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March 22, 2005

The Honorable John Breaux
Vice Chairman
President's Advisory Panel
on Federal Tax Reform
1440 New York Avenue, N.W.
Suite 2100
Washington, D.C. 20220

PRESIDENT'S ADVISORY PANEL ON FEDERAL TAX REFORM
2005 APR 21 A 10:59

Dear Chairman Breaux:

Enclosed please find our recent report on the impact of the corporate tax structure in the United States on the global competitiveness of manufacturers. This report, ***How the Corporate Income Tax, Foreign Border-Adjustable Value-Added Taxes, and International Trade Rules Team Up To Disadvantage U.S. Companies and Their Workers,*** is an empirical analysis that calls attention to the tax competition facing the U.S. manufacturing sector in relation to our major competitors. The high rate of U.S. corporate taxes in conjunction with rebates of VAT taxes in Europe and elsewhere have a major impact on trade balance.

I am confident that the conclusions drawn from this thorough, extensive, and exhaustive assessment of this issue can assist you in your deliberations and discussions during this crucial review of our tax system.

If you would like to discuss the paper or the issue in further detail, please feel free to contact me (703.647.5125) or the report author, Dr. Garrett Vaughn (703.647.5127).

Sincerely,

Thomas J. Duesterberg
President and Chief Executive Officer

Enclosure

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Economic Report

1600 Wilson Boulevard, Suite 1100, Arlington, Virginia 22209 • 703/841-9000 • Fax 703/841-9514

ER-584e March 2005

How the U.S. Corporate Income Tax, Foreign Border-Adjustable Value-Added Taxes, and International Trade Rules Team Up To Disadvantage U.S. Companies and Their Workers

by
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Manufacturers Alliance/MAPI
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The Alliance promotes the technological and economic progress of the United States through studies and seminars on changing economic, legal, and regulatory conditions affecting industry

How the U.S. Corporate Income Tax, Foreign Border-Adjustable Value-Added Taxes, and International Trade Rules Team Up To Disadvantage U.S. Companies and Their Workers

The President's Advisory Panel on Federal Tax Reform, as part of its work, should consider how this nation's corporate income tax disadvantages U.S. companies and their workers against foreign rivals operating under value-added taxes (VATs). The rules of the World Trade Organization (WTO) allow VATs—***but not*** income taxes—to be rebated on exports and imposed on imports ("adjusted" at a nation's border)

WTO rules help several European countries divert from the United States more of the world's most productive capital resources—and the better-paying jobs those resources create. During the past decade, Western Europe has used aggressive "tax competition" to nearly double its exports to the rest of the world—far faster than this nation's export growth—and built a substantial trade surplus with the United States. To do so, Western Europe has reduced corporate income tax rates, while rebating VATs on its exports and using the WTO's arbitrary rules to thwart effective responses by the United States.

This paper spells out why more competitive U.S. corporate income tax rates would attract to this nation more new, cutting-edge investment projects ***and*** the better-paying jobs such facilities create. United States' companies and American workers would benefit substantially even if no changes can be made to the WTO rules favoring VATs over income taxes.

The first section of this paper's four sections discusses why economic rivalry and "gaming" by Europe of WTO rules can distort trade, even though economists expect no distortions from "smoothly operating" VATs. Although one VAT cannot game another country's similar VAT, it can game another country's corporate income tax. The paper's second section discusses why workers, rather than investors, bear the real burden of an uncompetitive U.S. corporate income tax rate—even though companies write the checks to the Internal Revenue Service (IRS). The second section then discusses Europe's strategy for nearly doubling its export sector: cutting corporate income tax rates while continuing to rebate VATs on its exports. The third section reviews Europe's use of the WTO's arbitrary rules to stymie the federal government's attempts to counter Europe's strategy by reducing the harm done by the U.S. corporate income tax to this country's competitiveness. The fourth section contains a conclusion and summary.

1. The Economic Principles Underlying VATs

Does a border-adjustable VAT encourage a country's exports and discourage its imports? Intuitively, "YES!" would seem the question's obvious answer, since VATs are ***rebated*** on exports but imposed on imports. Surprisingly, most economists answer "NO!" so confidently that few have bothered to seek empirical confirmation.

However, that answer of "no" assumes an idealized world of "smoothly operating" VATs interacting only with each other. In the real world, VATs do not always work smoothly and may interact with something besides another VAT: a corporate income tax (as in the United States), ***not*** border-adjustable under WTO rules.

Would a VAT interacting with a non-border-adjustable corporate income tax be expected to distort international trade? Many economists would again answer "no," expecting freely adjusting national currencies and prices to neutralize any of the VAT's trade-distorting tendencies. However, neither national currencies nor prices adjust freely. China and Japan are among several nations that promote exports by "pegging" their currencies. Corporate tax rates ***are*** prices—the prices companies pay a government in exchange for the opportunity to earn lawful income in a country. However, a "freely adjusting tax rate" is an oxymoron. Tax rates set by political markets resist change more stubbornly than commodity prices set in purely economic markets.[1] As "sticky" prices,

[1] Economic factors—sometimes termed "economic reality"—may influence how the political marketplace selects tax rates. Even so, however, political marketplaces often accept consequences, such as a shortage or surplus to preserve a politically popular price, over the longer term that an economic marketplace would not accept.

border-adjustable VATs and corporate income tax rates ***can*** distort international trade.[2]

Subsection **1.1** reviews why economists expect no trade distortions from VATs *per se*. Subsection **1.2** shows how a VAT country can selfishly "game" another country's corporate income tax. Subsection **1.3** explores the benefits to Europe from gaming a relatively high U.S. corporate tax rate—and the harm done to U.S. companies and workers. Subsection **1.4** shows that such tax "gaming" can be countered.

1.1 Why a VAT interacting with another VAT would not distort trade.—To many non-economists' incredulity, economic theory expects ***no*** trade distortions from border-adjustable VATs. Harvard University's Mihir A. Desai and the University of Michigan's James R. Hines, Jr. explain:

> Destination-based VATs are rebated on exports and imposed on imports, two features (known as "border adjustments") that almost irresistibly suggest that such tax systems encourage exports [and discourage imports by the countries imposing the VATs]. As long as prices and exchange rates are determined by market forces, however, the border adjustments under destination-based VATs should not affect either exports or imports. The reason is that price levels and nominal exchange rates adjust to offset perfectly the effect of border adjustments. This mechanism has been appreciated by the international trade literature for some time, and while perhaps counterintuitive, is nevertheless accepted by economists.[3]

Indeed, economists "accept" VAT export neutrality so firmly that the proposition "has seldom, if ever, been subjected to tests based on actual experience."[4]

Desai and Hines offer a straightforward "thought experiment" (or economic model) to help clarify economists' reasoning on VAT export-import neutrality:

> It is useful to think of a country exporting a commodity and subsequently importing the same commodity. With a smoothly functioning VAT there would be no tax consequences of such a round trip, since the VAT that is rebated at export would be reimposed at import. A destination-based VAT is a tax on net imports (imports minus exports), and since trade balance implies that net imports equal zero in present value, the VAT neither encourages nor discourages exports. Tariffs are taxes imposed on gross imports, so they discourage both exports and imports by making circular trade costly.[5]

This thought experiment cleverly explains why a VAT (among many) does not favor a particular country's exports. However, the thought experiment's one-dimensional setting prevents any consideration of how ***multiple*** parties may have different interests, leading one country to "game" another's tax regime for selfish ends. The Desai-Hines thought experiment rules out conflicts of interest from the start by picturing a ***single*** country (acting first as exporter and, then, importer) applying a ***single*** VAT (first rebating it, then re-imposing it) on a ***single*** product (leaving as export, then returning as import).[6]

1.2 Adding a corporate income tax to the Desai-Hines thought experiment.—Let us now consider how adding a non-border-adjustable corporate income tax to the mix can tempt a VAT country to "game" the other country's corporate tax.

Table 1 shows gross domestic product (GDP), exports, and imports for two hypothetical countries: the "United States" and "Europe." Each country exports $250 billion to the other country, where the

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[2] Governments impose many taxes for the express purpose (in addition to raising revenue) of reducing the consumption and production of certain goods—so-called "sin" taxes offer a prime example. Economists do not expect a sin tax to create a permanent surplus or deficit of the product—e.g., cigarettes—but they do expect the tax to reduce the amount bought and sold at equilibrium. In a similar way, taxes on exports and/or imports can change/distort the equilibrium amounts of exports and imports without creating a permanent trade surplus or deficit for any country.

[3] Mihir A. Desai and James R. Hines, Jr., "Value-Added Taxes and International Trade: The Evidence," November 2002, p. 5. Words in brackets are added.

[4] *Ibid.*, p. 2. When Desai and Hines test the proposition, their empirical results indicate that "countries that rely heavily on VATs export and import less as fraction of GDP than do other countries," p. 20. However, their results do ***not*** support the "intuitive" notion that "value-added taxes encourage exports by rebating taxes at the border." Hence, the authors' empirical results suggest that VATs may hinder ***trade***—that is, ***both*** imports ***and*** exports.

[5] *Ibid.*, p. 6.

[6] A well-constructed model offers the scientist a lens to interpret a "real world" far too complex for the human mind to explain and understand in one fell swoop. Ideally, an economic model selects the more important relationship(s) while excluding the less important to provide the greatest amount of insight into the "real world" at the least possible analytical complexity.

$250 billion appears as imports. Exports equal imports for each country *via* the circular flow of trade; e.g., Europeans will—sooner or later—redeem (spend) in the United States all dollars received for their exports. [The actual United States—or any country—can run a trade deficit only if its trading partners will finance its deficit by accepting financial securities as IOUs—e.g., U.S. Treasury bonds. Sooner or later, the IOUs will be spent on American-made goods and services, eliminating the U.S. deficit.]

Table 1
Initial Levels of GDP and Exports/Imports for Two Hypothetical Countries
(billions of dollars)

Country	GDP	Exports	Imports
United States	$2,000	$250	$250
Europe	$2,000	$250	$250

Table 1's hypothetical United States has a 40 percent marginal corporate income tax rate (both federal and state) on worldwide income—but no VAT. The hypothetical Europe has a 30 percent marginal corporate income tax on income earned within Europe ***and*** a 20 percent VAT. As in the real-world (as Section 3 discusses later in this publication), only the VAT is border-adjustable.

Each country's marginal corporate tax rate exceeds its ***average*** tax rate for both corporate and personal income—measured by the share of GDP absorbed by total income tax receipts. [Recall that GDP can be viewed as ***either*** the total value of a nation's production ***or*** as the sum of all incomes earned in that production.] The average income tax rate is 25 percent for the hypothetical United States and 20 percent for the hypothetical Europe. With both a VAT ***and*** an income tax, the Europe in Table 1 (as in the real world) has a larger overall tax burden than the United States—***but*** the ***lower*** tax on capital. Finally, as do many actual European countries, Table 1's Europe is assumed to have substantial unemployment while the United States approaches full employment.

Table 2 shows the respective tax liabilities for U.S. and European taxpayers. Note that U.S. taxpayers foot $50 billion of the $800 billion total revenue collected by the (hypothetical) European Revenue Service (ERS).

Now suppose that Europe lowers its marginal corporate income tax from 30 percent to 25 percent—reducing its ***average*** income tax rate from 20 percent to 18 percent. Table 3 shows each

Table 2
Initial Tax Liabilities of U.S. and European Taxpayers *Vis-à-Vis* Each Country's Tax Revenues
(billions of dollars)

Tax Liabilities	Tax Receipts
U.S. Taxpayers	**IRS**
+ $500 income tax to IRS on $2,000 income (at 25 percent) + $50 VAT to ERS on $250 exports (appearing as imports to Europe)	+ $500 income tax from U.S. taxpayers
= $550 Total Tax Liability	= $500 Total Tax Receipts
European Taxpayers	**ERS**
+ $400 VAT to ERS on $2,000 value added + $400 income tax to ERS on $2,000 income (at 20 percent) – $50 VAT rebated by ERS to exporters on $250 exports to U.S. (appearing as imports in the U.S.)	+ $400 VAT from European taxpayers + $400 income tax from European taxpayers – $50 VAT rebated to European taxpayers on exports + $50 VAT imposed on U.S. exports
= $750 Total Tax Liability	= $800 Total Tax Receipts

Table 3
Country GDP and Exports/Imports After Europe Reduces Its Corporate Income Tax
(billions of dollars)

Country	GDP	Exports	Imports
United States	$2,000	$250	$250
	$1,950	$250	$300
Europe	$2,000	$250	$250
	$2,050	$300	$250

Table 4
Country GDP and Exports/Imports After Currency Adjustments End the Trade Surplus (Europe)/Deficit (United States)
(billions of dollars)

Country	GDP	Exports	Imports
United States	$2,000 $1,950	$250	$250 $300
	$1,970	$270	$270
Europe	$2,000 $2,050	$250 $300	$250
	$2,020	$270	$270

country's new GDP, exports, and imports. Europe's corporate tax reduction attracts capital from the United States, stimulating its export sector to grow by $50 billion[7] and thereby displacing $50 billion of U.S. production. [Europe's substantial unemployment allows it to expand exports without reducing employment in its production destined for domestic sales.]

Table 3 leads to more change because the $50 billion trade surplus appearing in Europe, mirrored exactly by a $50 billion trade deficit in the United States, weakens the U.S. dollar against the euro (not shown in Table 3 which expresses all amounts in their dollar equivalents). The cheaper dollar stimulates U.S. exports, eliminating the trade imbalance, as shown in Table 4. However, U.S. workers in Table 4 are less productive than in Table 1 because—***through no fault of their own***—they now combine their talents with less capital equipment. Just as a highly educated worker would be unable to avoid lower productivity using the best slide rule of the 1950s instead of today's latest computer equipment, an entire workforce cannot avoid lower productivity when afforded reduced access to the newest, most advanced capital equipment. Hence, despite regaining full employment, U.S. workers produce $30 billion less GDP in Table 4 than in Table 1—and, so, ***lose $30 billion in net income***.

*1.3 **Europe's benefits from "gaming" the U.S. corporate income tax.***—While U.S. workers lose income, Europe benefits by: (1) expanding its economy (from $2,000 GDP to $2,020 GDP); (2) lowering its unemployment rate (implied by the increase in GDP); and (3) "recruiting" U.S. taxpayers to pay its ERS more VAT to help offset Europe's loss of corporate tax revenues. Because Europe could attract capital from the United States only by lowering its marginal corporate tax rate, that capital's before-tax productivity is presumed lower in Europe than in the United States. Hence, Europe's GDP growth ($20 billion) is less than the United States' GDP loss ($30 billion).

Table 5 summarizes the taxpayer liabilities and government tax revenues, after the weaker U.S. dollar eliminates the initial trade imbalance. Table 6 highlights the net changes in total tax liabilities and receipts that occur between Table 2 and Table 5.

Both countries lose tax revenues[8] following Europe's tax cut on capital, but Europe recovers

[7] As discussed in Section 2 later in this report, considerable academic research indicates that a given percentage reduction in corporate tax rates can attract a much larger percentage increase in capital investment.

[8] However, Europe's net increase in GDP of $20 billion implies less government spending in Europe to aid the unemployed.

some of those revenues through the additional VAT collected from U.S. taxpayers on expanded imports. Through the circular flow of trade, expanding exports—sooner or later—provoke a similar increase in a country's imports.

However, the tax consequences are not symmetrical. Europe's additional $20 billion of imports collects more VAT from U.S. taxpayers—even though Europe stimulated those additional imports by expanding its exports. Hence, through a literally circuitous route, Europe recruits U.S. taxpayers to pay to its ERS an extra $4 billion (20 percent of the additional $20 billion imported by Europe from the United States).

Table 5
Tax Liabilities of U.S. and European Taxpayers *Vis-à-Vis* Each Country's Tax Revenues After the Weaker U.S. Dollar Eliminates the Trade Imbalance
(billions of dollars)

Tax Liabilities	Tax Receipts
U.S. Taxpayers	**IRS**
+ $492.5 income tax to IRS on $1,970 income (at 25 percent average rate) + $54 VAT to ERS on $270 exports (appearing as imports to Europe)	+ $492.5 income tax from U.S. taxpayers
= $546.5 Total Tax Liability	= $492.5 Total Tax Receipts
European Taxpayers	**ERS**
+ $404 VAT to ERS on $2,020 value added + $363.6 income tax to ERS on $2,020 income (at 18 percent average rate) – $54 VAT rebated by ERS to exporters on $270 exports to U.S. (appearing as imports in the U.S.)	+ $404 VAT from European taxpayers + $363.6 income tax from European taxpayers – $54 VAT rebated to European taxpayers on exports + $54 VAT imposed on U.S. exports
= $713.6 Total Tax Liability	= $767.6 Total Tax Receipts

Table 6
Changes in Taxpayer Liabilities and Country Tax Revenues
(billions of dollars)

Tax Liabilities	Tax Receipts
U.S. Taxpayers	**IRS**
$550 total tax liability (Table 2) $546.5 total tax liability (Table 5)	$500 total tax receipts (Table 2) $492.5 total tax receipts (Table 5)
–$3.5 Change in Total Tax Liability	**– $7.5** Change in Total Tax Receipts
European Taxpayers	**ERS**
$750 total tax liability (Table 2) $713.6 total tax liability (Table 5)	$800 total tax receipts (Table 2) $767.6 total tax receipts (Table 5)
– $36.4 Change in Total Tax Liability	**– $32.4** Change in Total Tax Receipts

For the IRS, Europe's tax cut on capital leads to $30 billion less taxable income in the United States[9]—and $7.5 billion less revenue, at an average income tax rate of 25 percent. Yet, U.S. taxpayers' net tax liability falls by only $3.5 billion, even though their taxable income falls by eight and a half times that amount. While U.S. taxpayers pay $7.5 billion less to their own IRS, they also ***pay an additional*** $4 billion of VAT to the very same Europe that triggered their income loss. In effect, Europe "recruits" U.S. taxpayers to replace some of the revenues lost to its ERS from the reduction in its corporate income tax rate.

1.4 How the United States could better deter gaming by Europe.—Europe's ability to game the U.S. corporate income tax derives from the WTO rules that allow VATs—but not income taxes—to be adjusted at the border. Hence, in principle, the potential for gaming could be eliminated by treating VATs symmetrically *vis-à-vis* border adjustments; i.e., by ***either*** (1) ***dis***allowing border adjustments for ***both*** VATs and income taxes; ***or*** (2) ***allowing both*** VATs and income taxes to be adjusted at the border.[10] On this point, Gary Clyde Hufbauer and Paul Grieco state:

> If the WTO rules were reformed, one of two outcomes would result. Either foreign governments would no longer be permitted to use border tax adjustments to encourage exports and discourage imports or the US government could impose its corporate tax on imports and exempt its exports from corporate tax. Either outcome would level the tilt in international taxation as it affects sales of goods and services in the US market.[11]

However, even without reform of the WTO rules, a more competitive U.S. marginal corporate income tax rate would lessen a great deal of the damage. The U.S. marginal corporate income tax rate has become about 10 percentage points greater than Europe's over the last two decades—a substantial gap with effects on the location of new plant and equipment made even more potent by two factors discussed in Section 2: (1) capital's greater mobility; and (2) heightened company sensitivity to after-tax rates of return.

2. Why and How the U.S. Corporate Income Tax Harms Workers

By law, corporations—***not*** workers—write the IRS (and sister state tax agencies) checks to pay U.S. corporate income taxes. Yet, a corporation—as a "legal fiction"—cannot "pay" a tax. Only people can pay taxes. Among the people associated with a corporation—investors, executives, workers, suppliers—investors (as stockholders and owners) may appear at first glance to be the logical choice to pay corporate income taxes. Instead, market conditions "shift" most of the ***actual*** burden[12] of these taxes to workers ***indirectly*** through stagnating wages and salaries—as discussed in the next subsection.

2.1. Why capital's "mobility" can shift the corporate income tax burden from investors to workers.—Investment dollars naturally seek out the new plant and equipment that offer the globe's highest ***after-tax*** rates of return. A country can increase the after-tax return of a prospective new production facility by reducing its marginal corporate income tax rate. A company attempting to locate a new facility in a different, lower-return country will find investment dollars flowing to its competitors. Inevitably, therefore, investment capital moves toward those countries (and companies) that offer the highest after-tax rate of return.

Investment capital's "mobility" (in the economic sense of this term) leads to a difficult choice for workers. Either they accept the job loss from the migration away of new plant and equipment ***or*** workers must choose wage reductions sufficiently large to restore a competitive after-tax return to a new production facility. The higher a country's marginal corporate tax rate, the greater the wage reduction workers must accept—*if* they are to be offered the jobs at all. Whether workers choose fewer jobs or a lower wage rate, they—and not investors—bear the actual burden of a higher marginal corporate income tax rate, even though corporations write all checks paying that tax.

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[9] Recall that GDP can be viewed as the sum of all incomes earned within the U.S. borders, as well as the total value of economic production that occurs there.

[10] House Resolution 705, introduced July 7, 2004, by Representative Phil English (R-PA), urged "the President to resolve the disparate treatment of direct and indirect taxes presently provided by the World Trade Organization."

[11] Gary Clyde Hufbauer and Paul Grieco, "Senator Kerry on Corporate Tax Reform: Right Diagnosis, Wrong Prescription," Institutute for International Economics, April 2004 (number PB04-3), p. 2.

[12] From an economist's perspective, "paying" a tax is not identical to the tax's overall burden. As the remainder of Section 2 points out, the burden of a tax can include the loss of wealth that would have been created in the absence of the tax. None of that foregone wealth will show up in the coffers of the IRS. Yet, all of that foregone wealth counts as part of the tax's overall "burden."

Table 7
The Burden of a Corporate Income Tax on Workers When Capital is Mobile

	Europe		United States
Investment	$10,000,000[a]	=	$10,000,000[a]
Annual Revenue	+$11,000,000[a]	=	+$11,000,000[a]
Raw Material Cost	-$5,000,000[a]	=	-$5,000,000[a]
Wage Expenditure (100 Workers)	-$5,000,000[a] (annual wage: $50,000)	▶	-$4,833,333[c] (annual wage: $48,333)[c]
Annual Profit (Before Tax)	+$1,000,000[a]	◀	+$1,166,667[d]
Marginal Corporate Tax Rate	30 percent[a]	◀	40 percent[a]
Corporate Tax Payment	-$300,000[a]	◀	-$466,667[d]
After-Tax Profit	$700,000[b]	=	$700,000[b]
After-Tax Rate of Return	7 percent[b]	=	7 percent[b]

[a] Parameters determined by market conditions

[b] Europe s prospective after-tax profit and rate of return that a U S location must at least match to be competitive

[c] Wage expenditures and wage rates that U S workers must accept for a U.S location to be competitive with Europe

[d] Before-tax profit (and subsequent tax payment at the 40 percent rate) that a prospective U S location needs to earn if it is to offer a competitive after-tax rate of return

Table 7 illustrates how workers bear the real burden of a higher corporate income tax rate, not investors. Suppose that a new $10 million facility, requiring 100 workers, can locate in ***either*** the United States or Europe The United States imposes a marginal corporate income tax rate of 40 percent, compared to Europe's 30 percent In either location, the new facility's output, made from $5 million of raw materials, will sell for $11 million on world markets. European workers receive an annual wage of $50,000. Hence, the facility—***if*** it locates in Europe—would face a total, annual labor cost of $5 million. With annual revenues of $11 million and annual costs of $10 million (for both labor and raw materials), the investment would offer in Europe a before-tax profit of $1 million. Europe's 30 percent corporate tax would leave an after-tax profit of $700,000 for a 7 percent after-tax rate of return on the $10 million investment.

Because Europe, as a location for the new $10,000,000 facility, offers investors a 7 percent rate of return, a U.S location must offer at least a 7 percent rate of return to be competitive. In order to pay the IRS 40 percent of before-tax profit—yet still provide investors with a 7 percent rate of return—a U.S. location must, somehow, produce a larger before-tax profit than a European location. How could a U.S. location do so? Increasing annual revenues above $10 million is not possible, because world markets establish the prices for which the output can be sold. Decreasing annual raw material costs below $5 million also is not possible because, again, world markets set the prices for the raw materials. A U.S. location cannot negotiate for a lower marginal tax rate with the IRS. Annual wage expense is the one item remaining that—by adjusting—can enable a U.S location to become competitive with Europe. ***If*** U.S. workers accept a lower annual wage[13] than European workers—$48,333 instead of $50,000—then a U.S. location can produce enough before-tax profit to ***both*** pay the IRS 40 percent of that profit ***and*** leave investors with an after-tax return of 7 percent Hence, U.S. workers bear the real burden of the higher U.S. marginal corporate income tax rate—either as a lower wage rate or as potential job offers that never actually materialize. Whatever choice U.S workers make, investors receive a 7 percent after-tax rate of return.

[13] Of the $466,667 collected by the IRS and sister U.S state tax agencies (from corporate checks), only $300,000 can be said to "actually" fall upon investors—the same amount they would pay if the facility were to locate in Europe The remaining $166,667 going to the IRS *et al.* would "really" come from lower wages U.S. workers must accept to be offered the jobs. After all is said and done, the higher U.S. corporate tax rate reduces an ***actually employed*** worker's annual wage from $50,000 down to $48,333. [In Table 4, the lower incomes to workers are reflected in reduced GDP, compared to Table 1.]

However, that "after-tax" rate of return refers to the ***corporate*** income tax. United States investors ***must still pay personal*** income tax on their 7 percent "after-tax" returns, whether the facility locates in Europe or the United States. Just as most workers cannot easily relocate to whatever country currently offers the world's highest wage rate, an individual investor cannot easily relocate to the country now offering the world's lowest personal income tax.

2.2 Research confirms that: (1) capital has become more mobile since the 1960s, and (2) capital's greater mobility has stimulated "tax competition" by foreign governments seeking to secure the location of more cutting-edge production facilities.—Several empirical studies have found capital to have indeed become more mobile since the 1960s[14] with the development of highly efficient global financial markets and enormously improved computer technologies. Many countries in Europe and elsewhere around the world have responded to capital's increased mobility by cutting their taxes on capital—but not the United States. A January 28, 2005 article in *The Wall Street Journal* noted:

> European countries have been steadily slashing corporate tax rates as they vie for foreign investment....Following the lead of Ireland, which dropped its rates to 12.5 percent from 24 percent between 2000 and 2003, one nation after another has moved toward lower corporate rates with fewer loopholes. The Netherlands, the second most popular European target for U.S. investment, recently joined the movement, lowering its corporate rates by three percentage points to 31.5 percent and simplifying its tax structure.[15]

By leaving its corporate tax rate nearly unchanged since 1986, the United States now has a higher marginal corporate tax rate than any European country, and higher than any other industrialized country except Japan.[16] The U.S. rate—about 40 percent (both federal and state average)—now exceeds Europe's average by about 10 percentage points.[17]

However, European countries generally tax other income sources more heavily than the United States, strongly suggesting that they cut capital taxes precisely to attract new investment[18]—not because they want to benefit investors or lessen overall tax burdens. Indeed, some European countries (such as France and Germany) are only reluctantly considering corporate tax cuts because of intense competitive pressures.[19]

In contrast to Europe, the United States has lowered taxes on non-capital income sources over the last few decades to reinvigorate its economy. Daniel Mitchell of The Heritage Foundation observes that "the overall tax burden in the United States" is "low compared to Europe" even though the United States also "has one of the highest

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[14] Rosanne Altshuler, Harry Grubert, and T. Scott Newlon, "Has U.S. Investment Become More Sensitive to Tax Rates?" in: James R. Hines, Jr. (editor), *International Taxation and Multinational Activity,* University of Chicago Press, pp. 9-32 as reported in: Rosanne Altshuler and Harry Grubert, "Taxpayer Responses to Competitive Tax Policies and Tax Policy Responses to Competitive Taxpayers: Recent Evidence," *Tax Notes International*, June 28, 2004, 34(13), pp. 1349-1362; Mihir A. Desai and James R. Hines, Jr., "Evaluating International Tax Reform," *National Tax Journal*, September 2003, p. 495.

[15] Glenn R. Simpson, "As Europe Cuts Corporate Taxes, More U.S. Companies Are Enticed" *The Wall Street Journal*, January 28, 2005, p. A1.

[16] "KPMG's Corporate Tax Rates Survey," KPMG, January 2004, pp. 3-4. See also: Glenn R. Simpson, *op. cit.*, "Germany's trims leave the standard U.S. rate—about 40 percent including average state taxes—above that of every country in Europe, according to separate studies by the Organization of Economic Cooperation and Development and KPMG."

[17] For instance, see Chris Edwards, "Social Policy, Supply-Side, and Fundamental Reform: Republican Tax Policy, 1994-2004," *Tax Notes*, November 1, 2004, p. 694, and Margie Rollinson, international tax expert at Ernst & Young, referenced in: Glenn R. Simpson, *op. cit.*, p. A2.

[18] Scholars have addressed the hypothesis of tax competition using rigorous, formal statistical analysis. For instance, Rosanne Altshuler and Harry Grubert find that "the evolution of country effective tax rates between 1992 and 1998 seems to be driven by tax competition." See: Rosanne Altshuler and Harry Grubert, *Tax Notes International, op. cit.*

[19] For instance, a recent *Financial Times* article noted that, "The argument ahead of the EU's admission of 10 new members in May pitched France and Germany against the European Commission, the EU's executive body and lower-tax candidate countries, which stressed the economic merits of tax competition." See: Vanessa Houlder, "Tax is Weapon of Choice in Fight to Win Investors," *Financial Times*, January 12, 2005, p. 6. Ironically, the *Financial Times* reported only a month later that "the likelihood of corporate tax reform in Germany is rising after the government endorsed calls for a lower tax burden to boost competitiveness" and "economists have long urged a corporate tax overhaul to boost Germany's appeal to investors." See: Bertrand Benoit, "Schröeder Heeds Tax Reform Call," *Financial Times*, February 11, 2005, p. 4.

corporate income taxes in the industrialized world."[20] That tax imbalance contributes to under-investment in new plant and equipment, harming the ability of American workers to compete for the world's better-paying jobs such investment creates. By reducing the tax structure's bias against investment in new capital equipment, a lower marginal corporate income tax rate would stimulate more economic growth—and more income gains for workers—than would comparable reductions in other taxes. A March 1, 2005 analysis by the Joint Committee on Taxation of the U.S. Congress concludes:

> Reductions in the corporate tax burden affect the economy primarily by increasing business incentives to invest in productive capital like machinery, equipment and technology, thereby gradually increasing the productive capacity of the economy. Reductions in taxes on labor affect the economy by changing both average income and the after-tax return to labor, thereby immediately affecting the willingness of people to work at market wage rates. Thus, the corporate tax rate reduction has the greatest effect on long-term growth, as the stock of productive capital accumulates and leads eventually to higher labor productivity.[21]

Considerable empirical research confirms that foreign (especially European) governments have cut their corporate tax burdens specifically to attract within their borders more "machinery, equipment and technology," thereby increasing their respective economies' "productive capacity" and "labor productivity" (to borrow the words of the Joint Committee on Taxation):

- Mihir Desai and James Hines, Jr. conclude that "there is considerable econometric evidence that international tax rate differences influence the location of property, plant and equipment investment."[22]
- Rosanne Altshuler of Rutgers University and Harry Grubert of the U.S. Treasury Department, in a study published June 28, 2004, report: "The evolution of country effective tax rates between 1992 and 1998 seems to be driven by tax competition. Countries that lost shares of U.S. manufacturing-affiliated real capital cut their rates the most over this period."[23]
- Rachel Griffith of the Institute for Fiscal Studies and Alexander Klemm of University College London in a study published December 2003 state: "We confirm the observation that most countries have lowered tax rates on corporate income and broadened tax bases . . . Summing up the direct evidence, it seems that the existence of some interaction in tax rates is now a relatively robust finding."[24]

Recent academic research also indicates that greater capital mobility and heightened company sensitivity to after-tax rates of return enable a country to attract substantial new investment with even a modest capital tax rate cut. On the other side of that same coin, retaining high capital taxes deters much job-creating new plant and equipment:

- Altshuler and Grubert found a "tax elasticity" of 4.12 for 1998 through 2000, indicating that a 1 percent increase in the after-tax return in a country leads to more than a 4 percent increase in real assets located in that country.[25]
- Gary Hufbauer, citing the work of John Mutti of Grinnell College, states that "a 5 percentage-point reduction in the corporate tax rate may increase export-oriented activity by as much as 20 percent."[26]
- Joeri Gorter and Ruud A. de Mooij of The Netherlands' Central Planbureau, in a study made public January 2005, review several academic studies done on capital's responsiveness to national tax rates and judge

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[20] Daniel J. Mitchell, "Making American Companies More Competitive," The Heritage Foundation, September 25, 2003.

[21] Joint Committee on Taxation, *Macroeconomic Analysis of Various Proposals to Provide $500 Billion in Tax Relief*, JCX-4-05, March 1, 2005, p. 2.

[22] Mihir A. Desai and James R. Hines, Jr., "Evaluating International Tax Reform," *National Tax Journal*, September 2003, p. 495.

[23] Rosanne Altshuler and Harry Grubert, *Tax Notes International, op. cit.*

[24] Rachel Griffith and Alexander Klemm, "What Has Been the Tax Competition Experience of the Last 20 Years?" Institute for Fiscal Studies and University College London, December 2003, pp. 3, 29.

[25] Rosanne Altshuler and Harry Grubert, *op. cit.*

[26] Gary Clyde Hufbauer, "The Foreign Sales Corporation Drama: Reaching the Last Act?" Institute for International Economics, Policy Brief No. PB02-10, November 2002, p.9.

high responsiveness by capital to be a common finding of the studies.[27]

2.3 Europe has expanded its exports (and imports) more rapidly than either the United States or Japan during the last decade.—Unlike European countries, Japan has not reduced its corporate tax rate to attract new investment.[28] Indeed, Japan's marginal corporate tax rate slightly exceeds that of the United States.[29] (Japan also has a 5 percent consumption tax,[30] which closely resembles a VAT.) But, in contrast to the chronic U.S. trade deficit, Japan has run a consistent trade surplus during the last decade (reaching a record level in 2004).[31] Instead of tax competition, Japan promotes its trade surplus using currency intervention, numerous high import tariffs, and selective government encouragement of exporters. Many, but not all, European countries—among them, Germany, Ireland, The Netherlands, and Belgium[32]—also run trade surpluses but through using different means than Japan. Therefore, a comparison of Japan and Europe can help show tax competition's relative ability to enlarge a region's export sector.

Table 8 shows that from 1993 through 2003 (the latest year for which data are available for all three regions), Western Europe increased its exports more rapidly than either the United States or Japan. Western Europe's imports also increased by about the same percentage as exports—benefiting Europe's tax collectors since VATs are ***imposed*** on imports. Table 9 shows that Western Europe increased its trade surplus with the United States while making almost no change in its trade deficit with Japan. The data shown in Table 9 are consistent with aggressive European tax competition with the United States—a competition that has kept many American workers from relatively high-paying jobs, leaving them to seek alternative, lower-paying employment.

Together, Tables 8 and 9 suggest Europe has used tax competition to attract more capital resources—***not*** to create a permanent trade surplus.[33,34] To attract more job-creating capital, European governments have lowered their corporate tax "prices" *vis-à-vis* comparable "prices" charged by the United States. Currency adjustments cannot restore ***relative*** corporate tax rates—and, so, cannot restore U.S. exports and imports to the same composition they would possess absent Europe's tax competition.[35] By attracting more of the world's more productive capital equipment, European governments steer American workers toward less productive capital, leaving them to toil longer, at less pay per hour, and earning less total income.

2.4 The U.S. corporate income tax remains relatively high; most rate reductions since 2001 involve the U.S. personal income tax.—In October 2004, President Bush signed into law the American Jobs Creation Act of 2004 (AJCA) which Deloitte, a well-known auditing and tax consulting firm, termed "the first major broad-based restructuring of business taxes since 1986."[36] However, AJCA still

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[27] Joeri Gorter and Ruud A. de Mooij, *Capital Income Taxation in Europe. Trends and Trade-Offs*, Central Planbureau (Netherlands), January 16, 2005, pp. 37-42, 47.

[28] For instance, see: David Ibison, "Japan's Powerful Tax Bureau Puts Up Barriers: A Proposal to Change the Tax Rules on Overseas Private Equity Investment is Causing Alarm," *Financial Times*, February 21, 2005, p. 22. The article discusses, among other things, "Japan's wariness about foreign investors in general and private equity firms in particular."

[29] KPMG, *op cit*, p. 3.

[30] U.S. Council for International Business, "Duties and Value-Added Taxes," downloaded from the Internet February 15, 2005.

[31] Tim Kelly, "Japan's Current-Account Surplus Grows," *International Herald Tribune*, February 15, 2005.

[32] Eurostat, "Euro-Zone External Trade Surplus 5.5 Bn Euro: 7.1 Bn Euro Deficit for EU25," December 21, 2004.

[33] Altshuler and Grubert (2004) comment on the findings of an earlier study by Grubert (2003): "The results suggest that countries do engage in tax competition to attract certain types of companies. Host countries grant lower tax rates to more mobile high-technology companies and extract rents from the average R&D intensive company. This suggests that they distinguish between mobile rents and those that are specific to a location. In addition, the results indicate that improving national trade may be an important policy goal: host countries lower tax rates on those companies that sell a greater share of output abroad and raise tax rates on those that import a relatively larger share of their components," p. 4.

[34] Although a trade surplus may appear early in a VAT county's deliberate effort to expand exports, the resulting additional income will also lead to more imports, whether or not the country's government intends—or even wants—more imports as a means to tax the citizens of other countries.

[35] As shown in Section 1, Desai and Hines are careful to state that the export neutrality of VATs presumes "***prices and exchange rates are determined by market forces***" [emphasis added]. Tax rates ***are*** prices but respond (*via* the political process) far more slowly to market forces than do the prices for "apolitical" oranges, steel, bananas, oil, and numerous other goods and services.

[36] "The American Jobs Creation Act of 2004: Overview of Domestic & International Provisions," Deloitte, 2004, p. 4.

Table 8
Export-Import Sectors of the United States, Japan and Europe: 1993-2003
(billions of dollars)

Country/Region	1993		2003		Percent Increase In:	
	Exports	*Imports*	*Exports*	*Imports*	*Exports*	*Imports*
United States[a]	$650.0	$702.1	$1,031.8	1,550.3	58.7	120.8
Japan[b]	$363.4	$241.2	$474.1	$386.0	30.4	60.0
Western Europe[b c]	$1,615.2	$1620.2	$3,143.7	$3179.0	90.4	96.2

[a]Source: BEA Amounts in billions of 2000$

[b]Source: World Trade Organization, *International Trade Statistics—2004,* Table II 2, p 30 (amounts in billions of dollars)

[c]"Western Europe" includes: Belgium, Denmark, Germany, Greece Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden, and the United Kingdom

Table 9
Western Europe's Exports, Imports, and Trade Balances With the United States and Japan: 1993 and 2003
(Money amounts in 1,000 million ECU/EUR)

Country	1993		2003		Trade Surplus (Deficit)		Change in Trade Surplus (Deficit): 2003 versus 1993
	Exports	*Imports*	*Exports*	*Imports*	*1993*	*2003*	
United States	91.40	90.60	220.48	151.17	0.79	69.31	68.52
Japan	24.66	52.20	40.06	66.78	(27.54)	(26.72)	0.82

Source: Eurostat, "Extra EU-15 Trade by Main Trading Partners,' downloaded February 16, 2005

left the marginal corporate tax rate relatively high—even for qualified manufacturing production. According to Deloitte's guide to the AJCA, a company taking full advantage of the Act's restructuring provisions, and now facing a marginal tax rate of 35 percent, "would be subject to an effective tax rate of 31.85 percent on qualifying income."[37] That rate, plus the average state corporate income tax rate, means that governments at the federal and state levels impose a marginal rate nearing 40 percent—higher than most European countries.

In the November 1, 2004 *Tax Notes,* Chris Edwards noted that "while many Americans seem to believe that corporations are big winners under Republican governments, the GOP has not cut corporate taxes" relative to those imposed by other countries.[38] Some may think that the 2001 and 2003 tax cuts affecting corporate dividends refer to the corporate income tax when, instead, those changes were made to the U.S. ***personal*** income tax. The personal income tax also covers corporate income when received as dividends by individuals. Unlike other income sources, corporate income is taxed ***twice***: first by the corporate income tax and then again by the personal income tax when stockholders receive surviving corporate income as dividends. The tax cuts of 2001 and 2003 trimmed back the second-round of taxation but ***not*** the first round.

Because the 2004 AJCA trimmed the U.S. marginal rate on corporate income only slightly, that rate remains relatively high *vis-à-vis* those of most other countries. Articles about Europe's continued corporate tax rate cutting—and the high

[37] *Ibid.,* p. 8

[38] Chris Edwards, *op cit.*, p. 694

U.S. corporate tax rate—continued to appear in leading newspapers early in 2005.[39]

The 2001 and 2003 changes to the U.S. personal income tax, lowering the rates on dividends and capital gains, certainly do encourage Americans to save and invest more (and spend less of their income on immediate consumption). However, when Americans search for the most attractive places to entrust their hard-earned savings, they often discover that—because of the high U.S. corporate income tax—other countries offer better opportunities than their own country. Many European countries have chosen an opposite strategy: offer foreign investors attractive opportunities but then punish their own citizens with high taxes on wages, salaries, and accumulated savings. By making our corporate income tax more competitive, Americans could realize more of the potential benefits from an economic environment that—overall—encourages more entrepreneurial creativity and faster economic growth.

3. The WTO's Arbitrary Tax Rules: A Brief History

The WTO's trade rules are modeled in the expanded thought experiment discussed in Section 1. In Section 1, the VAT country can exploit the other country's corporate income tax because the trade rules allow only the VAT to be adjusted at the border. Gary Hufbauer explains that the WTO rules' preferential treatment of VATs originated in the "twists of tax history,"[40] not economic principle. The rules allow border adjustments for "indirect" VATs but not for "direct" income taxes. Yet, "a VAT amounts to a combination of several direct taxes,"[41] revealing the different treatment to be arbitrary.

The U.S. government in 1962 created fertile ground for today's arbitrary WTO rules when it changed the corporate income tax to prevent exporters from "abusing" the repatriation of foreign income. Although European governments caused neither this initial, self-inflicted injury—nor the U.S. government's subsequent failure to keep its corporate tax rate competitive—Europe has used the WTO rules to frustrate any U.S. attempt to lessen the damage to its competitiveness done by the 1962 "tax reform." Invariably, European governments object to any relief from the "direct" U.S. corporate income tax as an "illegal subsidy" to U.S. exporters.

The United States first tried to soften the self-inflicted damage in 1971, with the Domestic International Sales Corporation (DISC). Hufbauer describes the DISC as a "partial tax deferral for the export earnings of a U.S. corporation." Following a 1974 complaint against the DISC by the European Commission, and a subsequent round of negotiations termed the "Tokyo Round Code on Subsidies and Countervailing Duties," the United States replaced the DISC with the Foreign Sales Corporation (FSC). United States negotiators thought they had an agreement with Europe permitting the FSC, which Hufbauer describes as allowing "partial tax exemption for the income of a foreign subsidiary derived from handling U.S. export sales." But, several years later in 1997, the European Union (EU) objected to the FSC as a violation of trade rules—to "create bargaining chips" according to Hufbauer.[42] In any case, the WTO subsequently ruled the FSC to be an export subsidy, illegal under its trade rules. European Union officials threatened to impose sanctions on selected U.S. exports unless the FSC was repealed.

The United States did repeal the FSC in October 2004 with the AJCA. Following the FSC's repeal, the EU continued to voice objections, raising "concerns over the grandfathering and transitional provisions of the new U.S. law."[43] The EU may impose sanctions against U.S. exports in the future if

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[39] For instance, see Glenn R. Simpson, *op. cit.*, pp. A1-A2 and Vanessa Houlder, *op. cit.*, p. 3.

[40] Ernest Christian explains the "twists of tax history" this way: "In the 1960s, the French wanted to subsidize exports by rebating the tax to each business in proportion to its exports, but the tax treaty (now WTO) prohibited rebates except in the case of a tax on the exported product itself. To get around this treaty prohibition, the French asked the U.S. trade negotiators to join them in pretending that a tax based on value added, unlike a tax based on net income, always becomes part of the price of the products and, therefore, that a proportionate part of a business's value added tax payments can be rebated to it when it makes an export sale. To help the struggling French economy of the 1960s, the U.S. negotiators agreed to the fiction." See: Ernest S. Christian, "Tax Reform Doesn't Have to Be Radical to Be Effective," *Investor's Business Daily*, February 15, 2005.

[41] Gary Clyde Hufbauer, *op. cit.*, p. 3.

[42] *Ibid.*, pp. 3-5.

[43] Joe Kirwin and Gary G. Yerkey, "EU Member States Unanimously Approve Measure Suspending Sanctions Against U.S.," *Daily Report for Executives*, January 24, 2005, p. G1.

its concerns are not addressed to its satisfaction.[44] [45] The WTO Dispute Settlement Body approved on February 17, 2005 a request by the EU to create a panel to assess the AJCA grandfathering and transition rules for the extraterritorial income exclusion regime that replaced the FSC.

Hence, the WTO rules' arbitrary, economically meaningless distinction between "direct" and "indirect" taxes still provide Europe the tools for turning the U.S. corporate income tax into a major disadvantage for U.S. exporters and their workers. Whatever the ultimate resolution to the EU's objections to the AJCA's grandfathering and transitional provisions, Europe can still use the same WTO rules to veto any future adjustments made to the corporate income tax to lessen its damage to U.S. competitiveness.

4. Conclusion

As the President's Advisory Panel on Federal Tax Reform continues its work, it should recognize the problem caused by the destructive synergy among: (1) Europe's border-adjustable VATs; (2) the high U.S. corporate income tax that applies to worldwide income; and (3) the arbitrary WTO rules that allow border adjustments for VATs but not for income taxes.

Of those three factors, the U.S. government can address only one through unilateral action: the high U.S. corporate income tax rate that applies to worldwide income. Because of that high rate, U.S. companies and their workers suffer a competitive disadvantage *vis-à-vis* their foreign competitors, even though the United States has one of the world's lower ***overall*** tax burdens (albeit one that remains high by historical standards). Although outwardly paid by corporations, highly mobile global markets for capital leave American workers bearing most of the corporate income tax's ***actual*** burden. Its high rate means less new plant and equipment locates within U.S. borders, dampening the demand for American workers, and reducing the wages and salaries they can command. Instead, more plant and equipment—much of it associated with higher-paying jobs—locates elsewhere, benefiting workers of other countries.

American workers have had to settle for reduced wage and salary growth because "fairness" has made high corporate taxes a political necessity. As a tax widely believed to fall on the "rich," a reduction in corporate taxes often becomes labeled as "unfair."

However, this simplistic portrayal bears little resemblance to the economic reality. Today's modern industrialized global economies weave together people's economic fortunes so intricately that governments cannot tax "the rich" without also burdening "the poor." Current high U.S. corporate tax rates burden millions of American workers—few of them "rich"—by keeping away many of the world's best-paying jobs. Such effects—however unintended and unwanted by the legislators who write the tax laws—largely explain why the U.S. corporate income tax does more to fund Europe's welfare states than provide real tax fairness to American workers.

While U.S. trade negotiators should do their utmost to secure reform of the WTO's arbitrary rules on the border-adjustability of VATs and corporate income taxes, members of the President's panel on tax reform should recognize the need to make this country's corporate tax rates more competitive. More competitive rates would be all the more important, should little progress be made reforming the WTO rules.

The overall U.S. economy—benefiting from this country's lower overall tax burden—has outperformed Europe's economy during the last decade, and by a wide margin. However, over the last decade, Europe's export sector has outperformed the U.S. export sector, and by a wide margin. Europe's willingness to compete with lower taxes—and the United States' failure to meet that competition—go a long way towards explaining the two, very different levels of performance.

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[44] *Ibid.*

[45] Deloitte summarizes the transitional provisions of the new law: "The [new law] repeals the ETI (extraterritorial income) exclusion, with the following transition rules:

- "For transactions before 2005, taxpayers retain 100 percent of their ETI benefits.
- "For transactions after 2004, taxpayers receive 80 percent of their otherwise-applicable ETI benefits for transactions executed during 2005, and 60 percent of their otherwise-applicable ETI benefits for transactions during 2006."

See: Deloitte, "The American Jobs Creation Act of 2004," p. 7