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Value-Added Tax as a New Revenue Source

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CONTENTS

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SUMMARY

President George W. Bush has stated that tax reform will be one of his top priorities in the 109th Congress. Some form of a value-added tax (VAT) has been frequently discussed as a full or partial replacement for the U.S. income tax system. In addition, some Members of Congress have expressed interest in the feasibility of using a value-added tax to finance health care reform.

A VAT is imposed at all levels of production on the differences between firms' sales and their purchases from all other firms. Policymakers may be interested in the following aspects of a VAT: revenue yield, international comparison of composition of taxes, vertical equity, neutrality, inflation, balance-of-trade, national saving, administrative cost, intergovernmental relations, size of government, and public opinion.

For calendar year 2004, a broad-based VAT would have raised net revenue of approximately $70 billion for each 1% levied. Most other developed nations rely more for revenue on broad-based consumption taxes than does the United States. A VAT is shifted onto consumers and, consequently, is regressive because lower-income households spend a greater proportion of their incomes on consumption than higher-income households. This regression could be reduced or even eliminated by any of three methods: a refundable credit against income tax liability for VAT paid, allocation of some of VAT revenue for increased welfare spending, or selective exclusion of some goods from taxation.

From an economic perspective, a major revenue source is better the greater its neutrality, that is, the less the tax alters economic decisions. A VAT is a relatively, but not completely, neutral tax. A VAT cannot be levied on all goods; consequently, a VAT would raise the prices of taxed goods relative to untaxed goods. This change in relative prices would distort households' choices among goods. A VAT cannot be levied on leisure; consequently, a VAT would affect households' decisions concerning work versus leisure.

The imposition of a VAT would cause a one-time increase in this country's price level. But a VAT would not affect this country's future rate of inflation if the Federal Reserve offset the contractionary effects of a VAT with a more expansionary monetary policy. If the United States continued its policy of flexible exchange rates, then the imposition of a VAT would not significantly affect the U.S. balance-of-trade. There is no conclusive evidence that a VAT would increase the rate of national saving more than another type of major tax increase.

The high revenue yield from a VAT would cause administrative costs to be low measured as a percentage of revenue yield. A federal VAT would encroach on the primary source of state revenue, the sales tax. But precedents exist for the federal government to levy a tax that some states have already imposed. A federal-state VAT could be collected jointly, but a state would lose some of its fiscal discretion. The hypothesis that a federal VAT would increase the size of the U.S. government has not been proven empirically.

MOST RECENT DEVELOPMENTS

On December 9, 2005, Treasury Secretary John Snow stated that the Bush Administration's plans for tax reform would not be subject to an "artificial timetable." Secretary Snow would not specify when President Bush would recommend a particular tax reform proposal.

BACKGROUND AND ANALYSIS

President George W. Bush has stated that tax reform is one of his top priorities in the 109th Congress. Some form of a value-added tax (VAT) has been frequently discussed as a full or partial replacement for the U.S. income tax system. In addition, some Members of Congress have expressed interest in the feasibility of using a VAT to finance health care reform or to fund America's war effort. Consequently, the value-added tax, a broad-based consumption tax, is the subject of congressional interest.

The value-added of a firm is the difference between that firm's sales and its purchases from all other firms. A VAT is levied on firms' value added at all stages of production. For calendar year 2004, a VAT imposed on most goods and services could have raised a net revenue of approximately $70 billion for each 1% rate levied.

Aspects of a VAT that often raise interest or concern include revenue yield, international comparison of composition of taxes, administrative cost, vertical equity, neutrality, inflation, balance-of-trade, national saving, administrative cost, intergovernmental relations, and size of government. This issue brief considers the experiences of the 29 nations (out of 30 nations) with VATs in the Organization for Economic Cooperation and Development (OECD) in 2002, relevant to the feasibility and operation of a possible U.S. VAT. In 2002, the OECD consisted of 22 European nations, Turkey, the United States, Canada, Australia, New Zealand, Japan, Mexico, and South Korea.

Revenue Yield

The primary reason for considering a VAT for financing health care reform or replacing all or part of our income tax system is its enormous revenue potential. Economists and public officials use the operating assumption that a VAT would be fully shifted to final consumers in the form of higher prices of goods. A VAT (or any other major tax increase) would have a contractionary effect on the economy unless offset by other economic policies. Consequently, the revenue estimates in this issue brief are made under the assumption that the Federal Reserve would use an expansionary monetary policy to neutralize the contractionary effects of a VAT. These revenue estimates also do not take into account the possible shifts in consumption patterns that might be expected if some items are taxed and others are excluded from taxation.

The potential revenue per 1.0% rate from a VAT would vary with the comprehensiveness of the tax base. A broad-based VAT would have limited exclusions,

while a narrow-based VAT would have numerous exclusions. Obviously, the broader the tax base, the lower the tax rate necessary to raise a given amount of revenue. Furthermore, the broader the VAT base, the more efficient the tax system. For calendar year 2004, each 1.0% rate for a VAT could have raised net revenue of approximately $70 billion with a broad base.

International Comparison of Composition of Taxes

One argument frequently made for a U.S. VAT is the relative reliance on consumption taxes in other developed countries. Most other developed nations do rely more on consumption taxes. For 2002, for taxes on general consumption (e.g., VATs and sales taxes), the United States (federal, state, and local governments) had a lower reliance (8.2%) of total tax revenues than any other OECD nation. Also for 2002, the United States' (federal, state, and local governments) general consumption taxes as a percentage of gross domestic product (2.2%) were lower than any other nation in the OECD.

Vertical Equity

The vertical equity of a tax concerns the tax treatment of households with different abilities-to-pay. Vertical equity may be affected by the measure of ability-to- pay and the tax period. Some economists argue that personal consumption is the best measure of ability-to-pay because consumption is the actual taking of scarce resources from the economic system. The most common measure of ability-to-pay is still income. Proponents of income as a measure of ability-to-pay argue that saving yields utility by providing households with greater economic security.

Tax incidence usually is measured by using a one-year period. Data on consumption and income are readily available in one-year increments and the concept of a one-year period is easily understood. But some tax economists believe tax incidence is more accurately determined by measuring consumption and income over a household's lifetime.

If consumption is used as a measure of ability-to-pay, a single-rate VAT with a broad base would be approximately proportional regardless of the time period. In other words, the percentage of consumption paid in VAT by households would be approximately constant as the level of household consumption rises.

If disposable income over a one-year period is the measure of ability-to-pay then a VAT would be viewed as extremely regressive; that is, the percentage of disposable income paid in VAT would decrease rapidly as disposable income increases. In most discussions of tax policy, both a one-year period and annual disposable income (or some other annual income measure) are used; consequently, the VAT is viewed as being extremely regressive.

If disposable income over a lifetime is the measure of ability-to-pay, a VAT would be mildly regressive. For lower and middle income households, it appears that nearly all savings are eventually consumed. Thus, it may be that for the vast majority of households, lifetime consumption and lifetime income are approximately equal. High income households

tend to have net savings over their lifetimes; consequently, they would pay a lower proportion of their disposable incomes in VAT than lower income groups.

Some supporters of progressive taxation oppose the VAT primarily because they believe that it is regressive. Some of these critics are especially concerned about the absolute burden of a VAT on low income households. The degree of regressivity, however, can be reduced by government policy. Three often-mentioned policies are exclusions and multiple rates, income tax credits, and earmarking of some revenues for increased social spending (including indexed transfer payments).

Neutrality

From an economic perspective, the greater a source of revenue's neutrality, the more it is generally preferred; that is, the less it affects economic decisions. Conceptually, a VAT on all consumption expenditures with a single rate that is constant over time would be relatively neutral compared to other major revenue sources.

For households, two out of three major decisions would not be altered by this hypothetical VAT. First, this VAT would not alter choices among goods because all goods would be taxed at the same rate. Thus, relative prices would not change. Second, a VAT would not affect the saving-consumption decision because saving would only be taxed once; that is, when savings are spent on consumption. But the third decision, a household's work-leisure decision, would be affected by a VAT. Leisure would not be taxed, but the returns from work would be taxed when spent on goods. (In contrast, the income tax affects both the saving-consumption decision and the work-leisure decision.)

For a firm, the VAT would not affect decisions concerning method of financing (debt or equity), choice among inputs (unless some suppliers are exempt or zero-rated), type of business organization (corporation, partnership, or sole proprietorship), and goods to produce. Other types of taxes may affect one or more of these types of decisions.

But this conceptually pure form of a VAT is not feasible. A VAT cannot be levied on all consumer goods; consequently, prices of taxed goods will rise relative to untaxed goods. This change in relative prices would affect consumers' decisions about which goods to purchase, and, consequently, firms' decisions about which goods to produce. Furthermore, most nations with VATs have more than one rate. Multiple VAT rates alter relative prices of taxed goods. Finally, VAT rates in most nations have tended to rise over time. Despite these deviations from a pure form of VAT, a broad- based VAT is relatively neutral. This neutrality is greater if the tax rate is relatively low, as could be the case for a VAT to reduce the U.S. deficit.

Inflation

A VAT initially would cause a one-time increase in the price level if the Federal Reserve had an expansionary monetary policy to offset the contractionary effects of the tax. For example, a 4% VAT on 75% of consumer outlays might cause an estimated increase in consumer prices of approximately 3%.

A VAT would have some secondary price effects. Some goods would rise in price because their factors of production, especially labor, are linked to price indexes. Yet, if the Federal Reserve disregarded these secondary price increases in formulating monetary policy, these secondary price increases would tend to be offset by price reductions in other sectors of the economy. In summary, a VAT would probably cause a one-time increase in the price level but not affect the rate of inflation (i.e., increased prices in the future).

Balance-of-Trade

Currently, all nations with VATs zero-rate exports and impose their VATs on imports. This procedure for taxing trade flows is referred to as the destination principle because a commodity is taxed at the location of consumption rather than production. The destination principle creates a level playing field because imported commodities rise in price by the percentage of the VAT, but exported commodities do not increase in price. For a particular nation, the VAT rate on domestically produced and consumed products would be the same. The VAT rate on a particular good would vary among nations.

With flexible exchange rates, the supply and demand for different currencies determine their relative value. If a country has a deficit in its balance-of-trade, this deficit must financed by a net importation of foreign capital. But net capital inflows cannot continue indefinitely. Thus, over time, this country's currency will tend to decline in value relative to the currencies of other nations. Consequently, this country's balance-of-trade deficit will eventually decline as its exports rise and imports fall. Hence, economic theory indicated that a VAT offers no advantage over other major taxes in reducing a deficit in the balance-of-trade.

National Saving

If a VAT is levied to replace part of income tax revenue, what would be the effect on the personal saving rate. A VAT taxes savings when they are spent on consumption, allowing savings to compound at a pre-tax rate. But an income tax is levied on all income at the time it is earned, regardless of whether the income is consumed or saved. The income tax is also levied on the earnings from income saved. Consequently, some proponents of the VAT have argued that choosing a VAT rather than an income tax to raise revenue would increase the return from saving, and, consequently, raise the savings rate.

The rate of return on savings, however, has never been shown to have a significant effect on the savings rate because of two conflicting effects. First, each dollar saved today results in the possibility of a higher amount of consumption in the future. This relative

increase in the return from saving causes a household to want to substitute saving for consumption out of current income (substitution effect). But a higher rate of return on savings raises a household's income; consequently, the household has to save less to accumulate some target amount of savings in the future (income effect). Thus, this income effect encourages households to have higher current consumption and lower current saving. In summary, there is no conclusive evidence that a VAT would increase the rate of national saving more than another type of major tax increase.

Administrative Cost

The value-added tax would require the expansion of the Internal Revenue Service. But the high revenue yield from a VAT could cause administrative costs to be low measured as a percentage of revenue yield. The administrative expense per dollar of VAT collected would vary with the degree of complexity of the VAT, the amount of revenue raised, the national attitude towards tax compliance, and the level of the small business exemption. Proposed VATs for deficit reduction usually are estimated to yield approximately $100 billion per fiscal year which would result in the spreading of administrative costs. In 1984, officials at the U.S. Treasury estimated that a completely phased in VAT would require additional staff of 20,694 at a cost of $700 million or approximately $1 billion at 1991 salary levels. For FY1991, the Internal Revenue Service had operating costs of $6.1 billion and average positions realized of 115,628.

Intergovernmental Relations

A federal VAT would encroach on the primary source of state revenue because states would find it more difficult to raise their sales tax rates. But, precedents exist for the federal government to levy a new tax that states have already imposed. For example, the federal government levied death taxes and personal income taxes after many states already had passed them.

The possibility exists for the joint collection of a federal-state VAT. But states would have to replace their sales taxes with VATs with the same tax base as the federal VAT. Consequently, states would lose some of their fiscal discretion.

Size of Government

There is an hypothesis that a relatively hidden tax such as the VAT leads to an expansion in the size of government. A VAT has the capacity to raise enormous revenues at a low tax rate. Households may underestimate their total tax burden because they pay VAT in small increments, and thus households may be less resistant to a higher VAT rate. But no conclusive evidence is currently available to support this hypothesis and it appears that the largest expansions in government spending in recent years have not been associated with any tax increases.

Table 1. General Consumption Taxes in OECD Countries

Country	Total Tax Revenue as a % of GDP[a] at Market Prices (2002)	General Consumption Taxes as a % of GDP (2002)	General Consumption Taxes as a % of Total Tax Revenues (2002)
Australia	31.5%	4.3%	13.5%
Austria	44.0	8.2	18.7
Belgium	46.4	7.3	15.7
Canada	33.9	5.2	15.3
Czech Republic	39.3	6.8	17.3
Denmark	48.9	9.7	19.9
Finland	45.9	8.4	18.2
France	44.0	7.3	16.7
Germany	36.0	6.5	18.0
Greece	35.9	8.4	23.5
Hungary	38.3	9.3	24.3
Iceland	38.1	10.5	27.6
Ireland	28.4	7.1	25.0
Italy	42.6	6.4	15.0
Japan	25.8	2.5	9.5
Korea	24.4	4.6	18.9
Luxembourg	41.8	6.5	15.5
Mexico	18.1	3.5	19.3
Netherlands	39.2	7.5	19.2
New Zealand	34.9	8.8	25.3
Norway	43.5	8.4	19.2
Poland	32.6	7.4	22.6
Portugal[b]	33.9	8.2	22.9
Slovak Republic	33.1	7.5	22.7
Spain	35.6	5.9	16.6
Sweden	50.2	9.2	18.4

Country	Total Tax Revenue as a % of GDP[a] at Market Prices (2002)	General Consumption Taxes as a % of GDP (2002)	General Consumption Taxes as a % of Total Tax Revenues (2002)
Switzerland	30.3	3.9	13.0
Turkey	31.1	8.1	26.1
United Kingdom	35.8	6.9	19.4
United States	26.4	2.2	8.2

Source: Adapted by CRS from OECD, *Revenue Statistics 1965-2003*, Paris, 2004.

a. GDP is an abbreviation for gross domestic product, which is a measure of total domestic output of goods and services.
b. The percentage for Portugal in last two columns are for 2001.

LEGISLATION

H.R. 15 (Dingell). National Health Insurance Act. Provides for a program of national health insurance. Imposes a five percent value-added tax (VAT) to finance health benefits. Revenue from the VAT would initially be deposited into the proposed National Health Care Trust Fund. Introduced January 4 2005; referred to the House Energy and Commerce Committee and the House Ways and Means Committee. On January 25, 2005; referred to Subcommittee on Health of the House Ways and Means Committee.

H.R. 25 (Linder). Fair Tax Act of 2005. To promote freedom, fairness, and economic opportunity by repealing the income tax and other taxes, abolishing the Internal Revenue Service, and enacting a national sales tax to be administered primarily by the States. Introduced January 4, 2005; referred to the Committee on Ways and Means.

H.R. 1040 (Burgess). Freedom Flat Tax Act. This bill would allow individuals to elect irrevocably to pay a flat tax as an alternative to our current income tax. In the first two years, the flat tax rate would be 19%, but in subsequent years the rate would decline to 17%. This bill would become effective in tax year 2006. It was introduced March 2, 2005, and referred to the Committee on Ways and Means.

H.R. 1601 (Fattah). Comprehensive Transform America Transaction Fee Act of 2005. This bill would require a study and comprehensive analytical report on transforming America by reforming the federal tax code through elimination of all federal taxes on individuals and corporations and replacing the federal tax code with a transaction fee-based system. Introduced April 13, 2005; referred to the Committee on Ways and Means.

S. 25 (Chambliss). Fair Tax Act of 2005. To promote freedom, fairness, and economic opportunity by repealing the income tax and other taxes, abolishing the Internal Revenue Service, and enacting a national sales tax to be administered primarily by the states. Introduced January 24, 2005; referred to the Senate Finance Committee.

S. 812 (Specter). Flat Tax Act of 2005. Imposes a 20% flat rate consumption tax (modified VAT) as a replacement of the individual income tax, the corporate income tax, and the estate and gift tax. This flat tax would consist of two components: a wage tax and a cash-flow tax on businesses. Introduced April 15, 2005; referred to the Senate Finance Committee.

S. 1099 (Shelby). The Tax Simplification Act of 2005. Repeals the corporate income tax, the individual income tax, and the estate and gift tax, and replaces these taxes with a flat rate consumption tax of 19% for the first two years (declining to 17% in the third year). Introduced May 23, 2005; referred to the Committee on Finance.

S. 1921 (DeMint). The Savings for Working Families Act of 2005. Replaces the current individual income tax, the corporate income tax, and the estate and gift taxes with an 8.4% national retail sales tax and an 8.4% subtraction-method value-added tax (referred to as a business tax). Introduced October 26, 2005; referred to the Committee on Finance.

S. 1927 (Wyden). Fair Flat Tax Act of 2005. Proposes to make the federal income tax system simpler, fairer, and more fiscally responsible. Introduced October 27, 2005; referred to the Committee on Finance.

FOR ADDITIONAL READING

CRS Products

CRS Issue Brief IB95060. *Flat Tax Proposals and Fundamental Tax Reform: An Overview*, by James M. Bickley.

CRS Report RL32603. *The Flat Tax, Value-Added Tax, and National Sales Tax: Overview of the Issues*, by Gregg A. Esenwein and Jane G. Gravelle.

CRS Report 98-529. *Flat Tax: An Overview of the Hall-Rabushka Proposal*, by James M. Bickley.

CRS Issue Brief IB92069. *A Value-Added Tax Contrasted with a National Sales Tax*, by James M. Bickley.

CRS Report RL32266. *Transaction Tax: General Overview*, by Maxim Shvedov.

CRS Report RL33025. *Fundamental Tax Reform: Options for the Mortgage Interest Deduction*, by Pamela J. Jackson.

CRS Report RL30351. *Consumption Taxes and the Level and Composition of Saving*, by Steven Maguire. crsphpgw