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Comparison of Tax Incentives for Domestic Manufacturing in Current Legislative Proposals

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Summary

Several tax bills have been introduced to eliminate the extraterritorial income (ETI) provision of the U.S. tax code that has been found to contravene trade agreement restrictions against export subsidies by the World Trade Organization (WTO). These bills contain tax cuts for domestic manufacturing which offset the loss of the export benefit, but take different approaches to the design of the manufacturing tax benefit. H.R. 1769 (Crane and Rangel), would allow a percentage reduction of the corporate tax rate that is proportional to the share of total output that is domestic. (A similar bill, S. 970, was sponsored by Senator Hollings.) An initial version of H.R. 2896, sponsored by Ways and Means Committee Chairman Thomas would have provided accelerated depreciation for manufacturing equipment in a bill that has many other provisions, although that provision was replaced by a reduction in the tax rate on manufacturing. (A similar bill, S. 1475, was sponsored by Senator Hatch.) S. 1637, originally sponsored by Senate Finance Committee Chairman Grassley and Ranking Member Baucus, and reported from the Senate Finance Committee would provide a rate cut similar to that in H.R. 1769. It would incorporate, but then phase out, the provision adjusting the cut for the share of production that is domestic. This bill also contains a number of other provisions.

Although the overall revenue cost of the rate cuts is larger than the effect of accelerated depreciation initially proposed in H.R. 2896, the provisions overall have about the same magnitude of effects on manufacturing tax burdens on new investment, reducing them by about 4%. The small revenue cost of accelerated depreciation can produce a similar incentive effect because it does not benefit the return to existing capital. These incentive effects would more than offset the lost benefit from the repeal of ETI. The approach in H.R. 1769 would, however, have a more certain and larger effect on encouraging domestic investment in manufacturing. First, additional domestic investment would have both a direct tax benefit effect, and an indirect effect through increasing the ratio of domestic to world production. Secondly, if one considers the other provisions of H.R. 2896 and S. 1637, these provisions provide benefits (in some cases quite large benefits) to investment overseas that could more than offset any domestic incentive. Within manufacturing, accelerated depreciation tends to introduce distortions across asset type, while rate reductions, particularly if confined to corporate rates, reduce distortions between debt and equity and corporate and noncorporate investment.

The two approaches have quite different implications for tax administration and compliance. Although any provision that singles out an activity to favor will encounter administrative costs in ascertaining the qualified activities, accelerated depreciation applied to manufacturing assets is probably feasible to administer without a great deal of additional cost. A rate reduction for a specific activity would, however, potentially lead to significant increases in these costs as firms that operate in many different activities attempt to claim manufacturing status and to transfer taxable income into their manufacturing activities through distortions in within-company transfer prices and misallocations of deductions and passive income. This report will be updated to reflect legislative developments.

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Several bills have been introduced which would eliminate the extraterritorial income tax (ETI) provision that has been found to contravene trade agreement restrictions against export subsidies by the World Trade 0rganization (WTO). Each bill includes other provisions, in some cases to offset the revenue gain from the provision with a tax cut, and in others to go beyond the offset to provide an overall net tax reduction.[1] Each bill has a provision that is specifically focused on manufacturing, and is either explicitly limited to or will in effect be largely focused on domestic manufacturing. The argument for providing an offsetting benefit to manufacturing is that the burden of the repeal of the ETI largely falls on the manufacture of goods in the United States, and in some ways the provision of benefits to domestic manufacturing is the closest way to provide general tax cuts to the firms that lose benefits. In addition, arguments are made that losing the export subsidy will discourage domestic production and this incentive is needed to offset the effects of eliminating the ETI.

In the case of the Crane-Rangel bill (H.R. 1769), the Grassley-Baucus bill (S. 1637) which was reported out of the Senate Finance Committee on October 1, and the most recent version of H.R. 2896 (Thomas) reported out of the Ways and Means Committee on October 28,. this tax benefit is provided through a rate reduction (in the form of a deduction in the first two bills). In the case of the initial version of Thomas bill (H.R. 2896) it is provided via a depreciation deduction. The Hollings (S. 970) bill is identical to H.R. 1769 and the Hatch (S. 1475) bill is similar in many respects to the initial version of H.R. 2896. This report focuses on comparing the manufacturing provisions. It begins with a brief description of the provisions in each of the three bills, and proceeds with an analysis of the general magnitude of the effect on investment incentives, the allocational effects across types of investment, and issues of administration and compliance.

Descriptions of the Proposals

While H.R. 1769 focuses on repealing the ETI and offsetting the gain with a manufacturer's subsidy, H.R. 2869 is much broader, with the ETI repeal and the manufacturing tax benefit only a part of the bill. And while the ETI and the manufacturing tax benefit are the largest provisions in S. 1637, there are significant

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[1] See Taxes, Exports, and International Investment: Proposals in the 108th Congress. RL32066, by David Brumbaugh for additional analysis of these proposals.

other provisions. While this paper focuses on comparing the domestic manufacturing provisions this section briefly discusses other provisions that will be referred to in the discussion of allocational effects.

H.R. 1769

H.R. 1769 proposes to offset the revenue loss from the repeal of ETI with a deduction of up to 10% of taxable income from domestic production. The deduction would be multiplied by the share of the total business that is domestic. Thus, if the capital output ratio were the same in the U.S. as abroad, the deduction for total income would be multiplied by the share domestic squared. If a firm had 50% of its output domestic, the effective deduction rate for domestic income would be 5%, and the effective deduction overall would be 2.5% (10% $X(0.5)^2$).

H.R. 2896

An earlier version of H.R. 2896 contained a provision to allow accelerated depreciation for manufacturing equipment and did not contain a manufacturing tax reduction.[2] This provision is also discussed in this study.

H.R. 2896 proposes a series of temporary and permanent provisions to offset the phased out repeal of ETI, which would gain $43.1 billion over 2004-2013. (All revenue estimates mentioned in this report refer to that 10-year period unless otherwise noted). For domestic manufacturing and certain other production activities, the top corporate tax rate would be lowered from 35% to (initially) 34% and then 32% in 2006 and after; this provision costs $61.1 billion. There are a number of other tax cuts and tax increases in the bill, but most of them would have limited benefits for domestic manufacturing or are temporary.

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[2] The initial version of H.R. 2896 proposed a series of temporary and permanent provisions to offset the repeal of ETI. (which gained $49 billion). The depreciation provision cost $35 billion; other provisions would have limited benefits for domestic manufacturing or are temporary. The largest set of tax cuts was a series of provisions benefitting earnings from foreign investment which amount to $80 to $90 billion (the higher number includes an $11.3 billion expansion of the alternative minimum tax that would significantly benefit foreign source income); all provisions were permanent with the exception of a temporary provision costing $3 billion to provide a tax holiday for the repatriation of earnings from abroad. The bill also contained $24 billion in provisions that benefitted smaller and medium sized businesses, with a $2 billion a temporary provision expanding equipment expensing; most of the cost ($19.5 billion) would reduce corporate tax rates for smaller firms. The remaining provisions involve removing more small firms from coverage of the AMT and benefits for Subchapter S corporations (incorporated firms treated as partnerships for tax purposes) ;a provision providing more rapid depreciation for leasehold improvements and restaurants (about $8 billion); a one-year extension of bonus depreciation ($12 billion), an extension of the R&D credit ($23 billion); an extension of net operating loss carryforwards ($5 billion); a general provision expanding depreciation for purposes of the AMT and tax provisions that raise revenues by about $9 billion by addressing tax shelters. (About $12 billion is raised by customs fees). Many of these provisions were retained in the revised version of the bill.

The largest set of tax cuts in the bill is a series of provisions benefitting earnings from foreign investment which amount to $39.2 billion including a $3 billion provision to allow a more complete offset of foreign tax credits losses against the alternative minimum tax (AMT). These provisions might provide tax cuts for firms that manufacture in the U.S. and also manufacture abroad, but their incentive effects would be to discourage domestic production. Another $4.7 billion is associated with allowing more net operating losses against the AMT and $1 billion in exempting smaller firms.

The bill also contains some additional provisions that benefit smaller and medium sized businesses, amounting to $18.4 billion, with $2 billion a temporary provision expanding equipment expensing; most of the cost would reduce corporate tax rates on taxable income, initially on income below $1 million and eventually below $20 million. Benefits for Subchapter S corporations (incorporated firms treated as partnerships for tax purposes) amount to $1.3 billion . Since most manufacturing is carried out by large firms, these benefits are unlikely to be very important to the industry. A provision providing more rapid depreciation for leasehold improvements and restaurants for a temporary period, amounting to about $2.1 billion, would also likely benefit smaller firms and would not benefit domestic manufacturing. $1.1 billion is associated with employee benefits and about $1 billion with a series of miscellaneous business provisions. The bill also raises about $9 billion from tax shelter provisions and $16 billion from customs fees.

S. 1637

This bill would provide a repeal of the ETI raising $55.7 billion in revenue, which would be offset by approximately $10 billion in transition relief. It would be offset by a deduction of 9% of the profits from U.S. domestic manufacturing production, costing $45.6 billion. (This deduction would reduce the rate from 35% to 31.85%). This deduction would be phased in and would initially be affected by the domestic share of worldwide production as in H.R. 1769 (but that effect would be eliminated in the long run).

The initial bill also contained some benefits for income from overseas investment, but in a much smaller amount of $7.1 billion, which included $3.8 billion for a temporary provision allowing tax free repatriation of foreign source income. Additional provisions added prior to markup raised the total from $7 billion to $25.5 billion, with an additional $11.3 billion added during markup, for a total of $38 billion. Thus, the permanent provisions for foreign investment are about the same size as in H.R. 2896 (but considerably smaller than the provisions in the initial version and in . There are also numerous provisions to raise revenue, including some that address tax shelters (and in some cases these tax shelters are related to foreign activities); these amounted to $25 billion before markup with another $30 billion added during mark-up.

Additional provisions added before markup expanded the manufacturing deduction largely by extending it to unincorporated businesses and to oil refining and timber at a cost of $14.1 billion and a mixture of other minor tax benefits including benefits for films and timber costing about $3 billion. $14 billion of other tax cuts were added during mark-up.

Magnitude of Effects on Domestic Manufacturing Investment

While the revenue costs discussed above provide some notion of the magnitude of effects of the tax provisions, they cannot easily be compared. Rate reductions occur each year in about the same amounts but accelerated depreciation confers its benefits primarily in timing effects. The rate reduction in S. 1637 is phased in. At the same time, the initial years of the accelerated depreciation deductions in the original version of H.R. 2896 occur in periods when bonus depreciation is in effect; the revenue cost is larger without bonus depreciation than with it.

Overall, however, the rate reduction in S. 1637 provides a larger tax benefit during the 10-year revenue estimating period and beyond than the accelerated depreciation deduction.

The rate reduction in S. 1637 also more than compensates for the effect of the loss of the export subsidy in manufacturing as a whole (although not necessarily for very export intensive firms). The repeal of ETI should reduce exports, which are largely manufacturing, and the domestic manufacturing subsidies that offset it would probably increase overall domestic manufacturing in the long run since the annual revenue cost in the last year for the manufacturing deduction is larger than the revenue gain from repealing ETI (a gain in 2013 of $7 billion compared to a loss from $10 billion from the original bill and another $2 billion from the additions). Since both the export deduction and the manufacturing deduction are of the same type (a reduction in current income taxes) the larger size of the manufacturing incentive suggests that it more than compensates for the additional burdens. The rate reduction in H.R. 2896 is slightly smaller, at $9 billion but still larger than the ETI repeal.

The composition of manufacturing will shift somewhat, however, because firms with a lot of export business will suffer relative to firms with little export business.

The size of the cash flow effects does not mean that the overall incentive to invest in domestic manufacturing is smaller than the original accelerated depreciation provisions. Rate reductions reduce the return to the existing stock of assets, while accelerated depreciation benefits only investment (net and replacement). To have the same incentive effect a rate reduction would cost more in present value terms than accelerated depreciation.

There is a way, however, to assess the general magnitude of the effects of these provisions, at least in terms of the incentives provided to domestic investment. Calculations in a recent CRS report[3] indicate that the initial depreciation provision in H.R. 2896 and the rate reductions in manufacturing in S. 1637 and H.R. 1769 have about the same overall magnitude of benefits for manufacturing, reducing the effective tax rate overall by about 1.5 percentage points (assuming no bonus

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[3]CRS Report RL32099, Corporate Income Tax Revisions and Effective Tax Rates, by Jane G, Gravelle.

depreciation). Since corporate investment is subject to a current rate of around 40%, this reduction is about a 4% reduction. It is small, but so is the overall effect of repealing ETI.

The provisions of H.R. 1769 would, however, have a more pronounced effect on providing an incentive to invest in domestic manufacturing than the other two bills, for two reasons. First, because the subsidy is dependent on the domestic share of value added, an increase in domestic investment has two effects on the tax benefit: the direct effect of increase in domestic taxable income, and the indirect effect of increasing the domestic share. (See appendix for a discussion.) Moreover, there is a disincentive to invest abroad. There is a temporary effect in S. 1637 of this type as well. Making an incentive dependent on the domestic share of output is more feasible with a rate reduction than with accelerated depreciation.

This analysis looks at the manufacturing subsidy in isolation. The relative effect of H.R. 1769 on encouraging substitution of domestic for foreign investment compared to the other bills would be greater when considering the benefits for foreign source investment in S. 1637 and H.R. 2896. Indeed, judging from revenue losses associated with foreign source income, while H.R. 1769 would offset (and perhaps slightly more than offset) the discouraging of domestic production from the export subsidies, S. 1637 and H.R. 2896 could encourage an outflow of capital.

Note also that these calculations assume no bonus depreciation. The independent effects of accelerated depreciation with bonus depreciation already in place are about 60% as large. The effects are also slightly smaller for the rate reductions.

Of course, there is an additional policy question: whether it is desirable to subsidize domestic or foreign production. Under a common standard used by economists to judge world wide economic efficiency (which suggests that U.S.-owned capital is allocated most efficiently when rates of return are equated in both places) the direction of change to increase economic efficiency depends on the extent to which foreign source income is undertaxed relative to U.S. income (as it is in low tax countries) or overtaxed (as it is in high tax countries). If the objective is to maximize U.S. economic welfare, however, it is better to encourage domestic investment in large part because taxes on returns to domestic investment accrue to the U.S. Treasury, while taxes on returns to foreign source investment may largely accrue to foreign governments. (This analysis assumes that foreign governments do not retaliate against U.S. policies to discourage capital outflow).

There is also a distributional effect: while tax subsidies benefit owners of capital in general, inducing investment in the United States tends to benefit domestic workers, but reduces earnings of foreign workers, while the opposite occurs when investment is encouraged to move abroad.

Other Effects on the Allocation of Capital

The alternative approaches – accelerated depreciation vs. rate reduction – will have other effects as well. The accelerated depreciation provisions are restricted to

equipment and are available for both debt and equity; therefore, within the manufacturing sector, they introduce distortions in the allocation of the capital stock without reducing distortions between debt and equity finance. Rate cuts also reduce distortions between corporate and non-corporate sectors, although there is relatively little non-corporate manufacturing. (The rate reduction in H.R. 1769, which is limited to corporations, would reduce this distortion more.) Thus, based on more neutral taxation of types of investments and finance within the manufacturing sector, the rate reduction is more neutral than accelerated depreciation.

Accelerated depreciation, however, reduces effective tax rates more per dollar of revenue loss and therefore is a more effective method of reducing the overall distortion between present and future consumption (because it does not benefit existing capital).

Issues of Administration and Compliance

Carving out a special tax provision for a particular industry will create some significant administrative costs – both in the definition of the favored activity and the allocation of income for diversified firms.

No definition of the favored activity can be drawn that will not give rise to some disputes about what activities are or are not manufacturing. State experience with manufacturing exemptions is instructive in showing the types of disputes that may arise. For example, recent cases dealt with whether the mixing of paint in a retail store was manufacturing, how to determine the extent to which newspapers involve manufacturing (the printing of the paper is manufacturing, but what about the gathering and processing of content?), and the extent to which activities such as broadcasting, on-site pizza dough making in a restaurant, brewing beer for a brew pub, and blending sand qualified as manufacturing.[4] These problems occur with both accelerated depreciation for manufacturing equipment and with a special tax rate on manufacturing profits, although they would probably be somewhat more troubling with a rate reduction because capital intensity in machinery use is probably more associated with traditional manufacturing activities where little dispute would arise.

A second, and perhaps more serious problem arises with the special rate reduction. Many firms operate in manufacturing and in other types of business as well. They may be firms with some amount of vertical integration (e.g. operating related wholesale and retail sales, or finance, businesses). Firms may also operate different types of businesses, an approach that reduces risk. And some activities may have a manufacturing and a non-manufacturing element (such as the newspaper example discussed above). These different businesses may be branches of the same entity, or may be separately incorporated affiliates. Because of the variety of activities, one cannot simply allow any firm that engages in manufacturing to take a deduction for its taxable income without allocating income to the manufacturing activity. In many cases, neither firms nor the IRS have existing experience in allocation of income and deductions across activities.

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[4] These cases were provided by Matt Tomalis of the Federation of Tax Administrators.

This problem of allocation of income has been a serious and longstanding problem in our international tax system, where, because we do not currently tax foreign source income and do not allow unlimited foreign tax credits, firms have an incentive to allocate income to the areas that minimize their tax liability. Two methods are used to achieve this effect. First, when domestic and foreign entities buy products from each other, taxable income will be affected by the intercompany price charged – an issue referred to as transfer pricing. Tax rules require an arm's length price (the price that would be charged by related parties) but this arm's length price is observable only if the items are traded in a general market and in many cases such comparables do not exist. Secondly, the firm can attempt to allocate deductions and other payments, such as interest, rents, royalties, and overhead costs, in a way to minimize taxable income in high tax jurisdictions. A great deal of time and effort on the part of taxpayers, the Internal Revenue Service, and the courts is devoted to adjudicating these issues.

There is a contrast between the complexity of accelerated depreciation versus a rate reduction, therefore, with respect to administrative costs. While carving out a special depreciation rule is somewhat complicated, the present depreciation system is actually linked to a more detailed underlying depreciation schedule where many assets are differentiated not according to type, but according to the industry in which they are used. Moreover, for manufacturing equipment, its use is relatively clear in most cases. There are assets used across industries (e.g. computers, furniture and fixtures) which were not classified by industry but by type (often part of overhead costs) that could present a problem.

In the case of a deduction for taxable income, however, all of the issues associated with transfer pricing and the allocation of passive income and deductions that have created such administrative difficulties in the international tax system would occur in the domestic U.S. economy. The rate reduction approach, therefore, would be more costly to administer and comply with than the accelerated depreciation deductions.

Conclusion

This analysis suggests that the rate reduction for manufacturing approach in S. 1637 and the current version of H.R. 2896, while costing more revenue than the accelerated depreciation for manufacturing equipment in the initial version of H.R. 2896 and other bills, has about the same effect on the overall cost of capital and the incentive to invest abroad. The rate reduction in H.R. 1769 has the larger effect because it is multiplied by the ratio of domestic to total output, a feature that can be added to a rate reduction approach easily, but not to an accelerated depreciation approach. Within the manufacturing sector, the rate reduction approach is more neutral and reduces other distortions, particularly if confined to a corporate rate reduction. However, the rate reduction raises much more serious issues with respect to administration and compliance than does the accelerated depreciation provision.

Appendix

The benefit, B, of the tax rate provision is, in the case of S. 1637:

(1) $B = grtK_D$

where g is the percentage deduction, t is the tax rate, r is the rate of return and K_D is the capital stock. For purposes of a small change we can hold the return fixed (one could also derive the effects by expressing benefits as $B = gt(Q_D - wL_D)$, where Q_D is output and L_D is the labor supply, and the last term in parentheses is profits). This example ignores debt finance.

In the case of H.R. 1769, the benefit is:

(2) $B = grtK_D (D/(F+D))$

where D is the amount of domestic production and F is foreign production.

Converting to logs and differentiating these equations, which produces percentage changes, holding g, r and t constant, in the case of S. 1637, and with a hat (^) denoting percentage change:

(3) $\hat{B} = \hat{K}_D$

The magnitude of the effects in H.R. 1769 depend on two issues. First, does the analysis involve examining the substitution of capital between domestic and foreign uses, holding the total capital stock fixed, or, instead simply involve an additional amount of capital added. Secondly, is the addition of capital accompanied by the same percentage addition of other inputs such as labor (referred to as a fixed technology case) or are other factors fixed. (The truth probably lies somewhere in the middle.)

In the case of H.R. 1769, and assuming that fixed technology of production, so that a percentage change in capital stock leads to a percentage change in output, and also assuming that capital invested in the United States is shifted from abroad (total capital stock is fixed)

(4) $\hat{B} = \hat{K}_D + \hat{D} = 2\hat{K}_D$

In this case the effect is twice as large for H.R. 1769.

If the domestic investment adds to the total capital stock the effect is

(5) $\hat{B} = \hat{K}_D + \hat{D}\ (F/(F+D)) = \hat{K}_D(1+F/(F+D))$

In this case, the incentive to invest domestically is actually greater for firms with a large amount of foreign activity.

An investment abroad in isolation, denoting foreign capital as $K_{F,}$ will lead to a reduction in the benefit:

(6) $\hat{B} = - (F/(F+D)) \hat{K}_F$

(and if we measure the change in foreign capital as a percent of domestic capital, the multiplicative term in (6) will be D/(F+D)).

If capital expands with no matching expansion of other inputs, such as labor, the additional effects will multiplied by the capital share of income. That is, a substitution will lead to a new version of equation (4):

(7) $\hat{B} = \hat{K}_D + a\hat{D} = (1+a)\hat{K}_D$

where a is the share of capital income. Since a is typically about a third, the effect of the exclusion which is multiplied by the share domestic is to provide an incentive about 33% larger.

There are similar modifications of the effects in the other equations (5):

(8) $\hat{B} = \hat{K}_D + a \hat{D} (F/(F+D) = \hat{K}_D(1+aF/(F+D))$

and (6):

(9) $\hat{B} = - a (F/(F+D)) \hat{K}_F$.