EFFECTS OF PROPOSED TAX REFORMS ON THE INTERNATIONAL COMPETITIVENESS OF U.S. INDUSTRIES

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Executive Summary

The Senate Finance Committee asked the International Trade Commission to determine the effects that tax reform proposals made by the President and the House Ways and Means Committee would have on the international competitiveness of U.S. industries. This is the first time in nearly a decade that the Commission has been asked to study the trade impact of major domestic legislation.

In response to the Committee's request, this study estimates how the proposed tax changes would affect the imports and exports of U.S. industries. The study also estimates the effects of these proposals on the cost of capital and on relative prices (but not the overall level of domestic prices). The estimates cover all major sectors of the U.S. economy. The sectors are those of the Commerce Department's small input-output table.

Effects of tax reform on trade

- When looking at individual industries, the estimated trade effects of either reform proposal are small relative to domestic output.

This is true even though our estimating methods tend to overstate the trade effects. Two major determinants of the importance of the trade effects in an industry are the price sensitivity of imports and exports, and the importance of imports and exports relative to domestic output.

- Our best estimates show that, for either the President's or the House proposal, none of the adverse trade effects would be as great as 1 percent of U.S. output.

The industries that would be affected most adversely by the President's proposal would be Office computing and accounting machines, and Motor vehicles and equipment. The increase in net imports in these sectors is 0.6 percent and 0.7 percent of domestic production, respectively. No other industries would be adversely affected by as much as 0.5 percent of domestic production.

Under the House proposal, the industry most adversely affected would be Chemical and fertilizer mineral mining. Net imports in the industry would increase by as much as 0.9 percent of domestic production; no other industry would be adversely affected by as much as 0.5 percent of domestic production.

- Under both proposals, the industry benefiting the most would be Footwear and other leather products.

The decrease in net imports for this industry would be from 1.7 to 2.4 percent of domestic output under the President's proposal and from 3.0 to 4.4 percent under the House proposal.

Other industries that would benefit under the President's proposal include Other agricultural products, with a decrease in net imports of from 0.7 to 0.8 percent of domestic output; Leather tanning and finishing, 1.1 to 1.3 percent; and Miscellaneous manufacturing, 1.1 to 1.8 percent.

Other industries that would benefit under the House proposal include Apparel, with a decrease in net imports of from 0.6 to 0.9 percent of domestic output; Household furniture, 0.3 to 0.6 percent; Leather tanning and finishing, 0.5 to 0.9 percent; Office, computing, and accounting machines, 0.3 to 1.1 percent; Radio, TV, and communication equipment, 0.4 to 0.7 percent; Aircraft and parts, 0.8 to 1.3 percent; and Miscellaneous manufacturing, 0.4 to 1.7 percent.

Effects on the cost of capital

- The effect on the cost of capital would vary significantly among different types of assets. Most short-lived assets would be adversely affected by both proposed reforms, whereas very long-lived assets would be favorably affected.

After accounting for the asset mix used by each industry, it was found that the changes in corporate taxes in the President's proposal would reduce the average cost of capital for most industries, whereas the changes in the House Ways and Means Committee proposal would increase the cost of capital for every industry except Real estate and rental. The two proposals would raise average corporate taxes by similar amounts. However, the two proposals differ markedly in the rate at which returns from new investment are taxed, and it is this rate that determines the effect on the cost of capital.

A characteristic of the House bill is that it would provide more uniform tax rates among different industries. The marginal effective corporate tax rate (the tax rate on the last, or "marginal," unit of corporate investment) generally would vary more among different industries under the President's proposal than Under the House bill.

Under the President's proposal, the largest reductions in the cost of capital among traded-goods industries would occur in Apparel, Miscellaneous textile goods, Leather tanning and finishing, and Footwear and other leather products. These declines were between 7 and 8 percent. Under the House proposal, the largest increases in the cost of capital among traded-goods industries would occur in Iron and ferroalloy mining, Nonferrous metal mining, Paper and allied products, Paperboard containers, and Motor vehicles and equipment. These increases would range from 9 to 10 percent.

Effects on Prices

- Even if all of the changes in the cost of capital were completely passed through by each industry at each stage of production, the changes in prices in the traded goods industries would still be quite small.

Under the President's proposal, these price changes (mostly price reductions) would all be less than 3 percent. Under the House proposal, these price changes (mostly price increases) would all be less than 4 percent. Under both proposals, the largest price increase would occur in Communications, except radio and TV. Under the House proposal, the second largest price increase would be in Electric, gas, water and sanitary services. Under the President's proposal, the second largest price increase would be in Transportation and warehousing.

Scope and limitations of the Commission's study

- The focus of the study is on the effects of the proposed tax changes on international trade of individual U.S. industries, and these are not the same as the effects on total domestic output of these industries.

The effects of tax changes on domestic output are likely to exceed the effects on trade. For example, even in an industry with no international trade, domestic producers would probably still experience some loss in sales if a tax increase raised their output price.

- Without its own macroeconomic model, the Commission was unable to make estimates of the aggregate trade-balance effects of either tax-reform proposal.

However, the Commission made estimates of what the trade effects would be for each industry if the aggregate trade balance changed in accordance with the predictions of various macroeconomic models, 1/ and if it did not change at all. Estimates of the industry trade effects were also made as though the value of the dollar were fixed.

1/ For the House proposal, these were the predictions from Wharton Econometric Forecasting Associates, Inc., Jan. 29, 1986, and Lawrence H. Meyers and Associates, Nov. 25, 1985. For the President's proposal, these were the predictions from Wharton Econometric Forecasting Associates, Inc., Oct. 16, 1985. All of these models predicted fairly small effects on the aggregate trade balance.

For any industry, tax reform directly affects the cost of doing business, but it also affects the environment in which the industry must operate. For example, the 1981-1982 investment tax incentives lowered the cost of capital to U.S. firms, but by reducing tax revenues they added to the large increase in the Federal budget deficit, which caused large capital inflows and contributed to a stronger U.S. dollar. The stronger dollar resulted in an unprecedented increase in U.S. imports and stagnating exports.

There are other possible macroeconomic considerations that should be mentioned. For example, if tax reform is revenue neutral but slows down economic activity, it would also tend to cause a decline in imports. In such a case, U.S. industries would be harmed by tax reform even while the trade balance is improving.

The above examples illustrate that the effects of tax reform on international trade might be different from what one would expect. In particular, the effects of tax reform on international competitiveness cannot be addressed by looking only at the direct effects of tax reform on the cost of capital. It is also necessary to account for macroeconomic considerations, such as the effects on international capital flows.

- In evaluating the effects of the two tax reform proposals on industry trade balances, the Commission considered only the tax changes that would cause a predictable change in business costs. Other changes, such as the treatment of personal income earned overseas, are only discussed qualitatively.

It would have been impossible to take into account the effect of every proposed change, even if more than four months were allowed to complete the study. Included in the analysis were the effects of the changes in depreciation schedules, the elimination of the Investment Tax Credit, the reductions in the statutory corporate tax rates, and the introduction of a deduction for dividends paid. These changes in the tax code account for most of the predictable change in the relative international competitiveness of U.S. industries.

Methodology

To estimate the trade effects of the proposed tax changes, the first step was to determine the effects on the cost of capital by industry. We overstated these cost changes by calculating the cost changes as though no firm would reduce its costs by changing its manufacturing techniques or accounting methods in response to the tax changes. The second step was to calculate the change in the cost of inputs for each of the industries. To do this the prices of each industry were treated as though the entire change in its tax bill were completely passed on to its customers. Again, no substitution by its customers was allowed for, thus this technique also

overstates the cost change for each industry. The final step was to take these upper bound estimates of price change and to translate them into changes in exports and imports by industry. In this last step, three cases were considered. In the first case, an exchange rate adjustment was included that caused the industry trade effects to sum to the aggregate trade balance effect predicted by one of the macroeconomic models. In the second case, the exchange rate adjustment was included that caused the industry trade effects to sum to zero. (The results from the first and second cases were very similar, and are viewed as the "best" estimates.) In the third case, no exchange rate adjustment was included.

Introduction

Purpose and overall design of the study

The purpose of this study is to determine how the tax reforms proposed by the President and the House Ways and Means Committee would affect the international competitiveness of U.S. producers. 1/ More precisely, the study provides estimates of how these proposed tax changes would affect U.S. imports and exports in individual industries. The remainder of this section summarizes the analysis and points out the main issues that need to be addressed in order to construct these estimates.

There are two ways in which tax reform can affect international competitiveness: It can change production costs and the pattern of domestic prices, and it can affect international capital flows. Tax changes that affect domestic costs of production but that have no effect on international capital flows would not affect overall U.S. competitiveness. However, tax changes that affect capital flows would have a corresponding effect on overall competitiveness, regardless of their effect on the costs of individual industries.

These statements follow directly from the balance-of-payments identity and are not derived from any disputable hypothesis. According to this identity, the balance on international capital flows and the trade balance must sum to zero. Thus, one approach to examining the trade effects of tax reform is to determine the effects on international capital flows and then use the balance-of-payments identity to obtain the effects on trade flows. Such an approach was outlined by Auerbach (1986). He notes that net capital flows, and therefore the trade balance, must equal private savings of U.S. residents minus the private and government demands for credit within the United States. This means that tax reform can only reduce the trade deficit if it reduces domestic investment demand or the government demand for credit (the budget deficit), or if it increases private U.S. saving. Since the proposed reforms are largely revenue neutral, this leaves private saving and investment demand as the primary conduits by which the reforms can influence the trade balance. However, the effects of tax reform on saving and investment are quite difficult to determine. In particular, no one has been able to construct a reliable estimate of the response of private saving to a change in the rate of

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1/ Throughout this study, a tax change that reduces exports or increases imports will be said to reduce international competitiveness. A tax change that increases exports or reduces imports will be said to increase international competitiveness. The effect on overall international competitiveness is the effect on the aggregate trade balance.

return, 1/ let alone the response to a change in taxes. Furthermore, the effects of the proposals on direct foreign investment of U.S. multinational firms are complicated and difficult to determine. 2/ As a result, even the direction of the net effect of these reforms on overall international competitiveness is open to question.

These considerations indicate the need to account for macroeconomic effects of the proposed tax changes. In particular, although estimates of the actual magnitude of the effects of the proposed tax reforms on international capital flows cannot be determined precisely, these effects cannot be ignored. 3/ This study accounts for these effects by incorporating the results from macroeconomic models of the U.S. economy that have been used to estimate the overall trade-balance effects of the proposed reforms. 4/

The contribution of this study is to provide estimates of the effects on individual industries. This is done by first determining the effects of the proposed tax changes on output prices and then applying a trade model to calculate the effects on trade flows by individual industry. The model is similar to the ones used by Basevi (1968) and Rousslang and Suomela (1985) to estimate the trade effects of U.S. import tariffs. The remainder of this first part describes the major provisions of the proposed tax reforms and briefly describes how each would affect U.S. international competitiveness. It also discusses the scope and limitations of the study. The second part describes the method used to estimate the trade effects of the proposed tax reforms. The third part describes how the estimates were constructed and the fourth part presents the results.

Major provisions of the proposed tax changes

This section provides a broad discussion of the four main tax changes that are common to both of the new tax proposals. These are the reduction in tax rates on individuals, the replacement of the Accelerated Cost Recovery System (ACRS), the elimination of the Investment Tax Credit (ITC), and the

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1/ A number of studies have found that taxes have an important effect on investments of multinational corporations. (See, for example, the survey in Kopits, 1976.) In the most recent study, Hartman (1985, p. 484) finds that "A change in U.S. tax policy which tends to diminish the tax rate faced by foreigners (for example, a decrease in federal or corporate income taxes), provides strong encouragement to increase foreign investment in the U.S."

2/ Fortunately, such results are available for both proposals. (See page 14.)

3/ Fullerton (1982) provides a brief summary of attempts to estimate this responsiveness.

4/ Mentz (1986) notes that both proposed reforms are revenue neutral as regards their impact on taxation of foreign income.

reduction in the overall statutory tax rate on corporate income. Each change is considered in isolation, as if it were the only change from current law. More detailed discussions of the other provisions in both proposals are given in appendixes A and B. 1/

The ACRS allows firms to take generous depreciation allowances that often exceed the actual rate at which depreciable assets wear out in the first years of the asset's life. This provision was designed in part to offset the effects of inflation on depreciation allowances. With high inflation rates, depreciation allowances based on true economic rates of depreciation are not sufficient to replace wornout assets. The ACRS compensates for this by letting firms get their depreciation allowances back faster, before they are eroded by inflation. The President's proposal moves depreciation allowances closer to the actual rate at which assets wear out, but it also indexes depreciation allowances for inflation. Thus, the President's proposal provides more generous depreciation allowances than current law at high rates of inflation, but is sometimes less generous than current law at low rates of inflation. The House Ways and Means Committee proposal also moves depreciation allowances closer to the actual rate at which assets wear out, but the allowances are only partially indexed for inflation.

The ITC gives a credit against current tax liabilities equal to 10 percent of the firm's current investment in new machinery and equipment. 2/ This provision is an obvious incentive to such investment and can result in substantial tax savings to those who can take advantage of it.

To keep the exposition as simple as possible and to concentrate on the relative price effects of the tax changes, the remainder of this broad discussion assumes that the proposed tax changes would not affect the average domestic price level. The focus is on relative price changes because these are important in determining the individual industry effects of the proposed changes.

Reduction in tax rates on income of individuals.--The reduction in tax rates on income of individuals affects the cost to U.S. producers of both capital and labor. Consider first the effect on the cost of labor. By reducing taxes on wages, the proposed rate reduction would tend to lower labor costs of U.S. producers. The size of the reduction in labor costs depends on how responsive the labor supply is to a change in the wage rate. This responsiveness has been the subject of considerable debate, but most studies

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1/ App. A lists the provisions in each proposal and shows the expected effect of the various proposed changes on U.S. tax revenues. App. B lists the concerns about some of these provisions that were expressed by industry representatives at the Commission hearings on the tax reform proposals and in post-hearing briefs to the Commission.

2/ The ITC is only 6 percent for investment in autos.

find it to be fairly small, 1/ indicating that the tax reduction would probably have little effect on labor costs of producers. However, to the extent that labor costs are reduced, this would tend to cause prices of labor-intensive industries (industries where labor costs account for a high proportion of the total value added) to decline relative to prices of other industries.

The reduction in individual tax rates on income from capital would tend to lower costs of capital to U.S. producers by shifting downward the supply curve of capital they face, increasing the supply of capital at any given price. This cost reduction would be greatest for industries that are relatively capital intensive and would tend to cause their prices to decline relative to prices of other industries. This effect is also likely to be small. By itself, the tax reduction would not make U.S. investment more attractive relative to foreign investment opportunities, because U.S. residents must pay the same tax rate on income from capital regardless of the geographical source of this income. 2/ Therefore, it would increase the supply of capital to U.S. producers only to the extent that it increased total U.S. saving. However, changes in the returns to saving appear historically to have elicited only very modest changes in the saving rate. 3/ Instead, saving appears to be determined largely by income. Furthermore, part of any increased U.S. saving would go abroad, both as a result of U.S. residents keeping a balance between domestic and foreign investments in their portfolios and in response to the reduction in U.S. rates of return that might be caused by the increased supply of saving. For these reasons, the lower tax rate on capital income of individuals would probably have little effect on the cost of capital.

Prices of labor-intensive industries and prices of capital-intensive industries cannot both fall relative to each other. The net effect of the reduction in labor costs and capital costs on the pattern of prices among U.S. industries is difficult to determine accurately, since we lack reliable estimates of the parameters that are needed to make such a determination. However, the net effect will be smaller than the effect of either the labor or the capital cost reduction by itself, and since both effects are likely to be small, the net effect is also likely to be small. This means that in the absence of any effects on international capital flows, the reduction in tax rates on income of individuals is likely to have little effect on relative prices among individual industries.

1/ See, for example, the study by Burtless and Hausman (1978). Fullerton (1982) provides a handy summary of studies that have estimated labor supply elasticities. This responsiveness is not given by the ordinary supply of labor facing a given industry. The ordinary supply curve indicates the response of labor to a change in the industry wage holding constant the wages in all other industries. For purposes of estimating the effects of the tax reduction, what is needed is the supply curve facing the industry when any wage change in the industry is matched by the same percent change in every other industry.

2/ There is no withholding tax on foreign interest income from the United States, and the tax rate on foreign dividend income from the United States is largely fixed by treaty.

3/ Statistical studies on the value of this elasticity are inconclusive. See, for example, Boskin (1978) and the criticism of this work by Hourey and Hymans (1978).

The outflow of part of the increase in U.S. saving mentioned above would, in the short run tend to depress the value of the dollar in foreign exchange markets and improve the overall U.S. trade balance. In the longer run, the increased net foreign investment would lead to increased repatriation of income from abroad, putting upward pressure on the dollar and reducing competitiveness of U.S. industries. The effects on overall competitiveness would probably not be very great in either the short run or the long run, because the response of saving to the tax reductions would probably not be very great.

Elimination of the ACRS and the ITC.--The elimination of the ACRS and ITC would reduce substantially the after-tax returns to investment in new machinery and equipment. Industries that invest heavily in such assets would experience an increase in their cost of capital, which would tend to cause them to experience price increases relative to other industries. This effect on relative prices might be more important than the effect of a change in overall individual tax rates for two reasons. First, unlike a uniform change in the tax rate on all capital income, the elimination of ACRS and ITC will cause shifts away from certain types of capital (namely equipment and machinery) toward other forms. Thus, costs of this type of capital would increase even if the overall supply of saving for U.S. investment remained unchanged. Second, since U.S. income from foreign investment does not now receive benefits from the ACRS or ITC, elimination of these benefits for domestic investment would tend to make foreign investment relatively more attractive, both for U.S. and foreign investors, and tend to cause capital to move away from the United States. This would further increase costs of capital to all U.S. producers. 1/ However, in the short run these international capital outflows would tend to cause the dollar to depreciate, which would help reduce prices of all U.S. producers relative to foreign competitors.

International competitiveness of U.S. producers that use machinery and equipment relatively intensively is impaired by the increase in the cost of this type of capital. This cost increase would adversely affect trade in these industries, which would tend to cause the dollar to depreciate. In the short run, the dollar might tend to depreciate further due to the effect of the tax changes on international capital flows. Thus, in the short run the net effect on the international competitiveness of U.S. producers that use machinery and equipment relatively intensively is ambiguous. The increase in their cost of capital would raise their production costs and their prices, but the tendency toward depreciation of the dollar would help reduce their prices relative to foreign competitors. International competitiveness of other industries that use less machinery and equipment is likely to improve. Their prices will be relatively unaffected by these tax changes, but they will gain price advantage relative to foreign producers as a result of the dollar depreciation.

In the longer run, the initial capital outflows would give rise to net capital inflows as they later give U.S. residents greater income from foreign investments and causes foreign investors to receive less income from U.S.

1/ If, as is sometimes the case, capital is quite mobile internationally within an industry, the effects of these tax changes on new domestic investments in the industry could be particularly adverse.

investments. This would tend to cause the dollar to appreciate and reduce the international competitiveness of all U.S. industries. Thus, in the longer run the effect of the tax changes on international competitiveness of machinery-intensive industries is unambiguously adverse, but the effect on competitiveness of other industries is ambiguous. In the very long run, after the effects on capital flows are largely dissipated, the net effect of these tax changes would be to reduce international competitiveness of machinery-intensive industries and increase that of other industries. In the absence of any net negative effects on international capital flows, any net negative effects on trade of U.S. machinery-intensive industries must be made up by net positive effects on trade of other U.S. industries.

Reductions in the statutory corporate tax rates.--A reduction in the statutory corporate tax rate would tend to cause U.S. investors to shift their investments away from countries where rates are higher than the new U.S. rates. This is true because, although U.S. corporations get a tax credit against their U.S. taxes equal to the foreign income taxes they pay, such credits are useless to the extent that they exceed the U.S. tax liability. This would make countries with higher tax rates less attractive to U.S. investors relative to countries with lower tax rates. Also, the President's reform proposals would prevent multinational corporations from applying excess tax credits generated in any foreign country to their U.S. tax liabilities on income from investments in other foreign countries, and the House bill would prevent multinationals from using excess foreign tax credits generated in one type of activity from being applied to their U.S. tax liability on foreign income from other types of activity. Thus, the reduction in the statutory rates in either proposal would probably tend to cause a net capital inflow, since U.S. investment opportunities would be made more attractive relative to investments in some high-tax countries. This capital inflow would tend to cause the dollar to appreciate, impairing the international competitiveness of U.S. producers in the short run. At the same time, it would reduce capital costs of U.S. producers and tend to cause a decline in prices of capital-intensive industries relative to other U.S. industries.

For capital-intensive industries, the price advantage from the lower cost of capital and the possible price disadvantage from the exchange rate appreciation make the short-run trade effects of the reduction in the statutory corporate rates ambiguous. The effects on international competitiveness of other U.S. industries is unambiguously negative. In the long run, after the effects on capital flows have largely worn off, the reduction in the statutory rates would tend to improve international competitiveness of capital-intensive industries and impair the competitiveness of other industries.

This discussion of the effects of a reduction in the U.S. statutory rates assumes that there is no response on the part of foreign governments. This assumption is unrealistic, since many countries use tax incentives to attract foreign investment. However, since repatriated income of U.S. investors is taxed at the U.S. rate and a tax credit is given for foreign income taxes, there is an incentive for foreign governments to tax income of U.S. affiliates at the same rate. 1/ They would merely lose tax revenue to the U.S. Treasury

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1/ Some incentive arises because U.S. taxes due on income from foreign subsidiaries of U.S. corporations are deferred until that income is repatriated. However, the effects of this tax deferral are generally believed to be fairly small. See, for example, Rousslang and Pelzman (1984).

without attracting any additional U.S. investment. On the other hand, if they failed to reduce their rates in response to a reduction in U.S. rates, they would provide a disincentive for U.S. investment. To prevent this, other countries might lower their corporate income tax rates to counter the reduction in the U.S. rates.

Combined net effects of the major proposed tax changes.--The above discussion shows that the trade effects of the various tax changes often conflict with one another, and the net effect is often ambiguous. Therefore, the direction as well as the magnitude of the trade effects must be determined with the aid of empirical evidence.

A few qualitative statements are possible. To the extent that a proposed reform raises the cost of capital, it will adversely affect international competitiveness of capital-intensive industries in the long run. If the proposed reform reduces the tax rate on income from foreign affiliates of U.S. corporations relative to the tax rate on their domestic income, it could cause net capital outflows from the United States that would work to improve the overall U.S. trade balance (and overall U.S. competitiveness) in the short run. However, it should be noted that increases in competitiveness purchased at the expense of a dollar depreciation are not necessarily beneficial to all U.S. residents. A dollar depreciation would raise the prices U.S. residents must pay for imports.

Scope of the study

Determining the trade effects of all of the proposed tax changes would require considerable resources, and it is necessary to limit the scope of the exercise. The following describes the major limitations of this study.

First, the focus of the study is on the effects of the proposed tax changes on international trade of individual U.S. industries, and these are not the same as the effects on total domestic output of these industries. In particular, the effects of tax changes on output are likely to exceed the effects on trade. For example, even in an industry with no international trade, domestic producers would probably still experience some loss in sales if a tax increase raised their output price.

Second, the study is not directly concerned with whether the present tax system or either of the proposed alternatives favor or discriminate against particular U.S. industries compared with some system that might be perfectly fair or neutral. Instead, it is concerned only with how the tax proposals would change the international competitiveness of individual industries. In a similar vein, the tax policies of other countries are relevant for this study only insofar as they determine how the proposed tax changes would affect costs of U.S. producers or international capital flows. In particular, a comparison of foreign and U.S. tax laws, showing how laws in different countries are more or less favorable to individual industries or to different types of capital investment, cannot be used directly to help measure the trade effects of the tax proposals. Such comparisons are more useful when policymakers are considering how to tax U.S. industries fairly, and deciding what tax incentives to provide various U.S. industries in the face of foreign tax provisions that might substantially help or hinder competitiveness of specific

industries abroad. 1/ They appear to provide little help in evaluating the trade effects of proposed tax changes. 2/ To identify these effects, all other factors must be held constant. Nevertheless, in the interests of completeness, appendix C summarizes some of the comparisons that have been made between U.S. and foreign tax provisions. The comparisons are limited to taxes on income from capital.

Third, the study does not give quantitative evidence to address an important argument in the debate over the effects of the proposed tax changes on international competitiveness. This is the argument that investment in new machinery, which both of the new tax proposals tend to discourage relative to current U.S. law, is needed to keep U.S. industries modern. According to this argument, most technology is embodied in machinery, and investment in new machinery is the primary means by which new technology is introduced into the production process. Thus, even though they treat research and development expenditures in much the same way as the current law, the new tax proposals might have the effect of discouraging technological advance, with significant adverse consequences for international competitiveness of U.S. industries in the long run. This argument would provide strong support for maintaining current preferential tax treatment for investment in new machinery, and it needs to be examined carefully.

Although there is little empirical evidence that bears directly on this argument, some inferences can be made from economic reasoning. According to elementary trade theory, the only way a country can give some of its local producers a permanent competitive edge in international markets is at the expense of other domestic producers that compete internationally. Thus, for long-run international competitiveness, the question becomes "Should action be taken to help international competitiveness of machinery-intensive industries at the expense of other U.S. industries?" The answer depends on whether the market allocates resources efficiently. The presumption of both the Administration and the House Ways and Means Committee is that their tax proposals, by treating all capital investments more neutrally instead of favoring investment in machinery, will improve overall efficiency. In the words of the committee:

> "The committee's fundamental view, embodied also in contemporaneous proposals for tax reform, is that the tax system makes the greatest contribution to economic growth when it has the lowest possible tax rates and does not try to prescribe how growth will happen. The strategy that any particular business might choose as most promising--whether to employ more or less equipment or labor, adopt

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1/ The role of taxes as an instrument of industrial policy is discussed in some detail in U.S. Congress, Subcommittee on Economic Stabilization of the House Committee on Banking, Finance and Urban Affairs (1984).

2/ After examining such comparisons, the staff of the Joint Committee on Taxation concluded that "comparative studies of tax policy and economic performance do not appear to provide conclusive evidence that countries with low effective tax rates achieve greater growth and investment than countries with high effective tax rates." (U.S. Congress, Joint Committee on Taxation, 1986, p. 15.) In fact, the data they present seems to show that high tax rates go with high rates of growth and investment.

different management practices, alter marketing and purchasing procedures, and so on--is a matter the committee feels is best left to private decisionmaking, undistorted by large tax preferences which presume that one answer fits all cases. This is the reason for the committee's decisions to scale back special tax benefits for expenditures on depreciable assets and to lower marginal tax rates." 1/

An argument has been advanced that investment in new machinery that puts new technology to work might generate some positive returns that private investors are unable to capture. (These uncaptured returns are called external economies, or externalities.) This argument maintains that the market might not allocate sufficient resources to new machinery and supports retention of the ITC and the ACRS to offset this alleged imperfection. 2/ However, measurable positive externalities for investment in machinery have not yet been demonstrated.

A stronger argument in favor of leaving the current tax code unchanged might be that the new proposals would discourage new investment in a number of industries and could cause significant adjustment costs in the short run that would substantially outweigh the long-run efficiency gains. As noted by the Subcommittee on Economic Stabilization:

"Our economic structure has adjusted in response to the 'economy-shaping' features of the tax code, and adjustment to a neutral tax system could impose significant transition costs. Mature basic industries are the principal beneficiaries of many of the investment provisions of the corporate tax code, and it has been argued that they stand to lose if simplification ends these preferences . . . . This concern needs to be addressed." 3/

The estimates from this study on the disaggregate trade effects of the proposed tax changes are meant to provide some information about these potential disruptive effects.

1/ U.S. Congress, House Ways and Means Committee (1985), p. 146.

2/ The effects on international competitiveness is an issue because the output effects of a given incentive or disincentive to investment in machinery can be magnified through trade. For example, in the absence of international trade, a new tax on machinery used in, say, the domestic auto industry might have little effect on investment in such equipment if the total U.S. demand for cars were not very price responsive. But in the presence of trade, the disadvantage to domestic producers could cause significant reductions in domestic output and investment in the auto industry, even if total sales of new cars in the United States remained fairly constant. In short, according to this argument the United States might lose benefits of externalities from investment in machinery and equipment, and these benefits might be eagerly picked up by foreign countries. Indeed, this is an important element in the debate over industrial targeting. (See the report by the U.S. International Trade Commission, 1983.)

3/ U.S. Congress, Subcommittee on Economic Stabilization of the House Committee on Banking, Finance and Urban Affairs (1984), p. 6.

Fourth, this study does not attempt to model the trade effects of all of the provisions in either the President's proposal or the House bill. Instead, it models only the effects of the main provisions that affect corporate taxes in both sets of proposals. These are the elimination of the investment tax credit, the changes in the schedule of depreciation allowances, the introduction of deductions for dividends paid, and the changes in the overall statutory corporate tax rate. The elimination of the investment tax credit and the return to less generous depreciation rules were repeatedly cited in testimony before the Commission as the most important provisions in the proposed tax reforms from the viewpoint of effects on U.S. competitiveness. 1/ Analyses of the effects of other tax changes, such as the effects of restricting the use of foreign tax credits and other changes in U.S. taxation of foreign source income, of changes in rules affecting depletion allowances, and of changes in taxation of income of U.S. workers abroad, are limited to statements made about these provisions in testimony before the Commission 2/ and to qualitative discussions.

Finally, this study considers only the effects of tax reform on the cost of capital and ignores the effects on cash flows of corporations. That is, it concentrates on the tax on returns from new investment and ignores the tax on returns from investment already in place. This procedure is the common approach to estimating the effects of taxes on prices and the allocation of resources. It is possible that changes in cash flow would also have some effect on new investment decisions of firms, but there is little reason to expect this effect to be quantitatively important.

Methodology

The methodology for estimating the trade effects of the proposed tax changes can be divided into three main parts. The first part describes the method used to estimate the effects of the proposed tax changes on production costs of the individual industries. The second part describes the method used to calculate the effects of the tax changes on international capital flows and the aggregate trade balance. The third part describes the method used to estimate the effects of the cost changes and the change in capital flows on trade flows in individual industries. This section provides an overall description of all three methods. Most of the technical equations are relegated to appendix D.

The effects on production costs

As was discussed in the introduction, the effect on production costs of a tax on capital income depends on whether the tax is passed forward to producers or is absorbed by ultimate owners of capital. The same is true for the effects of a tax on wages of workers. In both cases, whether the tax is passed forward depends on whether the taxed party can escape the tax by moving

1/ See Official Transcript, Proceedings Before the U.S. International Trade Commission, "The Effects of Proposed Tax Reform on the International Competitiveness of U.S. Industries," investigation 332-220, Washington, DC, Jan. 28, 1986.

2/ These statements are summarized in App. B.

elsewhere, either to another industry or to another country. For example, an increase in the tax on wages of workers in one U.S. industry would tend to put that industry at a disadvantage in hiring workers, since the industry would need to offer workers a higher pretax wage. Thus, the tax increase would be largely passed forward to producers in the industry. On the other hand, a uniform increase in the tax on wage income of workers in all industries would probably be largely passed back to workers, who would then receive a lower wage after taxes. This is true, because the reduction in net wages would probably cause few workers to withdraw from the labor market, and domestic workers would have no other avenue open to them to escape the tax increase.

This same line of argument applies to a uniform change in the tax on capital income of individuals, since the supply of saving appears to be fairly inelastic with respect to the rate of return. Although international investment opportunities might allow owners of capital to escape a tax increase if it were levied only on income of domestic residents from capital at home and not on their income from foreign investments, or if the tax caused foreign residents to reduce their U.S. investments, neither appears to be the case for the proposed changes in taxes on income of individuals.

In light of these considerations, this study concentrates on the effects of the proposed changes in the corporate income tax. Even if some of the reductions in the tax on income of individuals in these proposals were passed through in the form of wage decreases or decreases in the overall cost of capital, the effect of these tax reductions on relative prices would partially cancel each other. In contrast, the changes in corporate taxes do not affect returns from domestic and foreign source income uniformly, and capital can leave the corporate sector within the U.S. economy. Therefore, since it is changes in relative prices (along with the change in the exchange rate) that determine the effects on trade flows of individual industries, it seems appropriate to concentrate on the change in corporate taxes. The corporate tax changes included in the model are the elimination of the Investment Tax Credit, the changes in depreciation allowances, the introduction of dividend deductions, and the reductions in the overall statutory rate.

There are two major shortcomings in this approach if the results of the study are to be interpreted as the effects of all the changes in the proposed tax reforms. First, although uniform reductions in taxes on both wage and capital income of individuals are not generally expected to cause significant reductions in wage or capital costs of producers, these expectations are based on the notion that the elasticity of the labor supply and the elasticity of the supply of saving are small. However, as was already noted, there is some dispute as to the size of these parameters. Second, the model fails to consider a number of changes in corporate taxes. Although the changes that are ignored are not expected to have an important effect on international competitiveness of most industries, they could have important effects in some industries. For example, both proposals would change depletion allowances and these changes could have an important effect on capital investment in some natural resource industries. Even industries that are not directly affected by the ignored changes could be affected indirectly through a change in the cost of an intermediate input. In view of these shortcomings, strictly speaking the only claim that can be made for the quantitative results of the study is that they provide estimates of the effects of the four changes in corporate taxes that are explicitly included in the model.

The changes in corporate taxes affect relative prices through their effect on the cost of capital. There is a fairly standard method for determining the effects of corporate taxes on the cost of capital. This method is described in considerable detail in King and Fullerton (1984). It is based on the Hall-Jorgenson (1967) cost-of-capital formula and has been widely used. 1/ The form of the equation used in this study is 2/

$$R = [i(1 - u + c) - p + d](1 - k - z)/(1 - u + c) - d, \quad (1)$$

where R = the equilibrium real rate of return before taxes and after accounting for depreciation,

i = the nominal rate of interest,

u = the statutory corporate income tax rate,

c = the tax savings from the deduction for corporate dividends paid per dollar of pretax returns,

p = the rate of inflation,

d = the rate of economic depreciation,

k = the investment tax credit per dollar of investment,

z = the present value of the tax savings from the depreciation allowance.

Since firms can invest in bonds or physical capital, there should be an equality between what firms can earn after taxes on their capital investments and what they could earn from the bond market. 3/ The after-tax earnings from an investment in bonds is given as

$$B = i(1 - u + c) - p \quad (2)$$

where B is the real rate of return in the bond market. The marginal effective corporate tax rate measures the difference between R and B as a percent of R, or

$$E = (R - B)/R, \quad (3)$$

where E is the marginal effective corporate tax rate, which is also a measure of the increase in pre-tax returns needed to compensate for corporate taxes, or the percent increase in the cost of capital caused by the corporate tax.

1/ See, for example, Jorgenson and Sullivan (1981), Hulten and Wykoff (1981), Gravelle (1982), Fullerton and Henderson (1985), and Fullerton (1985).

2/ Equation (1) is adapted from Fullerton and Henderson (1985).

3/ This is the assumption of firm arbitrage. It is used in Bradford and Fullerton (1983), Fullerton (1985), and Fullerton and Henderson (1985). For an alternative, see Brumbaugh and Gravelle (1984).

The main effects of the new tax proposals on corporate income are the elimination of the ITC, the replacement of the ACRS, the reduction in the statutory corporate income tax rate, and the deduction for dividends paid. The effects of each proposal on the cost of capital can be calculated by making the appropriate changes in equations (1) and (2) above.

The effects of changes in the depreciation allowances are captured in the variable z, the present value of the tax savings from the depreciation allowance. For example, a scheme that postponed depreciation allowances would yield a lower value of tax savings from depreciation allowances. This variable is the product of the statutory corporate tax rate, the present value of the depreciation allowances per dollar of depreciable base, and the depreciable base per dollar of new investment. (This base is less than unity for assets for which the ITC is used.) The variable c accounts for the effects of the corporate deduction for dividends paid. This variable is the product of the statutory corporate tax rate, the dividend deduction, and the dividend payout rate. Under the President's proposal, the dividend deduction is 10 percent. Under the Ways and Means Committee proposal, this deduction begins with 1 percent in 1987 and climbs by 1 percent each year until it reaches 10 percent. (There is no dividend deduction under current law.)

The calculations of the effective tax rates are designed to capture the effect of tax changes on new investment decisions. For purposes of determining these effects, the change in the marginal effective tax rate is the appropriate concept to use. The marginal effective tax rate should not be confused with average tax rates. A detailed analysis of the difference between average and marginal rates and the appropriate uses for each is given in Fullerton (1984). A simple example demonstrates this difference. An increase in taxes on income from capital already in place coupled with a substantial decline in taxes on income from new investment would obviously give an incentive for new investment, even though these changes combined could raise total tax collections.

Several additional factors are important in determining the price effects of the changes in marginal effective corporate taxes. First, the marginal tax rate obviously varies by type of asset, since elimination of the ITC and the proposed changes in depreciation allowances have different effects on investments in different assets. Therefore, it is necessary to measure the marginal tax rate for each asset and then use data on the asset mix of each industry to find the appropriate marginal tax rate for the industry. Second, the change in the cost of capital must be converted to a change in output price. To do this, it is necessary to measure the returns to capital as a percent of total costs in the industry. This was done by measuring the return to property income as a percent of industry sales. (These data are available from the input-output table for the United States.) Finally, since corporations account for only part of total sales of the various industries, the price effects of the change in their costs might be diluted by the presence of producers whose costs are not directly affected by the changes in corporate taxes. However, it is also possible that the supply of corporate investment to some sectors is highly elastic, so that returns to corporations in the sector are held close to the overall return to all corporations. In such cases, corporate costs could determine industry prices, even if corporations accounted for only a part of total output.

The effects on international capital flows and the aggregate trade balance

Estimating the effects of the proposed tax changes on international capital flows and the aggregate trade balance is probably the most difficult part of determining the disaggregate trade effects of the proposed tax changes. Estimates of the aggregate trade-balance effects require a complete general equilibrium model of the U.S. economy. To obtain these aggregate estimates, this study relies on results from macroeconomic models that have been used to simulate the aggregate trade balance effects of the tax reform proposals. (The following results are all given in constant 1984 dollars.) Simulations by Wharton Econometric Forecasting Associates, Inc. 1/ show that the House Ways and Means proposal would increase the trade deficit by an annual average of about $100 million over the period from 1987 to 1990. Simulations by Laurence H. Meyer and Associates 2/ (using the Washington University macroeconomic model) show that this proposal would increase the trade deficit by an annual average of about $3 billion from 1986 to 1990. For the President's proposal, simulations by Wharton Econometric Forecasting Associates, Inc. 3/ show that the tax changes would improve the trade balance by an annual average of about $1.7 billion over the period from 1986 to 1990.

The results of these macroeconomic models are used in this study only to obtain evidence on the likely effects on the trade balance. The effects on the overall level of exports and imports predicted by these models will generally not be the same as those predicted in this study. The estimates in this study do not predict changes in overall demand or in total demand of individual industries. The estimates address only the question of the change in competitiveness of domestic and foreign suppliers in satisfying this demand. 4/

The effects on industry trade flows

After determining the total price effects of the proposed tax changes and the effects on the aggregate trade balance, these effects are combined to produce the estimates of the effects on trade flows by industry. The method used is a straightforward application of the standard model developed by Basevi (1968), except that an equation is added to account for the effects on international capital flows. This is the same basic method used by Rousslang and Suomela (1985) to calculate the trade effects of an import surcharge. According to this method, the change in imports in each industry is determined by the responsiveness of industry imports to the change in price of the competing domestic suppliers, the change in price (the total price effect) caused by the tax change, and the change in the exchange rate that would be

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1/ Wharton Econometric Forecasting Associates, Inc., Jan. 29, 1986.
2/ Lawrence H. Meyers and Associates, Nov. 25, 1985.
3/ Wharton Econometric Forecasting Associates, Inc., Oct. 16, 1985.
4/ Changes in trade lead to changes in domestic demand for inputs to production that lead to further changes in trade, and these secondary trade changes are also ignored in this study. However, most of these secondary trade effects are fairly small. (See Rousslang and Parker, 1981.)

necessary to ensure that the sum of all the industry changes in imports and exports was equal to the net change in international capital flows. Similarly, the change in exports in each industry is determined by the responsiveness of industry exports to a change in the industry price, the total price effect of the tax change, and the exchange rate change.

The detailed equations for calculating the effects on imports and exports are given in Appendix D. Estimates of the effects on imports and exports are made for 62 industry categories of the Commerce Department's small input-output table. Data on price responsiveness of U.S. imports and exports are taken from the study by Robert Baldwin (1976).

Applying the Model

Marginal effective tax rates were calculated from equations (1) and (2) for 53 different types of assets. Calculations were based on a real after-tax rate of return of 4 percent and expected inflation of 5 percent. 1/ Since the real rate of return and the expected inflation are taken as given, this means that inflation adds more than point-for-point to the nominal interest rate, as in Darby (1975).

When measuring marginal effective tax rates, it is assumed that firms take full advantage of the various incentives in the tax system. For example, it is assumed that in making investment decisions, firms count on getting full benefits from the ITC and that they plan to take the most generous depreciation expenses allowed. This procedure tends to overstate the effects on investment decisions of many of the proposed tax changes. For example, some firms might not count on being able to take the full ITC on new investments owing to insufficient tax liabilities. Their investment decisions would presumably not be as adversely affected by elimination of the ITC as if they had counted on getting the full tax benefit of this credit. Similarly, some firms do not depreciate assets as rapidly as current law allows, and so are less affected by changes in asset recovery periods.

The rates of economic depreciation used in the calculations are based on those in Hulten and Wykoff (1981) and Jorgenson and Sullivan (1981). These studies provide economic depreciation for more aggregate categories of assets than those used in this study. To get depreciation rates for the less aggregate categories, the rates in these studies were adjusted according to the schedule of asset lives in Gorman, Musgrave, Silverstein, and Comins (1985), p. 42. 2/

A dividend payout rate of 35 percent was used to calculate the tax savings from the deduction for corporate dividends paid. 3/ For the House

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1/ These are standard assumptions for these variables. See, for example, Fullerton (1985), Fullerton and Henderson (1985), and U.S. Department of Treasury (1985).

2/ Economic depreciation cannot be inferred from these asset lives, because assets do not depreciate uniformly during their lifetimes.

3/ This is the average dividend payout rate of all U.S. corporations for the period from 1984 to 1985, as reported in U.S. Department of Commerce (1986). The introduction of a deduction for corporate dividends might increase this rate, thus lowering the cost of capital by slightly more than is indicated in our calculations.

bill, only one-half of the dividend deduction was phased in. Future depreciation allowances were discounted at 9 percent (the firm's after-tax rate of interest) and schedules of depreciation allowances were calculated assuming that firms depreciate assets as rapidly as allowed under each of the tax laws considered.

Table 1 shows the present value of depreciation allowances for each asset class under current law and each of the proposed tax reforms. 1/ Table 2 shows the economic rate of depreciation and the ITC for each asset type. Table 3 provides the calculated marginal effective tax rate for each asset under current law and under each of the proposed reforms.

Each industry uses a variety of assets for its production process. Therefore, the marginal effective tax rate for each industry is a weighted average of the marginal effective tax rates of the assets used by the industry. The weights used to calculate industry tax rates are based on the average industry investment mix from 1974 to 1984. These investment weights were used to allocate the 53 asset tax rates among 61 industry categories. The asset investment weights for each industry were provided by the Department of Commerce in the form of computer data tapes. However, these weights do not include inventories or land. Investment weights for these latter assets were obtained from U.S. Department of Treasury (1985b), which lists inventories, land, and depreciable assets of corporations by industry. The use of actual investment weights rather than weights based on capital stocks is not completely appropriate, because short-lived assets are more heavily represented than they should be. This method was used for lack of the needed data on capital stocks. This procedure tends to overstate the adverse effects of both the President's proposal and the House bill on the cost of capital to industries, since both proposed reforms would increase the tax rate on most short-lived assets and reduce the tax rate on longer-lived assets. Table 4 shows the marginal effective corporate tax rate for each of the 61 industries under current law and under each proposed reform. (These 61 industries are not the same as the input-output industries used in the trade calculations below.) This table also shows changes in the cost of capital that would result from the changes in corporate taxes in each proposed reform. Table 5 shows corporate investment as a share of total investment in each of these industries.

The percent change in the cost of capital was applied to the share of property income for each industry to measure the direct effect of a tax reform on the output price of the industry. The share of property income in the total value of output by industry is taken from the small imput-output table for the United States published by the U.S. Department of Commerce (1984). Therefore, it was necessary to concord the 61 industry categories from the Commerce Department's investment flow model to the 77 industries of the Commerce Department's input-output model. Table 6 presents the shares of property income and the estimated direct price effects of both the proposed tax reforms for the input-output industries.

1/ The discounted values of depreciation allowances for the various asset classes under current law and under the President's proposal are available in U.S. Department of Treasury (1985, pp. 152-157). The figure for Petroleum and natural gas shafts and wells reflects a high proportion of investment in this asset that is expensed.

Table 1.
Present discounted value of depreciation allowances per dollar of investment, by asset

No.	Asset	ACRS 1/	CCRS 2/	IDS 3/
1	Household furniture and fixtures	0.837	0.890	0.811
2	Other furniture and fixtures	.837	.890	.751
3	Fabricated metal products	.837	.890	.811
4	Steam engines and turbines	.837	.853	.627
5	Internal combustion engines and turbines	.837	.853	.751
6	Farm tractors	.837	.920	.811
7	Construction tractors	.837	.920	.863
8	Agricultural machinery, except tractors	.837	.890	.751
9	Construction machinery, except tractors	.837	.920	.811
10	Mining and oilfield machinery	.837	.920	.811
11	Metalworking machinery	.837	.920	.751
12	Special industry machinery, n.e.c.	.837	.920	.751
13	General industrial equipment	.837	.920	.751
14	Office and computing machinery	.837	.940	.811
15	Service industry machinery	.837	.920	.751
16	Communication equipment	.837	.890	.751
17	Electrical apparatus	.837	.890	.811
18	Household electrical equipment	.837	.890	.811
19	Other electrical equipment, n.e.c.	.837	.890	.811
20	Trucks, buses, and truck trailers	.837	.940	.863
21	Autos	.908	.954	.863
22	Aircraft	.837	.920	.751
23	Ships and parts	.837	.853	.627
24	Railroad equipment	.837	.890	.676
25	Scientific and engineering instruments	.837	.920	.811
26	Photocopy instruments and equipment	.837	.920	.811
27	Other nonresidential equipment	.837	.890	.811
28	Industrial building	.570	.853	.627
29	Mobile (commercial) offices	.570	.890	.347
30	(Commercial) office buildings	.570	.610	.347
31	Commercial warehouses	.570	.610	.347
32	Other commercial buildings	.570	.890	.751
33	Religious buildings	.570	.610	.347
34	Educational buildings	.570	.610	.347
35	Hospital and institutional buildings	.570	.610	.347
36	Hotels and motels	.570	.610	.347
37	Amusement and recreational buildings	.570	.610	.627
38	Other nonfarm buildings	.570	.610	.347
39	Railroad structures, not replacement track	.613	.890	.676
40	Telephone and telegraph	.613	.853	.676
41	Electric light and power	.613	.853	.559
42	Gas	.707	.853	.627
43	Local transit utilities	.707	.853	.811
44	Petroleum pipeline public utilities	.707	.853	.559
45	Farm	.570	.610	.751

Table 1.
Present discounted value of depreciation allowances per dollar of investment, by asset--Continued

No.	Asset	ACRS 1/	CCRS 2/	IDS 3/
46	Petroleum and nat. gas shafts, wells------	0.967	0.963	0.921
47	Other mining shafts and wells----------	.837	.920	.751
48	Other nonresidential structures----------	.570	.853	.347
49	Railroad replacement track----------	.837	.890	.676
50	Nuclear fuel----------	.837	.890	.863
51	Residential structures----------	.570	.610	.347
52	Inventories----------	.000	.000	.000
53	Land----------	.000	.000	.000

1/ Accelerated Cost Recovery System (current law).
2/ Capital Cost Recovery System (President's proposal).
3/ Incentive Depreciation System (Congressional proposal).
4/ Over half of the investment in this asset is expensed, leading to the high average discounted value of depreciation allowances.

Source: Calculated by the staff of the U.S. International Trade Commission.

Table 2.
Economic rate of depreciation and investment tax credit per dollar of investment

No.	Asset	Real economic depreciation	Investment tax credit
1	Household furniture and fixtures	0.110	0.10
2	Other furniture and fixtures	.115	.10
3	Fabricated metal products	.092	.10
4	Steam engines and turbines	.050	.10
5	Internal combustion engines and turbines	.150	.10
6	Farm tractors	.173	.10
7	Construction tractors	.151	.10
8	Agricultural machinery, except tractors	.097	.10
9	Construction machinery, except tractors	.172	.10
10	Mining and oilfield machinery	.165	.10
11	Metalworking machinery	.123	.10
12	Special industry machinery, n.e.c.	.103	.10
13	General industrial equipment	.123	.10
14	Office and computing machinery	.273	.10
15	Service industry machinery	.165	.10
16	Communication equipment	.123	.10
17	Electrical apparatus	.112	.10
18	Household electrical equipment	.151	.10
19	Other electrical equipment, n.e.c.	.151	.10
20	Trucks, buses, and truck trailers	.254	.10
21	Autos	.333	.06
22	Aircraft	.183	.10
23	Ships and parts	.075	.10
24	Railroad equipment	.066	.10
25	Scientific and engineering instruments	.150	.10
26	Photocopy instruments and equipment	.166	.10
27	Other nonresidential equipment	.150	.10
28	Industrial building	.036	.00
29	Mobile (commercial) offices	.041	.00
30	(Commercial) office buildings	.025	.00
31	Commercial warehouses	.025	.00
32	Other commercial buildings	.025	.00
33	Religious buildings	.019	.00
34	Educational buildings	.019	.00
35	Hospital and institutional buildings	.023	.00
36	Hotels and motels	.045	.00
37	Amusement and recreational buildings	.047	.00
38	Other nonfarm buildings	.045	.00
39	Railroad structures, not replacement track	.018	.10
40	Telephone and telegraph	.033	.10
41	Electric light and power	.030	.10
42	Gas	.030	.10

Table 2.
Economic rate of depreciation and investment tax credit per dollar of investment--Continued

No.	Asset	Real economic depreciation	Investment tax credit
43	Local transit utilities	0.045	0.10
44	Petroleum pipeline public utilities	.045	.10
45	Farm	.024	.00
46	Petroleum and nat. gas shafts, wells	.076	.10 1/
47	Other mining shafts and wells	.056	.10
48	Other nonresidential structures	.045	.00
49	Railroad replacement track	.151	.10
50	Nuclear fuel	.250	.10
51	Residential structures	.015	.00
52	Inventories	.000	.00
53	Land	.000	.00

1/ Applies only to the part of this asset that is not expensed.

Source: Economic rates of depreciation are based on those in Hulten and Wykoff (1981) and Jorgenson and Sullivan (1981), and economic lives in Gorman, Musgrave, and Silverstein (1985). Investment tax credits were imputed by the staff of the U.S. International Trade Commission.

Table 3.
Calculated marginal effective tax rates by asset under current law and each proposed reform

(Percent)

No.	Asset	Current law	President's proposal	House Ways and Means Committee proposal
1	Household furniture and fixtures	-4.2	15.8	28.2
2	Other furniture and fixtures	-4.3	16.2	34.8
3	Fabricated metal products	-3.7	14.1	25.6
4	Steam engines and turbines	-2.5	13.0	31.7
5	Internal combustion engines and turbines	-5.3	24.0	39.5
6	Farm tractors	-6.0	16.2	35.7
7	Construction tractors	-5.4	14.8	26.6
8	Agricultural machinery, except tractors	-3.8	14.6	32.0
9	Construction machinery, except tractors	-6.0	16.1	35.6
10	Mining and oilfield machinery	-5.8	15.7	34.9
11	Metalworking machinery	-4.6	12.9	35.9
12	Special industry machinery, n.e.c.	-4.0	11.5	33.0
13	General industrial equipment	-4.6	12.9	35.9
14	Office and computing machinery	-9.1	17.6	45.0
15	Service industry machinery	-5.8	15.7	41.4
16	Communication equipment	-4.6	16.9	35.9
17	Electrical apparatus	-4.2	15.9	28.4
18	Household electrical equipment	-5.4	19.2	33.3
19	Other electrical equipment, n.e.c.	-5.4	19.2	33.3
20	Trucks, buses, and truck trailers	-8.5	16.7	35.8
21	Autos	-9.8	16.3	41.4
22	Aircraft	-6.3	16.8	43.4
23	Ships and parts	-3.2	16.1	37.2
24	Railroad equipment	-2.9	11.7	32.2
25	Scientific and engineering instruments	-5.3	14.7	33.2
26	Photocopy instruments and equipment	-5.8	15.7	35.0
27	Other nonresidential equipment	-5.3	19.2	33.2
28	Industrial building	41.0	11.2	28.1
29	Mobile (commercial) offices	42.6	9.2	42.2
30	(Commercial) office buildings	37.3	22.3	37.0
31	Commercial warehouses	37.3	22.3	37.0
32	Other commercial buildings	37.3	7.5	18.3
33	Religious buildings	35.1	20.7	34.7
34	Educational buildings	35.1	20.7	34.7
35	Hospital and institutional buildings	36.6	21.8	36.2
36	Hotels and motels	43.8	27.3	43.4
37	Amusement and recreational buildings	44.3	27.8	31.0
38	Other nonfarm buildings	43.8	27.3	43.4
39	Railroad structures, not replacement track	19.8	6.7	20.6
40	Telephone and telegraph	23.7	10.8	24.6
41	Electric light and power	23.0	10.4	29.9
42	Gas	14.2	10.4	26.5

Table 3.
Calculated marginal effective tax rates by asset
under current law and each proposed reform--Continued

(Percent)

No.	Asset	Current law	President's proposal	House Ways and Means Committee proposal
43	Local transit utilities	16.7	12.4	18.2
44	Petroleum pipeline public utilities	16.7	12.4	34.1
45	Farm	37.0	22.1	18.0
46	Petroleum and nat. gas shafts, wells	7.5	4.6	11.2
47	Other mining shafts and wells	-2.6	8.0	24.8
48	Other nonresidential structures	43.8	12.4	43.4
49	Railroad replacement track	-5.4	19.2	46.1
50	Residential structures	33.5	19.6	33.2
51	Inventories	46.0	31.2	35.6
52	Land	46.0	31.2	35.6

Source: Compiled by the staff of the U.S. International Trade Commission.

Table 4.
Change in cost of capital gross of real economic depreciation caused by moving from the current law to the proposed tax reforms, and the marginal effective tax rates under current law and the proposed tax reforms, by input-output sector

(In percent)

Input-output sector	Sector description	Change in cost of capital		Marginal effective tax rates		
		President's reform	House Ways & Means reform	Current law	President's reform	House Ways & Means reform
1	Livestock and products-----	-3.6	2.5	22.1	22.3	31.8
2	Other agric. products------	-3.6	2.5	22.1	22.3	31.8
3	Forestry/fishery products--	-1.0	6.8	15.8	21.4	36.7
4	Ag./forest/fishery serv.---	-1.0	6.8	15.8	21.4	36.7
5	Iron/ferroalloy mining-----	1.9	9.6	4.4	14.4	30.8
6	Nonferrous metal mining----	1.9	9.6	4.4	14.4	30.8
7	Coal mining----------	1.8	9.3	5.3	16.0	32.8
8	Crude petroleum/nat. gas---	-1.5	2.6	10.7	9.4	17.9
9	Stone mining & quarrying---	1.3	8.4	6.1	15.9	32.6
10	Chemical mineral mining----	1.3	8.4	6.1	15.9	32.6
11	New construction----------	-0.7	5.8	15.5	21.5	34.5
12	Maintenance construction---	-0.7	5.8	15.5	21.5	34.5
13	Ordnance and accessories---	-5.0	3.5	22.7	20.3	34.8
14	Food and kindred products--	-2.8	5.4	16.9	17.9	33.4
15	Tobacco manufactures-------	-5.4	3.1	23.1	19.7	34.5
16	Fabrics and thread mills---	-2.1	7.2	14.5	16.9	33.6
17	Misc. textile goods--------	-2.1	7.2	14.5	16.9	33.6
18	Apparel----------	-7.1	0.1	28.5	23.8	35.0
19	Misc. textile products-----	-7.1	0.1	28.5	23.8	35.0
20	Lumber and wood products---	-0.6	7.4	11.2	16.4	33.7
21	Wood containers----------	-0.6	7.4	11.2	16.4	33.7
22	Household furniture--------	-5.8	2.5	23.8	19.6	34.2
23	Other furniture----------	-5.8	2.5	23.8	19.6	34.2
24	Paper and allied products--	0.8	9.1	8.2	16.2	32.6
25	Paperboard containers------	0.8	9.1	8.2	16.2	32.6
26	Printing and publishing----	-0.9	7.9	11.7	16.1	34.3
27	Chemicals and products-----	-0.5	6.9	11.9	17.4	32.1
28	Plastics and synthetics----	-0.5	6.9	11.9	17.4	32.1
29	Drugs----------	-0.5	6.9	11.9	17.4	32.1
30	Paints, allied products----	-0.5	6.9	11.9	17.4	32.1
31	Petroleum refining---------	-3.2	5.3	16.2	15.4	32.8
32	Rubber & misc. plastic-----	-1.4	7.9	13.3	16.8	34.4
33	Leather tanning/finishing--	-7.9	0.1	28.5	22.8	34.8
34	Footwear & leather prod.---	-7.9	0.1	28.5	22.8	34.8
35	Glass and glass products---	0.1	7.9	9.8	16.9	35.2
36	Stone and clay wear--------	0.1	7.9	9.8	16.9	35.2
37	Primary iron/steel manu.---	-0.0	8.2	10.3	16.7	33.1
38	Primary nonferrous manu.---	-0.0	8.2	10.3	16.7	33.1
39	Metal containers----------	-2.2	6.6	16.0	18.4	34.8
40	Heating, plumbing, prod.---	-2.2	6.6	16.0	18.4	34.8
41	Screw machine products-----	-2.2	6.6	16.0	18.4	34.8
42	Other fabricated metal-----	-2.2	6.6	16.0	18.4	34.8
43	Engines and turbines-------	-2.5	5.6	18.0	19.6	35.5

Table 4.
Change in cost of capital gross of real economic depreciation caused by moving from the current law to the proposed tax reforms, and the marginal effective tax rates under current law and the proposed tax reforms, by input-output sector--Continued

(In percent)

Input-output sector	Sector description	Change in cost of capital		Marginal effective tax rates		
		President's reform	House Ways & Means reform	Current law	President's reform	House Ways & Means reform
44	Farm and garden machinery--	-2.5	5.6	18.0	19.6	35.5
45	Construction/mining mach.--	-2.5	5.6	18.0	19.6	35.5
46	Materials handling mach.---	-2.5	5.6	18.0	19.6	35.5
47	Metalworking machinery-----	-2.5	5.6	18.0	19.6	35.5
48	Special industry mach.-----	-2.5	5.6	18.0	19.6	35.5
49	General machinery----------	-2.5	5.6	18.0	19.6	35.5
50	Misc. mach., not electric--	-2.5	5.6	18.0	19.6	35.5
51	Office/computing machines--	-2.6	5.5	17.6	19.3	34.1
52	Service industries mach.---	-2.6	5.5	17.6	19.3	34.1
53	Electric equipment---------	-2.6	5.5	17.6	19.3	34.1
54	Household appliances-------	-2.6	5.5	17.6	19.3	34.1
55	Electric lighting equip.---	-2.6	5.5	17.6	19.3	34.1
56	Radio & TV equipment-------	-2.6	5.5	17.6	19.3	34.1
57	Electronic components------	-2.6	5.5	17.6	19.3	34.1
58	Misc. electrical mach.-----	-2.6	5.5	17.6	19.3	34.1
59	Motor vehicles and equip.--	0.5	9.9	8.8	16.5	35.4
60	Aircraft and parts---------	-4.9	3.3	22.6	20.5	34.5
61	Other transportation eq.---	-4.9	3.3	22.6	20.5	34.5
62	Scientific instruments-----	-3.6	5.0	19.6	19.1	35.1
63	Optical equipment----------	-3.6	5.0	19.6	19.1	35.1
64	Misc. manufacturing--------	-5.0	3.5	22.7	20.3	34.8
65	Transportation/warehousing-	3.3	13.5	2.1	15.6	35.9
66	Communications----------	3.2	11.7	4.2	15.7	32.9
67	Radio and TV broadcasting--	1.5	8.2	9.1	19.6	33.8
68	Utilities services---------	0.2	9.1	11.2	14.0	31.0
69	Wholesale & retail trade---	-6.5	0.3	27.5	22.6	33.6
70	Finance and insurance------	-1.2	7.0	14.9	18.9	36.1
71	Real estate and rental-----	-13.4	-2.9	35.1	22.6	34.0
72	Hotels, personal services--	-5.1	4.3	26.0	23.0	38.5
73	Business services----------	2.6	10.4	3.7	18.5	37.5
74	Eating/drinking places-----	-5.1	4.4	26.0	22.7	38.7
75	Automobile repair/service--	2.9	8.9	1.6	18.3	35.4
76	Amusements----------	0.7	7.2	12.4	21.7	34.8
77	Medical & educ. services---	-0.7	7.4	15.1	20.0	35.9

Source: Compiled by the staff of the U.S. International Trade Commission.

Table 5.--Corporate investment as a share of total nonresidential investment by industry

Code No.	Industry	In percent
1	Farms	8.0
2	Agricultural services, forestry, and fisheries	33.0
3	Metal mining	98.2
4	Coal mining	95.3
5	Oil and gas extraction	80.5
6	Nonmetallic minerals, except fuels	94.5
7	Construction	85.0
8	Lumber and wood products	90.9
9	Furniture and fixtures	98.3
10	Stone, clay, and glass products	98.9
11	Primary metal industries	99.1
12	Fabricated metal products	98.8
13	Machinery, except electrical	97.2
14	Electric and electronic equipment	99.8
15	Motor vehicles and equipment	100.0
16	Transportation equipment, except motor vehicles	99.7
17	Instruments and related products	100.0
18	Miscellaneous manufacturing industries	98.6
19	Food and kindred products	99.2
20	Tobacco manufactures	100.0
21	Textile mill products	99.5
22	Apparel and other textile products	97.8
23	Paper and allied products	100.0
24	Printing and publishing	97.2
25	Chemicals and allied products	99.7
26	Petroleum and coal products	100.0
27	Rubber and miscellaneous plastics products	100.0
28	Leather and leather products	98.6
29	Railroad transportation	100.0
30	Local and interurban passenger transit	82.0
31	Trucking and warehousing	67.0
32	Water transportation	85.0
33	Transportation by air	98.0
34	Pipelines, except natural gas	100.0
35	Transportation services	80.0
36	Telephone and telegraph	98.9
37	Radio and television broadcasting	90.0
38	Electric services	78.4
39	Gas services	100.0
40	Sanitary services	95.0
41	Wholesale trade	96.3
42	Retail trade	86.3
43	Federal reserve banks	100.0

Table 5.--Corporate investment as a share of total nonresidential investment by industry--Continued

Code No.	Industry	In percent
44	Commercial and mutual banks	99.8
45	Credit agencies other than banks	99.0
46	Security, commodity brokers, and services	90.0
47	Insurance carriers	100.0
48	Insurance agents, brokers, and services	60.0
49	Real estate	20.0
50	Holding and other investment companies	30.0
51	Hotels and other lodging places	60.4
52	Personal services	75.9
53	Business services	95.1
54	Auto repair, services, and garages	96.8
55	Miscellaneous repair services	68.4
56	Motion pictures	86.6
57	Amusement and recreation services	92.8
58	Health services	74.3
59	Legal services	25.8
60	Educational services	85.0
61	Social services, membership organizations, and miscellaneous professional services	65.0

Source: Bureau of Economic Analysis, U.S. Department of Commerce.
Insert table 5.

Table 6.
Shares of property type income and estimated direct price effects of the proposed tax reforms, by input-output sector

(In percent)

Input-output sector	Sector description	Share of property type income	Direct price effects: President's reform	Direct price effects: House Ways & Means reform
1	Livestock and livestock products	7.2	-0.3	0.2
2	Other agricultural products	42.1	-1.5	1.0
3	Forestry and fishery products	45.2	-0.4	3.1
4	Agricultural, forestry, and fishery services	17.6	-0.2	1.2
5	Iron and ferroalloy ores mining	13.4	0.3	1.3
6	Nonferrous metal ores mining	10.7	0.2	1.0
7	Coal mining	22.1	0.4	2.1
8	Crude petroleum and natural gas	57.6	-0.8	1.5
9	Stone and clay mining and quarrying	24.7	0.3	2.1
10	Chemical and fertilizer mineral mining	29.4	0.4	2.5
11	New construction	7.1	-0.0	0.4
12	Maintenance and repair construction	6.6	-0.0	0.4
13	Ordnance and accessories	14.0	-0.7	0.5
14	Food and kindred products	10.1	-0.3	0.5
15	Tobacco manufactures	18.1	-1.0	0.6
16	Broad and narrow fabrics, yarn and thread mills	6.2	-0.1	0.4
17	Miscellaneous textile goods and floor coverings	12.8	-0.3	0.9
18	Apparel	8.0	-0.6	0.0
19	Miscellaneous fabricated textile products	9.9	-0.7	0.0
20	Lumber and wood products, except containers	14.8	-0.1	1.1
21	Wood containers	4.3	-0.0	0.3
22	Household furniture	8.3	-0.5	0.2
23	Other furniture and fixtures	12.4	-0.7	0.3
24	Paper and allied products, except containers	12.5	0.1	1.1
25	Paperboard containers and boxes	11.5	0.1	1.0
26	Printing and publishing	12.5	-0.1	1.0
27	Chemicals and selected chemical products	14.5	-0.1	1.0
28	Plastics and synthetic materials	8.0	-0.0	0.6
29	Drugs, cleaning and toilet preparations	18.7	-0.1	1.3
30	Paints and allied products	13.7	-0.1	0.9
31	Petroleum refining and related industries	3.9	-0.1	0.2
32	Rubber and miscellaneous plastic products	13.0	-0.2	1.0
33	Leather tanning and finishing	13.4	-1.1	0.0
34	Footwear and other leather products	8.5	-0.7	0.0
35	Glass and glass products	12.2	0.0	1.0
36	Stone and clay products	14.9	0.0	1.2
37	Primary iron and steel manufacturing	5.2	-0.0	0.4
38	Primary nonferrous metals manufacturing	7.9	-0.0	0.6
39	Metal containers	13.6	-0.3	0.9
40	Heating, plumbing, structural metal products	11.7	-0.3	0.8
41	Screw machine products and stampings	9.7	-0.2	0.6
42	Other fabricated metal products	16.9	-0.4	1.1
43	Engines and turbines	13.4	-0.3	0.8
44	Farm and garden machinery	15.6	-0.4	0.9
45	Construction and mining machinery	12.2	-0.3	0.7

Table 6.
Shares of property type income and estimated direct price effects of the proposed tax reforms, by input-output sector--Continued

(In percent)

Input-output sector	Sector description	Share of property type income	Direct price effects: President's reform	Direct price effects: House Ways & Means reform
46	Materials handling machinery and equipment	14.0	-0.4	0.8
47	Metalworking machinery and equipment	17.7	-0.4	1.0
48	Special industry machinery and equipment	13.2	-0.3	0.7
49	General machinery and equipment	15.0	-0.4	0.8
50	Miscellaneous machinery, except electrical	9.2	-0.2	0.5
51	Office, computing, and accounting machines	9.9	-0.3	0.5
52	Service industries machines	13.9	-0.4	0.8
53	Electric industrial equipment and apparatus	13.5	-0.3	0.7
54	Household appliances	16.3	-0.4	0.9
55	Electric lighting and wiring equipment	17.7	-0.5	1.0
56	Radio, TV, and communication equipment	4.8	-0.1	0.3
57	Electronic components and accessories	7.8	-0.2	0.4
58	Misc. electrical machinery and supplies	13.2	-0.3	0.7
59	Motor vehicles and equipment	7.6	0.0	0.8
60	Aircraft and parts	5.3	-0.3	0.2
61	Other transportation equipment	5.3	-0.3	0.2
62	Scientific and controlling instruments	15.0	-0.5	0.8
63	Optical, ophthalmic, and photographic equipment	25.2	-0.9	1.3
64	Miscellaneous manufacturing	14.1	-0.7	0.5
65	Transportation and warehousing	13.8	0.5	1.9
66	Communications, except radio and TV	34.8	1.1	4.1
67	Radio and TV broadcasting	24.3	0.4	2.0
68	Electric, gas, water, and sanitary services	26.4	0.0	2.4
69	Wholesale and retail trade	15.6	-1.0	0.0
70	Finance and insurance	15.6	-0.2	1.1
71	Real estate and rental	59.3	-8.0	-1.7
72	Hotels, personal and repair services exc. auto-	24.4	-1.3	1.0
73	Business services	33.1	0.8	3.4
74	Eating and drinking places	10.2	.	.
75	Automobile repair and services	25.1	0.7	2.2
76	Amusements	16.9	0.1	1.2
77	Medical, educ. services and nonprofit org.	11.9	-0.1	0.9

Source: Compiled by the staff of the U.S. International Trade Commission.

The above procedure tends to overstate the direct price effects of the reform for two reasons. First, it treats that any cost change as being fully passed through to customers as an equal change in price. This would be true only if the supply curve of producers were perfectly elastic or the demand curve of customers were perfectly inelastic. Neither case is generally true. Second, it uses corporate supply curves in place of the industry supply curves. This procedure might be appropriate for some manufacturing industries where the corporate sector comprises the entire industry, but it is probably not appropriate where noncorporate producers supply a significant portion of total output. According to the data in table 5, corporations account for the bulk of output in manufacturing, but the corporate share in agriculture and some other nonmanufacturing sectors is fairly small.

The use of investment weights to translate asset tax rates into industry rates tends to overstate further the price effects of the House bill, since (as shown below) that bill raises the cost of capital to industries. However, the President's proposal reduces the cost of capital, so use of investment weights tends to understate the price effects of that proposal. The direct price effects were transformed into total price effects using the input-output equations described in appendix D. Table 7 shows the resulting total price changes for each proposed tax reform. Almost all the total price effects are negative for the President's proposal and positive for the House bill.

The Results

The total price effects in table 7 were combined with estimates of U.S. import demand elasticities and elasticities of foreign demand for U.S. exports (shown in table 8), ratios of trade to total domestic output (also shown in table 8), and estimates from the macroeconomic models described in the previous section. Estimates were also made for the case where there is no effect on international capital flows.

The results of these computations are presented in tables 9 through 12. Each table shows the effects on exports, imports, and the trade balance by industry. These effects were calculated using 1985 trade flows. Changes in exports and imports are also shown as percents, and the change in the trade balance is shown as a percent of domestic output for each industry. The trade changes are measured in terms of prices before the tax increase. Otherwise, they would reflect in part the change in prices caused by the tax changes and would not accurately depict changes in quantities. For example, if the demand for an industry's exports were very price inelastic, an increase in the industry's output price caused by a tax increase would cause the value of its exports to actually increase, even though the quantity exported and the firm's export earnings after taxes would both fall.

Table 7.
Total price effects of the proposed tax reforms, by input-output sector

(In percent)

Input-output sector	Sector description	President's reform	House Ways & Means reform
1	Livestock and livestock products	-1.7	1.5
2	Other agricultural products	-2.6	1.7
3	Forestry and fishery products	-0.7	3.8
4	Agricultural, forestry, and fishery services	-0.8	2.0
5	Iron and ferroalloy ores mining	-0.0	2.4
6	Nonferrous metal ores mining	-0.1	2.0
7	Coal mining	0.1	3.0
8	Crude petroleum and natural gas	-1.8	1.8
9	Stone and clay mining and quarrying	-0.0	2.9
10	Chemical and fertilizer mineral mining	0.1	3.6
11	New construction	-0.3	1.7
12	Maintenance and repair construction	-0.3	1.2
13	Ordnance and accessories	-0.9	1.2
14	Food and kindred products	-1.1	1.8
15	Tobacco manufactures	-1.8	1.6
16	Broad and narrow fabrics, yarn and thread mills	-0.6	1.8
17	Miscellaneous textile goods and floor coverings	-0.6	2.2
18	Apparel	-1.0	0.9
19	Miscellaneous fabricated textile products	-1.2	1.1
20	Lumber and wood products, except containers	-0.4	2.5
21	Wood containers	-0.3	1.7
22	Household furniture	-0.8	1.4
23	Other furniture and fixtures	-1.0	1.4
24	Paper and allied products, except containers	-0.2	2.5
25	Paperboard containers and boxes	-0.1	2.5
26	Printing and publishing	-0.4	2.1
27	Chemicals and selected chemical products	-0.4	2.5
28	Plastics and synthetic materials	-0.4	2.0
29	Drugs, cleaning and toilet preparations	-0.4	2.7
30	Paints and allied products	-0.4	2.3
31	Petroleum refining and related industries	-1.3	1.8
32	Rubber and miscellaneous plastic products	-0.5	2.1
33	Leather tanning and finishing	-1.6	1.2
34	Footwear and other leather products	-1.1	0.9
35	Glass and glass products	-0.2	2.0
36	Stone and clay products	-0.2	2.5
37	Primary iron and steel manufacturing	-0.2	1.6
38	Primary nonferrous metals manufacturing	-0.2	1.9
39	Metal containers	-0.5	2.0
40	Heating, plumbing, and structural metal products	-0.5	1.7
41	Screw machine products and stampings	-0.4	1.6
42	Other fabricated metal products	-0.6	2.0
43	Engines and turbines	-0.6	1.7
44	Farm and garden machinery	-0.7	1.8
45	Construction and mining machinery	-0.6	1.6
46	Materials handling machinery and equipment	-0.6	1.6
47	Metalworking machinery and equipment	-0.6	1.7
48	Special industry machinery and equipment	-0.6	1.5

Table 7.
Total price effects of the proposed tax reforms, by input-output sector--Continued

(In percent)

Input-output sector	Sector description	President's reform	House Ways & Means reform
49	General machinery and equipment	-0.6	1.7
50	Miscellaneous machinery, except electrical	-0.4	1.3
51	Office, computing, and accounting machines	-0.6	1.4
52	Service industries machines	-0.7	1.7
53	Electric industrial equipment and apparatus	-0.6	1.5
54	Household appliances	-0.7	2.0
55	Electric lighting and wiring equipment	-0.7	1.9
56	Radio, TV, and communication equipment	-0.6	1.0
57	Electronic components and accessories	-0.5	1.3
58	Misc. electrical machinery and supplies	-0.6	1.6
59	Motor vehicles and equipment	-0.2	1.8
60	Aircraft and parts	-0.5	1.0
61	Other transportation equipment	-0.6	1.1
62	Scientific and controlling instruments	-0.8	1.6
63	Optical, ophthalmic, and photographic equipment	-1.1	2.1
64	Miscellaneous manufacturing	-1.0	1.5
65	Transportation and warehousing	0.3	2.7
66	Communications, except radio and TV	0.9	4.4
67	Radio and TV broadcasting	-0.1	2.8
68	Electric, gas, water, and sanitary services	-0.4	3.9
69	Wholesale and retail trade	-1.3	0.7
70	Finance and insurance	-0.5	2.0
71	Real estate and rental	-8.5	-1.6
72	Hotels, personal and repair services exc. auto	-1.7	1.7
73	Business services	0.6	4.0
74	Eating and drinking places	-0.7	1.0
75	Automobile repair and services	0.4	3.0
76	Amusements	-0.4	2.2
77	Medical, educ. services and nonprofit org.	-0.7	1.5

Source: Compiled by the staff of the U.S. International Trade Commission.

Table 8.
Elasticities of demand for U.S. exports and U.S. imports, and ratios of 1984 exports and imports to 1984 domestic output

Input-output sector	Sector description	Elasticities of demand		Ratio: trade to domestic production	
		Exports	Imports	Exports	Imports
				-----Percent-----	
1	Livestock and products	2.09	0.40	0.45	1.11
2	Other agric. products	2.08	0.43	24.32	7.36
3	Forestry/fishery products	1.20	0.70	2.23	12.51
4	Ag./forest/fishery serv.	1.20	0.70	0.00	0.00
5	Iron/ferroalloy mining	1.21	1.21	16.24	27.99
6	Nonferrous metal mining	1.21	1.21	4.54	35.56
7	Coal mining	1.21	1.21	15.16	0.48
8	Crude petroleum/nat. gas	1.21	1.21	0.32	3.93
9	Stone mining & quarrying	1.21	1.21	8.11	9.17
10	Chemical mineral mining	1.21	1.21	10.64	30.57
11	New construction	0.00	0.00	0.00	0.00
12	Maintenance construction	0.00	0.00	0.00	0.01
13	Ordnance and accessories	1.20	0.60	8.45	0.97
14	Food and kindred products	2.62	1.14	3.64	5.24
15	Tobacco manufactures	2.62	1.14	5.24	0.40
16	Fabrics and thread mills	1.30	1.30	2.36	8.72
17	Misc. textile goods	1.30	1.30	6.31	8.23
18	Apparel	2.00	3.77	1.66	31.32
19	Misc. textile products	1.30	1.30	3.15	7.72
20	Lumber and wood products	1.64	1.68	8.49	9.05
21	Wood containers	1.40	1.42	5.61	11.19
22	Household furniture	1.00	6.00	1.86	13.40
23	Other furniture	1.00	6.00	2.17	3.86
24	Paper and allied products	3.77	1.40	5.62	9.20
25	Paperboard containers	3.77	1.40	0.00	0.43
26	Printing and publishing	3.77	1.40	1.29	1.08
27	Chemicals and products	1.65	1.65	17.63	10.48
28	Plastics and synthetics	1.85	1.65	12.11	4.22
29	Drugs	1.65	1.65	5.97	3.90
30	Paints, allied products	1.85	1.65	2.34	0.93
31	Petroleum refining	1.65	1.65	2.77	32.59
32	Rubber & misc. plastic	1.85	6.00	4.31	7.86
33	Leather tanning/finishing	1.85	4.00	17.46	23.46
34	Footwear & leather prod.	1.85	4.00	3.13	98.99
35	Glass and glass products	0.80	1.60	6.43	9.92
36	Stone and clay products	1.50	3.31	2.40	7.60
37	Primary iron/steel manu.	1.17	2.00	2.67	15.30
38	Primary nonferrous manu.	0.30	1.10	10.37	21.85
39	Metal containers	1.00	1.50	1.22	1.29
40	Heating, plumbing, prod.	0.20	1.00	3.15	1.67
41	Screw machine products	1.00	1.00	1.03	3.75
42	Other fabricated metal	1.33	2.10	4.16	112.53
43	Engines and turbines	1.05	1.05	32.13	1.37
44	Farm and garden machinery	1.05	1.05	10.58	13.70
45	Construction/mining mach.	1.05	1.05	21.19	5.96
46	Materials handling mach.	1.05	1.05	12.68	20.55

Table 8.
Elasticities of demand for U.S. exports and U.S. imports, and ratios of 1984 exports and imports to 1984 domestic output--Continued

Input-output sector	Sector description	Elasticities of demand		Ratio: trade to domestic production	
		Exports	Imports	Exports	Imports
				-----Percent-----	
47	Metalworking machinery	3.20	3.20	10.94	12.09
48	Special industry mach.	1.05	1.05	14.01	20.53
49	General machinery	1.05	1.04	12.81	13.88
50	Misc. mach., not electric	1.05	1.05	11.88	0.06
51	Office/computing machines	4.43	3.87	36.14	27.22
52	Service industries mach.	1.05	1.05	11.50	1.36
53	Electric equipment	1.75	1.04	12.89	8.80
54	Household appliances	2.00	0.80	7.16	18.41
55	Electric lighting equip.	4.20	5.42	5.85	9.35
56	Radio & TV equipment	2.00	2.80	9.16	29.27
57	Electronic components	5.42	0.50	15.65	21.52
58	Misc. electrical mach.	5.42	2.80	23.00	23.66
59	Motor vehicles and equip.	2.40	2.40	9.68	30.78
60	Aircraft and parts	3.77	6.00	20.51	6.23
61	Other transportation eq.	2.29	3.61	6.81	7.10
62	Scientific instruments	2.78	2.16	22.87	13.32
63	Optical equipment	1.40	1.40	11.47	21.65
64	Misc. manufacturing	2.80	3.77	29.90	71.40
65	Transportation/warehousing	0.00	0.00	0.00	0.00
66	Communications	0.00	0.00	0.00	0.00
67	Radio and TV broadcasting	0.00	0.00	0.00	0.00
68	Utilities services	0.00	0.00	0.00	0.00
69	Wholesale & retail trade	0.00	0.00	0.00	0.00
70	Finance and insurance	0.00	0.00	0.00	0.00
71	Real estate and rental	0.00	0.00	0.00	0.00
72	Hotels, personal services	0.00	0.00	0.56	0.25
73	Business services	0.00	0.00	0.00	0.00
74	Eating/drinking places	0.00	0.00	0.00	0.00
75	Automobile repair/service	0.00	0.00	0.00	0.00
76	Amusements	0.00	0.00	0.12	0.06
77	Medical & educ. services	0.00	0.00	0.05	0.04

Source: The elasticities are from Baldwin (1976). Ratios of trade to domestic production were compiled by the staff of the U.S. International Trade Commission.

Table 9 shows the effects of the House bill when the trade balance deteriorates by an annual average of $3 billion (as predicted by L.H. Meyers) and table 10 shows the effects of the House bill when the trade balance remains unchanged. This latter case is sufficiently close to the Wharton prediction that the trade balance would move toward deficit by an average of of $100 million to make a separate set of estimates for this case unnecessary. The changes in trade are changes in quantities, valued at initial prices (prices prior to the tax changes). The quantity changes are different from the actual changes in the value of imports and exports. For example, for the case depicted in table 9, the actual trade balance would deteriorate by $3.0 billion instead of the $1.1 billion change in quantity shown. For the case depicted in table 10, the change in the actual value of exports would be exactly the same as the change in the actual value of imports, and the change on the actual value of the trade balance would be zero.

The pattern of gains and losses in tables 9 and 10 are quite similar, indicating that the estimates of the disaggregate effects are not very sensitive to changes in the overall trade balance of the magnitude predicted by the macroeconomic models. The main result that emerges is that the effects are uniformly small. 1/ The largest losses relative to domestic output levels occur in Iron and ferroalloy ores mining (I/O 5, -.3 percent to -.4 percent), and Chemical and fertilizer mineral mining (I/O 10, -.8 percent to -.9 percent). The largest gains are in Apparel (I/O 18, +.6 percent to +.9 percent), Leather tanning and finishing (I/O 33, +.5 percent to + .9 percent), Footwear and leather products (I/O 34, +3.0 percent to +4.4 percent), Aircraft and parts (I/O 60, +.8 percent to +1.3 percent), and Miscellaneous manufacturing (I/O 64, +.4 percent to +1.7 percent).

The results for the President's proposal are reported in tables 11 and 12. Again, the trade effects are uniformly small when expressed as percents of domestic output, and the results are not very sensitive to changes in the overall trade balance of the magnitude predicted by the macroeconomic models. The largest losses are in Iron and ferroalloy ore mining (-.3 percent to -.4 percent), Chemical and fertilizer mineral mining (-.3 percent to -.4 percent), Office computing and accounting machines (I/O 51, -.1 percent to -.6 percent), Motor vehicles and equipment (I/O 59, -.5 percent to -.7 percent), and Aircraft and parts (-.1 percent to -.4 percent). The largest gains are in Other agricultural products (I/O 2, +.7 percent to +.8 percent), Leather tanning and finishing (+ 1.1 percent to +1.3 percent), Footwear and other leather products (+1.7 percent to +2.4 percent), and Miscellaneous manufacturing (+1.1 percent to +1.8 percent).

1/ This main result is consistent with the findings by Jane Gravelle (1986). Her study finds that the House proposal would have uniformly small effects on relative prices across industries.

Table 9.
Impact of the House tax proposal on trade
when the aggregate trade balance deteriorates by $3.0 billion

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	-0	-0.0	-0	-0.0	-0	-0.0
2	Other agricultural products	-78	-0.4	5	0.1	-83	-0.1
3	Forestry and fishery products	-5	-2.8	15	1.5	-20	-0.2
4	Agricultural, forestry, and fishery services	.	.	0	0.3	.	.
5	Iron and ferroalloy ores mining	-6	-1.2	8	1.1	-14	-0.4
6	Nonferrous metal ores mining	-1	-0.6	5	0.5	-6	-0.2
7	Coal mining	-91	-1.8	3	1.7	-94	-0.3
8	Crude petroleum and natural gas	-1	-0.3	11	0.3	-12	-0.0
9	Stone and clay mining and quarrying	-10	-1.7	13	1.6	-24	-0.3
10	Chemical and fertilizer mineral mining	-12	-2.6	26	2.5	-38	-0.9
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	7	0.4	-1	-0.2	8	0.0
14	Food and kindred products	-97	-0.9	46	0.3	-143	-0.0
15	Tobacco manufactures	-3	-0.3	0	0.0	-3	-0.0
16	Broad and narrow fabrics, yarn and thread mills	-4	-0.4	8	0.3	-12	-0.0
17	Miscellaneous textile goods and floor coverings	-6	-0.9	9	0.8	-15	-0.1
18	Apparel	10	1.2	-329	-2.6	339	0.6
19	Miscellaneous fabricated textile products	2	0.5	-6	-0.6	8	0.1
20	Lumber and wood products, except containers	-87	-1.8	87	1.6	-174	-0.3
21	Wood containers	-0	-0.3	0	0.2	-0	-0.0
22	Household furniture	0	0.1	-48	-1.5	48	0.3
23	Other furniture and fixtures	0	0.1	-11	-1.7	12	0.1
24	Paper and allied products, except containers	-172	-4.2	98	1.3	-269	-0.3
25	Paperboard containers and boxes	.	.	1	1.3	.	.
26	Printing and publishing	-35	-2.7	10	0.8	-45	-0.0
27	Chemicals and selected chemical products	-219	-1.7	137	1.5	-356	-0.4
28	Plastics and synthetic materials	-46	-1.1	13	0.8	-59	-0.2
29	Drugs, cleaning and toilet preparations	-71	-2.1	49	1.9	-120	-0.2
30	Paints and allied products	-4	-1.7	1	1.3	-5	-0.1
31	Petroleum refining and related industries	-25	-0.5	171	0.3	-196	-0.1
32	Rubber and miscellaneous plastic products	-35	-1.3	146	2.6	-181	-0.3
33	Leather tanning and finishing	2	0.6	-7	-1.7	9	0.5
34	Footwear and other leather products	2	1.1	-228	-2.6	230	3.0
35	Glass and glass products	-3	-0.4	10	0.7	-13	-0.1
36	Stone and clay products	-14	-1.5	100	2.8	-113	-0.3
37	Primary iron and steel manufacturing	-3	-0.1	6	0.1	-9	-0.0
38	Primary nonferrous metals manufacturing	-6	-0.1	40	0.4	-45	-0.1
39	Metal containers	-1	-0.5	2	0.6	-2	-0.0
40	Heating, plumbing, and structural metal products	-0	-0.0	2	0.2	-2	-0.0
41	Screw machine products and stampings	-0	-0.1	0	0.0	-1	-0.0
42	Other fabricated metal products	-12	-0.7	51	1.0	-63	-0.2
43	Engines and turbines	-9	-0.2	0	0.1	-10	-0.1
44	Farm and garden machinery	-4	-0.3	4	0.2	-8	-0.1
45	Construction and mining machinery	-6	-0.1	1	0.1	-8	-0.0

Table 9.
Impact of the House tax proposal on trade
when the aggregate trade balance deteriorates by $3.0 billion--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	-1	-0.1	1	0.1	-3	-0.0
47	Metalworking machinery and equipment----------	-19	-0.7	8	0.2	-27	-0.1
48	Special industry machinery and equipment----------	-1	-0.1	0	0.0	-1	-0.0
49	General machinery and equipment----------	-6	-0.2	6	0.1	-12	-0.0
50	Miscellaneous machinery, except electrical----------	4	0.2	-0	-0.2	4	0.0
51	Office, computing, and accounting machines----------	13	0.1	-93	-0.8	107	0.3
52	Service industries machines----------	-5	-0.3	1	0.2	-6	-0.0
53	Electric industrial equipment and apparatus---------	-4	-0.1	-0	-0.0	-4	-0.0
54	Household appliances----------	-11	-1.0	12	0.3	-23	-0.1
55	Electric lighting and wiring equipment----------	-24	-2.1	22	1.3	-46	-0.3
56	Radio, TV, and communication equipment----------	64	1.0	-217	-1.6	281	0.4
57	Electronic components and accessories----------	31	0.5	-9	-0.1	40	0.1
58	Misc. electrical machinery and supplies----------	-37	-1.2	2	0.1	-39	-0.3
59	Motor vehicles and equipment----------	-170	-0.9	386	0.6	-556	-0.3
60	Aircraft and parts----------	351	1.9	-231	-3.9	582	0.8
61	Other transportation equipment----------	17	0.8	-43	-1.6	60	0.2
62	Scientific and controlling instruments----------	-21	-0.4	1	0.0	-22	-0.1
63	Optical, ophthalmic, and photographic equipment-----	-22	-0.9	39	0.8	-61	-0.3
64	Miscellaneous manufacturing----------	-3	-0.0	-112	-0.5	109	0.4
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	-887		220		-1,106	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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Table 10.
Impact of the House tax proposal on trade
under flexible exchange rates

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	3	0.6	-1	-0.1	4	0.0
2	Other agricultural products	41	0.2	-7	-0.1	48	0.0
3	Forestry and fishery products	-5	-2.4	13	1.3	-17	-0.2
4	Agricultural, forestry, and fishery services	.	.	0	0.1	.	.
5	Iron and ferroalloy ores mining	-4	-0.8	5	0.7	-9	-0.3
6	Nonferrous metal ores mining	-1	-0.2	1	0.1	-2	-0.0
7	Coal mining	-73	-1.5	2	1.3	-76	-0.2
8	Crude petroleum and natural gas	0	0.0	-5	-0.1	5	0.0
9	Stone and clay mining and quarrying	-8	-1.4	10	1.2	-18	-0.2
10	Chemical and fertilizer mineral mining	-10	-2.3	22	2.1	-32	-0.8
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	13	0.8	-1	-0.4	14	0.1
14	Food and kindred products	-15	-0.1	-13	-0.1	-2	-0.0
15	Tobacco manufactures	6	0.5	-0	-0.3	7	0.0
16	Broad and narrow fabrics, yarn and thread mills	0	0.0	-4	-0.1	4	0.0
17	Miscellaneous textile goods and floor coverings	-3	-0.5	4	0.4	-8	-0.1
18	Apparel	15	1.8	-483	-3.8	498	0.9
19	Miscellaneous fabricated textile products	3	0.9	-10	-1.0	13	0.1
20	Lumber and wood products, except containers	-63	-1.3	58	1.1	-121	-0.2
21	Wood containers	0	0.2	-0	-0.3	0	0.0
22	Household furniture	1	0.4	-110	-3.5	111	0.6
23	Other furniture and fixtures	1	0.4	-25	-3.7	26	0.2
24	Paper and allied products, except containers	-129	-3.2	64	0.8	-193	-0.2
25	Paperboard containers and boxes	.	.	1	0.8	.	.
26	Printing and publishing	-21	-1.7	4	0.3	-26	-0.0
27	Chemicals and selected chemical products	-158	-1.3	90	1.0	-247	-0.3
28	Plastics and synthetic materials	-23	-0.5	4	0.3	-27	-0.1
29	Drugs, cleaning and toilet preparations	-55	-1.7	35	1.4	-90	-0.2
30	Paints and allied products	-2	-1.1	1	0.8	-3	-0.0
31	Petroleum refining and related industries	1	0.0	-100	-0.2	101	0.1
32	Rubber and miscellaneous plastic products	-20	-0.7	29	0.5	-49	-0.1
33	Leather tanning and finishing	3	1.2	-13	-3.0	16	0.9
34	Footwear and other leather products	4	1.6	-338	-3.9	342	4.4
35	Glass and glass products	-1	-0.2	3	0.2	-4	-0.0
36	Stone and clay products	-10	-1.1	60	1.7	-70	-0.2
37	Primary iron and steel manufacturing	5	0.2	-71	-0.6	76	0.1
38	Primary nonferrous metals manufacturing	-1	-0.0	4	0.0	-5	-0.0
39	Metal containers	-0	-0.2	0	0.1	-1	-0.0
40	Heating, plumbing, and structural metal products	0	0.0	-1	-0.1	1	0.0
41	Screw machine products and stampings	1	0.2	-3	-0.3	3	0.0
42	Other fabricated metal products	-6	-0.4	15	0.3	-21	-0.1
43	Engines and turbines	5	0.1	-0	-0.2	6	0.0
44	Farm and garden machinery	1	0.0	-2	-0.1	2	0.0
45	Construction and mining machinery	13	0.2	-7	-0.3	20	0.1

Table 10.
Impact of the House tax proposal on trade under flexible exchange rates--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	1	0.2	-3	-0.2	5	0.1
47	Metalworking machinery and equipment----------	5	0.2	-31	-0.8	36	0.2
48	Special industry machinery and equipment----------	5	0.3	-10	-0.3	16	0.1
49	General machinery and equipment----------	4	0.1	-8	-0.2	12	0.0
50	Miscellaneous machinery, except electrical----------	11	0.5	-0	-0.5	11	0.1
51	Office, computing, and accounting machines----------	215	1.4	-248	-2.0	463	1.1
52	Service industries machines----------	1	0.1	-0	-0.1	2	0.0
53	Electric industrial equipment and apparatus---------	15	0.4	-10	-0.3	25	0.1
54	Household appliances----------	-5	-0.4	3	0.1	-8	-0.0
55	Electric lighting and wiring equipment----------	-11	-0.9	-10	-0.6	-0	-0.0
56	Radio, TV, and communication equipment----------	102	1.6	-338	-2.5	441	0.7
57	Electronic components and accessories----------	127	2.1	-22	-0.3	149	0.3
58	Misc. electrical machinery and supplies----------	11	0.3	-31	-0.8	42	0.3
59	Motor vehicles and equipment----------	-39	-0.2	-114	-0.2	76	0.0
60	Aircraft and parts----------	556	3.0	-346	-5.9	902	1.3
61	Other transportation equipment----------	32	1.5	-73	-2.8	105	0.3
62	Scientific and controlling instruments----------	26	0.5	-24	-0.7	51	0.2
63	Optical, ophthalmic, and photographic equipment-----	-12	-0.5	18	0.4	-30	-0.1
64	Miscellaneous manufacturing----------	74	0.8	-381	-1.7	455	1.7
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	627		-2,400		3,028	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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Table 11.
Impact of the President's tax proposal on trade
when the aggregate trade balance improves by $1.7 billion

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	11	2.2	-4	-0.4	15	0.0
2	Other agricultural products	770	4.0	-75	-0.8	845	0.8
3	Forestry and fishery products	0	0.1	-0	-0.0	1	0.0
4	Agricultural, forestry, and fishery services	.	.	-0	-0.1	.	.
5	Iron and ferroalloy ores mining	-4	-0.7	6	0.7	-9	-0.3
6	Nonferrous metal ores mining	-1	-0.6	6	0.6	-7	-0.2
7	Coal mining	-46	-0.9	2	0.9	-47	-0.2
8	Crude petroleum and natural gas	6	1.4	-58	-1.4	65	0.1
9	Stone and clay mining and quarrying	-4	-0.7	6	0.7	-10	-0.1
10	Chemical and fertilizer mineral mining	-4	-0.9	9	0.9	-13	-0.3
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	6	0.4	-1	-0.2	7	0.0
14	Food and kindred products	132	1.2	-94	-0.6	226	0.1
15	Tobacco manufactures	40	3.1	-1	-1.4	41	0.2
16	Broad and narrow fabrics, yarn and thread mills	-0	-0.0	-0	-0.0	0	0.0
17	Miscellaneous textile goods and floor coverings	-0	-0.0	0	0.0	-0	-0.0
18	Apparel	6	0.8	-206	-1.6	213	0.4
19	Miscellaneous fabricated textile products	2	0.7	-7	-0.7	9	0.1
20	Lumber and wood products, except containers	-19	-0.4	21	0.4	-41	-0.1
21	Wood containers	-0	-0.4	0	0.4	-1	-0.1
22	Household furniture	0	0.2	-38	-1.2	38	0.2
23	Other furniture and fixtures	1	0.3	-16	-2.3	17	0.1
24	Paper and allied products, except containers	-72	-1.8	49	0.7	-122	-0.1
25	Paperboard containers and boxes	.	.	1	0.8	.	.
26	Printing and publishing	-13	-1.0	5	0.4	-17	-0.0
27	Chemicals and selected chemical products	-46	-0.4	32	0.4	-78	-0.1
28	Plastics and synthetic materials	-20	-0.5	7	0.4	-27	-0.1
29	Drugs, cleaning and toilet preparations	-15	-0.4	11	0.4	-26	-0.0
30	Paints and allied products	-1	-0.4	0	0.4	-1	-0.0
31	Petroleum refining and related industries	57	1.1	-592	-1.1	650	0.4
32	Rubber and miscellaneous plastic products	-9	-0.3	49	0.9	-58	-0.1
33	Leather tanning and finishing	5	1.8	-18	-4.2	23	1.3
34	Footwear and other leather products	2	0.9	-184	-2.1	187	2.4
35	Glass and glass products	-2	-0.3	9	0.6	-11	-0.1
36	Stone and clay products	-6	-0.7	54	1.5	-60	-0.1
37	Primary iron and steel manufacturing	-11	-0.5	105	0.9	-116	-0.1
38	Primary nonferrous metals manufacturing	-6	-0.1	45	0.4	-51	-0.1
39	Metal containers	-0	-0.1	0	0.1	-1	-0.0
40	Heating, plumbing, and structural metal products	-0	-0.0	1	0.1	-1	-0.0
41	Screw machine products and stampings	-1	-0.2	2	0.2	-3	-0.0
42	Other fabricated metal products	-1	-0.1	3	0.1	-4	-0.0
43	Engines and turbines	-1	-0.0	0	0.0	-1	-0.0
44	Farm and garden machinery	1	0.1	-2	-0.1	3	0.0
45	Construction and mining machinery	-3	-0.1	1	0.0	-4	-0.0

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Table 11.
Impact of the President's tax proposal on trade
when the aggregate trade balance improves by $1.7 billion--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	0	0.0	-0	-0.0	1	0.0
47	Metalworking machinery and equipment----------	1	0.1	-5	-0.1	6	0.0
48	Special industry machinery and equipment----------	-1	-0.0	1	0.0	-2	-0.0
49	General machinery and equipment----------	-0	-0.0	-0	-0.0	-0	-0.0
50	Miscellaneous machinery, except electrical----------	-5	-0.2	0	0.2	-5	-0.0
51	Office, computing, and accounting machines----------	-35	-0.2	10	0.1	-45	-0.1
52	Service industries machines----------	1	0.0	-0	-0.0	1	0.0
53	Electric industrial equipment and apparatus---------	-1	-0.0	-0	-0.0	-1	-0.0
54	Household appliances----------	1	0.1	-2	-0.1	3	0.0
55	Electric lighting and wiring equipment----------	4	0.3	-11	-0.6	15	0.1
56	Radio, TV, and communication equipment----------	-3	-0.0	2	0.0	-5	-0.0
57	Electronic components and accessories----------	-55	-0.9	6	0.1	-61	-0.1
58	Misc. electrical machinery and supplies----------	-6	-0.2	0	0.0	-6	-0.0
59	Motor vehicles and equipment----------	-189	-1.0	651	1.0	-840	-0.5
60	Aircraft and parts----------	-73	-0.4	26	0.4	-99	-0.1
61	Other transportation equipment----------	-0	-0.0	-2	-0.1	1	0.0
62	Scientific and controlling instruments----------	27	0.5	-15	-0.4	42	0.2
63	Optical, ophthalmic, and photographic equipment-----	16	0.7	-35	-0.7	51	0.3
64	Miscellaneous manufacturing----------	103	1.1	-364	-1.7	466	1.8
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	539		-610		1,150	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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Table 12.
Impact of the President's tax proposal on trade
under flexible exchange rates

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	9	1.8	-3	-0.4	12	0.0
2	Other agricultural products	697	3.6	-69	-0.8	765	0.7
3	Forestry and fishery products	-0	-0.1	1	0.1	-1	-0.0
4	Agricultural, forestry, and fishery services	.	.	0	0.0	.	.
5	Iron and ferroalloy ores mining	-5	-0.9	7	0.9	-12	-0.4
6	Nonferrous metal ores mining	-2	-0.8	8	0.8	-10	-0.3
7	Coal mining	-56	-1.1	2	1.1	-58	-0.2
8	Crude petroleum and natural gas	5	1.2	-50	-1.2	55	0.0
9	Stone and clay mining and quarrying	-6	-0.9	8	0.9	-13	-0.2
10	Chemical and fertilizer mineral mining	-5	-1.1	11	1.1	-16	-0.4
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	3	0.2	-0	-0.1	3	0.0
14	Food and kindred products	82	0.8	-62	-0.4	144	0.0
15	Tobacco manufactures	33	2.6	-1	-1.2	34	0.2
16	Broad and narrow fabrics, yarn and thread mills	-2	-0.2	6	0.2	-9	-0.0
17	Miscellaneous textile goods and floor coverings	-2	-0.2	2	0.2	-4	-0.0
18	Apparel	3	0.4	-125	-1.0	129	0.2
19	Miscellaneous fabricated textile products	2	0.5	-5	-0.5	6	0.1
20	Lumber and wood products, except containers	-34	-0.7	37	0.7	-71	-0.1
21	Wood containers	-0	-0.7	1	0.7	-1	-0.1
22	Household furniture	-0	-0.0	-7	-0.2	7	0.0
23	Other furniture and fixtures	1	0.2	-9	-1.3	9	0.1
24	Paper and allied products, except containers	-99	-2.4	68	0.9	-167	-0.2
25	Paperboard containers and boxes	.	.	1	1.0	.	.
26	Printing and publishing	-21	-1.7	8	0.6	-29	-0.0
27	Chemicals and selected chemical products	-83	-0.7	57	0.6	-140	-0.2
28	Plastics and synthetic materials	-34	-0.8	12	0.7	-45	-0.1
29	Drugs, cleaning and toilet preparations	-24	-0.7	18	0.7	-42	-0.1
30	Paints and allied products	-2	-0.8	1	0.7	-2	-0.0
31	Petroleum refining and related industries	42	0.8	-446	-0.9	488	0.3
32	Rubber and miscellaneous plastic products	-17	-0.6	107	1.9	-124	-0.2
33	Leather tanning and finishing	4	1.5	-15	-3.5	19	1.1
34	Footwear and other leather products	1	0.6	-127	-1.5	128	1.7
35	Glass and glass products	-3	-0.5	13	0.9	-16	-0.1
36	Stone and clay products	-9	-0.9	74	2.1	-83	-0.2
37	Primary iron and steel manufacturing	-15	-0.7	148	1.2	-163	-0.2
38	Primary nonferrous metals manufacturing	-8	-0.2	65	0.6	-73	-0.1
39	Metal containers	-0	-0.3	1	0.4	-2	-0.0
40	Heating, plumbing, and structural metal products	-1	-0.1	3	0.3	-3	-0.0
41	Screw machine products and stampings	-1	-0.4	4	0.4	-5	-0.0
42	Other fabricated metal products	-5	-0.3	23	0.4	-28	-0.1
43	Engines and turbines	-10	-0.2	1	0.2	-10	-0.1
44	Farm and garden machinery	-1	-0.1	2	0.1	-3	-0.0
45	Construction and mining machinery	-14	-0.2	5	0.2	-20	-0.1

Table 12.
Impact of the President's tax proposal on trade under flexible exchange rates--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	-1	-0.2	2	0.2	-4	-0.1
47	Metalworking machinery and equipment----------	-14	-0.5	15	0.4	-29	-0.1
48	Special industry machinery and equipment----------	-4	-0.2	7	0.2	-11	-0.1
49	General machinery and equipment----------	-6	-0.2	7	0.2	-13	-0.0
50	Miscellaneous machinery, except electrical----------	-9	-0.4	0	0.4	-9	-0.0
51	Office, computing, and accounting machines----------	-160	-1.0	91	0.7	-252	-0.6
52	Service industries machines----------	-3	-0.1	0	0.1	-3	-0.0
53	Electric industrial equipment and apparatus---------	-12	-0.3	5	0.2	-17	-0.1
54	Household appliances----------	-3	-0.3	3	0.1	-6	-0.0
55	Electric lighting and wiring equipment----------	-5	-0.4	5	0.3	-10	-0.1
56	Radio, TV, and communication equipment----------	-26	-0.4	68	0.5	-94	-0.1
57	Electronic components and accessories----------	-115	-1.9	13	0.2	-128	-0.3
58	Misc. electrical machinery and supplies----------	-37	-1.2	18	0.5	-55	-0.4
59	Motor vehicles and equipment----------	-267	-1.4	921	1.4	-1,188	-0.7
60	Aircraft and parts----------	-195	-1.1	86	1.5	-282	-0.4
61	Other transportation equipment----------	-9	-0.4	14	0.6	-23	-0.1
62	Scientific and controlling instruments----------	-2	-0.0	-1	-0.0	-1	-0.0
63	Optical, ophthalmic, and photographic equipment-----	10	0.4	-23	-0.5	33	0.2
64	Miscellaneous manufacturing----------	56	0.6	-225	-1.0	281	1.1
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	-379		781		-1,159	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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The procedures used to generate the results in tables 9 through 12 tend to overstate the effects of the proposed changes in corporate taxes included in the model for several reasons. First, it was assumed that corporations now take full advantage of the ITC and ACRS, so that they would feel the maximum adverse effects from elimination of these provisions. Second, it was assumed that all of the changes in taxes were fully passed forward to buyers in the form of price changes, both the direct effects of the tax changes and the indirect effects embodied in prices of intermediate inputs. For example, one might more reasonably expect that the tax changes would be fully absorbed by domestic producers in industries where the U.S. supply is small relative to the foreign supply and where domestic and foreign output are close substitutes, such as most natural resources. Finally, it was assumed that corporations are the marginal suppliers in each industry, so that over the relevant range the industry supply and the corporate supply are the same.

However, the effects on capital flows that were included in the calculations limited the trade effects of both proposals, and these effects were not chosen so as to provide upper-bound estimates of the trade effects. Instead, they were based on existing estimates of macroeconomic models. Since estimates of the effects on capital flows are subject to considerable error, a set of estimates was prepared in which it was assumed that capital flows were perfectly accommodating to the changes in trade caused by the price effects of the tax changes. That is, it was assumed that exchange rates were unaffected by these tax changes. The results of these calculations should definitely provide upper-bound estimates of the trade effects of each proposal.

Table 13 presents the results for the House bill under fixed exchange rates. All traded goods industries experience trade losses. However, the loss amounts to 2 percent or more of domestic output in only five industries: Footwear and other leather products (-4.2 percent), Office computing and accounting machines (-3.9 percent), Miscellaneous electrical machinery and supplies (-3.0 percent), Motor vehicles and equipment (-2.1 percent) and Miscellaneous manufacturing (I/O 64, -6.0 percent).

Table 14 presents the results for the President's proposal under fixed exchange rates. All industries with trade except Chemical and fertilizer mineral mining (I/O 10), experience trade gains under this proposal, and the loss in this industry is negligible. The largest gains are in Leather tanning and finishing (+2.0 percent), Footwear and other leather products (+5.1 percent) and Miscellaneous manufacturing (+4.2 percent).

A comparison of the data in table 8 and the results reported in tables 9 through 14 reveals that price sensitivity of imports and exports, and the importance of imports and exports relative to domestic output are major determinants of the importance of the trade effects in the industry.

Table 13.
Impact of the House tax proposal on trade
under fixed exchange rates

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	-15	-3.1	6	0.6	-21	-0.0
2	Other agricultural products	-661	-3.4	63	0.7	-724	-0.7
3	Forestry and fishery products	-9	-4.5	25	2.6	-34	-0.4
4	Agricultural, forestry, and fishery services	.	.	0	1.4	.	.
5	Iron and ferroalloy ores mining	-15	-2.9	22	2.9	-37	-1.2
6	Nonferrous metal ores mining	-6	-2.4	22	2.4	-27	-0.8
7	Coal mining	-180	-3.6	6	3.6	-186	-0.6
8	Crude petroleum and natural gas	-10	-2.1	89	2.1	-98	-0.1
9	Stone and clay mining and quarrying	-21	-3.5	29	3.5	-50	-0.6
10	Chemical and fertilizer mineral mining	-20	-4.4	46	4.4	-65	-1.6
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	-24	-1.4	2	0.7	-26	-0.1
14	Food and kindred products	-498	-4.7	335	2.0	-834	-0.3
15	Tobacco manufactures	-52	-4.1	1	1.8	-53	-0.2
16	Broad and narrow fabrics, yarn and thread mills	-23	-2.3	66	2.3	-89	-0.2
17	Miscellaneous textile goods and floor coverings	-18	-2.8	30	2.8	-48	-0.4
18	Apparel	-15	-1.8	431	3.3	-446	-0.8
19	Miscellaneous fabricated textile products	-5	-1.4	13	1.4	-18	-0.2
20	Lumber and wood products, except containers	-204	-4.2	231	4.3	-435	-0.8
21	Wood containers	-1	-2.3	2	2.4	-3	-0.4
22	Household furniture	-4	-1.4	258	8.3	-262	-1.5
23	Other furniture and fixtures	-4	-1.4	55	8.1	-59	-0.4
24	Paper and allied products, except containers	-383	-9.4	264	3.5	-647	-0.8
25	Paperboard containers and boxes	.	.	3	3.5	.	.
26	Printing and publishing	-102	-8.0	38	3.0	-140	-0.1
27	Chemicals and selected chemical products	-520	-4.1	369	4.1	-889	-1.1
28	Plastics and synthetic materials	-159	-3.8	57	3.4	-216	-0.6
29	Drugs, cleaning and toilet preparations	-150	-4.5	115	4.5	-266	-0.5
30	Paints and allied products	-9	-4.3	4	3.9	-13	-0.1
31	Petroleum refining and related industries	-151	-2.9	1,507	2.9	-1,658	-0.9
32	Rubber and miscellaneous plastic products	-109	-4.0	724	12.9	-833	-1.2
33	Leather tanning and finishing	-6	-2.1	20	4.6	-26	-1.4
34	Footwear and other leather products	-4	-1.7	316	3.7	-320	-4.2
35	Glass and glass products	-12	-1.6	46	3.2	-58	-0.5
36	Stone and clay products	-34	-3.7	296	8.2	-329	-0.8
37	Primary iron and steel manufacturing	-40	-1.9	387	3.2	-427	-0.5
38	Primary nonferrous metals manufacturing	-28	-0.6	217	2.1	-244	-0.5
39	Metal containers	-2	-2.0	9	2.9	-11	-0.1
40	Heating, plumbing, and structural metal products	-3	-0.3	15	1.7	-18	-0.0
41	Screw machine products and stampings	-4	-1.6	16	1.6	-20	-0.1
42	Other fabricated metal products	-44	-2.7	229	4.3	-273	-0.7
43	Engines and turbines	-81	-1.8	4	1.8	-85	-0.6
44	Farm and garden machinery	-26	-1.8	33	1.8	-59	-0.4
45	Construction and mining machinery	-102	-1.7	40	1.7	-142	-0.5

Table 13.
Impact of the House tax proposal on trade under fixed exchange rates--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	-13	-1.7	26	1.7	-38	-0.6
47	Metalworking machinery and equipment----------	-140	-5.3	199	5.3	-339	-1.4
48	Special industry machinery and equipment----------	-31	-1.6	52	1.6	-84	-0.6
49	General machinery and equipment----------	-55	-1.8	71	1.7	-126	-0.5
50	Miscellaneous machinery, except electrical----------	-31	-1.4	0	1.4	-32	-0.2
51	Office, computing, and accounting machines----------	-978	-6.2	670	5.4	-1,649	-3.9
52	Service industries machines----------	-35	-1.8	6	1.8	-41	-0.2
53	Electric industrial equipment and apparatus---------	-98	-2.7	48	1.6	-146	-0.5
54	Household appliances----------	-42	-3.9	54	1.6	-96	-0.6
55	Electric lighting and wiring equipment----------	-91	-8.0	182	10.3	-272	-1.5
56	Radio, TV, and communication equipment----------	-127	-2.0	379	2.8	-507	-0.8
57	Electronic components and accessories----------	-439	-7.1	55	0.7	-494	-1.0
58	Misc. electrical machinery and supplies----------	-274	-8.7	163	4.5	-437	-3.0
59	Motor vehicles and equipment----------	-816	-4.4	2,847	4.4	-3,663	-2.1
60	Aircraft and parts----------	-656	-3.6	338	5.7	-994	-1.4
61	Other transportation equipment----------	-55	-2.6	106	4.0	-161	-0.5
62	Scientific and controlling instruments----------	-256	-4.4	127	3.4	-383	-1.6
63	Optical, ophthalmic, and photographic equipment-----	-69	-3.0	144	3.0	-214	-1.1
64	Miscellaneous manufacturing----------	-379	-4.1	1,214	5.5	-1,593	-6.0
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	-8,340		13,122		-21,459	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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Table 14.
Impact of the President's tax proposal on trade under fixed exchange rates

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
1	Livestock and livestock products	17	3.6	-6	-0.7	24	0.0
2	Other agricultural products	1,030	5.4	-98	-1.1	1,128	1.0
3	Forestry and fishery products	2	0.8	-5	-0.5	6	0.1
4	Agricultural, forestry, and fishery services	.	.	-0	-0.5	.	.
5	Iron and ferroalloy ores mining	0	0.0	-0	-0.0	0	0.0
6	Nonferrous metal ores mining	0	0.1	-1	-0.1	1	0.0
7	Coal mining	-8	-0.2	0	0.2	-9	-0.0
8	Crude petroleum and natural gas	10	2.1	-89	-2.1	99	0.1
9	Stone and clay mining and quarrying	0	0.0	-0	-0.0	0	0.0
10	Chemical and fertilizer mineral mining	-1	-0.1	1	0.1	-2	-0.1
11	New construction	.	.	.	.	.	.
12	Maintenance and repair construction	.	.	0	0.0	.	.
13	Ordnance and accessories	19	1.1	-2	-0.6	21	0.1
14	Food and kindred products	309	2.9	-208	-1.3	517	0.2
15	Tobacco manufactures	61	4.8	-2	-2.1	63	0.3
16	Broad and narrow fabrics, yarn and thread mills	8	0.8	-23	-0.8	31	0.1
17	Miscellaneous textile goods and floor coverings	5	0.8	-8	-0.8	13	0.1
18	Apparel	17	2.0	-495	-3.8	512	1.0
19	Miscellaneous fabricated textile products	5	1.5	-14	-1.5	19	0.2
20	Lumber and wood products, except containers	31	0.6	-35	-0.6	65	0.1
21	Wood containers	0	0.4	-0	-0.4	1	0.1
22	Household furniture	2	0.8	-148	-4.8	150	0.9
23	Other furniture and fixtures	3	1.0	-39	-5.8	42	0.3
24	Paper and allied products, except containers	24	0.6	-16	-0.2	40	0.0
25	Paperboard containers and boxes	.	.	-0	-0.1	.	.
26	Printing and publishing	17	1.4	-7	-0.5	24	0.0
27	Chemicals and selected chemical products	83	0.7	-59	-0.7	141	0.2
28	Plastics and synthetic materials	28	0.7	-10	-0.6	39	0.1
29	Drugs, cleaning and toilet preparations	19	0.6	-15	-0.6	34	0.1
30	Paints and allied products	2	0.7	-1	-0.6	2	0.0
31	Petroleum refining and related industries	111	2.1	-1,111	-2.1	1,222	0.7
32	Rubber and miscellaneous plastic products	23	0.8	-154	-2.7	177	0.3
33	Leather tanning and finishing	9	3.0	-28	-6.5	36	2.0
34	Footwear and other leather products	5	2.1	-389	-4.5	394	5.1
35	Glass and glass products	1	0.2	-5	-0.4	6	0.1
36	Stone and clay products	2	0.3	-20	-0.6	22	0.1
37	Primary iron and steel manufacturing	5	0.2	-45	-0.4	49	0.1
38	Primary nonferrous metals manufacturing	3	0.1	-26	-0.2	29	0.1
39	Metal containers	1	0.5	-2	-0.8	3	0.0
40	Heating, plumbing, and structural metal products	1	0.1	-4	-0.5	5	0.0
41	Screw machine products and stampings	1	0.4	-4	-0.4	5	0.0
42	Other fabricated metal products	12	0.8	-65	-1.2	78	0.2
43	Engines and turbines	29	0.6	-2	-0.6	30	0.2
44	Farm and garden machinery	10	0.7	-13	-0.7	24	0.2
45	Construction and mining machinery	37	0.6	-14	-0.6	51	0.2

Table 14.
Impact of the President's tax proposal on trade under fixed exchange rates--Continued

Input-output sector	Sector description	Change in exports		Change in imports		Change in trade balance	Change in trade balance as a share of domestic output 2/
		Volume 1/	-Percent-	Volume 1/	-Percent-	Volume 1/	-Percent--
46	Materials handling machinery and equipment----------	5	0.7	-10	-0.7	15	0.3
47	Metalworking machinery and equipment----------	54	2.1	-77	-2.1	132	0.6
48	Special industry machinery and equipment----------	12	0.6	-20	-0.6	32	0.2
49	General machinery and equipment----------	21	0.6	-26	-0.6	47	0.2
50	Miscellaneous machinery, except electrical----------	10	0.4	-0	-0.4	10	0.1
51	Office, computing, and accounting machines----------	407	2.6	-279	-2.3	686	1.6
52	Service industries machines----------	13	0.7	-2	-0.7	16	0.1
53	Electric industrial equipment and apparatus---------	39	1.1	-19	-0.6	59	0.2
54	Household appliances----------	14	1.4	-19	-0.5	33	0.2
55	Electric lighting and wiring equipment----------	34	3.0	-68	-3.9	102	0.6
56	Radio, TV, and communication equipment----------	77	1.2	-231	-1.7	308	0.5
57	Electronic components and accessories----------	157	2.5	-20	-0.2	176	0.4
58	Misc. electrical machinery and supplies----------	103	3.3	-61	-1.7	165	1.1
59	Motor vehicles and equipment----------	88	0.5	-307	-0.5	395	0.2
60	Aircraft and parts----------	362	2.0	-187	-3.2	549	0.8
61	Other transportation equipment----------	30	1.4	-59	-2.2	89	0.3
62	Scientific and controlling instruments----------	129	2.2	-64	-1.7	193	0.8
63	Optical, ophthalmic, and photographic equipment-----	36	1.6	-76	-1.6	112	0.6
64	Miscellaneous manufacturing----------	268	2.9	-856	-3.9	1,124	4.2
65-77	Services----------	0	0.0	0	0.0	0	0.0
	Total----------	3,794		-5,542		9,337	

1/ The change in the quantity of trade valued at prices prior to the tax changes (in millions of dollars). Initial trade quantities are for 1985.
2/ Based on domestic output levels in 1984.

Source: Calculated by the staff of the U.S. International Trade Commission.

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Appendix A
The Provisions of the Proposed Tax Reforms

This appendix describes briefly the provisions of the proposed tax reforms that are the most important departures from current law from the viewpoint of their effects on international competitiveness of U.S. producers.

Provisions of the President's Proposals to the Congress for Fairness, Growth, and Simplicity

Individual income taxes

The main change in individual taxes from current law is that marginal tax rates on personal income would be reduced. The current system generally allows for 14 different tax brackets ranging from 11 percent on the low end to 50 percent on the high end. (For single individuals, there are 15 brackets between the high and low rates.) The President's proposal would replace these rates with only three brackets--15, 25, and 35 percent. According to estimates by the Treasury Department, the proposed changes would reduce overall individual tax liabilities by 7 percent and would reduce the overall marginal tax rate by 19 percent. The marginal tax rate refers to the tax rate that applies to the last dollar of income earned by the taxpayer. A reduction in the marginal tax rate is important because it reduces the disincentive effect that taxes produce on taxpayer efforts to generate additional income. Figure 1 shows how marginal tax rates would be changed for different family incomes.

In addition to changing the personal income tax rates, the President's proposal would also change a number of other personal income tax provisions from current law. These are summarized in table A-1. The most important of these changes is the elimination of deductions for state and local taxes. The net effect of all the proposed changes in personal taxes on average tax rates for different family income groups is shown in table A-2.

Taxes on capital and business income

The main changes in tax rates on income from capital from current law from the viewpoint of the effects on U.S. international competitiveness are a reduction in the statutory rate, elimination of the Accelerated Cost Recovery System (ACRS), and elimination of the Investment Tax Credit (ITC). The current law taxes corporate income at a graduated rate, from 15 percent on taxable corporate income up to $25,000 to 46 percent on taxable corporate income over $1 million. The proposed law also provides for a graduated rate beginning with 15 percent but ending with 33 percent for taxable corporate income above $360,000. (The current and proposed laws are summarized in table A-3.) In addition, the exclusion of the first $100 in dividend income on individual tax returns allowed for in the current law would be repealed. Instead, corporations would be allowed to deduct 10 percent of dividends paid to their shareholders. This deduction is meant to reduce the double taxation of capital income, since this income is taxed both at the corporate and individual levels. This change would benefit industries that distribute a large share of their earnings in the form of dividends, such as the communications industry and public utilities. Table A-4 shows how assets can be depreciated under the Capital Cost Recovery System (CCRS). Tables A-5 and A-6 show how the changes in depreciation rules would alter effective tax

rates. Table A-5 shows the effective tax rates for various types of assets under current law and table A-6 shows the effective rates under the proposed law.

The current depreciation rules allow corporations to deduct depreciation allowances according to an accelerated schedule. That is, they are able to recover the value of most depreciable property in a period significantly shorter than the econoic life of this property. The proposed law (the CCRS) would replace the ACRS with a depreciation schedule based more closely on the economic life of the asset. Since the ACRS is not indexed for inflation, the effective tax rate on capital income varies substantially with inflation. The CCRS, in contrast, is indexed for inflation.

Current law allows for an investment tax credit equal to 10 percent of the corporation's investment in certain depreciable property (mostly machinery and equipment), except 3-year property (largely automobiles, light trucks, and research and experimentation property), which receives a tax credit of only 6 percent. Table A-7 shows the use of the investment tax credit by various industries.

An illustrative example summarizing the effects of the President's proposed tax changes on effective tax rates on various types of corporate assets is shown in tables A-8 and A-9. Table A-8 shows the effects on the effective corporate tax rate on corporate income, and table A-9 shows the effects on the combined corporate and personal tax rates on corporate income.

The President's proposals also include a number of other changes, including a revision of capital gains tax rates and the tax treatment of inventories. These are summarized in table A-10. The most important of these changes from the standpoint of revenue effects is a provision to deny the rate reduction benefits attributable to excess depreciation. Some taxpayers (mostly corporations) used rapid initial depreciation to shift their tax liabilities into the future. These shifted tax liabilities would be substantially reduced by the reduction in marginal tax rates, providing a windfall gain to these taxpayers. The proposed provision would then eliminate this windfall.

Overall, the President's proposed tax reforms would leave total income tax collections approximately the same as they would have been under the old tax law. The net revenue effects are summarized in table A-11.

Provisions of the House Ways and Means Committee Tax Proposals

Individual income taxes

The House Ways and Means Committee proposals (hereafter the committee bill) would lower individual marginal income tax rates and replace the current system of 14 different tax brackets (15 for individuals) with four brackets, as shown in table A-12. The committee bill also raises the amount of income that can be earned before tax liabilities are incurred and increases the personal exemption. The net effect of these and the other changes contained in the committee bill is to lower the overall individual tax liability by an estimated 9 percent. Table A-13 compares the average income tax liability and tax rate for different income groups under current law and under the committee bill.

Taxes on capital and business income

The main changes in corporate tax rates in the committee bill are a reduction in the statutory rate, elimination of the ACRS and elimination of the ITC. The new corporate tax rate schedule specified in the committee bill is shown in table A-14. In addition, the committee bill does not allow exclusion of the first $100 dollars in dividend income on individual tax returns and instead allows corporations to deduct 10 percent of dividends paid to shareholders. These provisions are basically the same as those in the President's proposals.

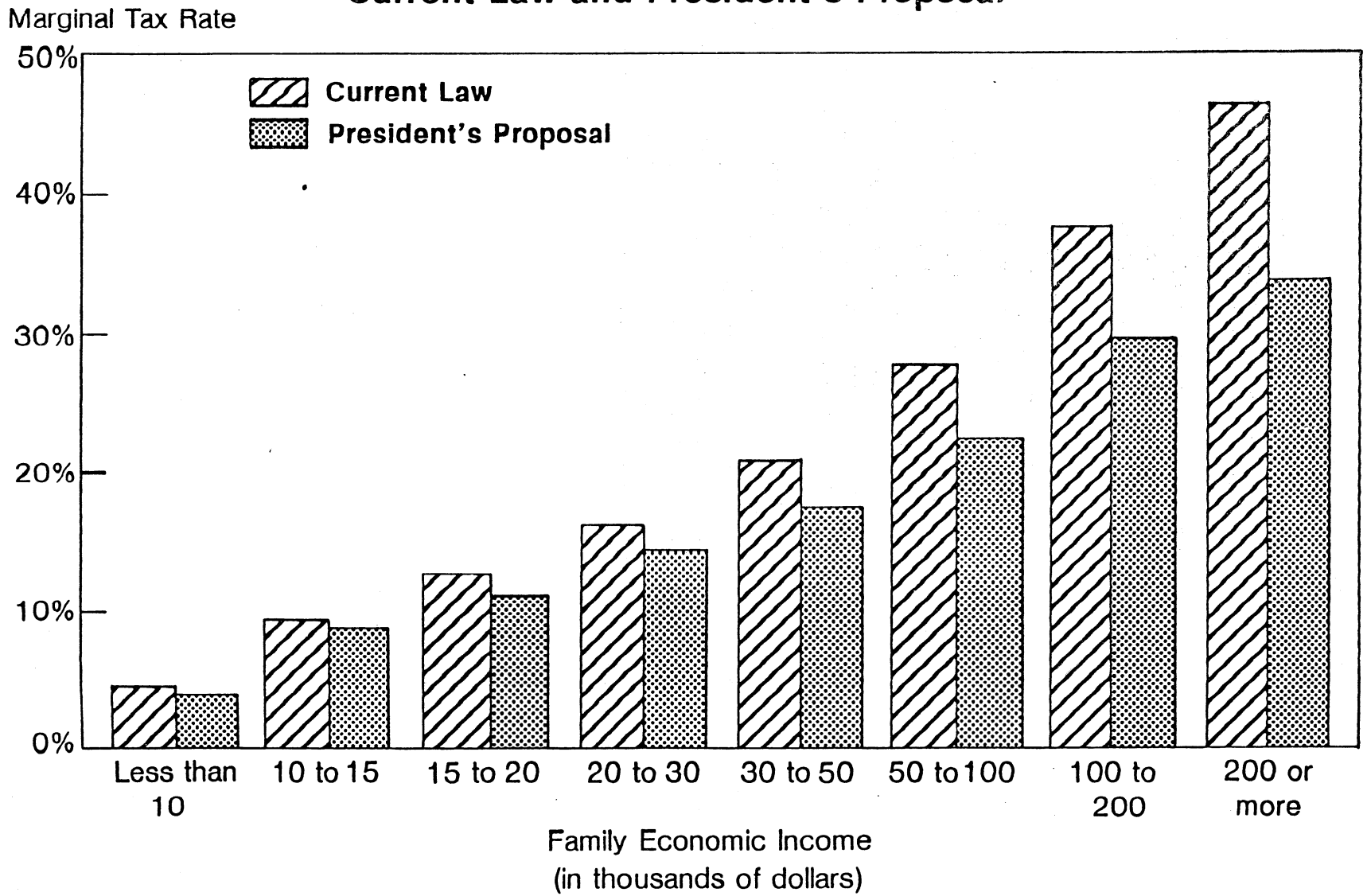
The committee bill replaces the ACRS with the Incentive Depreciation System (IDS). The IDS generally provides for longer depreciation periods that are more closely related to the economic life of the depreciable asset. The IDS groups assets into 10 classes according to the economic life of the asset. The assets in the first 9 classes can be depreciated by the double declining balance method, switching to the straight line method at a time to maximize the depreciation allowance. Assets in IDS class 10 are depreciated by the straight-line method. In all cases, the salvage value of property is treated as zero. Depreciation deductions on new investments after enactment of the bill will be subject to adjustments for inflation beginning in 1988.

The bill also makes numerous other changes in corporate taxes rules. Like the President's proposed changes, the committee bill would substantially alter the share of total taxes paid by individuals and by corporations, as shown in table A-15. Unlike the President's proposals, the committee bill is not quite revenue neutral, and would increase overall tax revenues by an estimated $7.3 billion in 1986, though it would reduce overall tax revenues in later years. The revenue effects of the bill and its various provisions are summarized in tables A-16 and A-17.

Figure 1

MARGINAL RATES OF TAX BY FAMILY ECONOMIC INCOME

Current Law and President's Proposal



Source: Office of the Secretary of the Treasury, May 28, 1985

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Table A-1.--Comparison of highlights of current law and the President's proposal, individual income

	Current Law (1986)	President's Proposal
Individual tax rates	14 rate brackets from 11 to 50%, indexed	3 rate brackets 15,25, and 35%, indexed
Exemptions		
Self, spouse	$1,080, indexed	$2,000, indexed
Dependents	$1,080, indexed	$2,000, indexed
Zero bracket amount		
Single	$2,480, indexed	$2,900, indexed
Joint	$3,670, indexed	$4,000, indexed
Heads of Household	$2,480, indexed	$3,600, indexed
Two-earner deduction	Yes	No
Earned income credit	Yes ($550 maximum)	Increased and indexed ($726 maximum)
Child care expenses	Tax credit	Deduction
Fringe benefits		
Health insurance	Not taxed	Limited amount taxed
Group-term life insurance, legal services, dependent care, education assistance	Not taxed	Not taxed
Parsonage allowance	Not taxed	Not taxed
Wage Replacement		
Unemployment compensation	Taxed if AGI over $12,000 ($18,000 if married)	Taxed
Workers' compensation	Not taxed	Taxed, but eligible for expanded and indexed credit for elderly and disabled
Veterans' disability benefits	Not taxed	Not taxed

Table A-1.--Comparison of highlights of current law and the President's proposal, individual income--Continued

	Current Law (1986)	President's Proposal
Itemized Deductions		
State and local income tax	Deductible	Not deductible
Other state and local taxes	Deductible	Not deductible, unless incurred in income-producing activity
Charitable	Deductible by itemizers and nonitemizers	Deductible for itemizers, but no deduction for non-itemizers
Mortgage interest	Deductible	Deductible, for principal residences
Other personal interest	Personal interest deductible; investment interest limited to $10,000 over investment income	Limited to $5,000 over investment income for expanded definition of interest subject to limit (with phase-in)
Medical expenses	Deductible (above 5% of AGI)	Deductible (above 5% AGI)
Tax Abuses		
Entertainment expenses	Deductible	Not deductible
Business meals and travel expenses	Deductible	Deduction denied for 50% of meal costs above cap
Income shifting to children and via trusts	Permissible	Curtailed, except for post-death trusts
Retirement savings		
IRA	$2,000	$2,000
Spousal IRA	$250	$2,000
Corporate pensions	Tax deferred	Tax deferred
Social security	Generally not taxed	Generally not taxed

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-2.--Average tax rate and change in taxes paid by income class

(In percent)

Income Class	Average Tax Rate		Change in Taxes
	Current Law	President's Proposal	
Less than $10,000	1.4	0.9	-35.5
$10,000 - $15,000	3.2	2.5	-22.8
$15,000 - $20,000	4.6	4.0	-13.5
$20,000 - $30,000	6.3	5.7	-8.7
$30,000 - $50,000	7.8	7.3	-6.6
$50,000 - $100,000	9.4	9.0	-4.2
$100,000 - $200,000	13.2	12.7	-4.1
$200,000 and Over	21.0	18.7	-10.7
Total	8.7%	8.1%	-7.0%

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-3.--Corporate income tax rates

Current law

For corporate income under $100,000, tax generally is imposed under the following schedule:

	Tax Rate	Taxable income
(1)	15 percent	up to $25,000
(2)	18 percent	between $25,000 and $50,000
(3)	30 percent	between $50,000 and $75,000
(4)	40 percent	between $75,000 and $100,000

The graduated rates are phased out for corporations with taxable income over $1,000,000, so that corporations with taxable income of $1,405,000 or more pay, in effect, a flat tax at the 46 percent rate.

President's Proposal

	Tax Rate	Taxable income
(1)	15 percent	up to $25,000
(2)	18 percent	between $25,000 and $50,000
(3)	25 percent	between $50,000 and $75,000

The graduated rates would be phased out for corporations with taxable income over $140,000, so that corporations with taxable income of $360,000 or more would pay, in effect, a flat tax at the 33 percent rate.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-4.--CCRS asset classes under the President's proposal

CCRS Class	Classification of ACRS Property	Deprec. Rate 1/	Recovery Period 2/
Class 1	3-year property	55 %	4
Class 2	Trucks, Buses, and Trailers Office, Computing, and Accounting Equipment	44 %	5
Class 3	Construction Machinery, Tractors, Aircraft, Mining and Oil Field Machinery, Service Industry Machinery, and Instruments	33 %	6
Class 4	5-year, 10-year, and 15-year public utility property not assigned to Class 2,3, or 5 -- E.g., Metal Working Machinery, Furniture and Fixtures, General Industrial Machinery, Other Electrical Equipment, Communications Equipment, Fabricated Metal Products, and Railroad Track and Equipment	22 %	7
Class 5	Railroad Structures, Ships and Boats, Engines and Turbines, Plant and Equipment for Generation, Transmission and Distribution of Electricity, Gas and Other Power, and Distribution Plant for Communications Services	17 %	10
Class 6	18-year property; 15-year low-income housing	4 %	28

1/ The depreciation method switches from a constant declining-balance rate to the straight-line method in the year of service in which the straight-line method produces greater depreciation allowances than the declining-balance rate would, assuming a half-year convention for computation of the straight-line method.

2/ The recovery period is the number of years over which cost recovery is computed under the straight-line method. A consequence of assuming a half-year convention for purposes of computing depreciation rates under the straight-line method is that depreciation schedules cover one year more than the recovery periods.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-5.--Effective corporate tax rates on income from equity-financed investments with various rates of inflation for 46 percent taxpayer under current law 1/

Asset Class (Years)	Inflation Rate (Percent)		
	0	5	10
3	-75	-9	18
5	-47	-4	16
10	-6	19	31
15	8	33	43
18	27	39	45

1/ Assumptions: Real return after tax is four percent. The investment tax credit selected is the maximum allowable for new equipment (6 percent on three-year equipment and ten percent on 5-, 10-, and 15-year equipment). Effective tax rates are the difference between the real before-tax rate of return and the real after-tax rate of return divided by the real before-tax rate of return.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-6.--Effective tax rates on equity financed investments in equipment and structures under the President's proposal 1/

Class	Paid 2/	Held 3/
1	16 4/	18
2	16	18
3	17	18
4	17	18
5	17	18
6	23	25

1/ Assumes 33 percent statutory tax rate and 4 percent required return after tax and inflation. The effective tax rate at the entity level may be lower than reported here on leveraged investments, depending on the degree of debt-finance and the relation between the interest rate on debt and the rate of return on the investment. Effective tax rates on different property within a recovery class may vary somewhat depending on experienced economic depreciation rates.

2/ Assumes application of a 10 percent dividend paid deduction to a corporation which distributes 100 percent of its earnings derived from depreciable assets.

3/ Assumes no distribution of corporate earnings derived from depreciable assets.

4/ The difference between the 16 percent effective tax rate for Classes 1 and 2 and the 17 percent effective tax rate for Classes 3 through 5 are due to rounding and are not significant.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-7.--Utilization of investment tax credits in 1981
($ millions)

Industry	Investment Credit Earned	Investment Credit Used Against 1981 Tax Liabilities	Percent of Earned Credit Allowed	Unused Investment Credit
All manufacturing	$11,327	$9,116	80	$6,720
Food manufacturing	1,025	831	81	403
Tobacco manufacturing	144	151	105 1/	0
Textile mill products	146	125	86	83
Apparel	60	56	93	25
Lumber and wood	309	48	16	392
Furniture and fixtures	38	30	79	14
Paper products	373	303	81	207
Printing and publishing	482	345	72	218
Chemicals	1,134	872	77	653
Petroleum and refining	2,332	2,295	98	209
Rubber and plastic	132	111	84	120
Leather products	20	19	95	4
Stone, clay and glass	264	148	56	242
Primary metals	492	649	132 1/	981
Fabricated metals	447	326	73	229
Machinery	1,166	938	80	420
Electrical equipment	1,081	631	58	1,080
Motor vehicles	865	739	85	877
Transportation equipment	418	123	29	501
Instruments	296	293	99	24
Other manufacturing	103	81	79	42
Utilities	4,844	3,047	63	7,939
Other sectors	9,831	6,649	68	8,022
Total	$26,002	$18,812	72	$22,681

1/ Percentage greater than 100 indicates that credits were carried forward and used from previous years.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-8.--Effective corporate and personal income tax rates on equity financed investments when the returns to capital are distributed equally between dividends and capital gains 1/

	All capital 2/	Equip. and struct.	Equipment	Structures	Inventories 3/
Pre-1981 law 4/ at 10 percent inflation	63	63	52	67	62
ACRS 5/:					
With investment tax credit at:					
10 percent inflation	59	57	44	61	62
5 percent inflation	51	47	21	54	59
Without investment tax credit at:					
5 percent inflation	55	54	55	54	59
Capital cost recovery system:					
With 10 percent dividend relief 6/	41	39	35	40	46

1/ Assumes a 4 percent real return after corporate tax. Assumes two-thirds of capital gains deferred indefinitely, and the remaining third taxed at the given statutory rate less the applicable exclusion. The effective tax rate at the entity level may be lower than reported here on leveraged investments, depending on the degree of debt finance and the relation between the interest rate on debt and the rate of return on the investment.

2/ All capital includes equipment, structures and inventories.

3/ Assumes LIFO accounting with no reduction in inventories and inventory prices rising with inflation.

4/ Assumes 46 percent corporate statutory tax rate and 32.7 personal tax rate and 60 percent capital gains exclusion. Assumes sum of years digits depreciation over 9 years and 10 percent investment credit for equipment and 150 percent declining balance over a 34.4-year life for structures.

5/ Assumes 46 percent corporate tax rate and 32.7 percent personal tax rate with 60 percent capital gains exclusion. Assumes 5-year depreciation schedule with half-basis adjustment for equipment and 18-year schedule for structures.

6/ Assumes 33 percent corporate rate and 26.5 percent personal rate with 50 percent capital gains exclusion. Assumes 10 percent corporate deduction for net dividends paid. Deviations in economic depreciation rates among assets may slightly alter tax rates.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-9.--Effective corporate income tax rates on equity financed investments when the returns to capital are distributed equally between dividends and capital gains 1/

	All capital 2/	Equip. and struct.	Equipment	Structures	Inventories 3/
Pre-1981 law 4/ at 10 percent inflation	48	48	31	53	46
ACRS 5/:					
With investment tax credit at:					
10 percent inflation	41	40	20	45	46
5 percent inflation	35	31	-4	39	46
Without investment tax credit at:					
5 percent inflation	41	39	41	39	46
Capital cost recovery system:					
With 10 percent dividend relief 6/	25	22	17	24	32

See footnotes for table A-8, except only corporate tax rates apply.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-10.--Comparison of highlights of current law and the President's proposal, capital and business income

	Current Law (1986)	President's Proposal
Capital and business income		
Corporate tax rates	Graduated, up to 46%	Graduated, up to 33%
Limited partnerships	Losses flow through to partners	Same as current law
Dividend relief	$100/$200 exclusion	Exclusion repealed; 10% dividend-paid deduction
Depreciation	ACRS	Indexed, with investment incentive
Investment tax credit	6% - 10%	No
Capital gains	60% excluded	50% excluded (optional indexing in 1991)
Interest income/ expense	Fully taxed/ deductible	Fully taxed/ deductible
Inventory accounting		
LIFO conformity required	Yes	No
FIFO	Not indexed	Indexed
Uniform production cost rules	No uniform rules	Uniform rules
Installment sales	Deferral	Generally no deferral if receivables pledged
Bad debt reserve deduction	Yes	No
Oil industry percentage depletion	Yes	Phased out with stripper exception

Table A-10.--Comparison of highlights of current law and the President's proposal, capital and business income--Continued

	Current Law (1986)	President's Proposal
Expensing of intangible drilling costs	Yes	Yes
Windfall profits tax	Will phase out in 1991	Will phase out in 1991
Financial institutions		
Special bad debt deduction	Yes	No
Deduction for interest to carry tax-exempts	Yes	No
Exemption of credit unions	Yes	No, except for small credit unions
Deferral for life insurance income and annuity income	Yes	No, except for existing policies
Exemption of certain insurance companies including fraternal organizations	Yes	Yes
Municipal bonds		
Public purpose	Tax-exempt	Tax-exempt
Private purpose	Tax-exempt	Taxable
Rehabilitation and energy credits	Yes	No
Minimum tax on individuals and corporations	Yes	Retain and tighten

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-11.--Change in receipts by source if the President's proposal is implemented

($ billions)

	Fiscal Years		
	1986	1988	1990
INCOME TAX REFORM AND SIMPLIFICATION FOR INDIVIDUALS 1/			
A. Rate Reduction			
Rate schedules (see Note B at end of table)	-11.1	-60.6	-72.7
B. Fairness for Families			
Increase the Zero Bracket Amount 2/	-4.4	-6.6	-7.6
Repeal the additional exemption for the blind and elderly; increase the taxpayer and dependent exemption to $2,000	-18.8	-42.1	-48.0
Expand the credit for the elderly and the disabled	-.2	-1.1	-1.3
Repeal second earner deduction	1.6	7.7	9.0
Expand and index earned income tax credit 3/	*	-1.6	-1.9
Replace child and dependent care dredit with a deduction from gross income	*	-.3	-.3
Fairness to Families, subtotal	-21.8	-44.0	-50.1
C. Fair and Neutral Taxation			
Excluded Sources of Income:			
Include a portion of employer provided health insurance in taxable income ($10/individual; $25/family per month)	2.4	3.7	4.0
Repeal exclusion of employer provided death benefits	*	*	.1
Repeal exclusion of employee awards	*	*	*
Repeal tax exempt threshold for unemployment compensation	--	1.2	1.1
Repeal exclusion of worker's compensation and black lung benefits (net of credit)	--	1.3	1.8
Limit exclusion of scholarships and fellowships	*	.2	.2
Repeal exclusion of prizes and awards	*	*	*
Extend exemption of contributions to group legal plans	-.1	-.2	-.3
Extend exemption of contributions for education assistance	-.1	-.2	-.3
Discrimination rules for employee benefits other than retirement benefits	*	.2	.2
Excluded Sources of Income, subtotal	2.3	6.1	6.9
Preferred uses of income:			
Repeal deduction for state and local taxes	4.5	34.1	40.0
Accelerate expiration of charitable contributioin deduction for non-itemizers	.4	--	--
Preferred Uses of Income, subtotal	5.0	34.1	40.0
D. Tax Abuses			
Restrict entertainment expense deductions and limit deductions for business meals (50 % over $25 per meal)			
Individual	.3	.7	.9
Corporate	.3	.8	1.0
Limit temporary assignments to 1 year			
Individual	*	*	*

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Deny deduction for education travel			
Individual	*	*	*
Corporate	*	*	*
Deny deduction for cruise ship seminars			
Individual	*	*	*
Corporate	*	*	*
Limit deduction for luxury water travel			
Individual	*	*	*
Corporate	*	*	
Tighten grantor trust rules			
Individual	*	*	*
Corporate	*	*	*
Revise taxation of trusts and estates			
Individual	.2	.6	.8
Tax unearned income of children under 14 at parent's rate			
Individual	.1	.5	.6
Tax abuses, subtotal:			
Individual	.6	1.8	2.3
Corporate	.3	.8	1.0
E. Further Simplification			
Implement return-free system	--	--	--
Revise the alternative minimum tax	.1	.3	.3
Move miscellaneous deductions above line and combine with employee business expense subject to a 1% of AGI floor	.2	1.7	1.9
Repeal political contribution credit	*	.3	.4
Repeal deduction for special needs adoption expenses	--	4/	4/
Repeal income averaging	1.0	4.3	4.9
Simplification, subtotal	1.3	6.6	7.6
BASIC TAXATION OF CAPITAL AND BUSINESS INCOME			
A. Revise Corporate Tax Rates			
Reduce maximum corporatre rate to 33%			
Corporate	-9.8	-36.1	-42.0
Revise graduated corporate rate structure			
Corporate	-.2	-.4	-.5
Reduce corporate tax rates, subtotal:			
Corporate	-10.0	-26.7	-41.8
B. Taxing Real Economic Income			
Capital gains			
Individual- (50% exclusion rate)	.6	4.6	5.4
Corporate	--	*	*

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Adjust depreciation schedules and index for inflation			
Individual	.1	1.3	5.8
Corporate	.3	2.3	15.4
Repeal investment tax credit			
Individual	1.7	5.6	6.4
Corporate	14.0	29.4	37.4
Allow expensing of first $5,000 of depreciable business property, repeal scheduled increases			
Individual	--	.1	.3
Corporate	--	.2	.4
Allow indexed FIFO, real conformity			
Individual	--	-.2	-.2
Corporate	--	-4.5	-4.5
Taxing real economic income, subtotal:			
Individual	2.4	11.4	18.5
Corporate	14.3	27.4	48.7
C. Recapture Saving			
Individual	*	.3	--
Corporate	7.6	20.4	--
D. Retirement Saving			
Increase spousal IRA limit to $2,000			
Individual	-.3	-.9	-1.1
Uniform distribution requirements			
Individual	*	*	*
Excise	*	*	*
Tax on pre-retirement distributions, uniform basis recovery rules			
Individual	-.1	.1	.9
Tax on qualified plan reversions			
Corporate	*	*	*
Repeal 10 year averaging of lump sum distributions			
Individual	.5	.6	.7
Repeal 3 year basis recovery rule for contributory plans			
Individual	.8	2.8	2.8
Eliminate defeeral of appreciation on employer retirement securities			
Individual	--	*	.1
Simplify contribution deduction limits			
Individual	*	*	.1
Excise tax on excess retirement contributions			
Individual	*	*	*
Excise	--	*	*
Repeal combined plan limt for con-topheavy plans			
Individual	-.1	-.3	-.4

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Tax on retirement distributions in excess of ceiling			
Individual	*	*	*
Modify rules for deductions of ESOP contributions, allow PAYSOP credit to expire			
Individual	*	*	*
Corporate	*	*	*
Modify cash and deferred arrangements (CODAs)			
Individual	1.1	2.1	2.8
Modify CODA and non-CODA discrimination rules			
Individual	--	*	*
Retirement savings, subtotal:			
Individual	1.9	4.5	5.8
Corporate	*	*	*
Excise	--	*	*
E. Neutrality toward the form of business organization			
10 percent dividends paid deduction, 90 percent intercorporate dividends received deduction			
Individual	--	-.3	1.3
Corporate	--	-6.2	-8.0
Repeal $100/$200 divident exclusion			
Individual	.2	.6	.7
Neutrality toward business organization, subtotal:			
Individual	.2	.3	1.9
Corporate	--	-6.2	-8.0
INDUSTRY SPECIFIC SUBSIDIES, TAX SHELTERS, AND OTHER TAX ISSUES			
A. Other general issues of income measurement			
Match expense and income from multiperiod production: completed contracts			
Individual	.1	.7	1.1
Corporate	.5	3.6	4.4
Restrict use of cash accounting method			
Individual	.1	.3	.3
Corporate	.4	.8	.8
Limit bad debt deductions to actual loss			
Individual	*	.1	.1
Corporate	.7	1.2	1.3
Treat pledges of installment obligations as payments			
Individual	*	.2	.4
Corporate	*	.1	.3
Income measurement, subtotal:			
Individual	.2	1.5	2.1
Corporate	3.3	10.3	15.0

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
B. Subsidies for specific industries			
Energy subsidies:			
Repeal business energy credits, limit gasahol exemption			
Individual	-*	-.1	-.1
Corporate	-.2	-.3	-.3
Excise	.2	.3	.4
Phase out percentage depletion except for stripper wells			
Individual	.1	.4	.8
Corporate	.1	.3	.9
Index basis of certain depletable assets			
Individual	--	-*	-*
Corporate	--	-.1	-.2
Repeal special treatment of royality income			
Individual	*	.1	.2
Corporate	*	*	*
Repeal of capital gains treatment for timber income			
Individual	*	*	*
Corporate	*	.1	.2
Repeal special rules for mining reclamation reserves			
Individual	*	*	*
Corporate	*	.1	.1
Energy, subtotal:			
Individual	*	.5	.9
Corporate	-*	.2	.7
Excise	.2	.3	.4
Financial institutions:			
Repeal depository institution's bad debt reserve deductions			
Corporate	.7	1.1	1.1
Disallow interest incurred to carry tax exempts 5/			
Individual	-*	-.4	-.8
Corporate	.1	.4	.9
Repeal tax exemption of large credit unions			
Corporate	.2	.4	.4
Repeal special carryover rules for depository institutions			
Corporate	*	*	*
Repeal special reorganization rules for troubled thrifts			
Corporate	--	--	--
Limit life insurance reserve deductions			
Corporate	.4	.7	.8
Repeal special percentage of taxable income deduction for life insurance companies and repeal exemption of certain small life insurance companies			
Corporate	.5	1.0	1.1
Limit P&C reserves			
Individual	-.1	-.1	-.1
Corporate	.1	1.0	2.4

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Repeal P&C insurance company deduction for addition to protection against loss accounts			
Corporate	.1	.1	.1
Limit deductibility of P&C dividends			
Corporate	.1	.1	.1
Repeal special tax exemption, rate reductions, and deductions of small mutual P&C companies			
Corporate	*	*	*
Financial institutions, subtotal:			
Individual	-.2	-.5	-.9
Corporate	2.1	4.9	6.9
Insurance investment income:			
Repeal exclusion of inside buildup			
Individual	--	--	--
Repeal exclusion of current annuity income			
Individual	*	.2	.4
Insurance investment income, subtotal:			
Individual	*	.2	.6
State and local governments debt and investments:			
Repeal exemption for nongovernmental bonds			
Individual	.4	3.5	5.5
Corporate	-.1	-.6	-1.0
Tighten restrictions on tax exempt bond arbitage			
Individual	.1	.2	.2
Corporate	*	*	*
State and local government, subtotal:			
Individual	.5	3.7	5.7
Corporate	*	-.6	-1.0
Special expensing and amortization rules:			
Repeal expensing of conservation expenditures and farmers fertilizer and field clearing			
Individual	.4	.1	.1
Corporate	.4	.1	.1
Repeal 5 year amortization of expenditures for rehabilitation of low income rental housing			
Individual	*	*	*
Corporate	*	*	*
Repeal 5 year amortization of pollution control			
Corporate	*	*	*
Repeal 50 year amortization of railroad tunnels and bores			
Corporate	*	*	*
Repeal 5 year amortization of trademark expenses			
Individual	*	*	*
Corporate	*	*	*

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Repeal 84 month amortization, 10 percent credit for reforestation			
Individual	*	*	*
Corporate	*	*	*
Special expensing and amortization, subtotal:			
Individual	.4	.1	.2
Corporate	.4	.1	.1
Other specific subsidies:			
Repeal rehabilitation tax credits			
Individual	.1	.9	2.1
Corporate	*	.3	.6
Repeal special rules for returns of magazines etc and qualified discount coupons			
Corporate	.2	*	*
Repeal exclusion of merchant marine capital construction fund			
Corporate	*	.1	.1
Extend credit for research and experimentation			
Individual	-*	-*	-*
Corporate	-.6	-1.5	-1.9
Require employers to make nondeductible payments to employees who receive ESOP dividends			
Individual	*	*	*
Corporate	*	*	*
Other subsidies, subtotal:			
Individual	.1	.9	2.1
Corporate	-.3	-1.0	-1.2
C. Further curtailment of tax shelters			
Repeal deduction for nonbusiness interest other than principal home mortgages ($5,000) limitation)			
Individual	*	.4	1.5
Limit artificial losses (at risk rules)			
Individual	.1	.3	.5
Corporate	-.1	-.3	-.4
Tax shelters, subtotal:			
Individual	.1	.7	1.9
Corporate	-1.	-.3	-.4
D. International issues			
Use per country limitation for foreign tax credit			
Corporate	.9	3.0	3.6
Modify rules concerning source of income and allocation of deductions			
Corporate	.4	1.1	1.3

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Replace secondar dividend rule with branch profit tax			
Corporate	*	*	*
Possessions tax credit			
Corporate	-*	*	.2
Treat foreign exchange gains or losses as adjustments in interest			
Corporate	*	*	*
Rationalize tax treatment of U.S. territories			
Corporate	*	*	*
International issues, subtotal:			
Corporate	1.3	4.1	5.1
E. Other related tax issues			
Penalties			
Simplify information return penalties			
Individual	--	--	--
Corporate	--	--	--
Repeal maximum limits for penalties			
Individual	*	*	*
Corporate	*	*	*
Estate and gift	*	*	*
Excise	*	*	*
Change failure-to-pay penalty to cost-of-collection charge			
Individual	.3	.3	.3
Corporate	*	*	*
Estate and gift	*	*	*
Excise	*	*	*
Penalties, subtotal:			
Individual	.3	.3	.3
Corporate	*	*	*
Estate and gift	*	*	*
Excise	*	*	*

Table A-11.--Change in receipts by source if the President's proposal is implemented--Continued

($ billions)

	Fiscal Years		
	1986	1988	1990
Total Change in Receipts:			
Individual	-17.9	-32.0	-26.9
Corporate	18.9	24.3	25.2
Estate and gift	*	*	*
Excise	.2	.4	.4
Total	1.2	-7.3	-1.2
Current service April uodate receipts:			
Individual	358.9	436.1	517.8
Corporate	76.9	100.3	110.8
Estate and gift	5.3	4.7	5.1
Excise	34.3	32.9	32.6
Total	475.5	574.1	666.2
Unified budget receipts - tax reform:			
Individual	341.0	404.2	490.9
Corporate	95.8	124.6	136.0
Estate and gift	5.4	4.7	5.1
Excise	34.5	33.2	33.0
Total	476.7	566.7	665.0

* - negligible. Detail may not add to total due to rounding.

1/ Individual unless otherwise noted.

2/ Zero bracket amounts are increased to (in 1986 dollars): $2,900 for single filers, $3,600 for heads of households, and $4,000 for joint filers.

3/ Includes outlays associated with the refundable portion of the credit.

4/ The effect of the repeal of these provisions is assumes to be offset by increased expenditures. The receipts generated by these provisions are not shown in this table.

5/ The proposal would effectively eliminate the use of deposits by banks for leveraged holdings of tax exempt bonds. These bonds would then be held primarily by individuals.

NOTE A: The estimates are based on the April update of the 1986 budget. The effects of the reduced corporate and individual rates are estimated assuming all other provisions are enacted. The revenue effects of all other provisions reflect current law tax rates. These estimates do not include the revenue impact of delaying the date of announcement.

NOTE B: The individual rate schedule estimate assumes that the relationship between collections and tax liability is unchanged from current law. The 1986 level revenue effect may be significantly altered depending on the prescribed changes in the withholding tables and the estimated tax rules.

Source: Office of the Secretary of the Treasury, May 28, 1985.

Table A-12.--Tax rates and taxable income brackets for filing status under the House Ways and Means committee bill

Tax rates (percent)	Married, filing jointly	Unmarried individual	Head of Household	Married, filing separately
15	0-$22,500	0-$12,500	0-$16,00	0-$11,500
25	22,500-43,000	12,500-30,000	16,000-34,000	11,250-21,500
35	43,000-100,000	30,000-60,000	34,000-75,000	21,500-50,000
38	Over 100,000	Over 60,000	Over 75,000	Over 50,000

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985.

Table A-13.--Average income tax liability and tax rate, under present law and committee bill, by income class, 1987

Income class	Tax liability		Average tax rate	
	Present law	Committee bill	Present law	Committee bill
0-$10,000	$68	$16	1.4	0.3
10,000-20,000	886	678	5.8	4.4
20,000-30,000	2,168	1,954	8.3	7.5
30,000-40,000	3,346	3,045	9.3	8.5
40,000-50,000	5,100	4,658	11.0	10.1
50,000-75,000	8,166	7,563	13.2	12.2
75,000-100,000	14,223	13,407	15.1	16.0
100,000-200,000	28,245	26,196	18.4	19.8
Over 200,000	136,714	128,711	23.5	22.1
Total	3,210	2,919	11.3	10.5

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985

Table A-14.--Present law corporate tax rates

Taxable Income	Tax Rate (percent)
Not over $25,000	15
Over $25,000 but not over $50,000	18
Over $50,000 but not over $75,000	30
Over $75,000 but not over $100,000	40
Over $100,000	46

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985.

Table A-15.--Corporate income tax as a percentage of total budget receipts and total income tax receipts, under present law and under the committee bill (by fiscal year)

	Percentage of total budget receipts		Percentage of total income tax receipts	
	Present law	Committee bill	Present law	Committee bill
1950	26.5	-	39.9	-
1955	27.3	-	38.3	-
1960	23.2	-	34.6	-
1965	21.8	-	34.3	-
1970	17.0	-	26.6	-
1975	14.6	-	24.9	-
1980	12.5	-	20.9	-
1985	8.4	-	15.6	-
1986*	9.3	11.2	16.8	20.1
1987*	10.1	12.8	18.0	22.9
1988*	10.0	13.0	17.7	23.2
1989*	9.8	13.0	17.2	22.9
1990*	9.0	12.7	15.8	22.3

* Present law percentages for 1986-1990 are based on Congressional Budget Office, August 1985, projections. Committee bill projections are calculated by the Joint Committee on Taxation using the Congressional Budget Office baseline.

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985.

Table A-16.--Summary of estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990

($ millions)

	Fiscal Years		
	1986	1988	1990
I. Individual Income Tax Provisions			
Individual	-15,076	-53,555	-63,523
Corporate	668	1,117	1,346
Total	-14,408	-52,438	-62,177
II. Capital Income Provisions			
Individual	1,295	5,740	12,264
Corporate	9,064	23,531	39,799
Excise	-2	-3	
Total	10,357	29,268	52,062
III. Corporate Provisions			
Individual	227	593	539
Corporate	-5,531	-20,988	-21,999
Total	-5,304	-10,395	-21,460
IV. Tax Shelters			
Individual	28	234	460
Corporate	-26	-140	-311
Total	2	94	149
V. Minimum Tax Provisions			
Individual	800	5,170	4,235
Corporate	1,171	909	1,247
Total	1,971	6,079	5,482
VI. Foreign Tax Provisions			
Individual	22	42	52
Corporate	979	2,222	3,376
Excise	23	44	55
Total	1,024	2,308	3,483
VII. Tax-Exempt Bonds			
Individual	118	799	1,269
Corporate	14	-162	-169
Total	132	637	1,100
VIII. Financial Institutions			
Individual	-43	-406	-836
Corporate	944	1,389	1,803
Total	901	983	967

Table A-16.--Summary of estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
IX. Accounting Provisions			
Individual	602	1,401	1,503
Corporate	6,147	15,399	12,288
Total	6,749	16,800	13,791
X. Insurance Products and Companies			
Individual	2	5	5
Corporate	979	2,193	2,855
Total	981	2,198	2,860
XI. Pensions and Deferred Compensation; Fringe Benefits; ESOPs			
Individual	851	3,662	5,594
Corporate	1,065	1,405	595
Excise	20	58	62
Total	1,936	5,125	6,251
XII. Minor Children; Tusts and Estates; GST			
Individual	194	634	789
Estate and gift		-7	-8
Total	194	627	781
XIII. Compliance and Tax Administration			
Individual	2,840	1,014	1,263
Corporate	110	270	392
Excise	13	8	8
Estate and gift	12	12	12
Total	2,975	1,304	1,675
XIV. Miscellaneous Provisions			
Individual	(*)	(*)	(*)
Corporate	-8	-18	-21
Excise			15
Total	-8	-18	-6
XV. Technical Corrections			
Individual	-182	-17	-13
Corporate	-2	-22	(*)
Excise	20	5	5
Total	-174	-34	-8

Table A-16.--Summary of estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Totals:			
Individual	-8,322	-34,684	-36,400
Corporate	15,574	27,105	41,201
Excise	64	112	145
Estate and gift	12	5	4
Grand total	7,328	-7,462	4,950

*Loss of less than $5 million

Note.--Detail does not add to total due to rounding.

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985.

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990

($ millions)

	Fiscal Years		
	1986	1988	1990
I. Individual Income Tax Provisions			
Rate changes 3/	-5,827	-31,527	-38,004
Increase in standard deduction	-4,940	-6,630	-7,521
Repeal the additional exemption for the blind and elderly; increase the taxpayer and dependent exemption to $2,000	-9,190	-34,445	-39,415
Floor under itemized deductions	1,868	9,784	11,270
Increase the earned income tax credit 4/	-48	-3,017	-3,844
Repeal political contribution credit		265	284
Limit employer provided child care to $5,000	1/	1/	1/
Taxation of unemployment compensation		724	682
Limit exclusion of schloarships and fellowships	10	146	184
Repeal exclusion of prizes and awards	1/	1/	1/
Repeal second earner deduction	1,420	6,113	6,840
Miscellaneous itemized deductions, employee business expense	430	3,075	3,515
Extend charitable contributions deduction for non-itemizers	134	-1,048	-1,192
Repeal deduction for special needs adoption expenses 5/		8	9
Repeal income averaging	477	1,993	2,463
Limitations on deductions for meals, travel, and entertainment:			
Individual	590	1,004	1,206
Corporate	668	1,117	1,346
Housing allowances for clergy and military personnel	2/	2/	2/
Subtotal, Individual Income Tax:			
Individual	-15,076	-53,555	-63,523
Corporate	668	1,117	1,346
Total	-14,408	-52,438	-62,177

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
II. Capital Income Provisions			
Depreciation, expensing:			
Individual	-36	778	3,329
Corporate	-304	2,093	12,082
Repeal finance leasing:			
Corporate	-23	102	499
Repeal investment tax credit:			
Individual	1,183	4,253	7,489
Corporate	9,171	21,583	26,506
Credit limitations:			
Corporate	315	312	67
Repeal 5-year amortization of trademark expenses:			
Individual	1	7	18
Corporate	2	15	36
Repeal 5-year amortization of pollution control equipment:			
Corporate	1/	1/	1/
Retain 5-year amortization of expenditures for rehabilitation of low income rental housing:			
Individual	1/	-2	-13
Repeal 50-year amortization of railroad tunnels and bores:			
Corporate	1/	1/	1/
Extension of treatment for removal of architectural barriers:			
Corporate	-9	-8	
Extend modified credit for research and experimentation:			
Individual	-25	-83	-264
Coporate	-449	-1,116	-446
Modify rehabilitation tax credit:			
Individual	20	361	731
Corporate	12	161	315
Merchant Marine Capital Construction Fund:			
Corporate	3	4	4
Capital gains treatment of coal and iron royalties:			
Individual	15	53	96
Corporate	-6	-6	

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Intangible drilling costs:			
Individual	39	30	12
Corporate	393	121	73
Oil, gas, geothermal depletion:			
Individual	140	500	610
Corporate	43	172	217
Hard minerals depletion:			
Individual	2	11	15
Corporate	68	302	419
Mining exploration and development costs:			
Corporate	14	63	49
Energy credits and related incentives:			
Individual	-16	-98	-8
Corporate	-18	-28	4
Excise	-2	-3	
Targeted jobs tax credit:			
Individual	-23	-71	
Corporate	-148	-233	-13
Orphan drug credit:			
Corporate		-8	
Subtotal, Capital Income:			
Individual	1,295	5,740	12,264
Corporate	9,064	23,531	39,799
Excise	-2	-3	
Total	10,357	29,268	52,062

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
III. Corporate Provisions			
Corporate changes:			
Corporate	-5,186	-21,181	-23,352
Dividends paid deduction:			
Individual		-4	52
Corporate		-303	-1,290
Dividends received deduction:			
Corporate	139	252	373
Repeal partial exclusion of dividends received by individuals:			
Individual	199	597	659
NOL provisions:			
Corporate	16	73	136
Recognition of gain and loss in liquidations:			
Individual	28		-172
Corporate	-500	171	2,139
Subtotal, Corporate:			
Individual	227	593	539
Corporate	-5,531	-20,988	-21,999
Total	-5,304	-20,395	-83,622
IV. Tax Shelters			
Extension of at risk limitations to real property:			
Individual	19	138	333
Corporate	-26	-140	-311
Limitation on deduction for nonbusiness interest:			
Individual	9	96	127
Subtotal, Tax Shelters:			
Individual	28	234	460
Corporate	-26	-140	-311
Total	2	94	149

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
V. Minimum Tax:			
Revise the alternative minimun tax:			
Individual	800	5,170	4,235
Revise corporate minimum tax:			
Corporate	1,171	909	1,247
Total	1,971	6,079	5,482
VI. Foreign Tax Provisions			
Foreign tax credit limitation:			
Corporate	275	452	514
Creditability of gross withholding tax:			
Corporate	59	83	295
Deemed paid credit:			
Corporate	6	64	103
Income from sale of property:			
Corporate	170	379	482
Transporation income:			
Corporate	190	81	94
Dividend and interest income:			
Corporate	12	22	27
Allocation of interest and other expenses:			
Corporate	172	689	1,148
Allocation of R&D expenses:			
Corporate	-243	-160	
Tax haven income			
Corporate	132	223	271
Determination of U.S. control:			
Corporate	16	33	40
De minimis tax haven income rule:			
Corporate	19	33	39
Foreign investment companies:			
Corporate	10	17	21
Possessions tax credit and income from intangibles:			
Corporate	57	131	192
Foreign Sales Corporations (FSC):			
Corporate	70	115	127

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Private sector earnings of Americans abroad:			
Individual	22	42	52
Branch level tax:			
Corporate	16	31	37
Tax on foreign insurers:			
Excise	23	44	55
Foreign currency gain or loss:			
Corporate	18	29	36
Subtotal, Foreign Tax:			
Individual	22	42	52
Corporate	979	2,222	3,376
Excise	23	44	55
Total	1,024	2,308	11,536
VII. Tax-Exempt Bonds			
Subtotal, Tax-Exempt Bonds:			
Individual	118	799	1,269
Corporate	14	-162	-169
Total	132	637	1,100
VIII. Financial Institutions			
Limitation on bad debt reserves:			
Corporate	468	712	700
Disallow interest incurred to carry tax-exempt bonds:			
Individual	-41	-405	-835
Corporate	70	477	930
Repeal special carryover rules for depository institutions:			
Corporate	1/	1/	1/

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Meals, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Repeal special reorganization rules for troubled thrifts:			
Corporate	408	201	174
Deposits in failed financial institutions:			
Individual	-2	-1	-1
Corporate	-2	-1	-1
Subtotal, Financial:			
Individual	-43	-406	-836
Corporate	944	1,389	1,803
Total	901	983	967
IX. Accounting Provisions			
Simplified LIFO for certain small businesses:			
Individual		-38	-60
Corporate		-384	-637
Limitation on use of cash accounting method:			
Corporate	267	596	636
Recognition of gain on pledges of installment obligations:			
Individual	38	283	292
Corporate	715	1,311	608
Match expense and income from multiperiod production:			
Individual	181	977	1,081
Corporate	3,738	12,270	10,035
Repeal of reserve for bad debt for nonfinancial businesses:			
Individual	31	86	90
Corporate	945	1,446	1,502
Limitation on accrual of vacation pay:			
Individual	4	2	2
Corporate	77	18	18
Contributions in aid of construction:			
Corporate	88	108	91

Table A-17.-- Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Repeal 84-month amortization, 10% credit for reforestation:			
Individual	1/	1/	1/
Corporate	1/	1/	1/
Capital gains treatment of timber income:			
Individual	1	23	26
Limit expensing of conservation expenditures and repeal expensing of fertilizer and field clearing expenditures:			
Individual	347	68	72
Corporate	317	34	36
Subtotal, Accounting:			
Individual	602	1,401	1,503
Corporate	6,147	15,399	12,288
Total	6,749	16,800	13,791
X. Insurance Products and Companies			
Policy holder issues:			
Individual	2	5	5
Life insurance company provisions:			
Corporate	401	748	860
Repeal tax exemption for certain life insurance companies:			
Corporate	222	465	404
Property and Casualty (P&C) insurance provisions:			
Corporate	299	951	1,591
Repeal P&C insurance company deduction for addition to protection against loss accounts:			
Corporate	74	109	41
Small P&C company provision:			
Corporate	-17	-57	-41
Subtotal, Insurance:			
Individual	2	5	5
Corporate	979	2,193	10,465
Total	981	2,198	2,860

Table A-17--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
XI. Pensions and Deferred Compensation; Fringe Benefits; ESOPs			
Allow spousal IRA for earnings less than $250:			
Individual	2/	2/	2
Modify cahs and deferred arrangements (CODAs) $7,000 cap:			
Individual	551	966	1,304
Reduce Section 415 limits:			
Individual	117	357	468
Uniform distribution requirements:			
Individual	1/	1/	1/
Excise		1/	1/
Replace 10-year averaging with limited 5-year averaging:			
Individual	27	97	233
Repeal 3-year basis recovery rule for contributory plans:			
Individual	134	1,869	2,365
Tax on pre-retirement distributions, uniform basis recovery rules:			
Individual	120	251	985
Adjustments to Section 404 limitations:			
Individual	18	51	62
Excise		1/	1/
Tax on qualified plan reversions:			
Excise	20	30	30
Tax on excess retirement distribution:			
Excise		28	32
Loan Providion:			
Individual	1	6	11
Repeal exclusion of current annuity income of corporations:			
Corporate	3	15	73
Two-year extension of the exclusion for group legal plans:			
Individual	-44	-75	
Two-year extension of the exclusion for educational assistance:			
Individual	-73	-106	

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Discrimination rules for employee benefits:			
Individual		138	151
ESOP provisions:			
Individual			25
Corporate	1,062	1,371	522
Subtotal, Pensions; Fringe Benefits; ESPOPs:			
Individual	851	3,662	5,594
Corporate	1,065	1,405	595
Excise	20	58	256
Total	1,936	5,651	6,251
XII. Unearned Income of Minor Children; Trusts and Estates; GST Tax unearned income of certain minor children at parent's rate:			
Individual	97	300	363
Revise taxation of trusts and estates:			
Individual	97	334	426
Generation-skipping transfer tax:			
Estate and gift		-7	-8
Subtotal, Trusts and Estates:			
Individual	194	634	789
Estate and gift		-7	-8
Total	194	627	781
XIII. Compliance and Tax Administration 6/			
Penalty provisions:			
Individual	308	320	332
Corporate	32	37	42
Estate and gift	12	12	12
Excise	8	8	8

Table A-17.-- Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Revise estimated tax rules:			
Individual	2,450	230	240
Interest rate provisions:			
Individual	39	90	202
Corporate	78	163	345
Information reporting provisions:			
Individual	43	454	494
Diesel fuel tax collection:			
Excise	5	1/	1/
Subtotal, Compliance and Adminitration:			
Individual	2,840	1,014	1,263
Corporate	110	270	392
Excise	13	8	8
Estate and gift	12	12	12
Total	2,975	1,304	8,358
XIV. Miscellaneous Provisions			
Exclusion for certain foster care payments:			
Individual	2/	2/	2/
Rules for spouses of individuals missing in action:			
Individual	2/	2/	2/
Olympic Trust Fund excise tax:			
Excise			15
Distributions of low cost articles and member list rentals:			
Corpoate	-4	-8	-11
Interest and tax deductions of cooperative housing corporations:			
Individual	2/	2/	2/
Software royalties and securities dealer interest treatment for the personal holding company tax:			
Corporate	-4	-10	-10

Table A-17.--Estimated revenue effects of tax provisions of H.R. 3838, as reported by the Committee on Ways and Means, fiscal years 1986-1990--Continued

($ millions)

	Fiscal Years		
	1986	1988	1990
Subtotal, Miscellaneous:			
Individual	2/	2/	2/
Corporate	-8	-18	-21
Excise			15
Total	-8	-18	-6
XV. Technical Corrections			
Subtotal, Technical Corrections:			
Individual	-182	-17	-13
Corporate	-2	-22	2/
Excise	10	5	5
Total	-184	-34	-8
Total, Individual Income Tax	-8,3422	-25,415	-34,400
Total, Corporate Tax	15,574	27,105	41,201
Total, Excise Tax	64	112	145
Total, Estate and Gift Tax	12	5	4
Total, Change in Receipts	7,328	-7,462	4,950

1/ Gain of less than $5 million.
2/ Loss of less than $5 million.
3/ Rate change lines include the effects of changes relating to capital gains as well as the interactions between rate changes and other provisions of the bill.
4/ The changes to the earned income credit will reduce revenues by $8 million in 1986, $258 million in 1987, $992 million in 1988, $1,147 million in 1989, and $1,289 million in 1990; and increase outlays by $40 million in 1986, $1,177 million in 1987, $2,025 million in 1988, $2,275 million in 1989, and $2,555 million in 1990.
5/ An outlay of magnitude similar to the amount shown here is anticipated as a result of section 1407, concerning payment of expenses relating to the adoption of children with special needs.
6/ Section 1315 dealing with attorneys' fees is estimated to increase fiscal year outlays by less than $5 million annually.

Source: Committee on Ways and Means, U.S. Congress, December 7, 1985.

Appendix B

Summary of Testimony Before the Commission on the Effects of Tax Changes Not Quantified in This Report

This appendix briefly summarizes the concerns of business representatives over the tax reform proposals as communicated to the Commission during the hearings for this study and in post-hearing briefs. Almost all of their comments were addressed to the provisions of the House bill.

The majority of witnesses commented on the unfavorable impact of the elimination of the Investment Tax Credit and the Accelerated Cost Recovery System. None of the witnesses provided any quantitative estimates of the trade effects of any of the proposed tax changes. Since this report examines these proposed changes in depth, this appendix summarizes only comments made about other provisions of tax reform proposals.

Emergency Committee for American Trade

Representatives of the Committee argued that the following changes in taxation of foreign-source income proposed in HR 3838 make it more difficult for U.S. corporations to compete abroad.

Foreign tax deferral.--H.R. 3838 eliminates foreign tax "deferral" for all foreign banking, shipping, and insurance operations, thereby taxing foreign-source income generated by these operations before it is repatriated to the United States.

The foreign tax credit.--H.R. 3838 establishes a series of "baskets" of foreign income depending upon the line of business that generated the income. This is a major change from the overall averaging basis of calculating the foreign tax credit currently followed by the United States and its major trading partners. The result will be higher taxes imposed by the United States on certain types of foreign-source income than on others.

The licensing of technology.--H.R. 3838 authorizes the U.S. Internal Revenue Service to require that licensing agreements to be revised if it feels that the royalty payments are not high enough.

Export income sourcing rules.--H.R. 3838 significantly raises the level of taxation on export income by changing the sourcing rules. It also reduces the benefit provided in the recently enacted Foreign Sales Corporation legislation.

Allocation of research and development expenditures to foreign-source income.--H.R. 3838 raises the costs of conducting research and development in the United States by raising taxes apportioning part of these expenses to foreign income. This raises the tax liabilities of the U.S. firms.

Allocation of interest expenses.--H.R. 3838 raises substantially the tax cost of domestic borrowing used in part to finance foreign operations.

National Foreign Trade Council, Inc.

The representative from the Council testified that the following proposals in H.R. 3838 would significantly increase tax costs for U.S. businesses and place them at a competitive disadvantage both in the U.S. market and abroad.

Foreign tax credit.--Several measures would limit the use of the foreign tax credit. One of these is the assignment of income to "baskets." This has much the same effect as using a per-country limit for the foreign tax credit. Other changes having to do with "look through" rules and reducing the amount of research and development expenses similarly reduce the foreign tax credit.

Dividend paid deduction.--HR 3838 allows a 10 percent deduction for dividends paid. Since the deduction does not apply to dividends paid from income not taxed in the United States, it would raise the cost of capital to U.S. companies operating abroad.

Possession tax credit.--Further reducing the tax inducements for firms to operate in U.S. possessions will increase the cost structure of U.S. possessions' companies.

Transfer of intangibles.--Under HR 3838 the Internal Revenue Service would be able to revise licensing agreements if it feels that the royalty payments are not high enough. This would give an advantage to foreign competitors that are not subject to these rules.

Acceleration of U.S. tax.--HR 3838 would not allow U.S. banks, insurance companies, and shipping companies to defer taxes on income earned by a foreign affiliate, even when these earnings are retained abroad. This proposal discriminates against U.S. banks, insurance companies, and shipping companies in favor of competing foreign corporations.

Consolidated Coal Co.

Representatives of Consolidated Coal Co. testified that by targeting existing tax incentives for capital investment, H.R. 3838 would weaken those capital intensive industries facing intense competition overseas. A Price Waterhouse study indicated that the coal industry's tax liability for the period 1986 to 1990 would incease by $1.6 billion or 75 percent. Besides elimination of the ACRS and the ITC, the main features of H.R. 3838 raising coal industry taxes are the 50 percent reduction in the percentage depletion allowance, the change to an alternative minimum tax, and changes in the provisions dealing with the recapture of mining expenses when a mine begins production.

They argued that coal exports would be disproportionately affected by an increase in taxes owing to the intense competition from other coal exporting countries and the already high costs of U.S. coal in world markets.

Republic New York Corporation

The representatives for Republic New York Corporation were concerned with the provision in H.R. 3838 that ends the exemption to Subpart F income for banks. They argued that this effectively raises the cost of lending for U.S. banks compared to their foreign competition in markets overseas.

Debasco Service Inc.

The representative from Debasco was concerned with the provisions in HR 3838 that raise taxes on income of U.S. Nationals working abroad. The argument is often made that this would reduce foreign demand for U.S. goods, since U.S. engineers working abroad are more familiar with U.S.-made equipment.

Hewlett Packard Co.

Representatives of Hewlett Packard said that H.R. 3838 would treat research and development expenses less favorably and that payments for technology transfer to foreign affiliates would be measured not by the arms-length standard, but by the level of net profits of the affiliate taking into account variations from year to year. They argued that this would undo twenty years of progress in harmonizing the taxing regimes of the major developed countries of the world, lead to substantial international double taxation, cause continuous disputes between the Internal Revenue Service and U.S. multinational taxpayers, and, in the end, act to discourage U.S. companies from maximizing the share of their worldwide research and development performed in the United States.

They also argued that H.R. 3838 would eliminate the sourcing rule that treats part of income from U.S. exports as foreign source income. They noted that the percentage of export income exempt from tax under the Foreign Sales Corportation provisions would be reduced from 15 to 13 percent.

They noted that H.R. 3838 would change the threshold for deferral of Subpart F income from 10 percent of gross income to 10 percent of earnings and profits; reduce the research and development credit from 25 percent to 20 percent; extend the research and development credit provision for only three years instead of making it permanent; and allocate only 50 percent of U.S. research and development expenses to U.S. source income, with the other 50 percent split between U.S. and foreign sources based on sales or gross income, for only two years. They believe these proposed changes would lead to uncertain results if taxpayers conducting research and development in the United States license technology to foreign affiliates. They point out that a clear way to overcome this uncertainty is to conduct research and development outside the United States.

Coalition of Service Industries

Representatives of the Coalition said that the foreign tax provisions of H.R. 3838 are far reaching, especially as they affect Subpart F, the foreign tax credit, the allocation and apportionment of deductions for the foreign tax

credit computation, and the source of income rules. They believe these provisions would make it impossible for some companies to operate in foreign countries. They also believe the proposed reductions in the Foreign Sales Corporation benefit and in the amount of tax excluded income earned abroad to be damaging to U.S. trade.

Federation of American Shipping

Representatives of the Federation said that HR 3838 would repeal the shipping reinvestment exclusion of Subpart F of the Internal Revenue Code, thereby subjecting American companies to current U.S. taxation on the earnings of their foreign shipping subsidiaries even when those earnings are reinvested in shipping assets.

The United States has followed the international practice of not taxing foreign flag vessels trading to U.S. ports if the nation of registry does not tax U.S. flag vessles trading to its ports. They argued that H.R. 3838 would, among other things, change the rules on determining U.S. source income, impose, in certain cases, a 4 percent tax on U.S. source gross transportation income regardless of whether there is a profit or loss and change the rules for determining eligibility for reciprocal exemption from tax on shipping income. They believe these provisions would subject U.S. controlled vessels to additional U.S. taxation and would be harmful to them in international trade and competition.

Bankers Association for Foreign Trade

Representatives of the Association said that two of the tax reform proposals would radically affect the ability of U.S. banks to obtain tax credits for withholding taxes paid abroad. The first is the President's proposal to change the current overall foreign tax credit limitation to a per country foreign tax credit limitation. This proposal would impact all U.S. companies with international operations. The second is section 602 of HR 3838, as passed by the House. This would deny U.S. banks foreign tax credits for gross foreign withholding taxes on foreign loans in excess of the U.S. tax on the net interest income of such loans. They argued that the effects of a reduced foreign tax credit for foreign withholding is likely to be particularly severe on capital goods exports, which account for almost 50 percent of U.S. exports.

Caterpillar Tractor Co.

Representatives of Caterpiller Tractor said that one of the most direct, adverse effects on exports would come from "reform" provisions affecting the Foreign Tax Credit (FTC). These are the change in the source rule relating to export sales income, and the switch from the current "overall" limitation to a "per country" limitation. They argued that excessive taxation from the proposed Foreign Tax Credit revisions would, in effect, increase the cost of U.S. exports originating from foreign operations.

U.S. Business Council

Representatives of the Council said that the following features of H.R. 3838 would seriously affect U.S. international competitiveness:

1. Expanding the scope of subpart F.

2. Eliminating the "80-20" corporation exception to the normal sourcing rules.

3. Adopting a new consolidated methodology of apportioning interest to foreign source income.

4. Modifying section 482 rules relating to intercompany licensing of intangibles adopted by the bill.

Semiconductor Industry Association

Representatives of the Association said that the following provisions of the present tax bill would exacerbate trade disadvantages of the United States and its multinationals:

1. Foreign tax credit provisions.

2. Royalties for transfers of intangibles.

3. Foreign Sales Corporations.

4. Exclusion of income for U.S. taxes of overseas employees of U.S. companies.

5. Research and development expenses.

6. Alternative minimum tax.

Florida Citrus Mutual

Representatives of the Mutual argued that because of the losses following orange crop freezes, changes in the proposed tax legislation are needed to keep the Florida Citrus Growers competitive against imports. Especially important are the continuation of deductibility of postfreeze loss recovery costs and the enhancement of such treatment by permitting additional investors to participate in the recovery efforts of the owner at the time of the loss.

Appendix C

International Comparisons of Tax Rates on Income From Capital

This appendix summarizes a number of previous efforts to compare U.S. and foreign tax rates on income from capital. Such comparisons are difficult to make, because if they are done properly they must consider simultaneously all the taxes that affect capital. These include both the taxes at the corporate level and those at the personal level. Furthermore, it is probably inappropriate to treat all taxes on capital in the same way in determining their effect on the cost of capital to domestic producers. For example, a tax imposed on income from capital in only one industry would probably raise the cost of capital 1/ to that industry by the full amount of the tax. That is, the tax would reduce investment in the industry and raise the before-tax return by the full amount of the tax. On the other hand, a uniform tax on all income from capital to domestic residents might have little effect on before-tax returns in any domestic industry if domestic saving is not very responsive to changes in the rate of return and if capital is not mobile internationally. 2/

In light of these considerations, it is useful to make international comparisons of taxes on income from capital at two levels: corporate taxes and total taxes (corporate and individual taxes combined). Table C-1 describes the major provisions of corporate taxes for a number of countries, including the U.S. current law, the President's proposal, and the House Ways and Means Committee proposal.

Table C-2 describes the major provisions of taxes on capital income of individuals for these countries. Table C-3 shows the major sources of tax revenue in selected developed countries in 1982. This provides a summary comparison of the overall structure of taxes in these countries. These data indicate that U.S. taxes are lower than in most of the other countries, both overall taxes and corporate income taxes. The data also show that corporate taxes generate only a relatively small amount of total tax revenues in any of these countries. In the United States, these taxes were only about 2.1 percent of total gross domestic product in 1982. This was just one-fourth as much as social security tax revenues and less than one-fifth as much as income taxes paid by individuals.

Both of the new tax proposals for the United States would make major changes in the treatment of depreciation allowances. This has prompted some analysts to compare the current U.S. treatment of depreciation with that of other countries. Table C-4 reports the results of such a comparison for light manufacturing equipment. The values of the various recovery allowances depend on the rate of inflation and the real rate of return. Comparisons in the table are based on a rate of inflation of 5 percent and a real rate of return of 4 percent.

1/ Recall that the cost of capital is the minimum rate of return that an investment must yield before taxes in order to provide the same net-of-tax return that could be realized from a loan at prevailing market interest rates.

2/ The responsiveness of saving to changes in the rate of return is a matter of some debate, but it does not appear to be very great. Feldstein and Horioka (1980) provide evidence that saving is not very mobile internationally.

Partial comparisons such as those in table C-4 give little information about the disincentive for new capital investment inherent in the tax system as a whole. One comparison that accounts for the effects of all taxes is the cost of capital tax wedge. This is the increase in the cost of capital caused by all taxes on capital, both corporate and individual. Table B-5 provides international comparisons of these total tax wedges, as calculated by Fiscal Associates, Inc. The calculations are based on data provided by the Office of Tax Policy, U.S. Department of Treasury, and the Offices of Federal Tax Services, Arthur Andersen and Company. According to the the data in this table, U.S. taxes impose the greatest burden on capital costs among the countries listed. This is true both for current law and for the tax law proposed by the President, although the proposed law would reduce the U.S. burden slightly. No comparable calculations are available for the House Ways and Means Committee tax proposals.

The tax wedges in table C-5 refer only to the cost of capital to corporations for equity-financed investments. But tax treatment varies according to the tax classification of the owner, how the investment is financed, the type of asset involved, the industry involved, and the tax classification of the investor. Therefore, a comprehensive and indepth comparison would require measuring different tax rates according to asset type, industry, source of finance, and owner. King and Fullerton (1984) provide such indepth comparisons of the effective marginal total tax rates on income from capital in 1980 for the United States, the United Kingdom, Sweden, and West Germany. (The marginal effective total tax rate is the rate at which income from a small increase in the level of real investment is taxed.) Using the same methods, Shoven (1985) made similar comparisons between taxes on capital in Japan and the United States. The results for 1980 from both studies are reported in table C-6. The data in this table indicate that, in 1980, the United States had the highest marginal effective tax rate on income from new equity investments and the highest rate on buildings. However, the overall U.S. rate was lower than that in West Germany and about the same as that in Sweden.

The study by John Shoven also compares taxes on capital in Japan and the United States in 1985, both under current law and under the President's proposal. Table C-7 provides the results of these comparisons. These results show that the overall effective marginal total tax rate on investment income is substantially higher in the United States than Japan, and that the President's proposal would increase the difference slightly. This last result appears to disagree with the findings of Fiscal Associates, Inc. (reported in table C-5), which indicate that the President's proposal would reduce the capital cost tax wedge from its value under current law.

Table G-1.--Tax treatment of asset user

	Canada	Japan 1/	United Kingdom	West Germany	United States (current law)	President's proposal	Ways and Means Committee's proposal
Depreciation	Most equipment is depreciated over 3 years at 25, 50, and 25%. Structures, depreciate at a 5% rate using declining balance method.	Most equipment is depreciated at a 25% rate using a declining balance method. Special acceleration rules for small firms, pollution controls, and energy savings. Structures depreciated over 44 years straight-line.	Prior to 3-14-84, expensing of most plant and equipment. After phase in most equipment will be permitted 25% declining balance depreciation. Most buildings that were permitted 75% expensing will be permitted 4% declining balance depreciation (25% for small workshop or buildings in enterprise zones).	Most equipment depreciates at a 30% declining balance rate. Structures are depreciated over 40 years using straight line. Some more accelerated methods allowed in border areas.	Most equipment depreciates over a 5-year period using 150% declining balance with half year convention. Most structures depreciate over 18 years using 175% declining balance.	Most equipment depreciated at 33% rate over a 6-year period, autos at 55% over 4 years; truck, buses, and office equipment at 44% over 5 years. Other public utility property and machinery at 22% rate over 7 years. Most structures at 4% rate over 28 years.	Assets divided into 10 classes according to asset life. Double-declining balance, switching to straight-line used for depreciation, except straight-line used exclusively if asset life exceeds 36 years.
Investment Tax Credits	Basic 7% on equipment and buildings and higher the same provinces and special R&D credits.	Allowed for targeted industries 10% for R&D, 7% for energy savings.	Cash grants for investment in depressed areas.	Cash grants for investment in depressed areas, R&D, and some energy sector investments.	10% for most equipment, 6% for autos plus special energy credits.	None.	None.
Treatment of earnings distribution	Special rules for dividend recipient fully taxed to corporations.	Corporate rate on earnings distribution is 10% lower than for those retained.	Done for divident recipient fully taxed to corporations.	Dividend distribution taxed at 36% rate; retained earning taxed at 56%.	Fully taxed.	10% of distributed dividends exempted.	10% distributed dividends are exempted.
Treatment of interest expenses	Fully deductible.	Fully deductible even if used to buy corporate securities.	Fully deductible if used for capital spending.	Fully deductible if used for capital spending.	Fully deductible.	Fully deductible.	Fully deductible.

1/ Under certain circumstances, corporations in Japan can establish tax reserve accounts that defer taxes.

Source: International Business-Government Counselors, Inc. (1985), and Committee on Ways and Means, U.S. Congress (1985).

Table C-2.--Tax treatment of financial investor

	Canada	Japan 1/	United Kingdom	West Germany	United States (current law)	President's proposal	Ways and Means Committee's proposal
Dividends received	34% of dividends received is added to taxable income of shareholder, individuals who claims credit for same amount.	Individuals get a tax credit for 10% of dividends received.	By 1986, 3/7 of dividends received is taxable to shareholder who gets refundable credit of same amount.	The 36% tax on distributed corporate earning constitute a credit for the individual	First $200 of dividends received by is exempt.	Fully taxed, partial relief for corporations.	Fully taxed, partial relief for corporations.
Interest income	Fully taxed.	Interest on savings accounts of up to 3 million yen ($12,000) for every individual is tax exempt if deposited in postal savings, bank deposits, and certain Govt. bonds.	Fully taxed.	Fully taxed with withholding.	Fully taxed except for limited amounts of tax exempt bond interest.	Fully taxed.	Fully taxed
Capital gains	Generally 50% exempt and for some plans the 5% of accrued gain taxable.	No tax on capital gain on securities with 50% exemption on other long term gains.	Prior to 1984, only 30% above threshold (3,000L) was taxed with indexing by 1986 will be 30% of indexed gain tax exempt.	Generally no tax.	60% of long term gains excluded	Either 50% excluded or inflation indexed gain taxed at ordinary rate.	50% excluded in 1986; 42% excluded after 1986.
Treatment of interest	Fully deductible.	Deductible even if used to buy securities, but are limits for home mortgages and consumer interest.	Interest on borrowing to buy securities not deductible.	Some limits.	Disallows interest payments allocable to tax exempt income.	Deductible up to investment income plus $5,000 plus mortgage interest.	Disallows interest payments allocable to tax exempt income.

Source: International Business-Government Counselors, Inc. (1985), and Committee on Ways and Means, U.S. Congress (1985).

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Table C-3.—Distribution of major sources of tax revenue in selected countries, 1982 1/

(In percent)

	U.S. current law	France	Germany	The Netherlands	Sweden	United Kingdom	Japan	Canada
A. As a percent of GDP								
Total tax revenues	30.5	43.7	37.3	45.5	50.3	39.6	27.2	34.8
Individual income tax	11.5	5.6	10.8	10.9	20.5	11.2	6.9	12.4
Corporate income tax	2.1	2.2	1.9	3.1	1.7	3.8	5.4	2.8
Social Security taxes	8.4	19.8	13.5	18.9	15.3	8.0	8.3	3.9
employee share 2/	4.2	6.2	6.3	10.9	0.6	3.1	4.1	1.4
employer share	4.2	12.6	7.2	8.0	13.4	3.6	4.2	2.5
Property taxes	3.1	1.6	1.2	1.6	0.5	5.0	2.4	3.1
Sales and excise taxes	5.3	13.0	9.9	10.8	12.2	11.5	4.2	12.1
Other taxes	–	1.4	3/	0.1	0.1	3/	0.1	0.5
B. As a percent of total taxes								
Total tax revenues	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Individual income tax	37.8	12.9	28.9	23.9	40.8	28.4	25.3	35.6
Corporate income tax	7.0	5.1	5.1	6.8	3.3	9.6	19.7	8.2
Social Security taxes	27.7	45.4	36.2	41.6	30.5	20.2	30.4	11.3
employee share 2/	13.8	14.4	16.8	24.0	1.1	7.9	15.0	4.1
employer share	13.8	28.8	19.4	17.6	26.8	9.0	15.4	7.2
Property taxes	10.1	3.7	3.3	3.6	1.0	12.7	8.9	9.0
Sales and excise taxes	17.4	29.7	26.5	23.8	24.2	29.0	15.4	34.6
Other taxes	–	3.2	3/	0.3	0.2	0.1	0.3	1.3

1/ Includes all levels of Government.
2/ Includes taxes of self-employed.
3/ Less than 0.05 percent.

Source: International Business-Government Counsellors, Inc.

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Table C-4.--International comparisons of the present value of cost recovery allowances for light manufacturing equipment per 100 dollars of new investment

Country	Present value 1/
Luxembourg	136.2
Spain	111.1
Belgium	105.8
Canada	96.3
U.S.-ACRS/ITC 2/	91.7
France	85.1
Hong Kong	85.0
Denmark	84.0
U.S.-CCRS 3/	83.4
Sweden	80.7
Italy	79.8
United Kingdom	79.4
West Germany	77.7
Switzerland	76.8
Republic of Korea	74.9
Japan	69.0
Taiwan	69.0

1/ Present values are based on a real rate of return of 4 percent and inflation of 5 percent.
2/ This is the current U.S. law.
3/ This is the President's proposed law.

Source: Arthur Anderson & Co., Office of Federal Tax Services, Washington, DC, June 1985.

Table C-5.--Comparisons of the capital cost tax wedge

Country	Equipment	Structures
	Percent	
Canada	26.0	84.9
France	10.6	43.3
Germany	18.3	76.5
Japan	43.4	87.9
United States		
Current law	77.0	143.8
President's proposal	68.9	94.5

Source: Fiscal Associates, Inc., Aug. 19, 1985.

Note.--The tax wedges reported in this table are based on an inflation rate of 5 percent.

Table C-6.--Effective marginal tax rates in 1980

(In percent)

	United States	Japan	United Kingdom	Sweden	West Germany
Asset					
Machinery	22.8	10.0	-33.3	1.5	46.6
Buildings	41.8	3.9	41.0	37.3	31.2
Inventories	45.5	-2.1	42.7	71.0	60.8
Industry					
Manufacturing	55.0	11.9	-6.9	28.3	46.8
Other industry	15.8	-10.2	-2.3	62.6	57.9
Commerce	37.5	4.9	39.5	40.7	36.6
Source of Finance					
Debt	-22.2	-68.4	-81.7	6.4	-33.3
New share issues	104.6	83.1	-0.9	93.2	65.7
Retained earnings	66.5	65.2	29.3	69.5	111.5
Owner					
Households	61.9	-10.5	38.3	108.0	82.0
Tax-exempt institutions	-37.3	-2.7	-33.5	-52.8	-17.9
Insurance companies	44.3	76.9	-2.1	22.0	-38.9
Overall	38.4	4.3	6.6	37.0	46.1

Source: National Bureau of Economic Research, The Taxation of Income From Capital, Mervyn King and Don Fullerton, eds., (Chicago: The University of Chicago Press), 1984, and John Shoven, "A Comparison of the Taxation of Capital Income in the United States and Japan," Stanford University, mimeo, September 1985.

Note.--The tax rates are calculated based on a rate of inflation of 10 percent. It is assumed that the real pretax rate of return in each sector is fixed.

Table C-7.--Marginal effective tax rates on investment in Japan and the United States

(In percent)

	Effective tax rate	
	1980	1985
Japan	7.4	22.0
U.S.-Current law	37.0	31.0
U.S.-President's proposal	-	34.0

Source: John Shoven "A Comparison of the Taxation of Capital Income in the United States and Japan," Stanford University, mimeo, September 1985.

Appendix D

Technical Equations

This appendix provides the equations for transforming the direct price effects of the proposed tax changes into total price effects and for calculating the effects of the total price changes on industry trade flows. From the input-output relationship, the total percent increase in the output price for industry j caused by the tax changes is given as

$$P_j = A_{1j}P_1 + A_{2j}P_2 + \ldots + A_{nj}P_n + e\,(b_{1j} + b_{2j} + \ldots + b_{nj}) + D_j \qquad \text{(D1)}$$

where P_i = the total price effect of the tax change for industry i,

a_{ij} = the value of domestic output of input i required per dollar of output j,

e = the exchange rate change caused by the tax change,

b_{ij} = the value of imports of input i required per dollar of output j,

D_j = the direct price effect of the tax change, in percent terms.

The total price changes in equation (D1) are all determined simultaneously.

The change in the value of U.S. exports in industry j caused by the total price changes from (D1) is given as

$$dE_j = -(P_j + e)r_jE_j + P_jE_j \qquad \text{(D2)}$$

where dE_j = the change in the value of exports in industry j,

r_j = the elasticity of foreign demand for U.S. exports from industry j,

e_j = the initial value of exports from industry j.

Similarly, the change in the value of U.S. imports in industry j are given by the equation

$$dM_j = (P_j + e)m_iM_j - eM_j \qquad \text{(D3)}$$

where dM_j = the change in the value of imports in industry j,

m_j = the elasticity of demand for imports in industry j,

M_j = the initial value of imports in industry j.

The exchange rate change caused by the tax change is given by the equation

$$e = \left(\sum_j P_j[E_j(r_j + 1) - M_jm_j] - dTB\right) / \sum_j [M_j(m_j - 1) - E_jr_j], \qquad \text{(D4)}$$

where dTB = the change in the aggregate trade balance caused by the tax change (this is the net effect of the tax change on international capital flows). Equations (D1) through (D4) must all be solved simultaneously to determine the total price effects, the exchange rate effect and the industry effects on exports and imports.

After determining the effects on the exchange rate and values of trade flows, the following equations were used to calculate the effects on quantities of exports and imports, measured at initial (pretax) prices:

$$dE_j = -(P_j + e)r_j E_j ,$$

$$dM_j = (P_j + e)m_j M_j$$

Appendix E

Notice and Agenda for the Commissions Hearings on the Effects of Proposed Tax Reforms on the International Competitiveness of U.S. Industries

submitted a DOCD describing the activities it proposes to conduct on Lease OCS-G 5540, Block 90, Ship Shoal Area, offshore Louisiana. Proposed plans for the above area provide for the development and production of hydrocarbons with support activities to be conducted from an onshore base located at Dulac, Louisiana.

DATE: The subject DOCD was deemed submitted on December 12, 1985.

ADDRESSES: A copy of the subject DOCD is available for public review at the Office of the Regional Director, Gulf of Mexico OCS Region, Minerals Management Service, 3301 North Causeway Blvd., Room 147, Metairie, Louisiana (Office Hours: 9 a.m. to 3:30 p.m., Monday through Friday).

FOR FURTHER INFORMATION CONTACT: Ms. Angie Cobert; Minerals Management Service; Gulf of Mexico OCS Region; Rules and Production; Plans, Platform and Pipeline Section; Exploration/Development Plans Unit; Phone (504) 838-0876.

SUPPLEMENTARY INFORMATION: The purpose of this Notice is to inform the public, pursuant to section 25 of the OCS Lands Act Amendments of 1978, that the Minerals Management Service is considering approval of the DOCD and that it is available for public review.

Revised rules governing practices and procedures under which the Minerals Management Service makes information contained in DOCDs available to affected states, executives of affected local governments, and other interested parties became effective December 13, 1979 (44 FR 53685). Those practices and procedures are set out in revised § 250.34 of Title 30 of the CFR.

Dated: December 16, 1985.

J. Rogers Pearcy,

Acting Regional Director, Gulf of Mexico OCS Region.

[FR Doc. 85-30408 Filed 12-24-85; 8:45 am]

BILLING CODE 4310-MR-M

INTERNATIONAL TRADE COMMISSION

[Investigation 332-220]

Effects of Proposed Tax Reforms on the International Competitiveness of U.S. Industries

AGENCY: United States International Trade Commission.

ACTION: At the request of the Committee on Finance of the United States Senate, the Commission has instituted investigation No. 332-220 under section 332(b) of the Tariff Act of 1930 (19 U.S.C 1332(b)) concerning how the President's proposed tax reform and the tax reforms recently proposed by the House Committee on Ways and Means would affect the international competitiveness of U.S. industries.

EFFECTIVE DATE:

FOR FURTHER INFORMATION CONTACT: Donald J. Rousslang (202-523-0075), Chief, Research Division, Office of Economics, U.S. International Trade Commission, Washington, DC.

SUPPLEMENTARY INFORMATION:

Background

The Commission instituted the investigation, No. 332-220, following receipt of December 2, 1985 of a request therefor from the Chairman of the Committee on Finance of the United States Senate. In accordance with the Committee's request, the study will estimate the effects of the proposed tax changes on the exports and imports of individual U.S. industries. It will also analyze other aspects of the effects on U.S. competitiveness.

Public Hearing

A public hearing in connection with this investigation will be held at the U.S. International Trade Commission Building, 701 E Street NW., Washington, DC., beginning at 10:00 a.m. on January 28, 1986. All persons shall have the right to appear, by counsel or in person, to present information and to be heard. Requests to appear at the public hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on January 14, 1986. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs. The deadline for filing prehearing briefs is January 21, 1986.

Written Submission:

In lieu of a public hearing, interested persons are invited to submit written statements concerning the investigation. Commercial or financial information that a party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of § 201.6 of the Commission's Rules of Practice and Procedure (19 CFR information, will be made available for inspection by interested persons. To be assured of consideration by the Commission, written statements should be received no later than February 4, 1985. All submissions should be addressed to the Secretary at the Commission's office in Washington, DC.

Posthearing briefs must be submitted not later than the close of business on February 4, 1986. A signed original and 14 true copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's Rules (19 CFR 201.8).

Hearing-impaired persons are advised that information on this matter can be obtained by contacting our TDD terminal on (202) 724-001.

By order of the Commission.

Issued: December 19, 1985.

Kenneth R. Mason,

Secretary.

[FR Doc. 83-30520 Filed 12-24-85; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. 337-TA-215]

Certain Double-Sided Floppy Disk Drives and Components Thereof; Commission Decision To Review Initial Determination, Schedule for Filing of Written Submissions and Violation and on Remedy, the Public Interest, and Bonding

AGENCY: International Trade Commission.

ACTION: Notice is hereby given that the Commission has determined to review portions of the administrative law judge's initial determination finding no violation of section 337 of the Tariff Act of 1930 in the above-captioned investigation.

Authority: The authority for the Commission's disposition of this matter is contained in section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) and in sections 210.53-.56 of the Commission's Rules of Practice and Procedure (49 FR 46123 (Nov. 23, 1984); to be codified at 19 CFR 210.53-.56).

FOR FURTHER INFORMATION CONTACT: Marcia H. Sundeen, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-523-0350.

SUMMARY: On November 1, 1985, the administrative law judge issued an initial determination (ID) finding no violation of section 337 in the importation or sale of certain double-sided floppy disk drives. Complainant, respondents and the Commission investigative attorney filed petitions for review of certain parts of the ID pursuant to section 210.54(a) of the Commission's rules.

Having examined the record, including the petitions for review and the responses thereto, the Commission

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

Notice of Investigation
(332-220)

The Effects of Proposed Tax Reforms on the International Competitiveness of U.S. Industries

AGENCY: United States International Trade Commission

ACTION: At the request of the Committee on Finance of the United States Senate, the Commission has instituted investigation No. 332-220 under section 332(b) of the Tariff Act of 1930 (19 U.S.C. 1332(b)) concerning how the President's proposed tax reform and the tax reforms recently proposed by the House Committee on Ways and Means would affect the international competitiveness of U.S. industries.

EFFECTIVE DATE: December 18, 1985

FOR FURTHER INFORMATION CONTACT: Donald J. Rousslang (202-523-0075), Chief, Research Division, Office of Economics, U.S. International Trade Commission, Washington, D.C.

BACKGROUND: The Commission instituted the investigation, No. 332-220 , following receipt of December 2, 1985 of a request therefor from the Chairman of the Committee on Finance of the United States Senate. In accordance with the Committee's request, the study will estimate the effects of the proposed tax changes on the exports and imports of individual U.S. industries. It will also analyze other aspects of the effects on U.S. competitiveness.

PUBLIC HEARING: A public hearing in connection with this investigation will be held at the U.S. International Trade Commission Building, 701 E Street N.W., Washington, D.C., beginning at 10:00 a.m. on January 28, 1986. All persons shall have the right to appear, by counsel or in person, to present information and to be heard. Requests to appear at the public hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on January 14, 1986. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs. The deadline for filing prehearing briefs is January 21, 1986.

WRITTEN SUBMISSIONS: In lieu of a public hearing, interested persons are invited to submit written statements concerning the investigation. Commercial or financial information that a party desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available for inspection by interested persons. To be assured of consideration by the Commission, written statements should be received no later than February 4, 1985. All submissions should be addressed to the Secretary at the Commission's office in Washington, D.C.

Posthearing briefs must be submitted not later than the close of business on February 4, 1986. A signed original and 14 true copies of each submission must be filed with the Secretary to the Commission in accordance with Section 201.8 of the Commission's Rules (19 CFR 201.8).

Hearing-imparied persons are advised that information on this matter can be obtained by contacting our TDD terminal on (202) 724-002.

By order of the Commission

Kenneth R. Mason
Secretary

Issued: December 19, 1985

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : The Effects of Proposed Tax Reforms on the International Competitiveness of U.S. Industries

Inv. No. : 332-220

Date and time: January 28, 1986 - 10:00 a.m.

Sessions were held in connection with the investigation in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., in Washington.

Congressional appearances:

Honorable Max Baucus, United States Senator, State of Montana

Honorable Ralph Regula, United States Representative, State of Ohio

WITNESS AND ORGANIZATION

Basic Industries Coalition, Inc., Washington, D.C.

John K. Meagher, Chairman

Institute for Research on the Economic of Taxation, Washington, D.C.

J. D. Foster, Economist

Emergency Committee for American Trade, Washington, D.C.

Robert L. McNeill, Executive Vice Chairman

National Foreign Trade Council Inc., New York, N.Y.

Thomas J. Dubos, Chairman, Tax Committee

Howard N. Haug, Vice President of Tax Policy

- more -

WITNESS AND ORGANIZATION

Coalition for Jobs Growth and Inrernational Competitiveness, Washington, D.C.

Dr. Ted Eck, Chief Economist, Amoco Corporation

GTE Service Corporation, Washington, D.C.

Dr. Daniel A. Hodes, Chief Economist, GTE Corporation

Dr. Laurence J. Mauer, Associate Professor of Economics, St. John's University

Chamber of Commerce of the United States, Washington, D.C.

Dr. Richard Rahn, Vice President and Chief Economost, Chamber of Commerce of the United States

National Association of Manufacturers, Washington, D.C.

Paul R. Huard, Esq., Vice President Taxation and Fiscal Policy

Dr. Gordon Richards, Director of Economic Analysis for the National Association of Manufacturers

Consolidation Coal Company, Washington, D.C.

William G. Karis, Vice President - Planning Consolidation Coal Company

Plaia & Schaumberg--Counsel
Washington, D.C.
on behalf of

Association of Cold-Rolled Strip Steel Producers

George T. Ryan, President, Thompson Steel Company, Inc.

Gene Brown, President, Whittaker Steel Strip Corporation

Austin Murphy, President, Blair Strip Steel Corporation

Tom M. Schaumberg--OF COUNSEL

- more -

WITNESS AND ORGANIZATION

Invest to Compete Alliance, Washington, D.C.

James H. Mack, Public Affairs Director of the National Machine Tool Builders Association

American Trucking Association, Alexandria, Virginia

Kenneth D. Simonson, Chief Economist and Director of Tax Policy for the American Trucking Association

Republic New York Corporation

Walter H. Weiner, President

Herbert J. Richman, Executive Vice President

Fay Palais, First Vice President

Debasco Service, Inc., New York, N.Y.

Allen Epstein, Director of Corporate Tax

Appendix F

Letter of November 27, 1985 From the Chairman
Senate Finance Committee
and
the Commission's Reply

United States Senate

COMMITTEE ON FINANCE
WASHINGTON, DC 20510

November 27, 1985

The Honorable Paula Stern
Chairwoman
U.S. International Trade Commission
701 E Street, N.W.
Washington, D.C. 20436

Dear Madam Chairman:

The Senate Committee on Finance requests that the United States International Trade Commission conduct an investigation under section 332 of the Tariff Act of 1930 to determine the effects that the President's tax reform proposals will have on the international competitiveness of U.S. industries. The Committee also requests that the Commission's investigation consider the effects of the House Ways and Means Committee proposal.

To accomplish the above, the study should provide, to the extent possible, estimates of how the proposed tax changes would affect the import and export competitiveness of U.S. industries. The estimates should cover all major sectors of the U.S. economy and should provide disaggregated detail. It is understood that an input-output model will constitute the central focus of this study.

The final report should be transmitted to the Committee on Finance no later than four months after receipt of this request.

Sincerely,

Bob Packwood

BOB PACKWOOD

CHAIRWOMAN

UNITED STATES INTERNATIONAL TRADE COMMISSION

WASHINGTON, D.C. 20436

January 10, 1986

Honorable Bob Packwood
Chairman, Committee on Finance
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in reply to your letter, received on December 2, 1985, in which you requested that the U.S. International Trade Commission conduct an investigation under section 332 of the Tariff Act of 1930 to examine the effects on U.S competitiveness of tax reforms proposed by the President and by the House Committee on Ways and Means.

The Commission has instituted investigation No. 332-220, the Effects of Proposed Tax Reforms on the International Competitiveness of U.S. Industries, in response to your request. Enclosed for your information is a copy of the notice instituting the investigation. The Commission expects to submit a final report to the Comittee on or before April 2, 1986.

Please continue to call on us whenever we can be of assistance to you.

Sincerely,

Paula Stern

Paula Stern
Chairwoman

Enclosure

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