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EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS

fine

July 23, 1985

TO: Thomas Dawson

Enclosed are two copies of our formal paper on "Implications of Tax Reform for Economic Growth."

Please handle discreetly as we discussed.

Let me know if there is anything we can do to help.

A large, stylized handwritten signature in cursive script, appearing to read "Beryl".

Beryl W. Sprinkel
Chairman

The Economic Case for Tax Reform

The goal of this paper is to provide a quantitative assessment of the potential economic benefits of the President's tax reform proposal. It stresses the long-term advantages rather than the short-term implications of the proposed policy changes and concludes that substantial benefits can reasonably be expected.

The approach adopted is to apply standard economic reasoning and existing empirical research to estimate the effect of tax reform on aspects of economic performance that are of continuing concern. Four aspects of performance are highlighted: resource allocation; labor supply; saving, investment, and capital formation; and tax evasion. Where possible, simplifying assumptions are used to generate quantitative estimates of the likely effects of tax reform.

This paper specifically eschews the use of commercial macroeconomic models for the analysis of the tax reform proposal. These models are designed primarily to forecast the short-run effects on the level of resource utilization of changes in the policy environment. Most importantly, these models are inherently incapable of capturing an important source of the economic benefits that tax reform promises -- the improved allocation of capital and other resources. Many presentations of the macroeconomic models' results acknowledge

this defect,* but do not attempt to modify their results accordingly.

1. Resource Allocation

The current tax system generates a waste of resources because it encourages people and firms to engage in activities which have favorable tax consequences but which are not as productive as alternative activities which do not have special tax treatment. For example, the favorable tax treatment of real estate encourages the construction of office buildings, even though much of the space remains vacant. The resources that went into the construction of these buildings could have been used more productively in some alternative investment.

* For example: "These results, like others generated with macroeconomic models, do not explicitly account for the gains in economic efficiency that may arise if reform discourages unproductive investment," The President's Tax Proposal: Implications for Capital Formation (Center for the Study of American Business, June 1985), page 3. Or: "Econometric models are not designed to measure the microeconomic effects of tax reform. Therefore, their primary uses are: (a) to warn of possible 'demand side' changes which will result in a shock to the economy, and (b) to describe the sectorial and industrial impacts of these shocks," Testimony of Leon Taub, Chief Economist of Chase Econometrics, before House Ways & Means Committee, June 11, 1985.

Similarly, the current tax system features a lower effective tax rate on investment in equipment compared to structures or inventories, so that firms are induced to use equipment in production at the expense of more productive alternatives.

A major objective of the Administration's tax plan is to reduce the waste due to tax-induced inefficient resource allocation. The plan would cause a more efficient allocation of resources for three reasons: (i) it reduces the dispersion in the rates of taxation on different kinds of investment; (ii) it eliminates the preferential tax treatment currently afforded to certain activities, such as municipal services; (iii) it reduces marginal tax rates, thus reducing the cost of the differential tax treatment that remains in place. All three of these provisions will reduce the waste generated under the current system because resources are attracted to tax-favored, but less productive, uses.

Any quantitative estimate of the cost of tax-induced resource misallocation -- or the benefit of reducing this misallocation -- depends critically on what is assumed about the responsiveness of economic decisions to tax considerations. The more responsive are production and consumption decisions to changes in relative prices caused by taxes, the greater the resource cost for any given amount of revenue raised. In no case have economists agreed on what the

precise degree of responsiveness is. However, in many cases there is broad agreement about the range of likely responsiveness.

To date, no comprehensive study exists of the resource allocation gains of the Administration's tax plan. However, there are studies of the resource misallocation cost of the current tax system and there are studies of the benefits of particular pieces of the tax plan. Drawing on the findings of these studies, we can piece together some understanding of the likely gains due to resource allocation improvement.

Ballard, Shoven, and Whalley (1985) recently used an applied general equilibrium model of the U.S. economy to estimate the resource misallocation cost of the current tax system. They estimated the cost to be between 13 and 22% of revenues collected at all levels of government. Since revenues in 1984 amounted to about 31% of GNP, this loss corresponds to a range of 4.0 to 6.8% of GNP. This is the annual gain that could be expected from eliminating all tax-induced distortions in economic decisions.

Of course, the Administration's tax plan would by no means eliminate all sources of resource misallocation, so these estimates provide an upper bound on the potential gains. However, these estimates are insightful because they indicate that the maximum potential gains from reforming the tax system are large.

Some studies have focused on particular aspects of the Administration's plan. A recent study by the Congressional Research Service (Gravelle, 1985) estimated that the business tax provisions of the Administration's plan would, by causing a more efficient allocation of capital, produce an efficiency gain equal to 1.1% of output, which would occur as an annual flow. Put another way, the gain is equivalent to increasing the total capital stock by 7.3%. The model underlying these results assumes unitary elasticities of substitution for different types of capital and unitary price elasticities. Although there is empirical support for these assumptions, they are not consensus estimates. If, for example, all the elasticities were equal to one-half instead of one, then the efficiency gain would be roughly one-half of the published estimate, or between 0.5 and 0.6% of GNP.

The Administration's plan eliminates the preferential tax treatment of several activities. One important source of resource allocation improvement concerns the provision of municipal services. Because state and local taxes are currently deductible in the computation of federal taxable income, the net cost of a dollar of additional services to itemizers is $\$(1-t)$ dollars, where t is the Federal marginal tax rate. This implicit subsidy to state and local spending encourages communities to provide services to residents as long as their value exceeds $\$(1-t)$, even though the social cost of the resources used is \$1. The result is an

inefficient overprovision of state and local services, which is exacerbated by the presence of direct Federal and state subsidies and indirect subsidies such as the ability to issue tax-exempt debt. A recent study by Gordon and Slemrod (1983) used an applied general equilibrium approach to estimate that the gain from eliminating the sub-federal tax deductibility provision amounted to 0.9 percent of consumption. This is likely to be an overestimate of the true potential gain for a few reasons. First, the study assumes unitary elasticities for both input demand and consumption good demand. Second, it assumes that all predominantly homeownership communities are determined by itemizing households. Finally, the analysis presumes a pre-ERTA tax structure, so that the baseline tax system features Federal statutory marginal rates as high as 70 percent. In spite of these caveats, the analysis is valuable in identifying the significant potential gain from eliminating this source of resource misallocation.

There are sources of improvement in resource allocation beyond those mentioned already. There are numerous provisions which eliminate special tax treatment of particular activities. In addition, the reduction of marginal tax rates would reduce the extent of misallocation that arises from the aspects of non-uniform taxation that remain under the Administration's tax proposal, such as the tax exemption of

activities financed by fringe benefits. The amount of resources that move to a tax-preferred sector in order to escape a 35% tax rate will be smaller than the amount of resources that move to escape a 50% percent rate.

This is the most difficult aspect of resource allocation improvement to get a quantitative handle on. An impressionistic estimate can be gleaned from Ballard, Shoven, and Whalley, whose calculations indicate that the gain from moving to a proportional comprehensive income tax in excess of the gain from simply eliminating capital income tax and consumer good tax differentials lies between 1.4 and 2.5% of GNP. Of course, the Administration's plan is neither proportional nor completely comprehensive, but it does significantly reduce and compress marginal tax rates. As above, these calculations are most useful as illustrations of the maximum potential economic gain from tax reform.

In summary, a strong case can be made that the current tax system wastes the country's economic resources by causing them to be allocated to less productive, but tax preferred, uses and that the Administration's tax plan takes a significant step toward reducing this waste. Any quantitative assessment of the improvement in resource allocation is dependent on several assumptions about which no consensus exists among economists. Nevertheless, our review of the literature suggests that an improvement in economic activity equivalent to a GNP increase of 1 to 1-1/2% is not

unreasonable. This estimate is obtained by first adjusting downward the calculations of the three pieces of the resource allocation gain, and then summing them. In particular, we sum one-half of the estimated gain from improved capital allocation (0.5 to 0.6%) one-third of the estimate of the gain from improved allocation of municipal services (0.3%), and one-fifth of the midpoint of the estimate of residual resource allocation improvement (0.4%), to obtain 1.2 to 1.3% of GNP. The adjustment factors represent our best judgment about the appropriate economic assumptions. This gain would materialize gradually as resources were shifted from less productive to more productive uses in response to the changed tax incentives.

2. Labor Supply

The Administration's tax plan reduces the average level of statutory Federal marginal tax rates by 19%, which increases the after-tax return to working. An increased return to working will tend to increase labor supply depending on how responsive individuals are to the increased incentive to work.

Much empirical research has tried to quantify the responsiveness of labor supply to changes in wage rates and income, investigating the historical behavior of aggregate labor supply, the behavior of individuals faced with different wage rates and incomes, and the behavior of individuals under experimental programs. No consensus has yet been reached. A

useful survey of the range of empirical estimates is provided by Stuart (1984). He notes that recent work on male labor supply has produced uncompensated (including the income effect of changes in wages) labor supply elasticities (the percentage change in labor supply resulting from a 1 percent change in the after-tax wage rate) that are both positive and negative, although absolute magnitudes are generally small. He concludes that a zero uncompensated wage elasticity for males is a reasonable assumption; this implies, for likely values of the income effect, a compensated (i.e., substitution effect only) of 0.2. Recent estimates of female labor supply elasticity are much higher. Stuart cites several recent studies with estimated uncompensated elasticities ranging from 0.91 to as high as 4.83. He concludes that a value of 1.0 for female wage elasticity is not implausibly high, and an elasticity of 2.0 is not "completely out of the ballpark."

In our baseline estimates, we use the conservative estimate of female uncompensated labor supply elasticity of 1.0, and adjust that to a compensated elasticity of 1.2. Using the relative share of labor income for males in 1976 of 0.682, we compute an aggregate compensated elasticity of 0.518.

The next step in the analysis is to ascertain how the Administration's tax plan would change the overall well-being of households and the marginal return to working. Because the plan is approximately revenue neutral, private income will not be significantly affected in the short run. To the extent

that the new tax improves economic performance, national income will increase. However, for these purposes this effect is small enough so that we can safely ignore the income effect on labor supply.

A decline in the marginal tax rate, ceteris paribus, increases the marginal return to working. Analysis accompanying the Administration's tax plan claims that the average reduction in marginal tax rates is 19%, from 23.6% percent to 19.1%. This implies that, holding wage rates (w) constant, the average after-tax return to working increases from $w(1-.236)$ to $w(1-.191)$, or by 5.9%. Absent any qualifications, it is this figure which should be applied to the estimate of labor supply elasticity discussed above to obtain a rough estimate of labor supply response. There are several qualifications to this calculation of the increase in the marginal return to working. For itemizers, the loss of sub-federal income tax deductibility increases the effective rate of state and local income taxation. In addition, the elimination of the two-earner credit means that the decline in statutory marginal rates overstates the true decline in effective marginal taxation for many workers. Furthermore, note that while the marginal return to working in terms of most goods increases, the marginal return in terms of goods which lose their preferential treatment declines.

Working in the opposite direction is the proposal to fully tax all unemployment benefits, which will tend to increase the incentive to supply labor.

With some simplifying assumptions it is possible to quantify some of these qualifications. We assume: (i) all itemizers (36.6% of taxpayers in 1983) take a deduction for sub-federal income taxes; (ii) the average sub-federal marginal income tax rate for itemizers is .06, (iii) the two-earner credit (which applied to 12.0% of all reported wages and salaries in 1983) is effective at the margin for all taxpayers who claim it; (iv) the average Federal marginal tax rate of taxpayers who currently take advantage of these provisions is 30% percent higher than that of the general taxpaying population, and (v) the negative effect on the marginal return to working of eliminating tax preferences and the positive effect of fully taxing unemployment benefits exactly offset. In this case the average marginal tax rate under current law is not .236, but rather $.236 \times (1 - 1.3 \times (.366 \times .06 + .12 \times .1))$, or .2256. Thus, the decline to .191 is a decline of 15.3 percent instead of 19.0%. This corresponds to an increase in the after-tax wage of 4.5%. Applying the aggregate labor supply elasticity of 0.518 to the increased after-tax wage of 4.5% yields an estimated increase in the desired supply of labor 2.3%, holding wage rates constant. Using a female compensated labor supply elasticity of 2.0 instead of 1.0 would generate a labor supply increase of 3.8%.

If it is assumed that all the workers who currently use the two-earner credit are female, then the average after-tax wage increases by 4.9% for males and 3.5% for females. Applying the separate supply elasticities to these wage increases and then aggregating slightly reduces the supply response from 2.3% to 2.0% in the base case, and from 3.8% to 3.2% if the female labor supply elasticity is 2.0.

Because the demand for labor is not perfectly elastic, an increase in the desire to supply labor for any given wage rate would in the long run result in a decline in the level of wage rates, which would offset to some degree the decrease in taxation. If we use the common assumption that demand for labor is inversely proportional (i.e., has a wage elasticity of -1) to the gross wage, then the increase in the quantity of labor resulting from a 4.5 increase in the after-tax wage (for any given pre-tax wage) would be 1.5%, assuming an aggregate supply elasticity of 0.518.

All things considered, a 3% increase in labor supply is an optimistic assessment of the likely equilibrium outcome, and a more likely outcome is an increase of 1 to 2%. This would lead to an increase in real GNP of about three-fourths of the increase in labor supply, or $3/4$ to $1-1/2\%$. Note that an increase in GNP due to increased labor supply is not directly comparable to an increase in GNP due to improved resource allocation. This is because the increased output from greater labor supply should be netted against the value of the leisure time foregone.

3. Saving, Investment, and Capital Formation

Several aspects of the Administration's proposal would affect the incentive to save and the incentive to invest in U.S. productive assets. In an economy closed to international capital flows, the combination of these impacts determines the change in the flow of saving and investment (which must be equal) and the change in the level of domestic interest rates. In a world with international capital flows, the impact on national saving and domestic investment may be different.

Two aspects of the Administration's proposal have potentially important implications for the incentive to save because they affect the marginal after-tax rate of return to saving. They are the expansion of Individual Retirement Accounts (IRAs) and the reduction in marginal tax rates.

An IRA plan is an effective inducement to saving only once all previously accumulated assets have been transferred into the IRA, and even then only if borrowing to place funds in the IRA is ruled out. In the absence of these conditions, individuals can obtain the tax benefit from an IRA without doing any net saving. The Administration's proposal, by extending to \$4,000 the limit on a single-earner couple's annual IRA contribution, would hasten the transition period that elapses before asset shifting is completed and the program becomes effective at the margin. By imposing a stricter limit on interest deductibility, the incentive to borrow to finance an IRA may also be reduced for some taxpayers. A third necessary condition for an effective IRA is that desired saving must not exceed the annual contribution limit. For this reason, the Administration's proposal expands the affected population to include those single-earner couples whose desired saving lies between \$2,250 (the current contribution limit) and \$4,000 (the proposed limit). This is likely to be a small fraction of single-earner couples. We conclude that the expanded IRA will have a positive but not significant impact on the rate of saving.

The lowered marginal tax rates of the Administration's proposal will tend to increase the after-tax rate of return to saving for a given pre-tax rate of return. This is offset to some degree by the increased effective sub-federal income tax rates for itemizers who lose tax deductibility, by the proposed increases in the taxation of financial institutions (part of which will inevitably be passed through to savers in the form of lower interest rates), and by the elimination of some tax-preferred methods of saving, such as industrial development bonds. In general, the precise relationship between reduction in marginal tax rates and the corresponding increase in the marginal after-tax return to saving is complicated because the income from many forms of saving is already effectively tax-exempt or tax-preferred. Determining the magnitude of the saving response to generally higher after-tax rates of return is problematic because econometric estimates of the interest responsiveness of saving vary widely. Much applied work has utilized Boskin's (1978) estimate of an interest elasticity of saving equal to 0.4, although the methodology underlying this estimate has been

criticized and remains controversial. Using Boskin's estimate as a benchmark for quantitatively assessing saving responses allows a rough calculation of the possible magnitude of saving response for given interest rates. To do this, we first calculate the change in the after-tax return on a fully taxable saving instrument, such as a government bond. Performing a calculation similar to the one in the section on labor supply, the average marginal tax rate falls from $.236 \times (1 - 1.3 \times (.366 \times .06))$, or .2292, to .191, a decline of 16.7%. This corresponds to an increase in the after-tax return for saving of 5.0%. We then assume that the after-tax rate of return on a taxable saving instrument bears the same relationship to the actual marginal after-tax return to saving as it did over the period of Boskin's study. Applying an interest elasticity of saving equal to 0.4 to a 5.0% increase in the after-tax return implies a 2% (not 2 percentage points) increase in saving.

Assessing the impact of the proposal on investment is particularly difficult because of two apparently contradictory characteristics. On the one hand, the analysis accompanying

the Administration's proposal estimates that the effective corporate-level tax on equity-financed investment would fall from 35 to 26% if all its provisions were enacted. (This decline reflects an increase in the effective tax rate on investment in equipment and a reduction in the effective tax rate on investment in structures and inventories.) Based on his own similar calculations of effective tax rates, Charles Hulten of the Urban Institute has estimated that the demand for tangible corporate capital would rise by 5 and as much as 10 percent. The apparently contradictory element of the plan is that the revenue projections show increases in corporation tax revenues of about 25% over the period 1986 to 1990. Somereconciliation of these two elements is possible. Nearly \$60 billion in revenue is raised between 1986 and 1989 by the excess depreciation recapture tax, which does not affect the return to new investment. Furthermore, the change to a more back-loaded system of depreciation allowances (including no investment tax credits) accelerates revenue that will later be lost as larger depreciation allowances in the later years of capital goods' productive lifetime are taken.

Nevertheless, the analysis accompanying the proposal states that in a steady state the corporation income tax will raise 9 percent more revenue than it would under current law. How this is compatible with a decline in the corporate-level effective tax rate on new investment is a more difficult question to answer. Part of the answer is that the effective tax rate calculations do not consider some revenue-raising provisions that apply only to certain sectors' investment. For example, the revised accounting rules for multiperiod construction will increase effective tax rates for certain investment activities, but are not considered in the effective tax rate calculations. Another part of the answer may be that the effective tax rate on debt-financed investment is not reduced by as much as the tax rate on equity-financed investment, so that the decline in the latter overestimates the decline in the effective tax rate on investment overall.

A completely satisfactory reconciliation of the effective tax rate calculations and the revenue projections is not available at this time. Further investigation of both issues is ongoing. In the absence of a satisfactory reconciliation, it is impossible to state with great confidence what the net impact on corporate investment demand will be. Our best preliminary estimate is that the net impact will be slightly positive. This conclusion also applies to noncorporate, nonresidential investment as the decline in statutory tax rates is similar to the corporate decline and the other major business tax provisions apply to both forms of business.

The effective rate of tax on investment in residential real estate (which is largely noncorporate) probably increases under this proposal. The effective rate of federal taxation of owner-occupied housing remains at zero, but the elimination of the deductibility of local property taxes increases the effective total tax burden.

In sum, there is perhaps a slight decline in the effective tax rate on corporate and noncorporate non-residential investment and a slight increase in the effective taxation of residential investment. As nonresidential capital comprises about 60% of the total private capital stock, the average effective tax rate on new investment is probably not much changed in either direction, although there is a shift in the relative burden of taxation from corporate capital to noncorporate real estate.

The upshot of slightly increased incentives to save and not much change in the overall incentive to invest would be, in a world closed to international capital flows, slightly lower interest rates and a slightly higher rate of investment. With internationally mobile capital, any increased saving would be spread among investment opportunities throughout the world, and neither interest rates nor aggregate domestic investment would be affected significantly.

4. Tax Evasion

A recent study by the Internal Revenue Service (IRS, 1983) estimated that in 1981 individual income tax revenue foregone due to evasion amounted to \$68.5 billion, or 24% of individual income tax receipts in that year. It further estimated that evasion had been growing at an annual real rate of 4.3% since 1973. Assuming the same real rate of growth between 1981 and 1985 yields an estimated tax gap in 1985 of \$96 billion.

Several studies have concluded that there is an inverse relationship between taxpayers' sense of fairness about the tax system and their willingness to evade. According to this argument, to the extent that the Administration's tax plan restores a sense of fairness, evasion will decline. Although this may be a significant factor, no reliable quantitative evidence about its potential magnitude exists.

Reducing marginal tax rates is likely to reduce the extent of evasion, because it reduces the return to understating taxable income. The only reasonable empirical study of the likely magnitude of such a response is due to Charles Clotfelter (1983).

Clotfelter estimated the responsiveness of tax evasion to marginal tax rates using data for 1969 from the Internal Revenue Service's Taxpayer Compliance Measurement Program (TCMP) survey, which consists of extensive audits of a random sample of the taxpaying population. Because of the difficulty

in detecting unreported income of filers and income of non-filers, it is estimated that the TCMP measured only 37 to 47 of all underreported income. Clotfelter estimated that the elasticity of underreported income with respect to marginal tax rates ranged from 0.5 to 3.0, depending on the econometric specification chosen. He apparently favored the lower end of the range as being more plausible. Using this range of estimated responsiveness, he simulated the impact on tax evasion of an across-the-board tax cut of 10%, and found that the overall reduction in underreporting of taxable income would lie between 9 and 26%.

Applying these findings to the likely effect of the Administration's tax plan requires several assumptions. First, we must assume that individuals' underlying attitudes have not changed substantially since 1969. Second, for computational convenience, we assume that the ratio of aggregate tax understatement to tax paid is equal to the ratio of income understatement to income reported. Finally, we assume that Clotfelter's simulation results for a 10% across-the-board cut in rates can be linearly extrapolated to apply to a larger cut in rates.

Given these assumptions, we can estimate the decline in tax evasion due to the reduction in marginal tax rates featured in the Administration's tax proposal. Although the decline is not uniform as in Clotfelter's simulation, the average decline in marginal tax rates is about 15%, taking

into account the elimination of state and local income tax deductibility and the two-earner credit. That corresponds to a predicted decline in underreporting and, by assumption, evasion of tax liability of between 13-1/2 and 39%. Given the estimated tax gap in 1985 of \$96 billion, tax evasion would decline by between \$13 and \$37 billion, compared to projected 1985 individual income tax revenues of \$323 billion. Even the low end of this range, which we view as more likely, indicates a substantial revenue pickup due to increased compliance.

These estimates of the reduction in noncompliance due to reduced marginal tax rates are based on the most reliable evidence that exists, but they should be interpreted with great caution. Both the baseline IRS figure of tax evasion and the compliance responsiveness estimate are derived using competent, but debatable, methodologies. Although the magnitude of response has not been definitively established, this exercise suggests that tax evasion is a large and growing problem, and that reducing marginal tax rates has the potential to induce a significant reduction in that problem.

5. Conclusion

Primarily because of improved resource allocation and incentives to supply labor, a case based on sound economic reasoning and existing empirical research can be made that the Administration's tax proposal will generate significant improvement in economic performance. The improved performance

could amount to as much as a 2 to 3 percent increase in the level of GNP. At current levels, this is equivalent to an increase of between \$80 and \$120 billion in annual GNP.

This improvement would occur gradually as individuals respond to the altered incentives and resources move toward more efficient uses. This adjustment period could be as long as 10 years, so that real growth per year over that time would be 0.2 to 0.3 percent higher than otherwise.

One source of uncertainty about the economic impact of the tax proposal is its long-run revenue neutrality. If there is a long-run revenue shortfall, then either the economic impact of a larger deficit must be considered, or else the tax proposal must be altered to raise more revenue, which would probably mitigate some of the advantages of the tax proposal discussed in this paper. Note, though, that the revenue projections do not consider any increased economic activity generated by the tax reform nor do they consider any increased tax compliance generated. The elasticity of Federal revenues with respect to real GNP is approximately 1.25, so that a 2 to 3 percent increase in real GNP would increase revenues by 2.5 to 3.8 percent, or from \$28 to \$42 billion in 1990 if the complete gain had occurred by then. Adding the lower estimate of revenue pickup due to increased compliance puts the potential revenue increase on the order of \$45 billion. Thus, the potential additional revenue from these sources is at least as large as the revenue shortfalls that are currently being investigated.

It is important that the estimates presented in this paper be regarded as possible outcomes based on standard economic reasoning rather than precise predictions. The quantitative estimates for each piece of analysis are based on certain analytical assumptions and on certain empirical magnitudes that are controversial among economists. Because several of the effects discussed here should also have been observed after the tax reductions in the Economic Recovery Tax Act of 1981, careful study of recent data should ultimately provide us with more information about the likely impact of tax reform. These cautions notwithstanding, this type of reasoning provides a more reliable guide to the long-term consequences of tax reform than the commercial macroeconomic models, which are not designed to deal with resource allocation issues.

References

Ballard, Charles, John B. Shoven, and John Whalley, "The Welfare Cost of Distortions in the United States Tax System: A General Equilibrium Approach," American Economic Review 75 (March, 1985), pp. 128-138.

Boskin, Michael, "Taxation, Saving, and the Rate of Interest," Journal of Political Economy 86 (April, 1978), pp. S3-S27.

Clotfelter, Charles, "Tax Evasion and Tax Rates: An Analysis of Individual Returns," Review of Economics and Statistics 3 (August, 1983), pp. 363-373.

Gordon, Roger and Joel Slemrod, "A General Equilibrium Simulation Study of Subsidies to Municipal Expenditures," Journal of Finance 38 (May, 1983), pp. 585-594.

Gravelle, Jane, "Effects of Business Tax Provisions in the Administration's Proposals: Updated Tables," Congressional Research Service Report #85-783E, June 6, 1985.

Internal Revenue Service, Income Tax Compliance Research: Estimates for 1978-1981; July, 1983.

Stuart, Charles, "Welfare Costs per Dollar of Additional Tax Revenue in the United States," American Economic Review 74 (June, 1984), pp. 352-362.

**EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL OF ECONOMIC ADVISERS**

August 8, 1985

NOTE TO RON PEARLMAN

Per your request, I am enclosing a copy of the CEA study -- "The Economic Case for Tax Reform." Please note this is still in draft form.

As we discussed this should be held close.

A handwritten signature in cursive script, appearing to read "Beryl", with a long, sweeping horizontal line extending to the right.

**Beryl W. Sprinkel
Chairman**

Executive Summary

The Economic Case for Tax Reform

The President's tax proposals have been hotly debated on the issue of fairness, but to date there has not been a serious examination of what is at least as important an issue: whether the proposed changes in the tax code will lead to improved economic performance. As a consequence, the Council of Economic Advisers analyzed the effects of the President's tax plan on four important aspects of economic performance: resource allocation; labor supply; saving, investment and capital formation; and tax evasion. It was concluded that, over the next 10 years, the tax proposals could increase GNP by as much as 2 to 3 percent. At current levels of GNP, this is equivalent to an increase of \$80 to \$120 billion per year of economic activity. These quantitative projections should be viewed as reasonable outcomes based on standard economic analysis, rather than as precise predictions.

Methodology

The CEA's analysis was based on an extensive survey of the existing empirical research and relevant economic literature. Commercial macroeconomic models were not used for several

reasons, primarily because they are not designed to deal with changes in the allocation of capital and other resources, a critical benefit of tax reform.

Resource Allocation

The President's tax proposals will result in a more efficient allocation of resources for three reasons, each of which will reduce the waste caused by the current tax system, where resources are attracted to tax-favored activities instead of being invested more productively. The tax plan moves toward a level playing field for capital investment, where different kinds of investment would start being taxed at the same rates. The plan eliminates the current preferential tax treatment of certain activities, such as municipal services. The reduction in marginal tax rates reduces the waste that is created by tax disparities that remain. All in all, by using resources more efficiently, for more productive uses, the analysis concludes that GNP could easily increase by 1 to 1-1/2 percent in the long run.

Labor Supply

As a result of the 19 percent reduction in Federal marginal tax rates, wage earners will have an average increase in their after-tax wages of up to 5.9 percent. The incentives from keeping more of the money that is earned could lead to an increase in the labor supply over the next few years of up to as much as 3 percent, but easily by as much as 1 to 2 percent. This, in turn, will result in an increase in GNP of between 3/4 and 1-1/2 percent.

Saving, Investment, and Capital Formation

The tax proposal, by increasing the after-tax return to saving, would stimulate saving. Two aspects, in particular, would increase the rate of return for savers: the 19 percent reduction in marginal tax rates and the expansion to \$4,000 of the annual limit on IRAs for all couples. Although the proposals will likely increase saving, the aggregate impact is not very large.

For investment, the analysis concludes that there would be a slight decline in the effective tax rate on corporate (non-residential) investment and a slight increase in the effective tax rate on residential investment. Therefore, the average tax rate on new investment will be about the same and there will

not be much effect on total capital formation. However, since capital will likely shift from residential to non-residential uses, there could be an increase in corporate capital of up to 5 or even as much as 10 percent.

Tax Evasion

As marginal tax rates are reduced, the incentives to evade income tax are reduced. It is projected that the individual income tax lost due to underreported income for 1985 will be about \$96 billion -- out of expected individual income tax revenues of \$323 billion. Estimates based on an empirical study are that the reduced incentives to evade income taxes could reduce underreporting by 13 to 39 percent, with the lower range being more likely. This would result in an increase in individual tax revenues; in 1985 the increase should be between \$13 and \$37 billion.

Conclusion

The President's tax proposals will result in improved economic performance. As special interests lose their tax benefits and loopholes are closed, resources will move into more productive uses. As incentives are increased to work and save and invest, there will be more savings, investment, and work. As tax rates are reduced, the incentives to cheat are

reduced, and more income will be driven from the underground economy. As a result of these changes, the U.S. economy will grow and GNP could increase by as much as 2 to 3 percent over the next 10 years. The result of this improved economic performance -- more jobs and more wealth for all Americans -- is one of the most important benefits of the President's tax proposals.

Testimony on Tax Reform

Introduction

In the few months since the release of the President's tax proposals, a great deal of attention has been paid to determining who would be the winners and who would be the losers under this proposal -- which individuals, which regions, and which industries would be likely to benefit more than others. Although these issues are important, an equally important issue has been given short shrift -- the effect of tax reform on the performance and growth potential of the U.S. economy. Unfortunately, in the debate about who wins and who loses, we forget that the economic benefits from tax reform will flow to all individuals, all regions, and all industries.

The purpose of my testimony today is to try to refocus attention on the substantial economic benefits that can be expected from tax reform. These benefits will occur because the tax proposal will provide greater incentives for the supply of productive factors, because it will encourage the more efficient use of the nation's resources, and because it will improve voluntary compliance with the tax law.

Resource Allocation

Economists worry more than anyone else about the allocation of resources to their most efficient uses. But resource allocation is not an issue that is peripheral to our

concern about economic growth. Not only should economic policy be addressed to increasing the size of the pie, it should also be addressed to making sure that the right ingredients go into the pie.

Economists typically measure the effect of resource misallocation in terms of lost output; that is, the cost to the economy of misallocated resources is the reduction in output that occurs because resources are not put to their most productive uses. A recent study estimated that the resource misallocation caused by the current tax system was equivalent to throwing away between 4.0 and 6.8 percent of GNP every year. Since this is approximately equal to the output lost due to unemployment, it is a significant waste, and therefore should command our attention.

The Administration's tax proposal would of course not eliminate all of the resource misallocation caused by the current tax system. Some will inevitably remain as long as income from labor and saving is still taxed at the margin, and there remain some tax differentials which induce inefficient economic decisions. Nevertheless, three aspects of the proposal would tend to reduce the waste caused by our current system: the levelling of effective tax rates on different forms of investment; the elimination of many instances of preferential tax treatment for particular activities or sectors; and the reduction in marginal tax rates. All three

aspects would reduce the extent to which resource allocation decisions are distorted by the tax system. The move toward a level playing field will restore the market as the allocator of resources, not a government "industrial policy" hidden in the tax system.

A recent study issued by the Congressional Research Service estimated that the efficiency gains from the business taxation provisions of the Administration's tax plan would amount to 1.1 percent of annual output. Another study put the efficiency gains from eliminating state and local tax deductibility at 0.9 percent of GNP. All quantitative studies of the potential gain from resource reallocation depend on assumptions about which there is not unanimous agreement among economists. Our best estimate of the gain is that it will be equivalent to an increase in GNP of between 1 and 1-1/2 percent. This gain would occur gradually over a period of several years as resources move toward more productive uses.

The more productive use of our economic resources will ultimately benefit all segments of society. It has become commonplace in the last few months for the sectors whose tax preferences would be eliminated under the tax proposal to estimate the number of jobs that would be lost as a consequence of tax reform. Such claims fail to consider that jobs will be created in the sectors whose relative tax disadvantage would be eliminated by tax reform. For example, some workers in luxury restaurants may be laid off because the excess of \$25 per meal

will no longer be allowed as a deductible business expense. However, individuals who cut back on luxury restaurant meals do not experience a decline in income. Therefore, they will spend their money elsewhere, perhaps at a somewhat less expensive restaurant. These restaurants will need new workers, and are likely to hire many of those who formerly worked for the expensive restaurant.

Factor Supply

The President's tax proposal will not only induce a more efficient allocation of resources, but will also encourage the growth of the amount of resources available for production. By reducing marginal tax rates by nearly 20 percent, there will be an increased incentive for individuals to supply labor, as they get to keep more of every dollar that they earn. We have estimated that total labor supply would probably increase by between 1 and 2 percent with the adoption of this proposal, and contribute to an increased GNP of between $3/4$ and $1-1/2$ percent.

The reduced marginal tax rates also, by increasing the after-tax return to saving, improve the incentive to save. The expanded IRA coverage also has this effect.

The business tax provisions probably provide, on average, an incentive to tangible investment. The reduction in statutory tax rates, the introduction of an indexed cost recovery system and the 10 percent dividend exclusion outweigh the elimination of the investment tax credit. The increased

incentive to invest does not apply to every type of investment in every sector of the economy, but does apply on average to new corporate investment. In fact, the Treasury has estimated that the average effective corporate tax rate on new equity-financed investment would decline from 35 percent to 26 percent. The major uncertainty in this analysis is the difficulty in reconciling the decline in average effective tax rates and the projected long-run increase in corporate tax revenues. In the absence of a satisfactory reconciliation, it is impossible to state with great confidence exactly what the net impact on investment demand will be. Our best preliminary estimate is that the net impact on nonresidential investment demand will be slightly positive, offset to some extent by increases in the taxation of residential investment.

The combination of increased incentives to save and a streamlined system of business taxation that lowers the effective rate of taxation on most kinds of investment would provide for improved prospects for nonresidential capital formation and growth.

Tax Evasion

The growing problem of tax evasion threatens the continued viability of the self-assessment system of tax collection. A major study by the Internal Revenue Service recently estimated that the amount of tax revenue lost due to tax evasion, on the individual side alone, amounted to \$68 billion in 1981, and had been growing at nearly 15 percent annually since 1973. If the

same real rate of growth has continued since 1981, then the individual income tax gap currently amounts to \$96 billion, or nearly 30 percent of what the IRS now collects per year. Tax evasion is not only unfair, it is inefficient from an economic standpoint. Tax evasion is unfair because it rewards individuals who are willing to exploit the self-assessment system and penalizes through higher tax rates those who are not. Tax evasion is inefficient because resources move into activities which are less productive than alternatives, but which are conducive to evasion.

How much can we expect tax evasion to decline if this proposal is enacted? As you can imagine, obtaining reliable data on tax evasion is difficult; tax evaders are rarely willing to provide such information to the authorities. The most careful study of this question, using data from IRS audits, concluded that an across-the-board 10 percent tax cut would reduce the extent of underreporting of taxable income by at least 9 percent and perhaps as much as 26 percent. The Administration's plan features an average cut in marginal tax rates of about 15 percent, taking into account not only the reduction in statutory marginal rates but also the elimination of the deductibility of state and local income taxes and the two-earner credit. This implies that the tax revenue lost to evasion would decline by at least 13-1/2 percent of current evasion, or \$13 billion. This extra revenue could be used either to reduce tax rates further or to reduce the deficit.

In addition to the revenue pickup, any decline in tax evasion would also contribute directly to greater fairness and efficiency of resource use.

Revenue Neutrality

Whether the tax proposal would raise as much revenue as the current system is an important issue and a complicated one. It is important because we believe that tax reform should not add to the Federal government's already too large deficit. It is complicated because it is exceedingly difficult to foresee the responses of firms and individuals to a fundamental change in the tax system. We expect and hope that economic decisions will be altered by the incentives of the new system, but precise predictions are impossible.

There is ample reason to be concerned that the proposal falls short of revenue neutrality in the long run. The Treasury's own analysis and the estimates made by the Joint Tax Committee find a revenue shortfall of between \$12 and \$25 billion over the next 5 years. Two important points about these numbers should be made. First, because the revenue estimation process is by no means an exact science, actual revenue could easily be at least as large as under the current system. Second, these revenue estimates do not take into account at all any improved economic performance which is, after all, the raison d'etre of the tax reform. Both a higher GNP and improved compliance with the tax law will raise revenues above what they otherwise would be. We estimate that,

when the economic benefits I have discussed today fully materialize, revenues could be as much as \$40 billion higher annually than in the absence of tax reform. This additional revenue is enough to offset the short-term revenue shortfall estimated by the Treasury and the Joint Tax Committee, and is enough to offset the long-term corporate tax revenue shortfall estimated by the Congressional Budget Office.

Our basic message is not that projected revenue losses ought to be ignored, but rather that the economic gains that tax reform will likely produce could easily generate enough extra revenue to offset the estimated magnitude of any revenue shortfall.

Conclusion

The economic case for tax reform is a compelling one. It promises substantial economic benefits, benefits that will be spread among all individuals, regions, and industries. A healthy economy benefits everyone.

To do nothing about tax reform will allow the current system to continue its inefficient use of our nation's resources and allow our tax base to continue to erode due to increased noncompliance. It is time for a radical restructuring of our tax system.

Using standard economic reasoning and an extensive survey of the literature, we estimate that the total gain from tax reform would be on the order of 2 to 3 percent of GNP, which would occur gradually over a period of as much as ten years.

Over this period this amounts to increasing projected growth rates by between 5 and 10 percent. The major components of this gain are the improved allocation of resources, estimated to increase GNP by between 1 and 1 1/2 percent, and increased supply of labor, estimated to increase GNP by between 3/4 and 1 1/2 percent.

An increase in GNP of 2 to 3 percent is the equivalent of adding 2 to 3 million jobs to the economy. Any short-run disruption and temporary loss of jobs that occur as resources seek more productive uses should always be weighed against this permanent improvement in our economic health.

This plan is a sound one, and we recommend its passage wholeheartedly.

First Draft
7/30/85
Revised 7/30 5:00 pm

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