abroad” in 1982, 1989, 1994, 1999 and 2004, the authors used regression analysis to control for a range of unobserved conditions. For instance, they estimated that a 10 percent increase in investments in CFCs was associated with 2.6 percent increase in U.S. domestic investment; and a 10 percent rise in compensation paid to foreign employees at CFCs was associated with a 3.7 percent rise in the domestic compensation to employees at the U.S. parent companies. Their data came from U.S. multinationals in manufacturing industries, so these findings apply most directly to manufacturing firms today. However, manufacturing multinationals comprise the bulk of all industrial groups, and we apply these findings to other sectors as well.

With these tools, we can project what the impact of repealing deferral in 2004 would have been for the total assets, investment in property, plant and equipment (PPE), employment and compensation of foreign subsidiaries and their U.S. domestic parent companies, by industry groups and subsectors. To allocate the effects across these uses, we use data from the Bureau of Economic Analysis on how multinational companies allocated their resources from 1999 to 2004, again by sector. Note, the category of total assets includes investments in PPE and therefore we net out PPE from total assets and call the new variable “Other Assets.” For example, in the case of mining, “Other Assets” (net of PPE) increased by \$160 million from 1999 to 2004, PPE increased by \$58.3 million and compensation expenditures increased by about \$2 million. Therefore, as a fraction of the total change in resources available for these three uses by mining companies over this period, we can calculate that “Other Assets” accounted for approximately 73 percent of the total changes in mining resources, PPE accounted for about 26 percent, and compensation claimed accounted for about 1 percent. We calculated these shares for each industry and assume the same allocation for all of its subsectors. We also assume that firms would have a symmetric response to a reduction in their profits as they would to an increase: They would reduce funds for each use in the same way that they would have allocated increased funds.

Using the BEA data for 2004, we estimated the impact of the repeal of deferral in that year on the resources of foreign subsidiaries available for investment, compensation

and “Other Assets” or the value of the subsidiary net of investments in PPE. Table 6, below, shows these effects by these categories, for each sector and sub-sector. For example, the repeal of deferral in 2004 would have reduced investment by foreign manufacturing subsidiaries by \$2.7 billion and expenditures on employee compensation – wages and jobs – by \$1.1 billion. The repeal also would have reduced the value of these subsidiaries, net of PPE, by \$17.6 billion. All told, the repeal of deferral in 2004 would have reduced the funds available to foreign subsidiaries of U.S. companies by \$8.2 billion for reinvestment in property, plant and equipment, by \$5.1 billion for compensation purposes, and by \$43.9 billion to build or purchase other assets.

Table 6: The Estimated Impact of Repealing Deferral on the Funds Used by Foreign Subsidiaries of U.S. Firms for Investment, Compensation and Building Other Assets, 2004 (\$ millions)

Industrial Sector and Sub-Sector	Funds No Longer Available for Reinvestment by Foreign Subsidiaries	Funds No Longer Available for Compensation	Funds No Longer Available for the “Other Assets” of Foreign Subsidiaries
Mining	80.00	3.00	219.20
Utilities	673.10	34.30	375.60
Construction	12.40	5.00	80.50
Manufacturing	2,708.40	1,092.10	17,605.00
Food manufacturing	100.50	40.50	653.10
Beverage and tobacco product	301.40	121.50	1,958.90
Textile mills and textile products	2.80	1.10	17.90
Wood products	2.60	1.00	16.90
Paper	30.30	12.20	196.60
Petroleum and coal products	78.00	31.40	506.70
Chemical manufacturing	1,136.90	458.40	7,390.00
Plastics and rubber products	25.30	10.20	164.50
Nonmetallic mineral products	90.00	36.20	584.70
Primary metals	60.30	24.30	392.20
Fabricated metal products	38.80	15.60	252.20
Machinery	33.90	13.70	220.60
Computer and electronic products	501.37	202.20	3,259.00
Electric equipment, appliances & components	110.80	44.70	720.20
Transportation equipment	81.80	33.00	531.50
Furniture and related products	-0.40	-0.10	-2.70
Miscellaneous manufacturing	93.90	37.90	610.50
Wholesale trade	168.70	276.30	5,348.00
Retail trade	100.60	41.90	203.10
Transportation and warehousing	440.20	33.80	119.70

Information	17.60	50.10	508.30
Publishing industries	20.20	57.60	584.80
Motion picture and sound recording	3.70	10.60	108.10
Broadcasting (except internet)	4.20	12.10	122.70
Telecommunications	-11.20	-31.90	-323.30
Internet providers, web portals, and data processing services	-0.70	-1.90	-18.80
Finance and insurance	285.90	814.50	8,268.00
Real estate and rental and leasing	212.90	-2.20	209.10
Professional, scientific, technical services	55.20	309.30	2,583.30
Architectural, engineering,	1.20	7.20	59.90
Computer system design	37.50	210.30	1,756.30
Management, scientific, & technical consulting services	3.00	17.00	141.90
Advertising and related services	1.00	6.80	56.90
Management of companies	3.40	2,412.20	8,313.10
Health care and social assistance	6.60	4.70	16.08
Accommodation and food services	8.70	6.10	21.10
Total	8,200.38	5,081.14	43,869.96

Next, we used the relationships between changes in investment, jobs and wages and “other assets” at foreign subsidiaries of U.S. multinationals and changes in these same elements at the parent companies in the United States, to estimate the impact of the repeal of deferral on investment, jobs and wages and other assets in the United States, using 2004 data. Note that the reductions in compensation and jobs are alternatives and equivalents: We calculate the reduction in compensation and then use annual average wages for each sector and subsector to translate those reductions into job losses. The results are provided in the following table, Table 7. It shows, for example, that the repeal of deferral in 2004 would have reduced domestic investment by U.S. multinational manufacturers by \$1.36 billion, cost nearly 30,000 jobs or reduced wage payments by \$1.2 billion, and reduced the value of these firms, net of PPE, by \$13.8 billion. Across the economy, the repeal in 2004 would have reduced U.S. domestic investment by \$3.9 billion, cost nearly 92,000 U.S. jobs or reduced payments for compensation to U.S. workers by \$3.9 billion, and reduced the value of these U.S. firms, net of PPE, by more than \$21.6 billion.

Table 7: The Estimated Impact of Repealing Deferral on Investment, Employment, Compensation and Building Other Assets, By U.S. Parent Companies, By Sector and Sub-Sector, 2004

Industrial Sector and Sub-Sector	Change in Domestic PPE Investment (\$ millions)	Change in Domestic Employment	Change in Domestic Compensation (\$ millions)	Change in Domestic Other Assets (\$ millions)
Mining	-13.1	-41	-2.1	-27.9
Utilities	-1,119.0	-2,641	-132.6	-476.6

Construction	-5.7	-231	-9.2	-80.8
Manufacturing	-1,360.5	-29,902	-1,200.3	-13,776.5
Food	-57.9	-1,542	-49.8	-601.1
Beverage and tobacco products	-88.5	-1,843	-72.3	-585.1
Textile mills and textile products	-2.9	-316	-7.6	-94.7
Wood products	-10.2	-	-	-
Paper	-16.7	-481	-18.9	-149.9
Petroleum and coal products	-49.5	-952	-59.6	-526.2
Chemicals	-497.1	-8,325	-447.0	-3,276.7
Plastics and rubber products	-11.6	-283	-9.5	-84.3
Nonmetallic mineral product	-34.0	-1,089	-35.0	-408.4
Primary metal	-39.3	-1,190	-44.4	-216.6
Fabricated metal product	-18.6	-549	-18.2	-120.7
Machinery	-16.8	-300	-11.1	-139.7
Computer and electronic product	-266.2	-5,887	-261.5	-2,177.3
Electric equipment, appliance, & components	-35.3	-996	-30.4	-320.7
Transportation equipment	-39.7	-852	-36.2	-897.5
Furniture and related products	0.4	12	0.3	2.6
Miscellaneous manufacturing	-59.2	-	-	-
Wholesale trade	-123.4	-4,025	-145.3	-1,271.2
Retail trade	-110.7	-7,294	-100.4	-189.4
Transportation and warehousing	-427.6	-823	-17.1	31.7
Information	-17.3	-2,068	-87.8	-755.5
Publishing industries	-42.2	-2,269	-128.7	-645.0
Motion picture, sound recording	-2.4	-262	-5.8	-58.2
Broadcasting (except internet)	-8.1	-1,142	-43.3	-362.7
Telecommunications	9.9	1,471	60.4	528.5
Internet providers, web portals, & data processing services	323.8	-	1.6	-
Finance & Insurance	-352.9	-23,278	-1,485.5	-3,943.1
Real estate, Rental & Leasing	-38.0	163	3.4	-46.9
Professional, scientific, technical Services	-34.8	-5,983	-270.3	-1,015.1
Architectural & engineering	-0.9	-271	-11.6	-26.4
Computer design, related services	-25.1	-2,654	-138.6	-782.0
Management, scientific, technical consulting services	-1.9	-129	-7.7	-13.7
Advertising and related services	-0.3	-101	-5.1	-27.8
Management of companies	-283.9	-15,238	-414.6	-90.9
Health care and social assistance	-40.2	-	-	-
Accommodation and food services	-3.5	-642	-7.8	-14.4
Total	-\$3,930.7	-92,002	-\$3,869.7	-\$21,656.4

VII. The Impact of Repealing Deferral This Year on the Assets, Investment, Jobs and Compensation of the U.S. Parent Companies of Multinational Firms

The preceding analysis implies very strongly that repealing deferral this year would have large, adverse effects on the value, investment, jobs and wages of the U.S. parent companies of multinational corporations. We can estimate these effects by assuming that deferral is repealed this year and applied to the earnings of the foreign subsidiaries of these corporations in 2009. To calculate these estimates, first we project

the 2009 earnings of foreign subsidiaries using IRS data on changes in those earnings from 2000 to 2004. Those years were a period of slow growth, including the 2001-2002 recession, and therefore provide a reasonable approximation of profits in the current economic environment. The projected changes in profits by sector and sub-sector are provided in Table 8, below. To the extent that 2009 turns out to be an especially poor year for these earnings, the estimates might apply in an approximate way to 2010.

Using these assumptions and methods, we estimate that repealing deferral would reduce the post-tax earnings of the foreign subsidiaries of U.S. multinationals by some \$102.8 billion in 2009, including reductions \$36.9 billion for manufacturers, \$23.1 billion for global wholesale trade businesses, \$17.3 billion for financial companies, and \$7.8 billion for information-related corporations. Among manufacturers, the largest reductions in post-tax earnings would occur in the foreign subsidiaries of U.S. pharmaceutical, beverage and tobacco, computer and electronics, electrical equipment and appliances, and non-metallic minerals companies.

Table 8: Impact of Repealing Deferral on the Post-Tax Profits of Foreign Affiliates of U.S. Multinational Companies, By Sector and Sub-Sector, 2009 (\$ millions)

Industrial Sector and Sub-Sector	Average Annual Growth of Pretax Profits	Projected Pretax Profits, 2009	Projected Profits after Foreign Taxes	Projected Post-Tax Profits after Repeal of Deferral	Change in Post-tax Profits after Repeal of Deferral
Mining	6%	\$36,767.70	\$24,302.30	\$23,899.00	- \$403.20
Utilities	8	7,041.50	6,135.10	4,577.00	1,558.10
Construction	10	2,144.30	1,554.80	1,393.80	161.00
Manufacturing	12	213,723.20	175,860.70	138,920.10	36,940.60
Food manufacturing	12	11,387.90	8,780.10	7,402.10	1,378.00
Beverage and tobacco products	15	24,519.10	20,733.40	15,937.40	4,796.00
Textile mills and textile product	26	711.90	532.90	462.80	70.10
Wood product	69	6,782.60	4,690.60	4,408.70	281.90
Paper	13	4,511.70	3,365.60	2,932.60	432.90
Petroleum and coal products	24	24,138.20	17,514.70	15,689.80	1,824.90
Chemical	11	69,245.70	60,229.60	45,009.70	15,219.80
Plastics and rubber products	18	5,999.30	4,348.40	3,899.50	448.80
Nonmetallic mineral product	26	10,684.10	9,161.30	6,944.70	2,216.60
Primary metal	19	6,346.70	5,253.30	4,125.30	1,128.00
Fabricated metal product	4	14,640.60	11,160.00	9,516.40	1,643.60
Machinery	22	9,066.50	6,605.60	5,893.20	712.40
Computer & electronic products	0	16,827.20	14,873.60	10,937.70	3,935.90
Electric equipment, appliances, & components	19	11,268.90	9,377.10	7,324.80	2,052.30
Transportation equipment	0	6,561.00	4,901.10	4,264.60	636.50
Furniture and related products	-11	40.70	24.60	26.40	-1.90
Miscellaneous manufacturing	23	23,869.10	17,578.90	15,514.90	2,064.00

Wholesale trade	32	151,486.80	121,610.90	98,466.40	23,144.50
Retail trade	31	44,616.50	30,324.30	29,000.70	1,323.60
Transportation & Warehousing	62	32,909.80	28,082.20	21,391.40	6,690.80
Information	69	109,668.30	79,107.30	71,284.40	7,822.90
Publishing industries	2	10,676.60	8,565.90	6,939.80	1,626.10
Motion picture & sound recording	69	25,282.20	18,096.50	16,433.40	1,663.10
Broadcasting (except internet)	2	1,504.60	1,319.20	978.00	341.20
Telecommunications	69	4,194.00	-2,250.00	2,726.10	-4,976.10
Internet providers, web portals, and data processing services	2	985.60	588.40	640.60	-52.20
Finance and insurance	13	100,342.20	82,539.90	65,222.40	17,317.40
Real estate, rental & leasing	08	5,228.40	4,010.60	3,398.50	612.10
Professional, scientific, & technical services	-17	8,550.20	6,723.80	5,557.60	1,166.20
Architectural and engineering	-17	218.00	168.70	141.70	27.00
Computer design	-17	5,110.20	4,114.50	3,321.60	792.90
Management, scientific, & technical consulting services	-17	427.10	341.70	277.60	64.00
Advertising and related services	-17	717.10	491.80	466.10	25.70
Management of companies	-17	23,496.10	20,872.70	15,272.50	5,600.20
Health care & social assistance	-17	116.40	86.50	75.70	10.80
Accommodation & food services	-17	590.60	398.10	383.90	14.20
Total		\$736,682.00	\$581,609.20	\$478,843.30	\$102,765.90

Next, we use these estimates to project the impact of the repeal of deferral on the total assets, investment in property, plant and equipment (PPE), employment and compensation by foreign subsidiaries and their U.S. domestic parent companies, by broad industry groups and their subsectors, in 2009. As with the analysis using 2004 data, we again use data from the Bureau of Economic Analysis on how multinational companies allocated their resources from 1999 to 2004, by sector. And again, the category of total assets includes investments in PPE and therefore PPE from total assets is netted out to yield “Other Assets.” We calculated the shares of each category for each sector and again assume the same allocation for all sub-sectors. We also assume again that firms would have respond to a reduction or increase in their profits in a symmetrical way: They would reduce funds for each use to the same extent that they would have allocated the increased funds to each use.

First, we project the impact of repealing deferral this year on the resources of foreign subsidiaries available for investment, compensation and “Other Assets.” Table 9, below, shows these effects for each sector and sub-sector. For example, we project that the repeal of deferral this year would reduce investment by foreign manufacturing subsidiaries by nearly \$4.7 billion and reduced their expenditures on employee compensation – wages and jobs – by \$1.9 billion. The repeal also would have reduced the value of these subsidiaries, net of PPE, by an estimated \$30.4 billion. All told, the repeal of deferral in 2009 would reduce the funds available to the foreign subsidiaries of U.S. companies by an estimated \$14.3 billion for reinvestment in property, plant and

equipment, by an estimated \$6.9 billion for compensation purposes, and by \$81.7 billion to build or purchase other assets.

Table 9: The Estimated Impact of Repealing Deferral on the Funds Used by the Foreign Subsidiaries of U.S. Firms for Investment, Compensation and Building Other Assets, 2009 (\$ millions)

Sector and Sub-Sector	Funds No Longer Available for Foreign Reinvestment	Funds No Longer Available for Compensation	Funds No Longer Available for the Other Assets of Foreign Subsidiaries
Mining	106.80	4.00	292.40
Utilities	968.30	49.40	540.40
Construction	20.40	8.20	132.40
Manufacturing	4,674.00	1,884.70	30,382.00
Food	174.30	70.30	1133.30
Beverage and tobacco product	606.80	244.70	3944.50
Textile mills & textile products	8.90	3.60	57.70
Wood product	35.70	14.40	231.90
Paper	54.80	22.10	356.10
Petroleum and coal products	230.90	93.10	1500.90
Chemical	1925.70	776.50	12517.60
Plastics and rubber products	56.80	22.90	369.20
Nonmetallic mineral product	280.50	113.10	1823.10
Primary metal	142.70	57.60	927.70
Fabricated metal product	208.00	83.90	1351.80
Machinery	90.10	36.30	585.90
Computer and electronic product	498.00	200.80	3237.10
Electric equipment, appliance, & component	259.70	104.70	1687.90
Transportation equipment	80.50	32.50	523.50
Furniture and related product	-0.20	-0.10	-1.50
Miscellaneous manufacturing	261.10	105.30	1697.50
Wholesale trade	674.00	1103.90	21366.60
Retail trade	385.40	160.60	777.60
Transportation and warehousing	4960.40	381.30	1349.20
Information	238.70	680.10	6904.00
Publishing industries	49.60	141.40	1435.10
Motion picture, sound recording	50.80	144.60	1467.70
Broadcasting (except internet)	10.40	29.70	301.20
Telecommunications	-151.90	-432.60	-4391.60
Internet providers, web portals, and data processing services	-1.60	-4.50	-46.10

Finance and insurance	528.50	1505.60	15283.30
Real estate, Rental and Leasing	310.40	-3.20	304.90
Professional, Scientific, and Technical Services	21.80	122.30	1022.00
Architecture & engineering	0.50	2.80	23.70
Computer system, related services	14.80	83.20	694.90
Management, scientific, & technical consulting services	1.20	6.70	56.10
Advertising and related services	0.50	2.70	22.50
Management of enterprises	1357.00	954.30	3288.90
Health care & social assistance	2.60	1.80	6.40
Accommodation, food services	3.40	2.40	8.30
Total	\$14,251.82	\$6,855.65	\$81,658.40

Next, we use these data and the relationships between the investment, compensation and other assets of foreign subsidiaries and their U.S. parent companies to estimate the impact of repealing deferral this year on domestic U.S. investment, jobs, compensation and the value of other assets of the U.S. parent companies. We find that the repeal of deferral in 2009 would lead to reductions by U.S. domestic manufacturers of an estimated \$1.8 billion in domestic investment, almost 36,000 jobs or more than \$1.7 billion in compensation paid to U.S. employees, and \$19.6 billion in other assets. All told, we estimate that repealing deferral this year would lead to cuts of almost \$10.4 billion in U.S. domestic investments in property, plant and equipment, the loss of more than 159,000 U.S. jobs or reductions of nearly \$7.3 billion in compensation paid to U.S. workers, and reductions of more than \$42.3 billion in the value of the other domestic assets of U.S. companies.

Table 10: The Estimated Impact of Repealing Deferral on U.S. Investment, Employment, Compensation and Building Other Assets By U.S. Parent Companies, By Sector and Sub-Sector, 2009

Industrial Sector and Sub-Sector	Change in Domestic Investment (\$ millions)	Change in Domestic Employment	Change in Domestic Compensation (\$ millions)	Change in Domestic Other Assets (\$ millions)
Mining	-\$24.22	-60	-3.70	-28.90
Utilities	-3,222.25	-4,865	-287.50	-1123.20
Construction	-5.80	-247	-13.80	-114.00
Manufacturing	-1,832.09	-35,796	-1747.10	-19641.10
Food	-78.35	-1,856	-72.90	-850.70
Beverage & tobacco products	-139.07	-2,574	-122.80	-1061.10
Textile mills and textile products	-7.32	-705	-20.60	-149.10
Wood products	-108.82	-	-	-
Paper products	-23.57	-604	-28.80	-219.10
Petroleum & coal products	-114.37	-1,955	-149.00	-1161.60
Chemical	-657.01	-9,781	-638.70	-4999.20

Plastics & rubber products	-20.38	-440	-17.90	-165.30
Nonmetallic mineral products	-82.82	-2,356	-92.00	-928.90
Primary metals	-72.50	-1,953	-88.50	-481.70
Fabricated metal products	-77.69	-2,041	-82.40	-585.10
Machinery	-34.87	-552	-24.80	-326.00
Computer & electronic product	-206.29	-4,056	-219.00	-1904.30
Electric equipment, appliance, & components	-64.51	-1,620	-60.20	-644.10
Transportation equipment	-30.50	-582	-30.00	-636.90
Furniture and related products	0.17	5	0.10	1.30
Miscellaneous manufacturing	-128.34	-	-	-
Wholesale trade	-641.91	-13,315	-583.00	-5702.80
Retail trade	-250.97	-12,928	-239.20	-380.00
Transportation, Warehousing	-2,890.86	-5,876	-149.30	-447.60
Information	-286.47	-21,167	-1217.50	-9572.90
Publishing industries	-126.20	-4,196	-322.30	-1751.80
Motion picture, sound recording	-39.62	-2,680	-80.80	-845.00
Broadcasting (except internet)	-24.24	-2,112	-108.50	-870.70
Telecommunications	164.09	15,052	837.90	5845.30
Internet s providers, web portals, & data processing services	968.25	-	4.10	-
Finance & Insurance	-786.10	-26,670	-2325.30	-4944.50
Real estate, Rental & Leasing	-14.87	390	7.00	-37.30
Professional, scientific, & technical services	-12.33	-1,722	-93.30	-329.20
Architecture & engineering	-0.32	-78	-4.00	-8.60
Computer design, related services	-8.90	-764	-47.90	-253.30
Management, scientific & technical consulting services	-0.67	-37	-2.70	-4.80
Advertising and related services	-0.12	-29	-1.70	-8.40
Management of Enterprises	-437.02	-36,827	-609.40	-37.20
Health care & social assistance	-10.12	-	-	-
Accommodation, food services	-1.01	-216	-3.10	-5.50
Total	-10,416.02	-159,301	-\$7,265.20	-\$42,364.20

These allocations are based on the long-term use of earnings by foreign subsidiaries; and under the current economic conditions, these companies could respond to a sharp decline in their post-tax earnings in a variety of ways. For example, they might dramatically reduce their investments in property, plant and equipment or, alternatively, respond to the reductions entirely by cutting employment. Therefore, we also project the impact of repealing deferral if the foreign subsidiaries focused all of their cutbacks on each of the uses. We then apply the relationships between changes in foreign and domestic investment, foreign and domestic compensation, and foreign and domestic other assets to project the upper bound of the potential domestic cutbacks in each category by the parent companies.

These estimates show potentially dramatic changes in U.S. domestic investment, employment, compensation and other assets that could follow the repeal of deferral this

year (Table 11, below). For example, the final impact of repealing deferral could focus on the accumulation of foreign and domestic assets. With less income available to foreign affiliates, there would be less capable of building up firm assets. Again, the analysis and findings by Desai *et.al.*, tell us that reduced foreign asset accumulation leads to reduced domestic asset accumulation. (The elasticity or multiplier in this category is about 0.24, so that lower foreign assets result in lower domestic assets in the parent company by a factor of 0.24, times the change in foreign assets.) If the foreign subsidiaries of U.S. multinationals absorbed all of the reductions in their post-tax earnings by reducing their investments in these assets, the network relationships between these subsidiaries and their parent companies would lead to reductions in the U.S. domestic assets of multinational companies of nearly \$23.8 billion by U.S. manufacturers and nearly \$53.3 billion across all industries and sectors.

Similarly, if the foreign subsidiaries of American multinational companies absorbed all of the reductions in their post-tax earnings by cutting jobs, their network relationships with their U.S. parent companies would lead to losses of some 701,000 U.S. jobs in manufacturing and 2.2 million jobs across the economy – or, the equivalent of compensation reductions for American workers of \$34.2 billion in manufacturing and \$107.3 billion across the economy. Since these estimates provide an upper bound of the potential responses, the actual economic consequences of repealing deferral almost certainly would be less than these individual upper limits, but in some cases they could be significantly greater than those projected under the allocated reductions in Table 10, above. Complete tables with the intermediate calculations used to derive the estimates for each of these uses are provided in the Appendix.

Table 11: Summary Estimates of the Projected Impact of Repealing Deferral on U.S. Investment, Employment, Compensation and Building Other Assets If U.S. Parent Companies Focused All of Their Cutbacks on Each of these Uses, By Sector and Sub-Sector, 2009

Industrial Sector and Sub-Sector	Change in Domestic Investment (\$ millions)	Change in Domestic Employment	Change in Domestic Compensation (\$ millions)	Change in Domestic Other Assets (\$ millions)
Mining	-\$91.41	-6,091	-\$370.30	-\$39.80
Utilities	-5,184.86	-153,372	-9,061.80	-3,238.70
Construction	-45.84	-4,840	-270.00	-138.60
Manufacturing	-14,479.92	-701,617	-34,244.40	-23,881.10
Food	-619.20	-36,373	-1,428.40	-1,034.30
Beverage & tobacco products	-1,099.17	-50,456	-2,407.00	-1,290.10
Textile mills and textile products	-57.85	-13,809	-403.40	-181.20
Wood products	-860.08	-	-	-
Paper products	-186.28	-11,837	-565.40	-266.40
Petroleum & coal products	-903.89	-38,328	-2,919.50	-1,412.30
Chemical	-5,192.68	-191,719	-12517.80	-6078.30
Plastics & rubber products	-161.09	-8,622	-351.20	-201.00

Nonmetallic mineral products	-654.54	-46,169	-1803.20	-1129.40
Primary metals	-572.99	-38,281	-1735.10	-585.60
Fabricated metal products	-614.04	-40,007	-1615.70	-711.40
Machinery	-275.59	-10,820	-487.00	-396.30
Computer & electronic product	-1,630.39	-79,505	-4293.40	-2315.40
Electric equipment, appliance, & components	-509.83	-31,743	-1179.10	-783.20
Transportation equipment	-241.02	-11,411	-588.50	-774.40
Furniture and related products	1.32	89	2.90	1.60
Miscellaneous manufacturing	-1,014.33	-	-	-
Wholesale trade	-22,041.67	-279,166	-12223.90	-6177.30
Retail trade	-861.95	-106,552	-1971.40	-646.90
Transportation, Warehousing	-3,899.35	-103,113	-2619.60	-2219.60
Information	-9,386.82	-243,457	-14003.10	-10847.00
Publishing industries	-4,135.26	-48,265	-3707.20	-1984.90
Motion picture, sound recording	-1,298.33	-30,826	-929.70	-957.40
Broadcasting (except internet)	-794.32	-24,287	-1247.70	-986.60
Telecommunications	5,376.81	173,126	9637.90	6623.20
Internet s providers, web portals, & data processing services	31,727.19	-	46.60	-
Finance & Insurance	-25,758.59	-306,753	-26746.00	-5602.60
Real estate, Rental & Leasing	-29.32	-74,870	-1336.90	-74.90
Professional, scientific, & technical services	-658.68	-16,417	-889.50	-375.70
Architecture & engineering	-16.84	-745	-38.10	-9.80
Computer design, related services	-475.28	-7,283	-456.10	-289.00
Management, scientific & technical consulting services	-35.59	-355	-25.50	-5.50
Advertising and related services	-6.47	-277	-16.70	-9.60
Management of Enterprises	-1,803.57	-216,109	-3576.20	-63.40
Health care & social assistance	-41.78	-	-	-
Accommodation, food services	-4.16	-1,270	-17.90	-9.30
Total	-84,287.91	2,213,628	-\$107,331.00	-\$53,314.9

In whatever way the foreign subsidiaries of U.S. multinational companies might absorb the sharp reductions in their post-tax earnings produced by the repeal of deferral, their responses would have large, adverse effects on the operations of their U.S. parent companies inside the United States, including significant reductions in their domestic investments in property, plant and equipment, jobs, wages, and their accumulation of other assets such as intangible property.

VII. The Impact of Repealing Deferral on the Ownership of U.S. Firms

Our analysis thus far has assumed that the repeal of deferral would not affect decisions by U.S. multinational corporations to continue to register their parent companies in the United States. However, that assumption almost certainly would not hold for all U.S. multinationals. The substantially higher tax rate which they would face

under the repeal of deferral would affect their competitiveness in foreign markets, where their subsidiaries would have to compete in foreign markets with foreign firms bearing much lower tax burdens. This disadvantage would be particularly great, because most other nations use a territorial-based tax system which does not tax the foreign-source earnings of their own multinational companies. It also would directly affect the market value of these firms, reducing the value of the holdings of tens of millions of Americans through their personal portfolios, personal retirement accounts, and the value of the defined benefit pension plans maintained by many employers, employee associations, and state and local governments.

Numerous economic studies have documented that home-country tax burdens can affect the ownership of foreign assets by changing after-tax returns, including the extent to which taxes influence ownership decisions by U.S. multinationals. Desai and Hines (1999), for example, measured the extent to which American firms reduced their participation in international joint ventures in response to the higher tax costs created by the separate “basket provisions” of the Tax Reform Act of 1986. Two other studies found that American multinational firms increasingly use “chains of ownership” for their foreign affiliates to reduce their differential tax burden, including intermediate ownership by affiliates located in countries that exempt foreign income from taxation.³⁵ Finally, recent research has documented significant ownership changes in which U.S. multinational firms invert their corporate structures and reconfigure their ownership as foreign corporations, in order to reduce the disproportionate burden imposed by the U.S. worldwide tax system.³⁶

The U.S.-based international shipping industry provides a case study of the potential ownership consequences of repealing deferral. The Tax Reform Act of 1986 ended deferral for the industry, until it was restored in 2004. A 2007 study published in *Tax Notes* traced the industry’s dramatic decline over this period.³⁷ The U.S.-owned, foreign-flag fleet serving international bulk-shipping markets contracted from 429 ships in 1986 to 272 ships in 2000, a 36.6 percent decline.³⁸ This decline was particularly pronounced in the tanker market: From 1988 to 2000, the number of U.S.-owned, foreign-flag tankers fell by nearly 50 percent, from 246 to 126 ships. Moreover, from 1988 to 1999, the U.S. share of the world merchant fleet fell from 5.6 percent to 2.9 percent; and the acquisition of U.S.-based shipping companies by foreign competitors not subject to the high U.S. tax on their shipping income accounted for much of this decline. For example, Singapore-based Neptune Orient Lines acquired the U.S.-based American President Lines, then the largest U.S. shipper, in 1997; and two years later, Denmark-

³⁵ Altshuler and Grubert (2003) and Desai, Foley and Hines (2003)

³⁶ Desai and Hines (2002)

³⁷ Kies, K. (2007). “A Perfect Experiment: Deferral and the U.S. Shipping Industry,” *Tax Notes*, p. 997.

³⁸ Sources for data include Henry Marcus et al., “U.S. Owned Merchant Fleet: The Last Wake-Up Call?” Massachusetts Institute of Technology, 1991; Warren L. Dean and Michael G. Roberts, “Shipping Income Reform Act of 1999: Background Materials Regarding Proposal to Revitalize the U.S. Controlled Fleet Through Increased Investment in International Shipping,” Thomas Coburn LLP, 1999; U.S. Maritime Administration; Fearnleys World Bulk Fleet, July 1998, July 1993, July 1999; *Fearnleys Review*, 1993, 1998, 1999; Fearnleys Oil & Tanker Market Quarterly, No. 1, 2000; *Fearnleys Dry Bulk Market Quarterly*, No. 2, 2000.

based A.P. Moller Group bought the international liner business of Sea-Land Services Inc., previously the largest U.S. shipper of containers. By shedding their U.S. ownership, these shipping businesses were no longer subject to high, subpart F taxation and could better compete in the global markets. The movement of these businesses overseas also meant the loss of their headquarter-based jobs and related employment in the United States. Further, the decline in U.S.-based shipping companies also meant fewer investors and participants in the U.S.-flag "Jones Act" domestic trade, which is limited to U.S.-owned enterprises. Thus, it is not surprising that the number of U.S.-owned, U.S.-flag ships also fell: From 1985 to 2004, the U.S.-flag fleet declined from 737 to 412 vessels; and the deadweight tonnage of U.S.-flag shipping capacity dropped by more than 50 percent.

These developments also had implications for American national security. During emergencies, the U.S. military often requisitions U.S.-owned tankers, bulk carriers, and other vessels to carry oil, gasoline, and other materials overseas where U.S. interests are challenged. The military turns first to U.S.-flag ships and then to U.S.-owned foreign-flagged ships, which together comprise the Effective United States Control (EUSC) fleet. A 2002 study by researchers at the Massachusetts Institute of Technology concluded that the EUSC fleet was no longer of sufficient size to meet U.S. strategic needs, noting,

The combination of U.S. tax laws passed in 1975 and 1986 resulted in a business environment where EUSC ship owners could no longer avoid paying tax on current income. This change put them at a major disadvantage to their foreign competitors who often paid little or no income tax. . . . Consequently, EUSC ship owners have greatly reduced their investment in EUSC ships since the Tax Reform Act of 1986.³⁹

The experience of the shipping industry suggests that a repeal of deferral could drive significant numbers of U.S. multinational corporations to shift their ownership structure and shed their U.S. base through reincorporation, mergers with foreign-based corporations, or their acquisitions by foreign-based companies. Such a development would have substantial, adverse effective of American jobs and investment.

VIII. Additional Costs from Repealing Deferral: The Impact on Tax Planning and Compliance, and the Use of Tax Havens

U.S. networked multinationals that maintain their U.S.-based ownership after repeal of deferral also will face larger, more complex and more costly tax-planning and tax-compliance burdens. First, every foreign affiliate will have to bear the considerable burdens of modern tax compliance with the U.S. Internal Revenue Service, as well as the tax authorities in the foreign markets where they reside and earn income, including 1) the collection, assembly, classification, and processing of financial and other information

³⁹ "Increasing the Size of the Effective United States Control Fleet," Henry Marcus *et al.*, MIT, August 2002

necessary to complete the schedules, forms and information returns; 2) the preparation and filing of the required forms and returns; and 3) extensive communication and negotiation with the government. While foreign affiliates are currently required to file information on their income and activities with the IRS, the additional burdens will significantly increase their compliance costs.

Since the repeal of deferral would subject foreign affiliates to the same tax rates as their U.S. parent company, we can use the actual tax planning costs of these U.S. firms to consider the new costs for the foreign affiliates in this area. One academic study estimated that the overall tax planning compliance costs of Fortune 500 companies in the early 1990s averaged some \$2 million annually, or more than \$3 million in 2009 dollars, with about 40 percent of those costs associated with their foreign operations and foreign-source income.⁴⁰ This share is greater than the share of multinational assets, sales, or employment attributed to foreign operations, suggesting that foreign-source tax-planning costs are disproportionately large relative to their role in the activities of multinational companies. The repeal of deferral, therefore, would likely sharply increase those costs, as the prospect of higher tax rates on foreign-source income lead to even greater tax planning operations to minimize their total tax burden.

The repeal of deferral also could increase the use of international tax havens by U.S. multinational corporations. As noted earlier, a country's tax regime can significantly affect the ownership structure of companies based there. A leading academic analysis of this phenomenon found that U.S. corporations seeking to avoid U.S. taxes on their foreign-source income can become foreign-based companies by "inverting" their corporate structure, so that a foreign subsidiary becomes the parent company and the U.S. parent company becomes a foreign subsidiary.⁴¹ This shift is often carried out by reincorporating in foreign tax haven that combine very low tax rates and a territorial-based tax system, such as Bermuda, the Cayman Islands, Ireland or Switzerland, with the firm's foreign subsidiary exchanging its shares for those of the American parent company. Individual shareholders who previously owned shares of the parent company receive new shares of the foreign (parent) company which now owns the U.S.-based firm. These inversions have increased in recent years, and a statistical analysis of expatriations conducted by one researcher suggests that the decision to invert is associated with rising U.S. tax liabilities on foreign-source income, as well as with firm size, heavy use of leverage, and the share of firm assets located abroad.⁴²

Table 12, below, shows the relationship between national corporate tax rates and foreign investment by U.S. MNCs across OECD member countries.⁴³ The data show a

⁴⁰ Blumenthal, M., and Slemrod, J. B. (1995). "The compliance cost of taxing foreign-source income: Its magnitude, determinants and policy implications." *International Tax and Public Finance* 2, 37-53.

⁴¹ Desai and Hines (2002)

⁴² Heavily leveraged firms are most likely to invert, since the U.S. worldwide tax regime is particularly costly for firms with sizable interest expenses.

⁴³ The data on corporate tax rates are available from the OECD as well the International Tax Database maintained by the American Enterprise Institute. See <http://www.oecd.org/dataoecd/26/56/33717459.xls>. The data on capital outflows from the U.S. come from the Bureau of Economic Analysis. International Economic Accounts, <http://www.bea.gov/international/index.htm#iip>.

negative correlation between corporate tax rates and foreign investment from the United States: Low-tax countries such as Ireland and Switzerland are major recipients of U.S. foreign investment, while countries with high corporate tax rates such as New Zealand and France have relatively lower levels of investment from the United States.

Table 12: National Tax Rates and U.S. Foreign Investment in OECD Nations, 2007

Country	Corporate Tax Rate	U.S. Investment Abroad, Net Outflows (\$ million)	Change in Corporate Tax Rate, 1994-2007	Proportionate Change in Investment, 1994-2007
Ireland	12.5%	\$14,572	-0.69	44
Germany	15.83%	8,291	-0.65	2
Poland	19.0%	1,224	-0.53	NA
Hungary	20.0%	808	-0.44	NA
Luxembourg	22.8%	20,077	-0.33	38
Canada	19.5%	22,772	-0.32	3
Portugal	25.0%	763	-0.31	2
Greece	25.0%	-364	-0.29	- 8
Netherlands	25.5%	73,324	-0.27	9
Austria	25.0%	3,824	-0.26	4
Denmark	25.0%	739	-0.26	1
Turkey	20.0%	3,590	-0.25	325
Italy	27.5%	3,841	-0.24	0
Japan	30.0%	15,586	-0.20	7
Mexico	28.0%	8,815	-0.18	1
Belgium	34.0%	3,226	-0.15	1
United Kingdom	28.0%	31,181	-0.15	2
Spain	30.0%	3,946	-0.14	2
Switzerland	8.5%	11,916	-0.13	12
Australia	33.0%	9296	-0.09	16
New Zealand	30.0%	194	-0.09	-1
Korea	25.0%	2,709	-0.07	6
Czech Republic	21.0%	106	0.00	--
Norway	28.0%	118	0.00	-1
Sweden	28.0%	4,555	0.00	7
France	34.4%	4,730	0.03	1
Finland	26.0%	98	0.04	0
Correlation		-0.06		-0.13

Further, countries which reduced their corporate tax rates between 1994 and 2007 generally experienced large increases in U.S. foreign direct investment, including Ireland, Luxembourg, Turkey, and the Netherlands. The Irish case is particularly striking, since its net capital inflows were negative in 1994 and jumped to \$14.6 billion in 2007, reflecting among other factors a 69 percent reduction in its corporate tax rate over time

and its entry into the European Union. Germany, however, also carried out a 65 percent reduction in its national corporate tax rate without experiencing a large increase in FDI from the United States. One reason may be Germany's 16 percent local corporate tax burden, along with slow GDP growth and high labor costs. While many factors affect the location of FDI, virtually all studies of the subject rank corporate taxes as a critical factor.⁴⁴ On balance, the increase in the corporate tax burden facing U.S. multinationals under the repeal of deferral will induce them to either seek out tax arrangements which they can exploit to minimize their tax bill, increasing their tax planning and tax compliance costs, or consider relocating their base operations outside the United States, especially in tax havens that offer low rates. Especially in the latter case, the consequences for U.S. investment, jobs, productivity and wages could be substantial – on top of the large reductions in investment, jobs and wages which follow directly from their network arrangements with their foreign affiliates.

IX. Conclusion

The world does not always work as expected, and despite the common political assumption that the repeal of deferral would induce U.S. multinational companies to focus more of their investment and job creation at home, the data and economic analysis point in a very different direction. Despite the intentions of its advocates, repealing or sharply limiting deferral would cost the U.S. economy many tens of billions of dollars in domestic investment and hundreds of thousands of jobs, as the sudden and sharp decline in the post-tax earnings of foreign subsidiaries works its way through the network arrangements of modern multinational companies. It also could seriously impair the competitiveness of U.S. companies in foreign markets, further reducing U.S. domestic investment and employment. Repealing or sharply limiting deferral also would increase the benefits for America's global companies to shift their headquarter operations to countries with much lower corporate tax rates and a territorial based tax system. Based on the evidence and analysis, we conclude that the repeal or substantial limitation of deferral could substantially harm the U.S. economy.

⁴⁴ See review article by Devereux, M. P., and Freeman H. (1995). "The Impact of Tax on Foreign Direct Investment: Empirical Evidence and the Implications for Tax Integration Schemes." *International Tax and Public Finance* 2(1), 85-106.

Appendix

Table A. Estimated Impact of Repealing Deferral on Domestic U.S. Investment by Multinational Corporations, If Their Foreign Subsidiaries Cut their Investments in Property, Plant and Equipment (PPE) by the Same Amount as the Cut in their Post-Tax Earnings, By Sector and Sub-Sector, 2009 (\$ millions)

Industrial Sector and Sub-Sector	Projected Foreign PPE	Projected Domestic PPE	Proportional Decline in Foreign PPE	PPE Multiplier= 0.26	Projected Change in Domestic Investment
Mining	\$268,287.60	\$233,919.64	0.0015	0.0004	-91.41
Utilities	40,846.40	522,771.93	0.0381	0.0099	-5,184.86
Construction	499.10	546.52	0.3226	0.0839	-45.84
Manufacturing	2,261,337.20	771,389.49	0.0163	0.0042	-14,479.92
Food manufacturing	34,572.30	59,751.69	0.0399	0.0104	-619.20
Beverage & tobacco products	24,706.60	21,778.43	0.1941	0.0505	-1,099.17
Textile mills & textile products	1,399.00	4,438.84	0.0501	0.013	-57.85
Wood product	1,247.80	14,642.06	0.2259	0.0587	-860.08
Paper	22,813.20	37,751.85	0.019	0.0049	-186.28
Petroleum and coal products	68,199.20	129,921.25	0.0268	0.007	-903.89
Chemical manufacturing	113,000.40	148,281.85	0.1347	0.035	-5,192.68
Plastics & rubber products	12,980.90	17,918.74	0.0346	0.009	-161.09
Nonmetallic mineral product	14,107.20	16,021.77	0.1571	0.0409	-654.54
Primary metal manufacturing	13,777.60	26,917.27	0.0819	0.0213	-572.99
Fabricated metal product	8,646.50	12,424.10	0.1901	0.0494	-614.04
Machinery manufacturing	17,476.40	26,002.62	0.0408	0.0106	-275.59
Computer & electronic product	34,495.50	54,958.99	0.1141	0.0297	-1,630.39
Electric equipment, appliance, & component	10,161.90	9,709.17	0.202	0.0525	-509.83
Transportation equipment	114,346.10	166,539.95	0.0056	0.0014	-241.02
Furniture & related products	1,391.50	3,798.78	-0.0013	-0.0003	1.32
Miscellaneous manufacturing	7,875.80	14,886.68	0.2621	0.0681	-1,014.33
Wholesale trade	39,714.50	145,469.37	0.5828	0.1515	-22,041.67
Retail trade	78,729.00	197,188.19	0.0168	0.0044	-861.95
Transportation & Warehousing	79,819.40	178,915.46	0.0838	0.0218	-3,899.35
Information	61,831.80	285,357.25	0.1265	0.0329	-9,386.82
Publishing industries	1,712.30	16,747.46	0.9497	0.2469	-4,135.26
Motion picture, sound recording	849.00	2,549.14	1.9589	0.5093	-1,298.33
Broadcasting (except internet)	4,369.60	39,119.68	0.0781	0.0203	-794.32
Telecommunications	52,821.80	219,520.02	-0.0942	-0.0245	5,376.81
Internet providers, web portals, and data processing services	3.20	7,419.98	-16.4458	-4.2759	31,727.19
Finance & insurance	26,876.50	153,757.82	0.6443	0.1675	-25,758.59
Real estate, Rental & Leasing	241,739.70	44,536.03	0.0025	0.0007	-29.32
Professional, scientific, &	14,868.00	32,298.24	0.0784	0.0204	-658.68

technical services					
Architectural & engineering	1,048.30	2,511.98	0.0258	0.0067	-16.84
Computer design services	7,549.30	17,404.60	0.105	0.0273	-475.28
Management, scientific, & technical consulting services	1,329.80	2,842.19	0.0482	0.0125	-35.59
Advertising	2,179.10	2,110.88	0.0118	0.0031	-6.47
Management of companies	8,524.70	10,559.25	0.6569	0.1708	-1,803.57
Health care & social assistance	1,490.40	22,106.01	0.0073	0.0019	-41.78
Accommodation & food services	29,389.80	33,092.53	0.0005	0.0001	-4.16
Total	3,153,953.93	2,631,907.73	2.5783	0.6704	-84,287.91

Table B. Estimated Impact of Repealing Deferral on Domestic U.S. Compensation by Multinational Corporations, If Their Foreign Subsidiaries Cut their Compensation Expenses by the Same Amount as the Cut in their Post-Tax Earnings, By Sector and Sub-Sector, 2009 (\$ millions)

Industrial Sector and Sub-Sector	Foreign Compensation	Domestic Compensation	Proportionate Reduction in Foreign Compensation	Compensation Multiplier = 0.37	Projected Change in Domestic Compensation
Mining	\$10,635.10	\$26,394.60	0.0379	0.014	-370.30
Utilities	1,624.50	25,534.10	0.9592	0.3549	-9061.80
Construction	1,499.40	6,796.60	0.1074	0.0397	-270.00
Manufacturing	220,773.10	553,132.60	0.1673	0.0619	-34244.40
Food manufacturing	14,589.00	40,873.70	0.0945	0.0349	-1428.40
Beverage & tobacco products	9,049.40	12,274.90	0.53	0.1961	-2407.00
Textile mills & textile products	477.90	7,430.90	0.1467	0.0543	-403.40
Wood product	-	4,910.80	-	-	-
Paper	6,206.40	21,905.10	0.0698	0.0258	-565.40
Petroleum and coal products	5,634.70	24,363.60	0.3239	0.1198	-2919.50
Chemical manufacturing	39,224.60	87,191.80	0.388	0.1436	-12517.80
Plastics & rubber products	7,714.50	16,315.80	0.0582	0.0215	-351.20
Nonmetallic mineral product	3,652.40	8,030.40	0.6069	0.2246	-1803.20
Primary metal manufacturing	4,588.70	19,076.50	0.2458	0.091	-1735.10
Fabricated metal product	6,133.30	16,295.20	0.268	0.0992	-1615.70
Machinery manufacturing	20,379.70	37,649.20	0.035	0.0129	-487.00
Computer & electronic product	22,394.90	66,024.90	0.1757	0.065	-4293.40
Electric equipment, appliance, & component	8,461.80	13,139.60	0.2425	0.0897	-1179.10
Transportation equipment	56,960.10	142,353.60	0.0112	0.0041	-588.50
Furniture & related products	1,426.30	5,975.00	-0.0013	-0.0005	2.90
Miscellaneous manufacturing	-	21,473.30	-	-	-
Wholesale trade	53,567.70	76,464.80	0.4321	0.1599	-12223.90
Retail trade	33,000.00	132,837.50	0.0401	0.0148	-1971.40
Transportation & Warehousing	9,693.60	10,257.40	0.6902	0.2554	-2619.60

Information	34,457.60	166,701.60	0.227	0.084	-14003.10
Publishing industries	6,422.20	39,570.90	0.2532	0.0937	-3707.20
Motion picture, sound recording	1,251.10	1,890.20	1.3293	0.4918	-929.70
Broadcasting (except internet)	2,314.50	22,872.30	0.1474	0.0546	-1247.70
Telecommunications	15,357.70	80,392.20	-0.324	-0.1199	9637.90
Internet providers, web portals, and data processing services	9,112.10	21,977.30	-0.0057	-0.0021	46.60
Finance & insurance	31,898.60	133,151.00	0.5429	0.2009	-26746.00
Real estate, Rental & Leasing	2,929.20	17,291.60	0.209	0.0773	-1336.90
Professional, scientific, & technical services	46,355.20	95,563.60	0.0252	0.0093	-889.50
Architectural & engineering	3,596.60	13,704.90	0.0075	0.0028	-38.10
Computer design services	24,086.70	37,448.80	0.0329	0.0122	-456.10
Management, scientific, & technical consulting services	7,392.80	7,944.10	0.0087	0.0032	-25.50
Advertising	5,249.30	9,208.60	0.0049	0.0018	-16.70
Management of companies	2,529.60	4,365.90	2.2139	0.8191	-3576.20
Health care & social assistance	-	21,963.00	-	-	-
Accommodation & food services	11,999.60	40,908.10	0.0012	0.0004	-17.90
Total	460,963.20	1,311,362.40	5.6534	2.0916	-107,331.00

Table C. Estimated Impact of Repealing Deferral on U.S. Employment by Multinational Corporations, If Their Foreign Subsidiaries Cut their Employment by the Same Amount as the Cut in their Post-Tax Earnings, By Sector and Sub-Sector, 2009

Industrial Sector and Sub-Sector	Foreign Employment	Domestic U.S. Employment	Average Annual Wage Per Foreign Employee	Decrease in Foreign Jobs	Proportional Decrease in Foreign Employment	Projected Change in U.S. Employment
Mining	234,157	247,139	45,419	8,878	0.0379	-6,091
Utilities	57,617	246,005	28,194	55,264	0.9592	-153,372
Construction	21,556	69,343	69,559	2,315	0.1074	-4,840
Manufacturing	4,986,542	6,451,021	44,274	834,368	0.1673	-701,617
Food manufacturing	414,590	592,461	35,189	39,159	0.0945	-36,373
Beverage & tobacco products	357,656	146,466	25,302	189,550	0.53	-50,456
Textile mills & textile products	13,860	144,775	34,481	2,034	0.1467	-13,809
Wood product	-	64,354	-	-	-	-
Paper	133,411	261,051	46,521	9,306	0.0698	-11,837
Petroleum and coal products	52,746	182,068	106,827	17,083	0.3239	-38,328
Chemical manufacturing	614,805	760,152	63,800	238,555	0.388	-191,719
Plastics & rubber products	184,262	227,987	41,867	10,721	0.0582	-8,622
Nonmetallic mineral product	81,861	117,038	44,617	49,681	0.6069	-46,169
Primary metal manufacturing	107,686	239,572	42,612	26,472	0.2458	-38,281
Fabricated metal product	133,111	229,678	46,076	35,671	0.268	-40,007

Machinery manufacturing	408,408	476,184	49,900	14,277	0.035	-10,820
Computer & electronic product	666,554	695,968	33,598	117,146	0.1757	-79,505
Electric equipment, appliance, & component	282,077	201,349	29,998	68,415	0.2425	-31,743
Transportation equipment	1,119,233	1,571,128	50,892	12,506	0.0112	-11,411
Furniture & related products	34,898	105,283	40,872	-46	-0.0013	89
Miscellaneous manufacturing	-	283,968	-	-	-	-
Wholesale trade	810,809	994,043	66,067	350,319	0.4321	-279,166
Retail trade	1,760,007	4,086,965	18,750	70,593	0.0401	-106,552
Transportation & Warehousing	314,966	229,830	30,777	217,399	0.6902	-103,113
Information	363,850	1,649,783	94,703	82,605	0.227	-243,457
Publishing industries	60,271	293,264	106,556	15,261	0.2532	-48,265
Motion picture, sound recording	22,851	35,676	54,750	30,376	1.3293	-30,826
Broadcasting (except internet)	29,675	253,429	77,994	4,375	0.1474	-24,287
Telecommunications	146,920	822,026	104,531	-47,604	-0.324	173,126
Internet providers, web portals, and data processing services	-	245,480	-	-	-	-
Finance & insurance	281,000	869,288	113,518	152,552	0.5429	-306,753
Real estate, Rental & Leasing	72,559	551,226	40,370	15,162	0.209	-74,870
Professional, scientific, & technical services	635,108	1,003,929	72,988	15,978	0.0252	-16,417
Architectural & engineering	51,289	152,484	70,125	385	0.0075	-745
Computer design services	311,976	340,379	77,207	10,270	0.0329	-7,283
Management, scientific, & technical consulting services	63,778	62,963	115,915	552	0.0087	-355
Advertising	78,328	87,034	67,017	383	0.0049	-277
Management of companies	29,157	150,179	86,760	64,549	2.2139	-216,109
Health care & social assistance	-	363,124	-	-	-	-
Accommodation & food services	958,122	1,651,112	12,524	1,134	0.0012	-1,270
Total	10,525,450	18,562,987	723,903	1,871,116	5.6534	-2,213,627

Table D. Estimated Impact of Repealing Deferral on the Domestic Assets of U.S. Multinational Corporations, If Their Foreign Subsidiaries Reduced their Investments in Other Assets (Net of PPE) by the Same Amount as the Cut in their Post-Tax Earnings, By Sector and Sub-Sector, 2009 (\$ millions)

Industrial Sector and Sub-Sector	Projected Foreign Assets	Projected Domestic Assets	Proportional Decrease in Foreign Assets	Asset Multiplier	Projected Change in Domestic Assets
Mining	1,144,898.30	470,898.40	0.0004	0.0001	-39.80
Utilities	84,193.70	729,170.60	0.0185	0.0044	-3238.70
Construction	12,458.60	44,676.60	0.0129	0.0031	-138.60
Manufacturing	2,697,539.70	7,266,198.90	0.0137	0.0033	-23881.10
Food manufacturing	169,404.50	529,818.50	0.0081	0.002	-1034.30
Beverage & tobacco products	157,706.10	176,765.00	0.0304	0.0073	-1290.10

Textile mills & textile products	3,159.30	34,020.50	0.0222	0.0053	-181.20
Wood product	-	52,992.30	-	-	-
Paper	81,307.40	208,470.90	0.0053	0.0013	-266.40
Petroleum and coal products	204,349.20	658,956.90	0.0089	0.0021	-1412.30
Chemical manufacturing	702,150.70	1,168,405.10	0.0217	0.0052	-6078.30
Plastics & rubber products	60,033.30	112,039.90	0.0075	0.0018	-201.00
Nonmetallic mineral product	44,440.20	94,345.90	0.0499	0.012	-1129.40
Primary metal manufacturing	64,868.40	140,327.10	0.0174	0.0042	-585.60
Fabricated metal product	59,272.30	106,894.80	0.0277	0.0067	-711.40
Machinery manufacturing	146,581.20	339,762.10	0.0049	0.0012	-396.30
Computer & electronic product	292,646.50	717,341.30	0.0134	0.0032	-2315.40
Electric equipment, appliance, & component	67,451.00	107,249.20	0.0304	0.0073	-783.20
Transportation equipment	505,232.00	2,561,247.40	0.0013	0.0003	-774.40
Furniture & related products	8,792.20	31,381.00	-0.0002	-0.0001	1.60
Miscellaneous manufacturing	-	186,349.40	-	-	-
Wholesale trade	990,415.60	1,101,435.50	0.0234	0.0056	-6177.30
Retail trade	238,514.10	485,676.30	0.0055	0.0013	-646.90
Transportation & Warehousing	100,844.80	139,389.80	0.0663	0.0159	-2219.60
Information	348,685.10	2,014,484.10	0.0224	0.0054	-10847.00
Publishing industries	57,037.70	290,101.90	0.0285	0.0068	-1984.90
Motion picture, sound recording	14,285.10	34,266.10	0.1164	0.0279	-957.40
Broadcasting (except internet)	40,125.20	483,371.60	0.0085	0.002	-986.60
Telecommunications	196,747.10	1,091,133.70	-0.0253	-0.0061	6623.20
Internet providers, web portals, and data processing services	-	115,612.20	-	-	-
Finance & insurance	6,967,593.70	9,392,465.00	0.0025	0.0006	-5602.60
Real estate, Rental & Leasing	287,048.40	146,268.30	0.0021	0.0005	-74.90
Professional, scientific, & technical services	337,017.00	452,359.50	0.0035	0.0008	-375.70
Architectural & engineering	20,915.50	31,627.70	0.0013	0.0003	-9.80
Computer design services	143,126.70	217,397.80	0.0055	0.0013	-289.00
Management, scientific, & technical consulting services	86,338.30	30,979.70	0.0007	0.0002	-5.50
Advertising	45,470.20	70,517.40	0.0006	0.0001	-9.60
Management of companies	9,618,604.10	453,840.00	0.0006	0.0001	-63.40
Health care & social assistance	-	42,404.20	-	-	-
Accommodation & food services	75,158.50	205,175.00	0.0002	0	-9.30
Total	22,902,971.60	22,944,442.20	0.172	0.0411	-53,314.9

References

- Altshuler, R., and Grubert, H. (2003). "Repatriation Taxes, Repatriation Strategies and Multinational Financial Policy" *Journal of Public Economics* 87, 73-107.
- Antràs, P., and Helpman, E. (2004). "Global Sourcing." *Journal of Political Economy* 112(3), 552-591.
- Antràs, P. (2003). "Firms, Contracts and Trade Structure." *Quarterly Journal of Economics* 118(4), 1375-1418.
- Blonigen, B.A. (2001). "In Search of Substitution between Foreign Production and Exports," *Journal of International Economics* 53, 81-104.
- Blonigen, B.A., and Wilson, W. W. (1999). "Explaining Armington: What Determines Substitutability Between Home and Foreign Goods." *Canadian Journal of Economics* 32, 1-21.
- Blumenthal, M., and Slemrod, J. B. (1995). "The Compliance cost of taxing foreign-source income: Its magnitude, determinants and policy implications." *International Tax and Public Finance* 2, 37-53.
- Brainard, L.S., and Riker D.A. (1997). "Are U.S. Multinationals Exporting Jobs?" NBER Working Paper No. 5958.
- Boise, C.M. (2006). "Breaking Open Offshore Piggybanks: Deferral and the Utility of Amnesty." Case Research Paper Series in Legal Studies, Working Paper 06-18.
- Bureau of Economic Analysis. International Economic Accounts, <http://www.bea.gov/international/index.htm#iip>.
- Bureau of Economic Analysis. Operations of Multinational Corporations, <http://www.bea.gov/international/index.htm#omc>.
- Congressional Budget Office (2004). "What Accounts for the Decline in Manufacturing Employment?" <http://www.irs.gov/taxstats/bustaxstats/article/0,,id=96282,00.htm>.
- Desai, M., Foley, F., and Hines, J. (2008). "Domestic Effects of the Foreign Activities of U.S. Multinationals." Ross School of Business. Paper No. 1020, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=825264
- Desai, M. A., Foley, C. F., and Hines, J. R. Jr. (2004). "The Costs of Shared Ownership: Evidence from International Joint Ventures." *Journal of Financial Economics* 73(2), 323-374.

Desai, M. A., Foley, C. F., and Hines, J. R. Jr. (2005a). "Foreign Direct Investment and the Domestic Capital Stock." *American Economic Review Papers and Proceedings* 95(2), 33-38.

Desai, M. A., and Hines, J. (2002). "Expectations and Expatriations: Causes and Consequences of Corporate Inversions." *National Tax Journal* 55(3).

Desai, M. A., and Hines, J. R. Jr. (March, 1999). "'Basket' Cases: Tax Incentives and International Joint Venture Participation by American Multinational Firms." *Journal of Public Economics* 71(3), 379-402.

Desai, M. A., Foley, C. F., and Hines, J. R. Jr. (2003). "Chains of Ownership, Tax Competition, and the Location Decisions of Multinational Firms" in H. Herrmann and R. Lipsey, eds. *Foreign Direct Investment in the Real and Financial Sector of Industrial Countries* Berlin: Springer-Verlag, 61-98.

Devereux, M. P., Freeman H. (1995). "The Impact of Tax on Foreign Direct Investment: Empirical Evidence and the Implications for Tax Integration Schemes." *International Tax and Public Finance* 2(1), 85-106.

Feenstra, R. C., and Hanson, G. H. (2005). "Ownership and Control in Outsourcing to China: Estimating the Property-Rights Theory of the Firm." *Quarterly Journal of Economics* 120(2), 729-761.

Feenstra, R. C. and Hanson, G. H. (1996). "Globalization, Outsourcing and Wage Inequality." *American Economic Review* 86(2), 240-245.

Feenstra, R. C., and Hanson G. H. (1999). "The Impact of Outsourcing and High-Technology Capital on Wages: Estimates for the U.S. 1979-1990." *Quarterly Journal of Economics* 114(3), 907-940.

Feldstein, M. (1995). "The Effects of Outbound Foreign Direct Investment on the Domestic Capital Stock." In Martin Feldstein, James R. Hines Jr. and R. Glenn Hubbard (eds.), *The Effects of Taxation on Multinational Corporations*. Chicago: University of Chicago Press, p. 43-63.

Gordon, R. H., and Hines R. J. Jr. (2002). "International Taxation." In Alan J. Auerbach and Martin Feldstein (eds.), *Handbook of Public Economics* 4, 1935-1995.

Hanson, G. H., Mataloni R., and Slaughter, M. J. (2005). "Vertical Production Networks in Multinational Firms." *Review of Economics and Statistics* 87, 664-678.

Harrison, A. E., and McMillan M. S. (2004). "The Impact of Overseas Investment by U.S. Multinationals on Wages and Employment." Working Paper.

Helpman, E., Melitz, M., and Yeaple, S. (2004). "Export Versus FDI with Heterogeneous Firms." *American Economic Review* 94(1), 300-316.

Helpman, E., and Krugman, P. (1985). *Market Structure and Foreign Trade*. Cambridge, MA: MIT Press.

Helpman, E. (1984). "A Simple Theory of International Trade with Multinational Corporations." *Journal of Political Economy* 92(3), 451-71.

Horst, T. (1980). "A Note on the Optimal Taxation of International Investment Income." *Quarterly Journal of Economics* 94(4), 793-798.

Hugh J. A., and Arnold B. J. (2004). *Comparative Income Taxation: A Structural Analysis*. Kluwer/Aspen, 372-76, 382-83.

Horstmann, I. J., and Markusen, J. R. (1992). "Endogenous Market Structures in International Trade." *Journal of International Economics* 32, 109-129.

Horstmann, I. J., and Markusen, J. R. (1987). "Strategic Investments and the Development of Multinationals." *International Economic Review* 28, 109-121.

Hummels, D., Ishii, J., and Yi, K. (2001). "The Nature and Growth of Vertical Specialization in World Trade." *Journal of International Economics* 54(1), 75-96.

Lipse, R. E. (1995). "Outward Direct Investment and the U.S. Economy." In Martin Feldstein, James R. Hines Jr. and R. Glenn Hubbard (eds.), *The Effects of Taxation on Multinational Corporations* (Chicago: University of Chicago Press), 7-33.

Kies, K. (2007). "A Perfect Experiment: Deferral and the U.S. Shipping Industry," *Tax Notes*, p. 997.

Markusen, J. R. (2002). *Multinational Firms and the Theory of International Trade*. Cambridge: MIT Press.

Markusen, J. R. (1984). "Multinational Firms, Multiplant Economies and Gains from Trade," *Journal of International Economics* 16(1), 205-226.

Markusen, J., and Venables, A. (2000). "The Theory of Endowment, Intra-Industry and Multinational Trade." *Journal of International Economics* 52: 209-234.

Markusen, J., and Venables, A. (1998). "Multinational Firms and the New Trade Theory." *Journal of International Economics* 46: 183-203.

Musgrave, P. B. (1969). *United States Taxation of Foreign Investment Income: Issues and Arguments*. Cambridge, MA: Harvard Law School, International Tax Program.

National Foreign Trade Council (1999). The NFTC Foreign Income Project. "International Tax Policy for the 21st Century, Part One: A Reconsideration of Subpart F 103, Tables 6-1.

Office of Tax Policy, Department of Treasury (December 2000). *The Deferral of Income Earned Through U.S. Controlled Foreign Corporations*.

Organization for Economic Co-operation and Development (2008). "Taxation of Corporate and Capital Income," <http://www.oecd.org/dataoecd/26/56/33717459.xls>.

Riker, D. A., and Brainard, L. S. (1997). "U.S. Multinationals and Competition from Low-Wage Countries." NBER Working Paper No. 5959.

Slaughter, M. (2000). "Production Transfer within Multinational Enterprises and American Wages," *Journal of International Economics* 50 (2), 449-472.

Stevens, G. V.G., and Lipsey, R. E. (1992). "Interactions Between Domestic and Foreign Investment." *Journal of International Money and Finance* 11 (1), 40-62.

Vaughan, M. (28 February, 2009). "President Takes Aim at Foreign Profits." *Wall Street Journal*, <http://online.wsj.com/article/SB123566551506583891.html>.

About the Authors

Robert J. Shapiro is the chairman of Sonecon, LLC, a private firm that advises U.S. and foreign businesses, governments and non-profit organizations. Dr. Shapiro has advised, among others, U.S. President Bill Clinton and British Prime Ministers Tony Blair and Gordon Brown; private firms including Amgen, AT&T, Cisco, Gilead Sciences, Google, MCI, Inc., SLM Corporation, Nordstjernan of Sweden, and Fujitsu of Japan; and non-profit organizations including the American Public Transportation Association, the Education Finance Council, BIO, and the U.S. Chamber of Commerce. He is also a senior fellow of the Georgetown University Business School, chairman of the Globalization Initiative of NDN and the Climate Task Force, co-chair of American Task Force Argentina, and a director of the Ax:son-Johnson Foundation in Sweden. From 1997 to 2001, he was Under Secretary of Commerce for Economic Affairs, where he directed economic policy for the U.S. Commerce Department and oversaw the nation's major statistical agencies. Prior to that, he was co-founder and Vice President of the Progressive Policy Institute. Dr. Shapiro also served as principal economic advisor in William Clinton's 1991-1992 presidential campaign, senior economic advisor to Albert Gore, Jr. in 2000, Legislative Director for Senator Daniel P. Moynihan, and Associate Editor of *U.S. News & World Report*. In 2008, he advised the campaign and presidential transition of Barack Obama. He has been a Fellow of Harvard University, the Brookings Institution and the National Bureau of Economic Research. He holds a Ph.D. and M.A. from Harvard, as well as an A.B. from the University of Chicago and a M.Sc. from the London School of Economics and Political Science.

Aparna Mathur is Research Fellow at the American Enterprise Institute, where she focuses on tax policy, health care and health policy issues. Dr. Mathur is also a noted scholar in international finance and econometrics, and an affiliate analyst for Sonecon, LLC. She has been a consultant to the World Bank, a researcher at the Tata Energy Research Institute, and an instructor in economics at the University of Maryland. Dr. Mathur holds a Ph.D. and M.A. from the University of Maryland, as well as degrees from Hindu College and the Delhi School of Economics of Delhi University.