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Issues in International Corporate Taxation: The 2017 Revision (P.L. 115-97)

Updated April 23, 2020

Congressional Research Service
https://crsreports.congress.gov
R45186

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

One of the major motivations for the 2017 tax revision (P.L. 115-97) was concern about the international tax system. Issues associated with these rules involved the allocation of investment between the United States and other countries, the loss of revenue due to the artificial shifting of profit out of the United States by multinational firms (both U.S. and foreign), the penalties for repatriating income earned by foreign subsidiaries that led to the accumulation of deferred earnings abroad, and inversions (U.S. firms shifting their headquarters to other countries for tax reasons). In addition to lowering the corporate tax rate from 35% to 21% and providing some other benefits for domestic investment (such as temporary expensing of equipment), the 2017 tax bill also substantially changed the international tax regime.

The tax change moved the system from a nominal worldwide tax on all foreign-source income, with a credit against U.S. tax for foreign taxes due, to a nominal territorial system that does not tax foreign-source income. Nevertheless, both systems could be considered a hybrid of a worldwide and territorial system. Prior law reduced the tax on foreign-source income by allowing deferral (taxing income of foreign subsidiaries only if it was repatriated, or paid as a dividend to the U.S. parent) and cross-crediting of foreign taxes (so the credit for high taxes paid in one country could offset U.S. tax on income from a low-tax country). The new system exempts dividends, but also imposes a current worldwide tax on global intangible low-taxed income (GILTI), but at a lower rate. It also introduces a corresponding lower rate on intangible income derived from abroad from assets in the United States (foreign-derived intangible income, or FDII). The new law adds the base erosion and anti-abuse tax (BEAT) to existing anti-abuse measures aimed at artificial profit shifting. BEAT imposes a minimum tax on ordinary income plus certain payments to related foreign companies.

Despite the lower corporate tax rate, it is not clear that capital will be shifted into the United States from abroad; although a lower rate reduces the tax rate on equity-financed investments, it decreases the subsidy to debt-financed investments. Whether the capital stock increases or decreases depends on the magnitude of the tax changes (which appear largely offsetting) and the international mobility of debt versus equity. It is also not clear whether the capital stock will be allocated more efficiently or in a way more optimal for U.S. welfare, although economic theory suggests that reducing the tax subsidy for debt is a clear improvement.

Although a territorial tax may make profit shifting more attractive, overall, given other elements of the new system, it appears to make profit shifting less important. GILTI and FDII bring the tax treatment of income from intangibles in the United States and abroad closer together, and BEAT and stricter thin capitalization rules (rules limiting interest deductions) also limit profit shifting, including shifting through leveraging.

The new system ends the penalties (except for portfolio investment in foreign firms) for repatriating earnings and thus eliminates the prior incentives to retain earnings abroad. A series of measures aimed at inversions appears to make inversions much less attractive.

Some of the measures may violate international agreements, such as the World Trade Organization (WTO), bilateral tax treaties, and Organization for Economic Cooperation and Development (OECD) minimum standards, to prevent harmful tax practices.

A number of concerns exist about design features in the new regime, including the dividend deduction, GILTI, FDII, BEAT, and other features. A variety of options might be considered to address these issues. In addition, there has been some controversy over certain regulatory decisions implementing the regime.

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This report begins by explaining prior international tax rules and the revisions made in the new law. The second part of the report discusses the four major issues of concern under prior law—allocation of investment, profit shifting, repatriation, and inversions—and how the new law addresses these concerns, or raises new ones. That section also discusses issues associated with international agreements. The final section summarizes commentary about problems and issues, including legal challenges and uncertainty, as well as new regulations, within the new international tax regime and options that have been suggested. That section discusses some of the more detailed rules. The Congressional Budget Office has recently projected a larger loss in corporate revenues from the 2017 tax revision due, in part, to regulatory decisions.[1]

International Tax Treatment Under Prior and New Law

The description of international tax law is divided into a section on basic rules, a section on allocation and anti-abuse rules, a section on tax treaties, a section on the new deemed repatriation rules, and a section on anti-inversion rules.[2]

Territorial or Worldwide: Basic Rules

Under a territorial or source-based tax, all income earned within a country is taxed only by that country, regardless of the nationality of the firms. Alternatively, under a worldwide or residence-based system, a tax would also be imposed on foreign-source income of domestic firms and a credit allowed for foreign taxes paid. For purposes of the corporate profits tax, most countries have a territorial system (although most have some type of anti-abuse rules, as discussed below in reference to the U.S. Subpart F rules).[3] With either regime, countries tax profits earned within their borders whether earned by a domestic or a foreign firm.

[1] Congressional Budget Office, The Budget and Economic Outlook: 2020-2030, January 2020, pp. 73-74, https://www.cbo.gov/system/files/2020-01/56020-CBO-Outlook.pdf.

[2] A few minor international provisions of the new law are not discussed in this section. For a comparison of all the provisions of the new law with prior law, international and others, see CRS Report R45092, *The 2017 Tax Revision (P.L. 115-97): Comparison to 2017 Tax Law*, coordinated by Molly F. Sherlock and Donald J. Marples.

[3] Prior international tax rules are discussed in more detail in CRS Report RL34115, *Reform of U.S. International Taxation: Alternatives*, by Jane G. Gravelle; and CRS Report R42624, *Moving to a Territorial Income Tax: Options and Challenges*, by Jane G. Gravelle.

Prior Law: Deferral and the Foreign Tax Credit

The prior U.S. tax system was a hybrid. It had some elements of a residence-based or worldwide tax, in which income of a U.S. firm is taxed regardless of its location, and some elements of a source-based or territorial tax. Income earned in the United States was taxed whether earned by a U.S. firm or a foreign firm. The provisions that introduced territorial features into a system that was nominally a worldwide system were deferral of income of foreign subsidiaries and cross-crediting of foreign taxes.

Glossary of Selected Terms

Base Erosion and Anti-Abuse Tax (BEAT): A minimum tax that applies a lower rate to an expanded base, including certain payments to foreign related firms.

Controlled Foreign Corporation (CFC): A foreign corporation with at least 50% of the shares owned by at least five U.S. shareholders owning 10% of more of the shares. Ownership is by value or voting power.

Expanded Affiliated Group (EAG): A group that includes a common parent with 50% ownership of the related firms. This group, which relates to inverted firms, is defined more broadly than affiliated group, where firms are linked by at least 80% ownership.

Earnings Before Interest and Taxes (EBIT): Earnings used as the permanent measure of income for restrictions on interest deductions under thin capitalization rules.

Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA): Earnings used as the temporary measure of income for restrictions on interest deductions under thin capitalization rules.

Foreign Derived Intangible Income (FDII): A formulary measure of income earned by domestic firms from the use of intangible assets abroad and eligible for lower tax rates.

Global Intangible Low-Taxed Income (GILTI): A measure of income earned by controlled foreign corporations with exclusion for returns on tangible assets, and subject to current U.S. taxes, at a lower rate.

Subpart F: Also called CFC rules, provisions of the tax code that tax on a current basis certain easily shifted foreign-source income of controlled foreign corporations.

Surrogate Foreign Corporation: A term related to the movement of headquarters abroad in an inversion, and refers to the new foreign parent, where the former U.S. shareholders own at least 60% of the shares but not 80% or more. A surrogate foreign corporation is not subject to U.S. tax, whereas a firm where the former U.S. shareholders own 80% or more is treated as a U.S. corporation.

Deferral

Deferral allowed a firm to delay taxation of its earnings in foreign-incorporated subsidiaries until the income was paid as a dividend to the U.S. parent company. Some income, however, was taxed currently. Income that was not part of corporate profits, such as royalties and interest payments, and income earned by foreign branches of U.S. firms was taxed currently. In addition, certain easily shifted income, called Subpart F income, was included in income and taxed currently.

Under prior and current law, firms can take deductions for expenses (overhead, interest, research) incurred by the U.S. parent that are properly allocated to foreign-source income whether that income is earned directly or through a foreign subsidiary and whether the income is deferred from U.S. tax because it is earned through a foreign subsidiary. An allocation of these expenses for purposes of the foreign tax credit limit is discussed below. As long as income is deferred, allowing deductions against U.S. income provides not a zero tax but a subsidy, with the magnitude of that subsidy depending on the foreign taxes paid.

The role that the allocation of expense could play in past and current foreign tax rules is shown through some effective tax rate calculations in a recent *Tax Notes* article.[4] U.S. effective tax rates on foreign source income were estimated at 2.3% under prior law, in 2004.

Foreign Tax Credits

The U.S. tax system allowed a credit against U.S. tax due on foreign-source income subject to tax for foreign income taxes paid. A foreign tax credit is designed to prevent double taxation of income earned by foreign subsidiaries of U.S. corporations. Thus, firms were not levied a combined U.S. and foreign tax in excess of the greater of the foreign tax or U.S. tax due if the income was earned in the United States. If the foreign tax credit had no limit, a worldwide system with current taxation and a foreign tax credit would produce the same result, for firms, as a residence-based tax. The tax effectively applicable would be the tax of the country of residence. Firms in countries with a higher rate than the U.S. rate would receive a refund for the excess tax, and firms in countries with a lower rate than the U.S. rate would pay the difference. However, to protect the nation's revenues from excessively high foreign taxes, the credit is limited to the U.S. tax due.

Cross-Crediting

Cross-crediting occurs when credits for taxes paid to one country that are in excess of the U.S. tax due on income from that country can be used to offset U.S. tax due on income earned in a second country that imposes little or no tax. If the limit were applied on a country-by-country basis, a firm would pay the maximum of the U.S. tax or the foreign tax in each country.

Cross-crediting allows income subject to a low tax to have its U.S. income tax offset by credits on highly taxed income. For this reason, foreign tax credit limits were applied to different categories of income, or baskets. The main baskets were passive and active baskets. Notably, however, royalties on active business operations were classified in the active basket, and because they were typically deducted in the country of source, they could benefit from excess credits against U.S. tax from foreign taxes on other active income. There were also restrictions on the use of excess credits generated from oil and gas extraction, which is often subject to relatively high foreign tax rates.

The combination of deferral, which allowed firms to choose the income to be subject to tax, and cross-crediting meant that multinational firms on average had relatively little U.S. tax; the effective U.S. residual tax was estimated at 3.3%.[5]

Sourcing Rules and the Foreign Tax Credit Limit

Because of the foreign tax credit limit, whether income is considered to be foreign-source income affects the tax liability of firms with excess credits: the greater the share of total income that is considered foreign-source income, the greater the ability to take foreign tax credits. Foreign-source income is also affected by deductions. Some deductions can be specifically attributed to foreign- or domestic-source income, but some general expenses incurred by the U.S. parent, such as interest and research and development costs, are allocated between U.S. and foreign income

[4] Patrick Driessen, "GILTI's Effective Minimum Tax Rate is Zero or Lower," *Tax Notes*, August 5, 2019, pp. 889-895.

[5] See Melissa Costa and Jennifer Gravelle, "Taxing Multinational Corporations: Average Tax Rates," *Tax Law Review*, vol. 65, issue 3 (spring 2012), pp. 391-414. See also Melissa Costa and Jennifer Gravelle, "U.S. Multinationals Business Activity: Effective Tax Rates and Location Decisions," Proceedings of the National Tax Association 103rd Conference, 2010, at http://www.ntanet.org/images/stories/pdf/proceedings/10/13.pdf.

based on the relative size of foreign and domestic assets. After December 31, 2020, interest paid by foreign subsidiaries is to be allocated in the same way; that expansion to include worldwide rather than just U.S. interest would allocate some foreign interest deductions to the United States and reduce foreign deductions, increasing the size of foreign-source income for the foreign tax credit limit.

Prior law allowed half of income from goods manufactured in the United States and sold abroad to be sourced to the country where the transfer takes place (the title passage rule). Since arranging a foreign transfer location for exports is relatively easy, this rule makes half of export income eligible for foreign tax credit offsets for firms with excess credits. In addition, as noted earlier, royalties paid in association with active business operations abroad were considered foreign-source income for purposes of the foreign tax credit limit, effectively shielding them from tax (since they are typically deductible as costs under foreign rules) for firms in excess credit positions.

New Law: Dividend Exemption, GILTI, and FDII

Perhaps the hallmark of the new law is that it virtually ends deferral. The system nevertheless remains a hybrid, albeit a different one, of worldwide and territorial approaches. The new law moves toward a territorial system with respect to its treatment of certain profits of tangible investments, such as plant and equipment. With respect to other income (primarily income from intangible assets) the system moves toward a current inclusion in income but at a lower rate, a minimum worldwide tax. It also maintains most of the existing treatment of included income (interest, royalties, rents, branch income, and Subpart F). Deferral of income and taxation at repatriation is retained only for portfolio investments (less than 10% U.S. ownership) in foreign firms. It also creates new foreign tax credit baskets.

Dividend Deduction

A 100% deduction for dividends is available for U.S. firms owning at least 10% of the foreign firm. No foreign tax credit is allowed, and the income is generally not subject to tax.

Global Intangible Low-Taxed Income

The new law, however, taxes, at a reduced rate, income of foreign subsidiaries (controlled foreign corporations, or CFCs) in excess of a deduction for 10% of tangible assets minus interest costs.[6] Subpart F income is excluded along with certain other income (foreign oil and gas income, related party dividends, and income effectively connected to the United States). GILTI is included in currently taxed income, but a 50% deduction for this income is allowed for taxable years beginning after December 31, 2017, and through tax years beginning before January 1, 2025, resulting in a 10.5% rate at the new 21% corporate tax rate. For taxable years beginning after December 31, 2025, the deduction is to be reduced to 37.5%, resulting in a higher rate of 13.125%.

Foreign tax credits are allowed for 80% of foreign taxes paid. As a result, a residual U.S. tax is collected when foreign tax rates are below 13.125% in the initial years (0.105/0.80), and subsequently 16.406% (0.13125/0.80). GILTI is in a separate foreign tax credit basket. The rules for allocating income for purposes of the foreign tax credit limit continue, and if those rules

[6] Tangible assets are measured at cost minus depreciation, with depreciation reflecting an alternative depreciation system with rules providing longer lives than that applied to domestic assets and determined at a straight line rate that is slower than depreciation of domestic assets.

produce a foreign-source taxable income smaller than that measured for purposes of the foreign tax, GILTI applies at rates lower than 13.125% (or 16.406%). These rates correspond with the FDII rates (discussed below). The residual U.S. tax in the early years begins at 10.5% when foreign taxes are zero and decline to 0% when foreign taxes are 13.125% (in the later years 13.125% and 16.406%, respectively).

Foreign-Derived Intangible Income

The new law also allows a deduction aimed at providing a lower tax rate on intangible income produced in the United States but derived from abroad. FDII is based on a formulary measure of domestic intangible income (deemed intangible income), which is then multiplied by the estimated share of this income that is derived from foreign sales and use. Deemed intangible income is defined as deduction-eligible income in excess of 10% of tangible depreciable assets. Deduction-eligible income, in turn, is gross income minus excepted income minus deductions (including taxes) allocable to this income. Excepted income subtracted out is generally foreign-source income (Subpart F income, GILTI, dividends from CFCs, foreign branch income) as well as active financial services income, and domestic oil and gas extraction income. The purpose of all of these deductions is to estimate a reasonable measure of intangible domestic source income.

To determine the share of this deemed intangible income that is eligible for the deduction, it is multiplied by the ratio of foreign-derived deduction-eligible income over total deduction-eligible income. Foreign-derived deduction-eligible income is aimed at measuring income from the export of goods and services; it includes any deduction-eligible income that is from the sale of property for foreign use and the provision of services used abroad, including leases and licenses (and therefore royalties, both those in the active foreign tax credit basket and those from unrelated firms).

FDII is eligible for a deduction of 37.5% for taxable years beginning after December 31, 2017, and through taxable years beginning before January 1, 2025, resulting in a 13.125% rate (the 21% corporate tax rate multiplied by (1-0.375)). For taxable years beginning after December 31, 2025, the deduction declines to 21.875%, resulting in a rate of 16.406% (21% multiplied by (1-0.21875)).

Taxable Income Limitation

The deduction for FDII and GILTI is limited if the sum of these amounts exceeds taxable income excluding GILTI. The excess is not allowed as a deduction and is apportioned between GILTI and FDII according to their shares of the total amount of GILTI and FDII.

Foreign Tax Credit Revisions

Several revisions are made in the foreign tax credit system. The taxes paid on dividends are no longer allowed as credits. In addition to a separate basket for GILTI, there is also a separate foreign tax credit basket for branch income. As a result, foreign royalties associated with an active business is no longer sheltered by excess credits, although these royalties now benefit from the deduction for foreign-derived intangible income. The new law also eliminates the ability to shield exports with excess credits by repealing the title passage rule and sourcing exports where they are produced (which also increases the deduction for foreign-derived intangible income).

The revision also requires assets to be valued on an adjusted tax basis (rather than a choice of fair market value or adjusted tax basis) for determining sourcing for the foreign tax credit limit.[7]

Allocation and Anti-Abuse Rules

In either type of system, territorial or worldwide with deferral, where taxes are paid and how much is determined by the allocation of income of multinational firms between different countries. The first right of taxation goes to the source country, regardless of whether the residence country has a territorial tax or a worldwide tax with a foreign tax credit.

Nexus is the first step in the process of determining whether a country has the right to tax any of a firm's profits. A U.S. firm that exports abroad, without taking part in an activity within the country it is exporting to, is not subject to profits taxes by that country. To establish the right to tax, a firm has to have nexus, or connection, with the country, which requires a permanent establishment. A permanent establishment is generally viewed as having a physical presence, which means that some assets are in the country (and a profits tax is a tax on the return to assets). A firm that manufactures abroad or has retail stores abroad has a physical presence, but other circumstances with a minimal presence are less clear. If nexus is established, then the amount of income sourced in that country must be determined. In the U.S. tax law, this establishment of a presence is termed *effectively connected income* and generally must require a physical presence or be derived from assets that are used in the United States. Tax treaties (discussed below) also contain provisions on permanent establishment.

Once the right to tax has been established, the allocation of income in each country must be determined. Although income can be allocated in a straightforward way for transactions between unrelated firms, related firms can potentially manipulate the location of profits by shifting the location of passive income, by setting the price of transactions between them to shift earnings (transfer prices), and to locate deductions, such as interest, in high-tax countries. The more income a firm can assign, for tax purposes, to a foreign subsidiary in a low-tax country, the lower its overall tax burden, since taxes in the residence country can be deferred on income or shielded by cross-crediting. The overall allocation of foreign-source income also affects the limit on the foreign tax credit.

Prior Law: Subpart F; Transfer Pricing; Interest Deductions and Thin Capitalization Rules

Subpart F

Like many other countries, the United States has anti-abuse rules to tax income that is relatively easily shifted on a current basis. The primary anti-abuse rule deals with CFCs. CFC rules are also commonly referred to as Subpart F rules, after the section of the tax code containing the rules. The rules applied to foreign firms in which U.S. shareholders that each own 10% of the voting power together own at least 50% of the voting power or value. Many CFCs are wholly owned by a single U.S. parent.

There are other anti-deferral rules, most importantly rules relating to passive foreign investment companies (PFICs) that are not CFCs and whose income is primarily passive.

The principal category of income taxed under Subpart F is called foreign base company income, and includes passive income (such as dividends, interest, rents, and royalties) received by a

[7] The adjusted tax basis is original cost reduced by depreciation deductions and increased by capital additions.

subsidiary and certain income from business operations. Income from business operations includes foreign base company income of sales and services subsidiaries in foreign countries where the production and consumption of those goods and services take place in other countries, and foreign oil-related income (income derived from processing, transporting, or selling oil and gas). In addition to foreign base company income, Subpart F includes income from insurance of risks outside the country (or within the country if receiving the same premiums).

Income invested in U.S. property (including lending to the parent) was taxed currently (to prevent a way to repatriate without paying dividends). There are de minimis exclusions (for small amounts or shares or tax rates more than 90% of the U.S. rates) and full inclusion rules (when Subpart F income is more than 70% of total income). A firm is not classified as a CFC unless stock has been held for 30 days.

Since the late 1990s, the scope of Subpart F has been reduced by the adoption of check-the-box rules. Check-the-box was a regulatory provision, but it has been codified and extended through the temporary look-through rules, set to expire after 2019. The provision allows a foreign subsidiary of a U.S. parent to elect to disregard its own (second-tier) subsidiary, incorporated in a different country, as a separate entity. If the second-tier subsidiary borrows from the first-tier subsidiary, it can deduct the interest in the country of incorporation; normally, the payment of interest would be considered Subpart F income and taxed currently. Under check-the-box, the payment is not recognized because there is no separate second-tier entity. If the first-tier subsidiary is in a no-tax jurisdiction, the interest is deducted, but not taxed currently. This type of arrangement creates what is referred to as a hybrid entity, one characterized differently in different jurisdictions.

Transfer Pricing

The current system generally requires firms to set hypothetical *transfer prices*, which are required to approximate the prices two firms would agree on if they conducted their transactions with unrelated parties (arm's length). These prices can be difficult to determine. When there are comparable transactions between unrelated parties that can be observed, establishing an arm's-length price is relatively straightforward. For many transactions, especially those associated with intangible assets or licenses for the right to use intangible assets (such as inventions, formulas, and trademarks), the intangible asset may be unique, and transfer prices are more difficult to establish.

Interest Deductions and Thin Capitalization Rules

One method of shifting profits is to claim interest deductions in the high-tax country. Although there was an allocation to foreign sources of interest for purposes of the limit on the foreign tax credit, there is not one to allocate interest between U.S. firms and related firms incorporated in other countries, whether subsidiaries to a U.S. parent or a subsidiary of a foreign parent.

There was a rule that limited the total amount of related party interest a firm can deduct, applying to all firms, sometimes referred to as Section 163(j) rules, or thin capitalization rules. The deduction for net interest was limited to 50% of adjusted taxable income (income before taxes, interest deductions, and depreciation, amortization or depletion deductions) for firms with a debt-to-equity ratio above 1.5. (This measure of income is referred to as EBITDA, for earnings before interest, taxes, depreciation, and amortization.) Interest paid above the limitation may be carried forward indefinitely. Most firms would not be constrained by a restriction, especially in light of the safe-harbor debt equity ratio (which would lead to a debt share of 60%). In addition, by allowing a fairly high limit to interest deductions and making it a percentage of income before

deductions for depreciation, most firms with significant amounts of tangible property would be unlikely to be affected by this restriction even if the safe harbor did not apply.

New Law: BEAT, Modifications to Subpart F, Transfer Pricing Changes, Stricter Thin Capitalization Rules

Base Erosion and Anti-Abuse Tax

The new law introduces a general anti-abuse provision whose focus is primarily on U.S. subsidiaries of foreign parents, although it applies in general to related parties (although as noted below, it may also affect U.S. multinationals with foreign-source income from higher-tax locations). Unlike Subpart F or the new GILTI provision, BEAT is not aimed at including income but at taxing deductions. BEAT imposes a minimum tax equal to 10% of the sum of taxable income and base erosion payments on corporations with average annual gross receipts of at least $500 million over the past three tax years and with deductions attributable to outbound payments exceeding 3% of overall deductions. The rate is 5% in 2018 and 12.5% for taxable years beginning after December 31, 2025. (Applicable taxpayers that are members of an affiliated group that includes a bank or registered securities dealer under Section 15(a) of the Securities Exchange Act of 1934 are subject to an additional increase of one percentage point in the tax rates, and the tax applies when base erosion payments exceed 2% of deductions.)

Base erosion payments include payments to related foreign parties, including those that would result in a deduction under Chapter 1 of the *Internal Revenue Code* (such as interest, rents, royalties, and services), the purchase of depreciable or amortizable property, certain reinsurance payments, and payments to inverted firms or foreign persons that are a member of an affiliated firm that includes the inverted firm that became inverted after November 9, 2017 (but not firms that continue to be treated as U.S. firms). Cost of goods sold would not be included, and cost of services would not be included if determined under the services cost method under the transfer pricing rules in Section 482.[8] Disallowed interest under the thin capitalization rules, which are tightened (as discussed below), would be first allocated to unrelated parties. Base erosion payments are reduced to the extent that withholding taxes are applied.[9]

A related person is a person who owns 25% of the taxpayer or another entity controlled by the same interests. The constructive ownership rules treat a taxpayer owning 10% of a firm as controlling 100% of the firm. (In other provisions of the code a taxpayer must have a 50% ownership to be considered as controlling 100% of the firm.)

Because BEAT is effectively a lower tax rate on a broader base, it will not apply to all taxpayers who have related party payments. Only taxpayers with base erosion payments that are large relative to their taxable income will be affected.

BEAT can increase the cost of certain transactions between U.S. subsidiaries and their foreign parents by including interest payments and royalty payments to the foreign parent in their BEAT base. These payments are targeted because they are also used to shift profits out of the United States.

[8] There is some uncertainty about whether services with a markup or that cannot use the services cost method would include the whole payment for services or just the markup. See discussion in the final section summarizing commentary on the new rules.

[9] Withholding taxes are applied to dividends, some interest, and royalties, but are often reduced to very low rates by tax treaties.

Although BEAT appears to be aimed at profit shifting out of the United States through royalty payments and interest payments, presumably to a foreign parent, BEAT is calculated in a way that allows the tax to be reduced by the research credit and 80% of the sum of three credits (the low-income housing credit, the renewable electricity production credit in Section 45(a) of the code, and credits for renewable energy, such as wind), but not other credits. A taxpayer falling under the BEAT minimum tax will not be eligible for foreign tax credits on foreign-source income. Thus a firm could have a higher tax liability under BEAT because it had large amounts of foreign tax credits relative to tax liability before credits.

Modifications to Subpart F

Subpart F is retained with only minor modifications. Foreign oil-related income is no longer included as Subpart F income, and a provision for recapturing certain prior shipping income is eliminated.[10] The 30-day holding period is eliminated. The determination of 10% ownership is based on shares of stock by value or voting power rather than just by voting power.[11]

Check-the-box is not altered.

Transfer Pricing

The new law modifies, and attempts to clarify, rules determining the valuation of intangible property. It adds goodwill, going concern value, or the value of workforce in place to the list of intangible property (which currently includes items such as patents, inventions, formula, processes design, pattern, know-how, copyrights, compositions, and other specified items). It also includes any other item with a value not attributable to tangible property or services of any individual. It specifies that the Secretary of the Treasury has the authority to require aggregation of intangible assets for valuation purposes (since value as a group may be different from the sum of individual values) and to use realistic alternative principles (a taxpayer may enter into the transaction if there is no realistic economically preferable outcome). For example, the taxpayer's earnings from licensing of an intangible asset to produce a product (such as a drug formula) could be compared to the income if the taxpayer instead manufactured the product (e.g., the drug).

Thin Capitalization Rules

Interest restrictions were extended to all interest payment, not just related party interest. Three other revisions to the thin capitalization rules cause them to apply to more firms. First, the safe-harbor debt-to-equity-ratio rule (i.e., the provision that requires debt to be 1.5 times equity value for the limit on the deduction for interest to apply) is eliminated. Second, deductible interest is reduced from 50% to 30% of adjusted taxable income for businesses with gross receipts greater

[10] Foreign base company shipping income (income associated with international transport by aircraft or vessel) has undergone several treatments under Subpart F. It is currently excluded, but between 1975 and 1986 it was excluded but reduced by the extent the income was reinvested in the business, and in 1986 it was excluded without a reinvestment requirement. If those reinvested funds are repatriated, that income is Subpart F income. The revision eliminates that coverage under Subpart F.

[11] The legislation also modifies the definition of a CFC. In determining whether a foreign corporation is a CFC (50% owned by U.S. persons who each own 10%), direct, indirect, and constructive ownership rules apply for determining CFC status (although only direct and indirect ownership applies for determining the share of Subpart F income). If a person owns 50% of the voting power, she is considered to own 100% of the stock under the constructive attribution rules. Constructive attribution rules also take into account related parties. Current law, however, does not allow these constructive attribution rules to apply so that a U.S. person is attributed stock owned by a foreign person even though they are related. The new allow allows attribution of stock owned by a related foreign person. This provision was primarily aimed at inverted firms and is discussed in that section.

than $25 million. Finally, for years beginning after December 31, 2021, adjusted taxable income does not allow a deduction for depreciation, amortization, and depletion (this base is called EBIT). The provision also has an exception for floor plan financing for motor vehicles (including boats and farm equipment as well as cars and trucks). Real estate can elect a longer depreciation period instead of limits on interest deductions which would be attractive for heavily mortgaged properties. In any case, real estate is not the normal target of concerns about earning stripping (concerns are generally directed at inverted firms and multinationals).

The Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 (P.L. 116-136) increased the interest deduction to 50% of EBIT for 2019 and 2020.

Hybrid Entities and Instruments

Hybrid entities and instruments can confer tax advantages on related parties if they are treated differently in different jurisdictions. An example of a "hybrid instrument" is one where a royalty or interest payment (which is deductible in the United States) is not included in income in the jurisdiction where the interest or royalty is received. A "hybrid entity" is one that is recognized as a separate entity in one jurisdiction but not the other, which affects whether they include payments in income. The tax revision disallows a deduction by a related party for an interest or royalty payment to a recipient in a foreign country if that payment is not taxed (or is included in income and then deducted) in the foreign country.

Tax Treaties

The United States and other countries have tax treaties designed to avoid double taxation. A significant area of coverage in treaties is the agreements regarding withholding taxes, but treaties cover other issues as well, such as the recognition of a permanent establishment or other grounds to impose source-based taxes, such as corporate profits taxes. For U.S. firms' subsidiaries incorporated abroad, the treaties of those countries of incorporation and other countries are also relevant.

A change in domestic law, as in P.L. 115-97, in the United States would override treaty provisions, and certain provisions in the new law may be in conflict with treaties, as discussed subsequently (basically the most recently enacted provision is treated as primary).[12]

Repatriation Rules

Prior Law: Voluntary Repatriation

U.S. firms with overseas operations could indefinitely postpone paying U.S. tax on foreign income by operating through a foreign subsidiary and reinvesting the earnings abroad. U.S. taxes were due when the earnings were repatriated to the United States as an intra-firm dividend or other payment. These earnings were taxed at the then corporate tax rate of 35%.

The U.S. firm paid taxes on its overseas earnings only when they were paid to the U.S. parent corporation as intra-firm dividends or other income.

With respect to repatriated dividends, U.S. firms can claim foreign tax credits for foreign taxes paid by their subsidiaries on the earnings used to pay the repatriated dividends. The ability to defer U.S. tax thus poses an incentive for U.S. firms to invest abroad in countries with low tax

[12] See CRS Legal Sidebar LSB10047, *What Happens if H.R. 1 Conflicts with U.S. Tax Treaties?*, by Erika K. Lunder.

rates. Proposals to cut taxes on repatriations are based largely on the premise that even this deferred tax on intra-firm dividends discourages repatriations and encourages firms to reinvest foreign earnings abroad and that a cut in the tax would stimulate repatriations.

New Law: Deemed Repatriation

A deemed repatriation is imposed on accumulated post-1986 foreign earnings determined as of a certain measurement date, without requiring an actual distribution, upon the transition to the new participation exemption system. The transition rule requires mandatory inclusion of such deferred foreign income as Subpart F income by U.S. shareholders of deferred foreign income corporations.[13] The included amount is taxed at a reduced rate that depends on whether the deferred earnings are held in cash (which are taxed at 15.5%) or other assets (which are taxed at 8%) with applicable foreign tax credits similarly reduced. (These rates are technically accomplished via a deduction that results in the stated rate.) The resulting tax may be paid in installments over eight years.[14]

S corporations are subject to a special rule. Shareholders of an S corporation are allowed to elect to maintain deferral on such foreign income until the S corporation changes its status, sells substantially all its assets, ceases to conduct business, or the electing shareholder transfers its S corporation stock.

Anti-Inversion Rules

Prior Law: Section 7874

In the American Jobs Creation Act of 2004 (P.L. 108-357), Congress responded to an increase in the prevalence of corporate inversions by enacting Section 7874 of the Internal Revenue Code (IRC). Section 7874 imposes negative tax consequences on an inverted company, by reducing or, in some cases, eliminating the tax benefits of an inversion. Section 7874 creates two different taxing regimes for the inverted corporation depending on whether 60% or 80% of the inverted company is owned by shareholders of the U.S. company. If at least 60% of the foreign parent's stock is held by former shareholders of the U.S. company, then the U.S. subsidiary (and related persons) is limited in its ability to claim credits and deductions against certain income when calculating its U.S. income taxes. If the 80% threshold is met, then the foreign parent is treated as a domestic corporation for U.S. tax purposes and subject to tax on its worldwide income. The section generally applies to companies that inverted after March 4, 2003, and is not applicable if the substantial activities test is met. Inverted firms not taxed as U.S. firms are referred to as surrogate firms.

Since 2004, additional regulatory steps have been taken to reduce the incentives for inversion transactions and their benefits. In 2012, Treasury Regulations (T.D. 9592, June 12, 2012) increased the safe harbor for the substantial business activities test from 10% to 25%. In 2014 and 2015, Treasury Notices 2014-52 and 2015-79 limited access to earnings of U.S. foreign

[13] In particular, for the last tax year beginning before January 1, 2018, the Subpart F income of a deferred foreign income corporation (as otherwise determined for that tax year under Code §952) is increased by the greater of (1) the accumulated post-1986 deferred foreign income of the corporation determined as of November 2, 2017, or (2) the accumulated post-1986 deferred foreign income of the corporation determined as of December 31, 2017.

[14] If installment payments are elected, the payments for each of the first five years equal 8% of the net tax liability. The amount of the sixth installment is 15% of the net tax liability, increasing to 20% for the seventh installment and 25% for the eighth installment.

subsidiaries and addressed several techniques that could be used to artificially reduce the calculated share of U.S. shareholders. In 2016, Treasury regulations regarding these notices put in place several anti-inversion rules that target groups that have engaged in a series of inversion or acquisition transactions as well as a rule that restricts postinversion asset dilution and restricts the ability of foreign-parent groups to shift earnings out of the United States through dividends or other economically similar transactions (under Section 385).[15]

New Law: Additional Restrictions on Inversions

The new law contains several measures that affect inverted firms that are not treated as U.S. firms.

Recapture of Deemed Repatriation Rate Reduction

A special recapture rule applies on deemed repatriations of newly inverted firms. This recapture rule applies if a firm first becomes an expatriated entity at any time during the 10-year period beginning on December 22, 2017, with respect to a surrogate foreign corporation that first becomes a surrogate foreign corporation during that period (i.e., post-enactment). In this case, the tax will be increased from 8% and 15.5% to 35% tax for the entire deemed repatriation, with no foreign tax credit allowed for the increase in tax rate. The additional tax is due on the full amount of the deemed repatriation in the first tax year in which the taxpayer becomes an expatriated entity.

Excise Tax on Stock Compensation

The excise tax rate on stock compensation received by insiders in an expatriated corporation is increased from 15% to 20%, effective on the date of enactment for corporations that first become expatriated after that date.

Individual Tax on Dividends from Inverted Companies

Dividends (like capital gains) are allowed lower tax rates than the rates applied to ordinary income. The rates are 0%, 15%, and 20% depending on the rate bracket that ordinary income falls into. Certain dividends received from foreign firms (those that do not have tax treaties and PFICs[16]) are not eligible for these lower rates. Dividends paid by firms that inverted after the date of enactment of P.L. 115-97 are added to the list of those not eligible for the lower rates.

Base Erosion Payments to Expatriated Entities

Base erosion payments generally do not include any amount that constitutes reductions in gross receipts, including payments for costs of goods sold (COGS). However, an exception applies for certain payments to expatriated entities, described below.

Base erosion payments include any amount that results in a reduction of gross receipts of the taxpayer that is paid or accrued by the taxpayer with respect to (1) a surrogate foreign corporation that is a related party of the taxpayer, but only if such corporation first became a surrogate foreign

[15] For a more detailed discussion of prior rules and inversion activity, see CRS Report R43568, *Corporate Expatriation, Inversions, and Mergers: Tax Issues*, by Donald J. Marples and Jane G. Gravelle.

[16] A PFIC is a passive foreign investment company, a foreign corporation that primarily holds passive assets. It does not fall under CFC rules, but has a separate set of anti-avoidance rules that generally were not changed by the new law.

corporation after November 9, 2017; or (2) a foreign person who is a member of the surrogate foreign corporation's expanded affiliated group (EAG).

A surrogate foreign corporation is a foreign corporation that meets the following criteria:

- It acquires (after March 4, 2003) substantially all of the properties held by a U.S. corporation, or substantially all of the properties constituting a trade or business of a domestic partnership.
- After the acquisition, the U.S. corporation's former shareholders, or the domestic partnership's former partners, own at least 60% of the stock (by vote or value) of the foreign acquiring corporation.
- The surrogate foreign corporation's EAG does not have substantial business activities in the country where that corporation is organized or created compared to the total business activities of the EAG.

A surrogate foreign corporation does not include a foreign corporation where the former shareholders of the U.S. corporation or the former partners of the domestic partnership hold 80% or more (by vote or value) of the stock of the foreign acquiring corporation after the transaction. The EAG includes the foreign acquiring corporation and all companies connected to it by a chain of greater than 50% ownership.

Modification of Attribution Rules

The constructive ownership rules for purposes of determining 10% U.S. shareholders, whether a corporation is a CFC and whether parties satisfy certain relatedness tests, were expanded in the 2017 tax revision. Specifically, the new law treats stock owned by a foreign person as attributable to a U.S. entity owned by the foreign person (so-called "downward attribution"). As a result, stock owned by a foreign person may generally be attributed to (1) a U.S. corporation, 10% of the value of the stock of which is owned, directly or indirectly, by the foreign person; (2) a U.S. partnership in which the foreign person is a partner; and (3) certain U.S. trusts if the foreign person is a beneficiary or, in certain circumstances, a grantor or a substantial owner.

The downward attribution rule was originally conceived to deal with inversions. In an inversion, without downward attribution, a subsidiary of the original U.S. parent could lose CFC status if it sold enough stock to the new foreign parent so the U.S. parent no longer had majority ownership. With downward attribution, the ownership of stock by the new foreign parent in the CFC is attributed to the U.S. parent, so that the subsidiary continues its CFC status, making it subject to any tax rules that apply to CFCs (such as Subpart F and repatriation taxes under the old law, and Subpart F and GILTI under the new law).

Interaction of Interest Restrictions, GILTI, FDII, BEAT, Repatriation Taxes, and Net Operating Losses

The 2017 tax revision introduced provisions that interacted with each other and with net operating losses (NOLs), which were also revised. NOL rules were subsequently further revised in the CARES Act. How this interaction is determined can have an effect on taxes paid. The CARES Act also temporarily increased the limit on interest deductions, as noted earlier. Before discussing these interactions, this section provides a brief explanation of NOL rules.

Net Operating Losses

When a firm has a loss (a net operating loss), taxes are not reduced immediately beyond zero. Rather, the business owes no income tax in that tax year and the loss can be carried to another year when firms have profits. Prior to the 2017 revision, losses could be carried back two years and carried forward for 20 years, fully offsetting tax liability. Carrybacks of losses yield immediate tax reductions, whereas carryforwards reduce future tax liabilities.

The 2017 act disallowed carrybacks but provided that losses could be carried forward indefinitely, but only reduce 80% of taxable income.

The CARES Act allows firms to carry back losses in tax years beginning after December 31, 2017, and before January 1, 2021 (for calendar year firms, covering 2018, 2019, and 2020) for up to five years. NOLs carried back can also offset 100% of taxable income—an increase from the 80% offset under permanent law.

Interactions with International Provisions

How offsets occur matter for two reasons. First, carryovers of unused deductions differ across provisions. NOLs and interest deductions can be carried forward indefinitely, but FDII and GILTI deductions cannot be carried to any other period and are lost if not used. Second, GILTI and deemed repatriations may also have foreign tax credits that cannot be immediately used if taxable income is reduced or eliminated. Foreign tax credits have a one-year carryback and a 10-year carryforward, but there is no foreign tax credit carryover for foreign taxes related to GILTI.

The 2017 act allowed firms to elect not to apply NOLs against deemed repatriation amounts. This election allows firms to avoid the loss of foreign tax credits. The CARES Act specified that when carrybacks are applied to the years when deemed repatriation taxes were paid, the taxpayer is automatically considered to make this election not to apply NOLs against deemed repatriation amounts.

Ordering Rules for Interest, GILTI, FDII, and NOLs

The 2017 act limited the deduction for GILTI and FDII to taxable income before taking into account these deductions. Interest deduction limits also relied on taxable income, and NOLs were limited to a percentage of taxable income. The law did not specify how to handle the relationship between taxable income and the limited deductions for interest, GILTI, FDII, and NOLs, and some provisions appeared to require simultaneous equations. Preliminary regulations issued in early 2019 specified how the interactions would be handled.[17] First, the taxpayer would determine a tentative deduction for GILTI and FDII without considering NOLs. Next the taxpayer would determine the amount of interest deducted, taking into account GILTI and FDII deductions but not NOLs. Then the taxpayer would determine the NOL deduction, taking into account interest deductions, but not GILTI and FDII deductions. Then FDII (income not the deduction) would be determined taking into account interest and NOLs. Finally the GILTI plus FDII deduction would be determined based on taxable income taking into account interest deductions and NOLs.

To illustrate, consider a simple case where a taxpayer has $100 of NOLs from a previous year, no ordinary income, and $100 of GILTI. Under the rule, the NOL would offset income before the

[17] Proposed REG-104464-18, March 6, 2018, https://www.federalregister.gov/documents/2019/03/06/2019-03848/deduction-for-foreign-derived-intangible-income-and-global-intangible-low-taxed-income. Corrections were published on April 12, 2019, https://www.federalregister.gov/documents/2019/04/12/C1-2019-03848/deduction-for-foreign-derived-intangible-income-and-global-intangible-low-taxed-income.

GILTI deduction (80% of $100), leaving $20 of income. The 50% deduction would apply and the remaining income of $10 would be subject to $2.10 of tax. The taxpayer would have $20 of NOLs to carry forward to future years. Now suppose instead the GILTI deduction could be taken first. In that case, GILTI would be reduced by a 50% deductions, leaving $50 in income. A net operating loss would be taken to offset 80% of that income, or $40, leaving taxable income of $10. This is still a $2.10 current tax, but now the taxpayer has a NOL carryforward of $60 rather than $20 to reduce taxes in the future. In effect, the ordering rule causes the loss of $40 of NOL carryforwards.

In addition to using up NOLs that could have value in the future, loss of GILTI and FDII can cause the loss of foreign tax credits, which means the 80% limit on NOL deductions can be harmful rather than beneficial. For example, if there were sufficient foreign tax credits to offset all taxes on GILTI, no current tax would be due in the above example. Without the 80% limit on NOLs, under the ordering rules, all GILTI would be eliminated by the $100 NOL, but if the GILTI deduction were allowed first, leaving $50, a $50 NOL would remain. In this case, there is a loss of $50 rather than $40 of NOLs, with no change in tax liability.

A firm can elect to opt out of the carryback rules enacted in the CARES Act, which could prevent the loss of GILTI and FDII deductions and foreign tax credits in 2018 and 2019. Opting out could also be beneficial, in general, if losses reduced foreign source income and foreign tax credits that could not be used in the 10-year foreign tax credit carryforward period.

Interest deductions apply before the GILTI and FDII deductions, and they can also lead to the permanent loss of the GILTI and FDII deductions and foreign tax credits, in the same manner as NOLs. The CARES Act's temporary interest deduction increase from 30% to 50% as a percentage of EBIT may not be beneficial to firms with this income, although they can also elect to opt out of the increase.

Deemed Repatriations

As noted, the 2017 act allowed firms to elect not to apply NOLs against deemed repatriation amounts. This election allows firms to avoid the loss of foreign tax credits. The CARES Act also specified that when carrybacks applied to the years when deemed repatriation taxes are paid (for example, in 2018 and 2019), the taxpayer is automatically considered to make this election. The CARES Act also allowed firms to skip years with a deemed repatriation because of concerns that these benefits would be considered an advance payment of deemed repatriation taxes as indicated in an IRS internal memo.[18]

BEAT and Interest Payments

BEAT only applies after related party deductions are 3% of total deductions. Proposed regulations issued December 6, 2019, allow a taxpayer to choose to forgo deductions to reduce BEAT payments below the threshold.[19] The increased interest deductions under the CARES Act may push additional firms above the threshold and may cause more firms to forego all interest deductions if the BEAT tax is higher than the normal tax.

[18] PMTA 2018-16 August 2, 2018, https://www.irs.gov/pub/lanoa/pmta_2018_16.pdf.

[19] IRS, REG-112607-19, "Additional Rules Regarding Base Erosion and Anti-Abuse Tax," 84 *Federal Register* 67046, December 6, 2019, at https://www.federalregister.gov/documents/2019/12/06/2019-25745/additional-rules-regarding-base-erosion-and-anti-abuse-tax.

Issues in Prior Law and Implications for New Law

The Location of Investment in the United States and Other Countries

A long-standing concern about the international tax system involved the effects of taxes on the location of investment in the United States rather than in other countries. One target of concern was the higher tax rate in the United States, and lowering that rate (of 35%) was an objective of the drive for tax revision.

Two questions can be raised about the prior law. One is the question of the potential effects of the tax changes on the allocation of investment. A related issue is whether the tax change makes the allocation of investment more efficient (increasing worldwide output) or better for the United States (increasing aggregate welfare in the United States by moving closer to an optimal treatment).

To address these issues, the first section begins with the comparison of U.S. tax rates with those of other countries before the tax change, and addresses the importance of considering effective tax rates. The next section examines the effect of the new generally applicable tax revisions (the rate changes and changes in depreciation on U.S. domestic investment). The final section examines the effects of the new international rules, or related rules, including the thin capitalization rules, GILTI, FDII, and BEAT. The section concludes with a discussion of what these findings imply for the allocation of investment and the efficiency or optimality of that allocation.

U.S. Tax Rates Compared to Other Countries Before the Revision

The U.S. corporate tax rate (combining federal and average state and local taxes, and accounting for the deductibility of state and local taxes) of 39% was higher than the statutory rate in any other major country, including the countries in the Organization for Economic Cooperation and Development (OECD) and the G-20. Using an average weighted by GDP, the statutory tax rate in the OECD countries outside of the United States was 27%. The rate for the G-20 was 28%.[20]

The statutory corporate tax rate, however, is more relevant for the profit-shifting issue to be discussed subsequently. Investment location is determined by the effective tax rate. Two measures of effective tax rates are the average effective tax rate and the marginal effective tax rate.

The average effective tax rate divides tax liability by some measures of profit, and thus captures to some degree special deductions and credits in the system as well as the statutory tax rate. The average effective tax rate captures many smaller provisions, but it does not capture the significant timing issues associated with accelerated depreciation and expensing.[21] To capture timing, a tax

[20] Data for tax rates of the OECD countries are from the OECD data. See http://www.oecd-ilibrary.org/economics/oecd-economic-surveys-norway-2018/norway-s-corporate-tax-rate-has-been-lowered_eco_surveys-nor-2018-graph33-en. Data for other countries in the G-20 are from Congressional Budget Office, *International Comparisons of Corporate Tax Income Tax Rates*, March 8, 2017, at https://www.cbo.gov/publication/52419. Data on GDP are from the Central Intelligence Agency *World Factbook*, estimated for 2017, at https://www.cia.gov/library/publications/the-world-factbook/rankorder/rawdata_2001.txt. The unweighted (simple) average of the OECD is about a percentage point lower. Typically larger countries have higher tax rates. Tax rates are based on weighted pre-tax returns, that is, a weighted average of 1/(1-t) rather than of t.

[21] Depreciation allows the cost of the asset to be deducted from earnings over a period of years. Depreciation is

rate needs to be based on looking forward to the expected tax payments for a representative investment and take into account the time value of money.

A marginal effective tax rate measures the difference between the return on the investment before taxes are considered to the return after taxes. This amount is the share of the return collected in taxes on a present value basis, and that amount is divided by the pre-tax return to obtain a marginal effective tax rate. The term *marginal* is used because it applies to marginal investments that break even (i.e., an investment that earns just enough to be worth undertaking). This measure is, in theory, the best measure to determine how the corporate income tax affects investment, but it requires a lot of information about depreciation practices. Because of the data demands, for example, studies often use a representative equipment investment, although there is a wide variation in the tax treatment and durability of equipment. Thus, these marginal effective tax rates should be considered as rough measures of relative tax burdens. In addition, the effective tax rates depend on the assets included in the measure and whether the measure includes the effect of debt finance.

A variety of different estimates in recent years have been made examining these two effective tax rates. In general, most studies of average effective tax rates found these tax rates (federal, state, and local combined) to be relatively close, whereas the U.S. marginal effective tax rate tended to be about 6 percentage points above the weighted average of the OECD.[22] These estimates were for equity investment (buildings, equipment, intangibles, and inventory), with the marginal effective U.S. tax rate estimated at about 22%.[23] These estimates assume the tax base for purposes of state and local taxes is the same as for federal taxes. The marginal effective tax rate for OECD countries outside of the United States, weighted by GDP, is 16.4%.

Considering equipment and buildings separately, equipment earnings were subject to a 22.5% marginal effective tax rate, compared to an 18.9% marginal effective tax rate in other OECD

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accelerated when it is allowed more quickly than the decline in the value of an asset, or economic depreciation. Expensing, the most extreme form of accelerated depreciation, allows cost to be recovered immediately, when the asset is acquired.

[22] See CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle. This report explains the different concepts of tax rate and also illustrates the importance of using tax rates where each country is weighted by GDP to make comparisons. A variety of estimates are presented in this report, although some of these estimates reflect tax rates that do not fall into the category of a standard marginal tax rate, or do not confine themselves to income tax rate comparisons. For example, a measure called an effective average tax rate (EATR) is a blend of statutory and marginal tax rates, and a measure by Mintz and Chen of the University of Calgary (Jack Mintz and Duanjie Chen, "U.S. Corporate Taxation: Prime for Reform," Tax Foundation, Special Report No. 228, February 4, 2015, available at https://taxfoundation.org/us-corporate-taxation-prime-reform; and Jack Mintz, "Corporation Tax: A Survey," *Fiscal Studies*, vol. 16, issue 4 (1995), pp. 23-68) includes the state and local sales tax (which sometimes falls on business capital assets) in the U.S. marginal tax rate. A study prepared for the Alliance for Competitive Taxation (*International Comparison of Effective Corporate Tax Rates Prepared for Alliance for Competitive Taxation by Price Waterhouse*, 2016, at http://www.actontaxreform.com/wp-content/uploads/2016/09/International-Comparison-of-Effective-Corporate-Tax-Rates_FINAL_20160926.pdf) reports these two measures. They also report a marginal effective tax rate (termed EMTR) estimated in an EU study that includes property and wealth taxes. The EU study does not provide a mean, and the reported comparison in the Alliance for Progress Study uses a simple average rather than a weighted average. See *Effective Tax Levels Using the Devereux/Griffith Methodology – Update 2015*, at http://www.zew.de/en/publikationen/effective-tax-levels-using-the-devereuxgriffith-methodology-update-2015/?cHash=b54a84e000c7e4e1ad65cdd59c575c10. Two measures of average effective tax rates are included in the Alliance for Competitive Taxation summary, one of which was included in the CRS report, but the other, by the World Bank, was for a hypothetical firm and not based on actual data.

[23] Separate rates were reported for investments not eligible and eligible for the domestic production activity deduction; weighting these by estimated shares of earnings eligible and not eligible (73% and 27%) for the deduction produces an overall rate of 21.7%.

countries (a difference of 3.6 percentage points), whereas buildings were subject to a 28.4% marginal effective tax rate in the United States and a 23.6% marginal effective tax rate in the rest of the world (a difference of 4.8 percentage points).

In 2016, the Treasury estimated a marginal effective tax rate in the United States (federal and subnational) of 18.1%, which compares to a 19.4% marginal effective tax rate in the rest of the G-7. The U.S. rate allowed for bonus depreciation.[24]

In 2017, the Congressional Budget Office (CBO) released a study of statutory, average effective, and marginal effective tax rates for the G-20.[25] The G-20 includes some of the larger economies of the world that are excluded from the OECD, especially the BRIC countries (Brazil, Russia, India, and China). Although the CBO data were from 2012, the study provided some updates for the changes in statutory rates through 2015 in the text. Making some further proportional changes for the minor tax rate reductions since that time (and excluding Saudi Arabia, where full data were not available), the estimates are a weighted statutory tax rate outside of the United States of 27.9%, compared to a 39.1% U.S. statutory rate. The average tax rate was 29% in the United States and 22.2% in the rest of the G-20 outside of Saudi Arabia.

The marginal effective rate, which accounted for debt finance as well as equity finance, was 18.6% in the United States, compared to a marginal effective tax rate of 10.9% in the rest of the G-20. Since the corporate tax subsidizes debt, including it in marginal effective tax rates would lower those rates.

The CBO report also provided data for marginal effective tax rates of tangible assets (buildings and equipment). Its estimate for equipment in the United States was 10.5%, compared to a 17.3% rate for the rest of the G-20; its estimate for buildings was 20.1%, compared to an estimated rate of 11.1% for the rest of the G-20.

These comparisons in the CBO study suggest that the rates of tax in the United States were several percentage points above the rest of the G-20 for all four categories of assets and for buildings, but lower for equipment.

Changes in Marginal Effective Tax Rates

This section provides estimates of federal marginal effective tax rates from the basic changes in the treatment of domestic investment: the reduction in the statutory tax rate from 35% to 21%, the repeal of the production activities deduction, the temporary expensing of equipment (allowed at 100% for the first five years and then phased out over the next five years), and the provision requiring the amortization over five years, that is, deducting the costs in equal amounts over five years (rather than expensing) for research and experimentation, to begin in 2022. In 2017, investments in equipment were allowed bonus depreciation, with half of the cost expensed and half depreciated. That bonus depreciation was, under prior law, to be phased out and be eliminated entirely after 2019, so the tables also report effective tax rates without bonus depreciation. Which comparisons are appropriate depend on what might have been expected to happen to bonus depreciation, which has been in place as a temporary provision since 2008 and has been continuously extended, as well as expectations as to whether the permanent provisions for depreciation of equipment and amortization of research investments will occur.

[24] The *President's Framework for Business Tax Reform: An Update, A Joint Report by the White House and the Department of the Treasury,* April 2016, https://www.treasury.gov/resource-center/tax-policy/Documents/The-Presidents-Framework-for-Business-Tax-Reform-An-Update-04-04-2016.pdf.

[25] Congressional Budget Office, *International Comparisons of Corporate Income Tax Rates*, March 8, 2017, at https://www.cbo.gov/publication/52419.

Table 1 reports the effective tax rates on equity-financed investments by asset group for 2017 law with and without bonus depreciation, and then for the temporary provisions in the new law (providing expensing of equipment and retaining it for research costs) and the permanent provisions (depreciation of equipment and five-year amortization for research). For purposes of bonus depreciation and expensing, public utility structures are considered equipment and are eligible.

Table 1. Marginal Effective Tax Rates for Equity-Financed Investment

Asset	2017 Law With Bonus Depreciation (%)	2017 Law Without Bonus Depreciation (%)	New Law: Temporary Provisions (%)	New Law: Permanent Provisions (%)
Equipment	13.4	23.6	0.0	13.7
Public Utility Structures	14.2	24.9	0.0	14.5
Nonresidential Structures	30.8	30.8	18.5	18.5
Residential Structures	28.1	28.2	16.7	16.7
Intangibles				
Research	-63.3	-63.3	-63.3	-30.2
Advertising	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0
Total	**15.6**	**19.7**	**3.2**	**10.9**

Source: Congressional Research Service (CRS). See CRS Report R44638, *Corporate Tax Integration and Tax Reform*, by Jane G. Gravelle; and CRS Report R44242, *The Effect of Base-Broadening Measures on Labor Supply and Investment: Considerations for Tax Reform*, by Jane G. Gravelle and Donald J. Marples, for method of computation and assumptions.

Notes: The corporate statutory rate used for 2017 law is 34.14% to reflect the production activities deduction. The other assumptions and underlying data include a corporate after-tax real discount rate of 7% and an inflation rate of 2%, used in all simulations. The research credit is 11.3% (see CRS Report R44522, *A Patent/Innovation Box as a Tax Incentive for Domestic Research and Development*, by Jane G. Gravelle). Note that these tables do not include land, which is not reproducible, and inventories, whose short lives make them likely relatively insensitive to the rates of return. Both are taxed at rates above the rates for other nonresidential structures (land at the statutory rate and inventories above the statutory rate). Other intangibles primarily reflect human capital investment.

Calculating from the tax rates as shown in this table, under 2017 law, investment in tangible assets is subject to positive effective tax rates ranging from 38% (0.134/0.35) to 88% (0.308/0.35) of the statutory rate with bonus depreciation and from 67% to 88% without bonus depreciation.[26] These differences reflect the degree of acceleration of the present value of depreciation deductions as compared with economic depreciation (the rate of decline in the value of an asset). Depreciation is more accelerated for equipment than for structures. Intangible investments are

[26] These categories are aggregates of in some cases very heterogeneous assets. Effective tax rates under 2017 permanent law without bonus depreciation range from 17% to 32% for equipment. Nonresidential structures include oil and gas investments with an effective tax rate of 11% and various types of buildings taxed at rates ranging from 26% to 35%.

taxed at zero or negative rates. Intangible assets are eligible for expensing (the maximum amount of acceleration in depreciation), which produces a zero effective tax rate. The addition of a research credit results in a negative tax rate for investment in research. (Note that the magnitude of negative tax rates may appear to be more powerful subsidies than are actually the case because of the method of calculating effective tax rates.[27]) Overall, investment returns are taxed at an effective rate of 15.6% with bonus depreciation, or 45% of the statutory rate, and at 19.7% without bonus depreciation, or 57% of the statutory tax rate. The tax on tangible investment is much larger than the tax on intangible investment.

The temporary provisions (allowing expensing of equipment and public utility structures and retaining the expensing of research) would cut the effective tax rate on equity-financed investment to 3%, whereas the permanent provisions would reduce the rate to 11%. If the assumption is made that temporary benefits become permanent, the appropriate comparison is the 2017 rate with bonus depreciation to the temporary provisions of the new law, showing an overall decline in the tax rate from 15.6% to 3%, a reduction of almost 13 percentage points. Comparing the permanent provisions, the rate falls from 19.7% to 10.9%, a slightly smaller reduction of 8 percentage points.

Table 2 provides estimates with assets financed by debt. Corporate investment financed by debt is subsidized rather than taxed. In a world without inflation and with tax depreciation equal to economic depreciation, the effective tax rate on debt-financed investments would be zero: the deduction for interest exactly offsets the tax on the earnings from the investment. The presence of inflation and accelerated depreciation causes debt-financed investments to be subsidized, because the deduction for interest is allowed a full rate on nominal income (including the inflation portion of the interest rate) and at the statutory rate, whereas only the real return is taxed and at a lower effective rate.

The effective tax rates for debt-financed assets are negative, but the rates rise (or subsidies decrease) under the new provisions, as the value of deducting interest at 21% is smaller than the value at 35%. The overall tax rates under the new temporary provisions change little from 2017 law without bonus depreciation, as the benefits for equity (expensing for equipment) offset the reduced debt subsidy due to the lower rate. The tax rates under the permanent provisions lead to a reduced subsidy with tax rates becoming a smaller negative.

[27] In calculating the effective tax rate, the required after-tax return is held constant: positive taxes increase the pre-tax required return, and negative tax rates reduce that pre-tax return. As the pre-tax return falls to a very low rate, the share received as a subsidy can become large when expressed as a percentage of that rate. An alternate way to present the tax rate is as a tax wedge, t/(1-t), which indicates how much higher or lower the pre-tax return would have to rise or fall to break even. Tax wedges are larger than tax rates for positive tax rates and smaller for negative ones. For example, the 30.8% tax rate is a wedge of 44.4%, whereas a minus 63.3% tax rate is a wedge of -38.8%.

Table 2. Marginal Effective Tax Rates for Debt-Financed Investment

Asset	2017 Law With Bonus Depreciation (%)	2017 Law Without Bonus Depreciation (%)	New Law: Temporary Provisions (%)	New Law: Permanent Provisions (%)
Equipment	-59.4	-38.8	-40.1	-20.0
Public Utility Structures	-63.0	-44.4	-40.1	-21.4
Nonresidential Structures	-27.5	-27.5	-13.8	-13.8
Residential Structures	-38.9	-38.9	-18.5	-18.5
Intangibles				
Research	-701.4	-701.4	-252.0	-147.3
Advertising	-87.1	-87.1	-40.1	-40.1
Other	-87.1	-87.1	-40.1	-40.1
Total	**-64.0**	**-53.5**	**-48.4**	**-27.4**

Source: Congressional Research Service (CRS). See CRS Report R44638, *Corporate Tax Integration and Tax Reform*, by Jane G. Gravelle; and CRS Report R44242, *The Effect of Base-Broadening Measures on Labor Supply and Investment: Considerations for Tax Reform*, by Jane G. Gravelle and Donald J. Marples, for method of computation and assumptions.

Notes: The corporate statutory rate used for 2017 law is 34.14% to reflect the production activities deduction. The other assumptions and underlying data include a nominal interest rate of 7.5% and an inflation rate of 2%, used in all simulations. The research credit is 11.3% (see CRS Report R44522, *A Patent/Innovation Box as a Tax Incentive for Domestic Research and Development*, by Jane G. Gravelle). Note that these tables do not include land, which is not reproducible, and inventories, whose short lives make them likely relatively insensitive to the rates of return. Both are taxed at rates above the rates for other nonresidential structures (land at the statutory rate and inventories above the statutory rate).

Table 3 and **Table 4** combine the debt and equity investment using two different leveraging rates, one estimated by CRS (36%) and one used in CBO effective tax rate estimates (32%). Rates in either case are small under current law, ranging from -0.3% to 5.7% and 7.8%.[28] Under the temporary provisions of the new law they receive an overall subsidy, whereas under the permanent provisions they receive a small effective tax rate of 2% to 3%. The provisions for the assets that are probably of most concern with shifting of investment (i.e., equipment and nonresidential structures) would have taxes fall more significantly.

[28] The 7.8% rate is higher than the rates in the CBO international study discussed above. It seems likely that the higher rate is due to inclusion of R&D, but not other intangibles (only R&D intangibles are in the National Income Accounts) and the inclusion of inventories, which are taxed at higher rates. The CBO report with the 32% debt share is *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options*, December 18, 2014, at https://www.cbo.gov/publication/49817.

Table 3. Marginal Effective Tax Rates for Debt- and Equity-Financed Investment, 36% Debt Share

Asset	2017 Law With Bonus Depreciation (%)	2017 Law Without Bonus Depreciation (%)	New Law: Temporary Provisions (%)	New Law: Permanent Provisions (%)
Equipment	-0.9	11.1	-9.6	5.4
Public Utility Structures	-0.8	11.3	-9.6	5.8
Nonresidential Structures	19.2	19.2	10.7	10.7
Residential Structures	15.2	15.2	8.2	8.2
Intangibles				
Research	-116.3	-116.3	-95.4	-52.2
Advertising	-16.7	-16.7	-9.6	-9.6
Other	-16.7	-16.7	-9.6	-9.6
Total	**-0.3**	**5.7**	**-6.6**	**1.8**

Source: Congressional Research Service. See CRS Report R44638, *Corporate Tax Integration and Tax Reform*, by Jane G. Gravelle; and CRS Report R44242, *The Effect of Base-Broadening Measures on Labor Supply and Investment: Considerations for Tax Reform*, by Jane G. Gravelle and Donald J. Marples, for method of computation and assumptions.

Notes: The corporate statutory rate used for 2017 law is 34.14% to reflect the production activities deduction. The other assumptions and underlying data include a real discount rate for equity of 7%, a nominal interest rate of 7.5%, and an inflation rate of 2%, used in all simulations. The research credit is 11.3% (see CRS Report R44522, *A Patent/Innovation Box as a Tax Incentive for Domestic Research and Development*, by Jane G. Gravelle). Note that these tables do not include land, which is not reproducible, and inventories, whose short lives make them likely relatively insensitive to the rates of return. Both are taxed at rates above the rates for other nonresidential structures (land at the statutory rate and inventories above the statutory rate).

Table 4. Marginal Effective Tax Rates for Debt- and Equity-Financed Investment, 32% Debt Share

Asset	2017 Law With Bonus Depreciation (%)	2017 Law Without Bonus Depreciation (%)	New Law: Temporary Provisions (%)	New Law: Permanent Provisions (%)
Equipment	1.0	12.8	-8.4	6.5
Public Utility Structures	1.3	13.2	-8.4	6.9
Nonresidential Structures	20.8	20.8	11.7	11.7
Residential Structures	17.1	17.1	9.3	9.3
Intangibles				
Research	-107.6	-107.6	-90.9	-49.2
Advertising	-14.9	-14.9	-8.4	-8.4
Other	-14.9	-14.9	-8.4	-8.4
Total	**1.7**	**7.8**	**-5.4**	**3.0**

Source: Congressional Research Service. See CRS Report R44638, *Corporate Tax Integration and Tax Reform*, by Jane G. Gravelle; and CRS Report R44242, *The Effect of Base-Broadening Measures on Labor Supply and Investment: Considerations for Tax Reform*, by Jane G. Gravelle and Donald J. Marples, for method of computation and assumptions. The debt share is from Congressional Budget Office estimates. See CBO, *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options*, December 2014, at https://www.cbo.gov/publication/49817.

Notes: The corporate statutory rate used for 2017 law is 34.14% to reflect the production activities deduction. The other assumptions and underlying data include a real discount rate for equity of 7%, a nominal interest rate of 7.5%, and an inflation rate of 2%, used in all simulations. The research credit is 11.3% (see CRS Report R44522, *A Patent/Innovation Box as a Tax Incentive for Domestic Research and Development*, by Jane G. Gravelle). Note that these tables do not include land, which is not reproducible, and inventories, whose short lives make them likely relatively insensitive to the rates of return. Both are taxed at rates above the rates for other nonresidential structures (land at the statutory rate and inventories above the statutory rate).

Other Provisions Affecting Location of Investment

In addition to the basic domestic changes affecting investment, and captured in the preceding tables, other elements may affect the tax burdens on domestic relative to foreign investment.

Restrictions on Interest Deductions

One element is the tighter limit on the deductibility of interest. In order to explore how important this issue is, consider the revenue estimate in the first full year of $17.7 billion, which, assuming a 21% tax rate, accounts for 14% of net interest paid, according to the National Income Accounts (calculation excludes financial corporations).[29] The estimate increases about 54% after the income base no longer allows depreciation deductions, and would then be about 20% of interest. This provision thus appears to be significant. If interest is not deductible at the margin, the overall effective tax rates would be similar to the equity rates in **Table 1**. For these firms, the overall

[29] See Table 7.1 of the National Income and Product Accounts, at https://www.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=3&isuri=1&1921=survey&1903=288.

effective tax rate of 7.8% would rise to around 11% under the permanent provisions and fall to 3% for the temporary ones.

As a conservative illustration of the possible aggregate effect, **Table 5** shows overall tax rates at a 32% debt share, with 20% of the interest disallowed, which causes the overall tax rate under the new law to rise by about two percentage points relative to the tax rates computed in **Table 4**. The effects would likely be larger because more of the disallowed interest would have marginal effects.

Table 5. Marginal Effective Tax Rates for Debt- and Equity-Financed Investment, 32% Debt Share, 20% of Interest Disallowed Under New Law

Asset	2017 Law With Bonus Depreciation (%)	2017 Law Without Bonus Depreciation (%)	New Law: Temporary Provisions (%)	New Law: Permanent Provisions (%)
Equipment	1.0	12.8	-6.6	8.0
Public Utility Structures	1.3	13.2	-6.6	8.5
Nonresidential Structures	20.8	20.8	11.7	12.3
Residential Structures	17.1	17.1	9.3	10.9
Intangibles				
Research	-107.6	-107.6	-86.3	-45.9
Advertising	-14.9	-14.9	-8.4	-6.6
Other	-14.9	-14.9	-8.4	-6.6
Total	**1.7**	**7.8**	**-3.6**	**4.7**

Source: Congressional Research Service. See CRS Report R44638, *Corporate Tax Integration and Tax Reform*, by Jane G. Gravelle; and CRS Report R44242, *The Effect of Base-Broadening Measures on Labor Supply and Investment: Considerations for Tax Reform*, by Jane G. Gravelle and Donald J. Marples, for method of computation and assumptions. The debt share is from Congressional Budget Office estimates. See CBO, *Taxing Capital Income: Effective Marginal Tax Rates Under 2014 Law and Selected Policy Options*, December 2014, at https://www.cbo.gov/publication/49817.

Notes: The corporate statutory rate used for 2017 law is 34.14% to reflect the production activities deduction. The other assumptions and underlying data include a real discount rate for equity of 7%, a nominal interest rate of 7.5%, and an inflation rate of 2%, used in all simulations. The research credit is 11.3% (see CRS Report R44522, *A Patent/Innovation Box as a Tax Incentive for Domestic Research and Development*, by Jane G. Gravelle). Note that these tables do not include land, which is not reproducible, and inventories, whose short lives make them likely relatively insensitive to the rates of return. Both are taxed at rates above the rates for other nonresidential structures (land at the statutory rate and inventories above the statutory rate).

Effects of the International Provisions: Dividend Relief, GILTI, FDII, and BEAT

The international changes will likely affect the choice of investment location, although in a way that is difficult to quantify. The exemption of dividends combined with the deduction for a return on tangible assets under the GILTI will make investing in plants and equipment abroad largely exempt from U.S. tax on foreign-source income through foreign subsidiaries. Most evidence suggests that returns to investment abroad were subject to a relatively small residual rate of

around 3%. Thus, moving to a zero rate would not likely create a significant change in tax treatment of foreign earnings, which in prior law are reduced by deferral and cross-crediting.

Because of the formula approach to exempting the returns to tangible investments, tangible investments in assets with a lower return than the 10% rate specified will also reduce the scope of GILTI coverage, whereas those with a higher return will subject some of the income from the intangible asset to GILTI. The opposite effect occurs with FDII, where low-yield tangible investments will increase the FDII deduction (by increasing gross income by less than the deemed return), whereas high-yield tangible investments will reduce the FDII deduction.

The international provisions in general are aimed at making the location of intangibles in the United States more attractive than in past law. The returns are subject to the GILTI tax rate on a current basis, a subsidy is allowed for intangibles located in the United States but licensed abroad, and intangible returns earned abroad may also face a current tax without a foreign tax credit under BEAT. However, for economic activity, the concern is where intangibles are created. In this case, intangibles, to the extent they are subject to a lower statutory rate in the United States due to FDII, would experience even higher overall tax burdens through the loss of the benefits from debt finance, given expensing. That is, equity investment is not affected by the lower tax rate with expensing (which is always zero), but the lower tax rate reduces the subsidy for debt, making the overall subsidy smaller (which means a higher burden). With five-year amortization in the case of research and development, the benefit of the lower rate on equity finance would roughly offset the burden of the lower rate on debt.

Although a separate basket for GILTI would have reduced opportunities under the title passage rule to increase the foreign tax credit limit, that rule has been repealed in any case. The loss of tax benefits for exports may also encourage more production abroad.

Effects on the Location of Investment

Overall, it is unlikely that the location of investment will be significantly affected by the tax change. Equity investment in tangible assets, especially the temporary investments for equipment, could increase. These effects are much smaller when debt is included. Moreover, adding intangible assets leads to an even smaller differential. These differences narrow further when restrictions on the deductibility of interest are in effect. (Other international provisions are probably not important to the location of investment.)

The importance of capital flows to the economy would also be limited. First, the corporate capital stock, where the principal effects of the reductions in equity capital would matter, is only a share of the business capital stock, and an even smaller share of the total capital stock in the country (even aside from land). Corporations account for about 55% of tangible business assets and 60% of tangible and intangible assets. Multinational corporations are a subset of that corporate share. Economic forces limit the amount of capital that can be absorbed (which is constrained by labor resources available to combine with production), and in general, capital investments in different locations in the world are imperfect substitutes.[30]

Moreover, it is not clear that the capital stock in the United States would increase. First, debt-finance costs would also rise for the noncorporate sector. Moreover, if debt is more mobile than

[30] See CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle, which suggests a small (0.2%) increase in GDP when a change of a similar size is made, without allowing for the possibility of debt finance.

equity, the corporate-sector capital stock could contract, since lower tax rates, although making equity finance more attractive, make debt finance more costly.[31]

Finally, although the size is likely to be small even though the direction is uncertain, the effects are also likely to be offset by the lowering of corporate rates elsewhere in the world. Such a fall in rates occurred the last time the United States lowered its corporate rate.[32] Moreover, there have been indications of lowered corporate tax rates after the momentum toward a lower corporate tax rate began in the United States. In July 2017, Belgium announced a rate reduction from 33.99% to 25% by 2020. In September, France announced its rate, already planned to fall from 33.33% to 28% by 2020, would be reduced further to 25%.[33] China has adopted a tax holiday for foreign companies investing in certain sectors, Australia is considering a reduction from 30%, and Israel has recently reduced its tax rate from 24% to 23% and possibly more in the future.[34] Germany has agreed to phase out a 5.5% surtax on corporate and individual income.[35]

Preliminary observations from the first year after the tax change have found little evidence of a flow of capital into the United States from abroad; although there was a small increase in net capital inflows in 2018, such an increase is not out of line with historical fluctuations.[36]

Effects on Efficiency and Optimality

Will the tax change lead to a more efficient or optimal system? Generally, efficiency refers to rules that will maximize worldwide welfare, which requires allocating capital to its best uses. That objective, in turn, requires that investments face the same tax rate so that they equalize their pre-tax returns. Optimality would require the same rules if maximizing world welfare, but different rules would apply in maximizing U.S. welfare. The method that produces efficiency is called *capital export neutrality*, whereas the method that produces optimal treatment for outbound investment is called *national neutrality*.[37]

Referencing the CBO study cited earlier, investment in equipment was already favored in the United States relative to the rest of the world, and the tax changes increase that favoritism, particularly in the case of expensing, where the overall marginal tax rate is negative. In the case of buildings, however, the United States had higher tax rates than other countries, and lowering the rates moved toward more efficiency. Note that the international comparisons use a representative asset, and the nonresidential structures category in the previous tables is a composite. Considering industrial and commercial buildings that tax rate is approximately the statutory rate, so that buildings tax rates on equity would fall from around 35% to 21% (plus

[31] The possibility of lowering the corporate tax rate leading to a reduction in the U.S. capital stock was made by Harry Grubert and John Mutti, "International Aspects of Corporate Tax Integration: The Role of Debt and Equity Flows," *National Tax Journal*, vol. 47, no. 1 (1994), pp. 111-133.

[32] See CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle.

[33] Amanda Athanasiou, "Big Banks Detail Costs and Benefits of Tax Reform," *Tax Notes International*, February 19, 2019, pp. 741-744.

[34] Mindy Herzfeld, "Competition or Coordination: Responses to the Tax Cuts and Jobs Act," *Tax Notes International*, January 15, 2018, pp. 209-212.

[35] Stephanie Soong Johnston, "German Leader Vows No Tax Hikes, Wins Backing for Coalition Deal," *Worldwide Tax Daily*, February 27, 2018.

[36] See CRS Report R45736, *The Economic Effects of the 2017 Tax Revision: Preliminary Observations*, by Jane G. Gravelle and Donald J. Marples.

[37] See CRS Report RL34115, *Reform of U.S. International Taxation: Alternatives*, by Jane G. Gravelle, for a detailed discussion of the efficiency and optimality issues.

about 4 percentage points for state and local taxes), which would bring them to a 25% rate, which is very close to the remaining G-20 average for equity-financed buildings of 23.8%.

Optimal rules differ for outbound and inbound capital. For outbound capital (investments of U.S. firms abroad), taxes should be imposed by allowing a deduction for foreign taxes paid so that the return received by the United States (whether in the form of profits or taxes on profits) from domestic versus foreign investments is equalized. Moving to a largely territorial tax for investments in tangible assets would move further from that optimal goal. For inbound investment (investments by foreigners in the United States), the optimal tax is 1/E, where E is the elasticity of capital inflow with respect to the after-tax rate of return. That rate maximizes the benefit for the United States from foreign investors. Setting a lower tax rate might induce more equity capital, but it would also reduce the amount of tax collected in the United States (the earnings from the investment accrue to foreigners). For equity, the elasticity is probably less, around two, so the optimal tax is around 33%.[38] Since the effective tax was already below this optimal rate, lowering it further will likely lead to a less optimal system. In the case of debt, however, the system moves toward a more optimal one. The optimal tax rate on inbound investment is never less than zero, and by reducing the subsidy for debt, the system moves closer to an optimal one, even if the elasticity of debt inflows is infinitely large.

There are also welfare gains for the United States aside from international considerations that arise largely from the corporate rate reduction, due to the reduction of subsidies for debt, which also brings overall tax rates across asset types closer together.

In sum, therefore, as in the case of investment, the effects on efficiency and optimality are mixed, with gains in some cases and losses in others.

A Note on Cash Flow, Employee Bonuses, Investment, and Stock Buybacks

There were news reports at the end of 2017 and early in 2018 that companies were using the tax cut to increase employees' pay, primarily in bonuses.[39]

Economic theory suggests that the availability of cash, whether from the tax cut or from access to funds held abroad, should not lead to increased pay directly.[40] Since employee compensation is deductible, it is not affected by the change in the tax rate or cash flow, and a firm that is maximizing profits should pay its workers the same amount regardless of the tax rate or cash on hand. There is, however, an advantage in making planned pay raises while the 35% rate is still in effect (the lower rate applies for tax years beginning after December 31, 2017, and not all firms have tax years that match the calendar year, so some bonuses paid in 2018 would also be

[38] An elasticity is a percentage change in quantity divided by a percentage change in price. For a substitution elasticity it is the percentage change in relative quantities divided by the percentage changes in relative prices. For a review of the empirical evidence on the elasticity of substitution between domestic and foreign capital with respect to the after-tax rate of return, indicating that the value is around 3, see Jennifer C. Gravelle, *Corporate Tax Incidence, Review of General Equilibrium Estimates and Analysis: Working Paper 2010-03*, Congressional Budget Office, May 20, 2010, at https://www.cbo.gov/publication/21486. To transform a substitution elasticity that considers the relative quantities (dKd/Kd –dKf/Kf) where the first term is the percentage change in domestic capital and the second the percentage change in foreign capital stock, into an elasticity for the percentage change in the domestic capital stock, multiply by the foreign share of the worldwide capital stock, estimated to be approximately 70%, leading to an elasticity of 2.

[39] See, for example, Adam Shell, "List of Companies That Paid Bonuses or Boosted Pay," *USA Today*, January 11, 2018. This article identifies about $870 million in one-time bonuses. See also data posted on the Americans for Tax Fairness, which is tracking bonuses, stock buybacks, and other spending, at https://americansfortaxfairness.org/trumptaxcuttruths/.

[40] See Alan D. Viard, "Economic Effects of the Corporate Rate Reduction," *Tax Notes*, March 5, 2015, pp. 1393-1406.

deductible at the higher rate). Other explanations that have been made for the announced pay increases are that pay raises were already planned due to a tightening labor market (and new minimum-wage increases going into effect in 2018) and that tying them to the tax cut was a public relations measure (especially as many of the firms are in industries that are heavily regulated by the government).[41]

Employee wages could increase if investment increases the capital stock. Cash should not directly affect investment unless the firms were previously liquidity constrained, and U.S. firms in general already had large cash reserves as well as access to low-cost debt. Any effects on wages should come from the incentives to invest in the United States, an effect that happens slowly and, as indicated earlier, may be relatively small.

There is some evidence that much of the tax cut and cash flow is being used to repurchase shares, an action equivalent to paying dividends. Statistical studies following the 2004 repatriation holiday found that most of the repatriation was used for this purpose.[42] According to one source, firms have repurchased $290 billion in stock (compared to $6.7 billion in bonuses),[43] and financial analysts have estimated buybacks in 2018 of $650 billion and $800 billion.[44] Paying dividends or repurchasing shares is consistent with what economic theory suggests in the short term, that a tax cut would benefit shareholders. To the extent the cut induces investment, it would occur over time.

Preliminary data from the first year the tax change was in effect found little or no effect on worker bonuses or wages, but a significant amount of share repurchases, with worker bonuses accounting for $4.4 billion but share repurchases of $1 trillion. There is no indication of an overall surge in wages compared to increases in wages and salaries relative to GDP or history.

Profit Shifting

Two methods used to recognize more profit in low-tax jurisdictions than economic reality suggests are increased leveraging in high-tax countries and use of transfer pricing, primarily of intangible assets such as drug formulas, technological advances, and trademarks.

To shift profits through leveraging, firms locate their debt in high-tax countries, including the United States. This technique involves both U.S. multinational firms locating their debt in the

[41] Martha White, "Companies Are Announcing Raises and Bonuses, But is Trump's Tax Plan the Reason?" NBC News, January 23, 2018, at https://www.nbcnews.com/business/business-news/companies-are-announcing-raises-bonuses-trump-s-tax-plan-reason-n839871.

[42] See CRS Report R40178, *Tax Cuts on Repatriation Earnings as Economic Stimulus: An Economic Analysis*, by Donald J. Marples and Jane G. Gravelle.

[43] As of mid-February 2018, $170 billion in buybacks were announced. See Patti Domm, Market Insider, CNBC, February 15, 2018, at https://www.cnbc.com/2018/02/15/companies-buying-back-stock-at-record-pace-since-trump-tax-bill-may-aid-markets-comeback.html. For the $290 billion figure and a list, see "More Than $290 Billion in Share Buybacks," Senate Democrats, at https://www.democrats.senate.gov/goptaxscam (site visited May 1, 2018). See also Americans for Tax Fairness, Trump Tax Cut Truths, https://americansfortaxfairness.org/trumptaxcuttruths/; Matt Egan, "Goldman Sachs Warns Against Falling in Love with Stock Buybacks," CNN Money, April 26, 2018, http://money.cnn.com/2018/04/26/investing/stock-buybacks-goldman-sachs/index.html.

[44] These estimates are from Goldman Sachs and J. P. Morgan. See Jeff Cox, "Companies Projected to Use Tax Cut Windfall for Record Share Buybacks, JP Morgan Says," CNBC, March 2, 2018, at https://www.cnbc.com/2018/03/02/companies-projected-to-use-tax-cut-for-record-share-buybacks-jp-morgan.html. A survey of Morgan Stanley analysts predicted that firms would use 43% of the tax cut for buybacks and dividends, 19% for mergers and acquisitions, 17% for investment, and 13% for bonuses. See Editorial Board, "Well-Heeled Investors Reap the Republican Tax Cut Bonanza," *New York Times*, February 25, 2018, at https://www.nytimes.com/2018/02/25/opinion/investors-republican-tax-cut.html.

United States rather than abroad and foreign parents of U.S. subsidiaries locating debt in their U.S. subsidiaries.

The second method of profit shifting is through transfer pricing methods that determine the price associated with a transfer of goods and assets. The standard for transfer pricing is that goods and assets bought and sold between related firms should reflect arm's length pricing, that is, the price that would be paid by two unrelated firms. If a U.S. firm sells a good or asset to its foreign subsidiary for a price that is too low, profit in the United States is reduced and profit abroad is increased. Most of the transfer pricing issues arise due to intangible assets that are often unique, so there is not a market to observe arm's length prices. A variety of different methods are used to determine transfer prices. When an intangible asset is transferred abroad (such as the right to sell a mobile phone or to sell advertising for a search engine), there is sometimes a buy-in payment by the foreign subsidiary, followed by cost-sharing payments. The subsidiary pays for a share of the research costs in the United States in return for a share of the rights (to future technological advances).

Estimates have suggested that leveraging is responsible for about 25% of profit shifting, and pricing of intangibles is responsible for the remaining 75%.[45]

Profit shifting would likely be reduced with a lower tax rate. As noted earlier, the U.S. statutory tax rate was higher than the average rate weighted by GDP in the OECD countries, 27%, and the G20 countries, 28%. Lowering the U.S. rate to 21% and adding about five percentage points for state and local taxes (the additional state tax rate slightly higher than the 4% in prior law because of the lower saving from the federal deduction with the lower federal rate) places the U.S. statutory rate close to the middle of other countries, at least at current foreign tax rates. Most profit shifting is estimated to be associated with low-tax or no-tax countries where profits of multinationals are out of line with the size of the country.[46] In that case, rate reduction alone might not affect profit shifting.

Based on estimates of elasticities of profit location based on tax rate, the rate reduction alone restores between 0.5% and 5% of profits in the United States.[47] Since the revenue lost directly from the rate cut (given the corporate alternative minimum tax was repealed) was about 35% of profits, if the primary objective of the rate cut was to address profit shifting, the rate cut costs more than the potential revenue gain, by some estimates much more.

Other provisions would also affect profit shifting, although some are more difficult to quantify. They include the thin capitalization rules and BEAT for leveraging, and GILTI, FDII, and BEAT for transfer pricing. If the rate reduction may be termed a "carrot" (a tax cut to induce less profit shifting), FDII would also be a carrot, whereas the remaining provisions could be termed "sticks" (tax increases to reduce profit shifting).

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[45] Jost H. Heckemeyer and Michael Overesch, *Multinationals' Profit Response to Tax Differentials: Effect Size and Shifting Channels*, Center for European Economic Research, Discussion Paper 13-045, July 2013, at http://ftp.zew.de/pub/zew-docs/dp/dp13045.pdf.

[46] See CRS Report R40623, *Tax Havens: International Tax Avoidance and Evasion*, by Jane G. Gravelle, for a discussion.

[47] An elasticity is the percentage change in quantity divided by the percentage change in price, although the elasticities used here are semi-elasticities measuring the percentage change in quantity divided by the absolute change in the tax rate. These estimates represent a range of effects from studies: an elasticity of 1.848 with current profit shifting accounting for 19% of profits, an elasticity of 1.41 with a share of profits at 15%, and an elasticity of 0.8 with a share of profits at 5%. The formula for measuring the effects is EdtS, where E is the elasticity, dt is the tax change (set at 0.14), and S is the current share of U.S. profits being shifted, consistent with the elasticities. See Jane Gravelle, "Policy Options to Address Profit Shifting: Carrots or Sticks?" *Tax Notes*, July 4, 2016, pp. 121-134.

FDII therefore can be seen as the same as a rate cut but applicable only to domestic income and in proportion to exports. As an additional rate reduction it appears to be only around a percentage point (based on the size of revenue effects), although it would be more significant for exporters and for firms that have a lot of intangibles, as is its objective (to provide a similar tax rate on the return to intangibles in foreign and domestic locations).

GILTI is the other half of the base erosion provisions designed to encourage intangibles to remain in the United States and might be more effective per dollar of gain, because it has a very direct effect of raising taxes for firms that operate largely in tax havens (although the effect would be more targeted with a per-country foreign tax credit limit). Although there is still a gap between the tax rate under FDII and under GILTI (if a firm operated solely in a no-tax jurisdiction, its rate abroad would be 10.5% on an additional amount of profit shifted, whereas it would be 13.125% in the United States, with these rates rising to 13.125% and 16.406% after 2025) assuming both investments were to serve foreign markets.

If firms were investing abroad to manufacture and export to the United States as compared to manufacturing and selling in the United States, the GILTI rate would be considerably below the standard corporate tax rate of 21% (as the FDII would not come into play, and BEAT does not cover cost of goods sold).

The movement of intangibles and their associated profits might take some time, as moving existing intangibles back to the United States would incur a tax (a provision allowing those assets tax-free status was in the Senate bill but was eliminated in conference).[48]

Both the tightening in the thin capitalization rules and the inclusion of interest payments in the BEAT would limit the amount of profit shifting that might be achieved through interest deductions. A more effective method (although perhaps one with certain administrative challenges) may be to allocate interest within firms in a multinational group in proportion to the firm's share of earnings or assets. This provision was included in both the House and Senate bills but dropped in conference.

Overall, it appears the new provisions have taken significant steps to reduce the incentives for profit shifting.

Repatriation

The prior law's application of the deferral principle allowed a firm to delay taxation of its earnings in foreign-incorporated subsidiaries until the income was paid as a dividend to the U.S. parent company. This tax contributed to U.S. companies holding an estimated $2.6 trillion in unrepatriated earnings that could not be directly used for U.S. operations.[49] Concerns were raised that the inability to use these funds could reduce U.S. economic growth and job creation. As noted earlier in the discussion of investment location, however, the holding of funds abroad was unlikely to affect domestic investment.

After the assessment of the deemed repatriation tax in the 2017 tax revision, U.S. companies will have unrestricted access to previously unrepatriated funds. In addition, future overseas earnings

[48] For further discussion, see Isabel Gottlieb, "Will Tax Reform Bring Back Patents?" Bloomberg BNA *Daily Tax Report*, January 19, 2018.

[49] Institute on Taxation and Economic Policy (ITEP), "Fortune 500 Companies Hold a Record $2.6 Trillion Offshore," March 28, 2017, https://itep.org/fortune-500-companies-hold-a-record-26-trillion-offshore/.

will generally not be taxed when repatriated to the United States as a result of the dividend exemption.[50]

Preliminary evidence indicated a substantial repatriation following the act, but not of all the cash held abroad. In 2018, repatriations were $664 billion compared to amounts ranging from $144 billion to $158 billion in each of the three previous years.[51] Some of the deferred income abroad is not in cash, but in physical investments such as plant and equipment. A study by the Federal Reserve estimated about $1 trillion held in cash.[52] Thus about half of the cash held abroad appears to have been repatriated based on the increase in repatriations in 2018 and the estimate of $1 trillion in cash.

Inversions

Corporate inversions occur when U.S. firms reorganize their structure so that the "parent" element of the group is a foreign corporation rather than a corporation chartered in the United States. A main objective of these transactions is U.S. tax savings, and they involved little to no shift in actual economic activity. These tax benefits included earnings stripping in the U.S. operation (in part by leveraging), future operation under a territorial system, and finding ways to effectively repatriate earnings of foreign subsidiaries. Since 2004, U.S. policy (both enacted law and regulations) has attempted to limit the benefits of inversion transactions.

The anti-inversion provisions in the 2017 tax revision significantly reduce the tax incentives available for newly inverted firms, especially in the next 10 years, when inversion triggers a retroactive taxation of deemed repatriations at a 35% rate, rather than rates of 8% and 15.5%. After that time, the base erosion tax on cost of goods sold, the downward attribution rules, and the taxation of dividends to individual shareholders at ordinary rates make inversions less attractive. The restrictions on interest deductions under the tightened thin capitalization rules make loading the U.S. firm with debt less feasible, although there are currently regulations aimed at inverted companies that treat some related party debt as equity. These regulations are, however, scheduled for review and could be changed, potentially making the thin capitalization rules more important as an anti-inversion measure.

Other provisions in the new law would also make U.S. headquarters more attractive, including the lower corporate rate, the move to a territorial tax to the extent of the dividend exclusion, and FDII, although GILTI and BEAT would make a U.S. location less attractive.

Although the legislative tax changes made inversions less attractive, announced inversions had already substantially slowed following the regulatory changes implemented in 2014, 2015, and 2016, and aggregate data also indicated that foreign acquisitions of U.S. companies fell in 2016 and 2017.[53]

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[50] Portfolio investment will remain subject to U.S. tax when repatriated.

[51] See CRS Report R45736, *The Economic Effects of the 2017 Tax Revision: Preliminary Observations*, by Jane G. Gravelle and Donald J. Marples.

[52] Michael Smolyansky, Gustavo Suarez, and Alexandra Tabova, "U.S. Corporations' Repatriation of Offshore Profits," September 4, 2018, FEDS Notes, Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/econres/notes/feds-notes/us-corporations-repatriation-of-offshore-profits-20180904.htm.

[53] See CRS Report R45736, *The Economic Effects of the 2017 Tax Revision: Preliminary Observations*, by Jane G. Gravelle and Donald J. Marples.

Issues With International Agreements: Tax Treaties, WTO, and OECD Minimum Standards

Several legal scholars and practitioners have pointed out conflicts between the new law and current international agreements.[54] This section summarizes the current agreements and that debate.

Current Agreements

Bilateral Tax Treaties

The United States has bilateral tax treaties with approximately 65 countries that are intended to reduce the incidence of double taxation and prevent tax evasion.[55] Under these treaties, residents (not necessarily citizens) of foreign countries are taxed at a reduced rate, or are exempt from U.S. taxes on certain items of income they receive from sources within the United States. These reduced rates and exemptions vary among countries and specific items of income. Under these same treaties, residents or citizens of the United States are taxed at a reduced rate, or are exempt from foreign taxes, on certain items of income they receive from sources within foreign countries. Treaties contain a number of provisions affecting the sourcing and taxation of profits.

World Trade Organization

The World Trade Organization (WTO), established in 1995, succeeded the General Agreement on Tariffs and Trade (GATT, established in 1947), which was created to foster an open international framework. The WTO provides a mechanism to settle disputes on practices that affect trade.

The United States had, in the past, a dispute over a series of tax provisions that were struck by GATT and then the WTO as prohibited export subsidies. The first provision was found to be a prohibited provision and was replaced by a second that was in turn found to be prohibited, then replaced by a third, also found illegal (the Domestic International Sales Corporation, or DISC, enacted in 1971; the Foreign Sales Corporation, or FSC, enacted in 1984; and the Extraterritorial Income regime, or ETI, enacted in 2000). Following the last finding, where countries could have levied countervailing tariffs, the ETI provisions were repealed (in 2004).

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[54] See David Kamin et al., *The Games They Will Play: Tax Games, Roadblocks, and Glitches Under the New Legislation*, December 7, 2017, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3084187 and *The Games They Will Play: An Update on the Conference Committee Tax Bill*, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3089423; Reuven Avi-Yonah, *Beat It: Tax Reform and Tax Treaties*, University of Michigan Public Law and Legal Theory Research Paper No. 587, January 2018, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3096879, and *The Elephant Always Forgets, Tax Reform and the WTO*, University of Michigan, Public Law and Legal Theory Research Paper No. 585, January 18, 2018, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3095349; Alison Bennett, "Legislation Raises Tax Treaty Concerns for U.S. Multinationals," Bloomberg BNA, *Daily Tax Report*, December 14, 2017; Joe Kirwin, "EU Contemplates WTO Challenge to U.S. Tax Reform," Bloomberg BNA, *Daily Tax Repor*t, December 22, 2017; Stephanie Soong Johnston, "EU Commission Mulls 'All Options" in Wake of Final U.S. Tax Bill," *Worldwide Tax Daily*, December 26, 2017; Bret Wells, "Get With The Beat," *Tax Notes*, February 19, 2018, pp. 1023-1032; J. P. Finet, "WTO Challenges to Tax Reform's International Provisions Likely," *Tax Notes International*, December 11, 2017.

[55] For a list of countries with which the United States has income tax treaties, see https://www.irs.gov/businesses/international-businesses/united-states-income-tax-treaties-a-to-z.

Organization for Economic Cooperation and Development

Although the Organization for Economic Cooperation and Development (OECD), with a 34-country membership, has no special authority, the United States is a party to the organization, which provides many standards for tax practices, such as transfer pricing. Recently, the OECD has engaged in a project to reduce base erosion and profit shifting (BEPS).[56] One hundred and two countries including the United States have agreed to four minimum standards, one of which is countering harmful tax practices, a standard primarily aimed at patent boxes (regimes that provide lower tax rates on income from intellectual property).

The New Law: Issues with Tax Treaties, WTO, and the OECD BEPS Agreement

Tax Treaties and BEAT

There is some disagreement over whether BEAT violates tax treaties. The primary reason such a violation might occur involves nondiscrimination rules, which require the same deductions be allowed to residents and nonresidents, and might apply because BEAT taxes payments to foreign related partners but not domestic ones. However, BEAT does not disallow deductions but rather includes them in a minimum tax base, leaving this issue uncertain. In addition, it is unclear what sort of action could be taken, at least by EU member states, whose tax laws are constrained by EU agreements.

WTO, FDII, and BEAT

There is considerably more agreement that FDII is also a prohibited export subsidy under the WTO. There are also some technical reasons to see parts of BEAT as inconsistent with the WTO as a tax on imports. BEAT excludes cost of goods sold, but includes imports of depreciable property and costs of goods sold for firms that invert. These latter instances may be so rare or so unlikely (i.e., if the law virtually ends inversions) that the practical consequence could be limited.

OECD Standards and FDII

One of the minimum standards agreed to by the United States was countering harmful tax practices, including patent boxes located in countries where the activities to create intangibles were not performed. The regime created by FDII could be viewed as in conflict with that agreement, since there is no connection to the economic activity creating the income being located in the United States. According to Douglas Poms, Treasury's international tax counsel, the OECD's Forum on Harmful Tax Practices will soon assess whether FDII violates the minimum standard for preferential regimes.[57]

Concerns and Options in the New Tax Framework

During consideration of the tax legislation and after its enactment, numerous issues have been raised about the general system and about specific aspects of the new law, including GILTI, FDII,

[56] See CRS Report R44900, *Base Erosion and Profit Shifting (BEPS): OECD Tax Proposals*, by Jane G. Gravelle.

[57] Ryan Finley, "Online Platform Users Shouldn't Create a PE, US Official Says," *Worldwide Tax Daily*, March 28, 2018.

BEAT, and other provisions. This section discusses some of the more technical issues within the framework of the new law, but some lawmakers have proposed more basic changes.

Subsequent to the tax revision, Representative Doggett and Senator Whitehouse each introduced a bill entitled the "No Tax Break for Outsourcing Act" on February 27, 2018 (H.R. 5108, S. 2459), which would increase the GILTI rate to 21%, eliminate the deduction for the return on tangible assets, eliminate the deduction for FDII, treat foreign corporations that are managed and controlled in the United States as domestic corporations, treat inverted firms as U.S. firms when the shareholders of the former U.S. company own more than 50% of the shares, and limit interest deductions in the United States to the proportionate share of the firm's assets.[58] The last proposal (to allocate worldwide interest) was in both the House and Senate versions of H.R. 1 (in somewhat different form) but was not retained in the final legislation. The bill was subsequently introduced in the 116th Congress as H.R. 1711 and S. 780. Other current bills include some provisions relating to those discussed here, including The Stop Tax Haven Abuse Act (H.R. 1712, introduced by Representative Doggett, and S. 779, introduced by Senator Whitehouse), which included the allocation of interest provision and the treatment of firms managed and controlled in the United States as U.S. firms. S. 2140 (Senator Durbin), the Stop Corporate Inversions Act, would treat foreign corporations that are managed and controlled in the United States as domestic corporations and treat inverted firms as U.S. firms when the shareholders of the former U.S. company own more than 50% of the shares.

Many of the issues discussed in this section have been raised by many individuals discussing different aspects of the bill, both in conferences and in individual articles.[59] This section also discusses significant regulations that have been promulgated since enactment.

General Issues in the Move to a Territorial Tax and the Dividend Deduction

Some critics have expressed general concerns about the overall system and the move to a territorial tax that treats operations and owners differently.[60] The dividend deduction applies only to income of businesses organized as foreign corporations and not to branches. At the same time, elements of the new law make it costlier to incorporate a new business. The elimination of the

[58] See https://doggett.house.gov/media-center/press-releases/rep-doggett-sen-whitehouse-introduce-bill-end-tax-breaks-exporting-jobs. The allocation of interest in H.R. 5108 and S. 2459 is based on the U.S. domestic corporation's share of worldwide earnings before interest, taxes, depreciation, and amortization (EBITDA).

[59] Although some specific issues have particular references (including a number of articles from various publications by *Tax Analysts* reporting on tax conferences), the following are general sources for many of the points discussed in this section. Two reports coauthored by 13 law professors appeared during the course of the debate and after the conference report: David Kamin et al., *The Games They Will Play: Tax Games, Roadblocks, and Glitches Under the New Legislation*, December 7, 2017, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3084187, and *The Games They Will Play: An Update on the Conference Committee Tax Bill*, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3089423; Reuven Avi-Yonah, *Beat It: Tax Reform and Treaties*, University of Michigan Public Law Research Paper No. 587, March 22, 2018, at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3096879. A conference held by the International Tax Policy Forum and Institute and Georgetown Laws Institute for International Economic Law, "Can an Internationally Competitive Tax Protect Its Tax Base?" on February 2, 2018, featured many experts in international tax law who commented on the new tax regime. Some of the slides are posted at https://www.itpf.org/conferences.

[60] This discussion summarizes comments made in Mindy Herzfeld, "How Some Taxpayers Got Cut Out of The Tax Cuts and Jobs Act," *Tax Notes International*, January 22, 2018, pp. 277-281. It does not cover some of the narrower and technical points made, especially with respect to the tax treatment of foreign investors. The treatment of individuals under GILTI is also discussed in Martin Sullivan, "More GILTI than You Thought," *Tax Notes*, February 12, 2018, pp. 587-592.

active trade or business exception in Section 367(a)(3) of the tax code taxes transfers of assets used in a foreign branch (and increases recognition of gain when incorporating branches with losses). The additions of goodwill, going concern value, and workforce in place to the definition of intangibles and the increased IRS authority over transfer pricing will increase the value of assets being transferred.[61]

In addition, the system treats individual owners of foreign corporations and portfolio investors differently from corporations with 10% ownership. There is no deduction for dividends because the provision was enacted as an expansion of the intercorporate dividend deduction, although the repatriation tax applies to corporate and individual shareholders that have at least one U.S. corporate shareholder owning 10% of the firm. Thus individuals pay the repatriation tax, which can be viewed as a transition tax to move to a system with the deduction, although they do not benefit from dividend deduction.

GILTI is treated as Subpart F income so it will be imposed on individual shareholders, without the indirect foreign tax credits; in addition, they do not get the GILTI deduction, and income is taxed at ordinary rates (although in some cases they would be eligible for lower rates on qualified dividends). They are also not eligible for a FDII deduction.[62]

The sale of stock will not be eligible for a dividend deduction, so firms may be encouraged to sell the underlying assets abroad to be eligible for the lower GILTI rate.[63]

At the same time, at least with respect to the dividend deduction, the individual shareholder is the final taxpayer, whereas a corporation's earnings from abroad would be taxed again to shareholders if distributed as a dividend.

One technical point relating to the dividend relief proposal is that the legislation did not change the rules treating as a deemed distribution when CFC stock is pledged as security on a loan of the U.S. firm, or when the CFC directly guarantees the loan. In that case, such income would be subject to tax, although an actual dividend would be deductible. This provision was included in the House and Senate bill but not in the final legislation.[64]

GILTI

GILTI has been criticized by some for being too harsh and by some as not capturing enough income.

Perhaps the major concern that GILTI is too harsh involves the foreign tax credit. The law retains the existing rules for the allocation of deductions for purposes of the foreign tax credit limit. These rules allocate interest, R&D spending, and overhead to a narrowed GILTI foreign tax credit basket (which excludes a variety of foreign-source income, including royalties that may be associated with domestic research and development). Allocating too many deductions to foreign-

[61] See Alexander Lewis, "U.S. Tax Reform Bill's International Provisions Require Quick Action, Practitioners Say," *Tax Notes Today*, December 19, 2017.

[62] As with Subpart F, individuals are required to include GILTI but can't get the foreign tax credit. There are some restructuring possibilities or elections that may provide individuals with tax reductions. See Sandra P. McGill et al., "GILTI Rules Particularly Onerous for Non-C Corporation CFC Shareholders," McDermott, Will & Emery, January 30, 2018, at https://www.mwe.com/en/thought-leadership/publications/2018/01/gilti-rules-particularly-onerous-nonc-corporation.

[63] Alexander Lewis, "Taxpayers Should Prepare Now for GILTI and FDII," *Worldwide Tax Daily*, January 29, 2018.

[64] Winston and Strawn LLP, "Tax Reform: Impact on Lending," January 16, 2018, at https://www.winston.com/en/thought-leadership/tax-reform-impact-on-lending.html.

source income can cause GILTI to apply at a higher rate than 13.125%. In addition, there is no foreign tax credit carryback or carryforward, so that unused foreign tax credits are lost, and no credits are allowed for loss CFCs.[65] CFCs with losses also lose the tangible asset return exclusion, as well as foreign tax credits, and foreign tax credits of other CFCs are reduced to the extent that the loss offsets another CFC's income.[66]

The IRS has proposed and finalized regulations that relate to the allocation of expenses to the different types of foreign source income. The regulations rejected the argument made by some commentators to allocate no deductions (as the law retained the prior allocation rules), and allocated expenses to the GILTI foreign income basket as well as other baskets (such as Subpart F and the general basket that includes royalties). It did allow for adjustments for exempt or excluded income, which will reduce the amount of expenses apportioned to GILTI. The final regulations also included an exclusion for high-taxed income (a similar provision exists for Subpart F income) that is taxed at more than 90% of the U.S. rate (or 18.9%). This rule is referred to as a high-tax kickout rate.

The current system, therefore, provides a benefit for foreign source income by allowing deductions by the U.S. parent for expenses properly apportioned to foreign sources when that income is not taxed. Proposed regulations have indicated that research expenses will not be apportioned to GILTI, however.[67] The regulation allowing an allocation of deductions to the exempt portion of income as well as the taxable portion can result in low tax rates or negative tax rates on foreign-source income just as the allowance of deductions associated with deferred income could.

Some taxpayers argued that all income from CFC's with tax rates above 13.125% should be excluded from coverage under GILTI. The regulations, however, followed the pattern of the treatment of Subpart F income. The 90% high-tax kickout rate has been criticized as not having a basis in the statute (unlike the Subpart F provision that is explicitly stated in the law) and creating another exempt set of income like that for Subpart F.[68] Legislation has been introduced by Senators Ron Wyden and Sherrod Brown (S. 3280) to prevent the high-tax kickout rate for GILTI.

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[65] In addition to being discussed in the general sources mentioned earlier, many of these points about GILTI are made by Martin Sullivan, "More GILTI than You Thought," *Tax Not*es, February 12, 2018, pp. 587-592. Sullivan also notes that the GILTI deduction is reduced when GILTI and FDII exceed taxable income. Sullivan's objective in the article appeared to be explaining these features of GILTI rather than necessarily suggesting revisions. Others have made the point that the taxable income limit is to prevent GILTI and FDII deductions from sheltering other taxable income. See Lee Sheppard, "News Analysis: International Clawbacks and Minimum Taxes in Tax Reform," *Tax Notes*, January 1, 2018.

[66] Alexander Lewis, "Taxpayers Should Prepare Now for GILTI and FDII," *Worldwide Tax Daily*, January 29, 2018.

[67] See regulation REG-105495-19 at https://www.irs.gov/pub/irs-drop/reg-105495-19.pdf, which excluded an allocation to the GILTI basket. The change is justified in the regulations because research must be properly compensated for.

[68] Stephen E. Shay, "A GILTI High-Tax Exclusion Election Would Erode the U.S. Tax Base," *Tax Notes*, November 18, 2019, pp. 1129-1146; Testimony of Professor Rebecca Kysar, before the House Ways and Means Committee, *TCJA's Business Tax Provisions: Design Flaws and Undemocratic Implementation*, February 11, 2020, https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Kysar%20Testimony.pdf.

The regulations had not dealt fully with the allocation of research and development expenses,[69] but proposed regulations indicated these expenses would not be allocated to GILTI, based on the argument that taxpayers must be compensated in income for the research expenditures.[70]

Another criticism is that interest is offset first against deemed tangible income, so if a firm borrows to buy an intangible asset and has some net tangible income, the expense reduces the exemption and is, in effect, not deductible. An alternative would be to allocate interest in proportion to the shares of tangible deemed income and overall income before interest deductions.[71] At the same time, the treasury regulations have been criticized as contravening the statute by allowing the interest expense to be netted against all interest income and not just interest income of related parties.

Many critics note that GILTI is not focused on intangible income but on any residual income not associated with tangible property, and thus captures excess profits, along with income from finance or insurance.

Another issue is the basing of tangible property on cost less depreciation rather than fair market value. The depreciation rules in that case provide for slower recovery than those used for domestic equipment (although they are similar for structures), but basis is not adjusted for inflation, so it seems more likely that tangible property will be undervalued, making the tangible exemption too small. Using cost minus depreciation does, however, avoid disputes over fair market value.

Others argue that GILTI could be made stronger. Unlike some earlier proposals for a minimum tax to limit profit shifting under a territorial tax, which were to be imposed on a per country basis, GILTI allows cross-crediting over all countries, which can help shield income from the U.S. tax. Cross-crediting creates incentives to blend operations in high-tax and low-tax countries. Under cross-crediting, if a firm is paying tax, there is an incentive to shift operations from the United States to a country with a similar tax rate to generate foreign tax credits to shield income potentially taxable under GILTI.[72] That is, under these circumstances, investment in intangible assets abroad is subsidized.

Another criticism of GILTI is that the 10.5% tax rate would still apply to operations in a zero-tax-rate country, and to match the FDII rate, the tax rate should be set at 13.125% as a method to

[69] Preliminary Reg-105600-18, at https://www.irs.gov/pub/irs-drop/reg-105600-18.pdf; regulations were finalized as part of general regulations relating to GILTI, T.D. 9866, on June 21, 2019, https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-12437.pdf. These regulations are discussed, along with others, by Mindy Herzfeld, "Status Check on TCJA Guidance," *Tax Notes Federal*, July 29, 2019, pp. 654-658. See also Mindy Herzfeld, "Gaps in the TCJA Guidance," *Tax Notes International*, August 5, 2019, pp. 480-484; and Andrew Velarde, Jennifer McLoughlin, and Ryan Finley, "GILTI Regs Make Room for High-Tax Exclusion," *Tax Notes International*, June 24, 2019, pp. 1340-1342.

[70] Internal Revenue Service (IRS), REG-105495-19, "Guidance Related to the Allocation and Apportionment of Deductions and Foreign Taxes, Financial Services Income, Foreign Tax Redeterminations, Foreign Tax Credit Disallowance Under Section 965(g), and Consolidated Groups," 84 *Federal Register* 69124, December, 17, 2019, at https://www.federalregister.gov/documents/2019/12/17/2019-24847/guidance-related-to-the-allocation-and-apportionment-of-deductions-and-foreign-taxes-financial.

[71] Testimony of Professor Rebecca Kysar, before the House Ways and Means Committee, *TCJA's Business Tax Provisions: Design Flaws and Undemocratic Implementation*, February 11, 2020, https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Kysar%20Testimony.pdf.

[72] This incentive was pointed out early in the tax debate. Gene B. Sperling, "How Trump's Corporate-Tax Plan Could Send American Jobs Overseas," *The Atlantic*, November 1, 2017, at https://www.theatlantic.com/business/archive/2017/12/tax-jobs-overseas/547916/?wpmm=1&wpisrc=nl_daily202.

protect the U.S. tax base. (These rates apply initially, but subsequently the rate should be set at 16.406%.)

Others have argued that the deemed return on tangible income may be too high and is fixed rather than variable. Thus, it cannot reflect inflation or variations in real interest rates. An alternative is to set the rate at a riskless return plus a fixed risk premium. Another concern about the tangible investment exemption is that it will encourage low-margin tangible investments to move abroad to generate additional GILTI deductions, which might support setting the deemed return rate lower.

Finally, given the criticisms of FDII (with respect to violating the WTO), incentives to locate abroad could also be offset by eliminating both the GILTI and FDII deduction, while allowing a 100% foreign tax credit. Or, alternatively, FDII could be eliminated, and the foreign tax credits allowed for GILTI could be in proportion to the share of income taxed (i.e., 50% of foreign taxes allowed with a 50% deduction, and 62.5% allowed when the exclusion is 37.5%), so a residual tax would apply whenever the foreign tax rate was less than the U.S. corporate rate.

Some other, more technical issues have also been raised about GILTI.[73] One issue is that there is not a clear allocation method for attributing foreign taxes to GILTI.[74] Issues of the assignment of foreign taxes were addressed in the regulations discussed above.[75]

Options for Revision

Most of the revisions that might respond to criticisms are relatively straightforward, such as allowing foreign tax credit carryforwards (including for loss CFCs), allowing the same level of exemptions for GILTI as for FDII, apportioning interest deductions based on the share of tangible earnings, imputing income for tangible assets with a riskless return plus a risk premium, or disallowing GILTI and FDII deductions altogether or disallowing FDII and reducing foreign tax credits under GILTI. Others, such as apportioning deduction allocations across the relevant foreign tax credit baskets, using a per country limit, or valuing tangible assets at market value, may represent administrative and policy challenges.

FDII

FDII has attracted considerable criticism because it appears likely to violate WTO rules, to the point that some have recommended it be eliminated altogether. As noted above, the same relative tax treatment at home and abroad can be obtained by eliminating both the GILTI and FDII deductions.

Commentary has pointed to mechanisms for a firm to increase the benefits of FDII, such as round tripping (selling abroad to an independent firm and then reimporting products), selling unfinished

[73] Elizabeth J. Stevens and H. David Rosen, "GILTI Pleasures," *Worldwide Tax Daily*, February 28, 2018, express concern that the statute does not appear to assign the gross-up of taxes (taxes added back to after-tax income to produce after-tax income) to the GILTI basket. Andrew Velarde, "Is Treasury Reconsidering Interest Limitation Role on GILTI?" *Tax Notes International*, February 12, 2018, p. 663 suggests that the law is unclear about interaction between the interest limitation and whether it applies to CFCs for determining GILTI.

[74] See Lee Sheppard, "News Analysis: International Clawbacks and Minimum Taxes in Tax Reform," *Tax Notes*, January 1, 2018.

[75] Preliminary Reg-105600-18, at https://www.irs.gov/pub/irs-drop/reg-105600-18.pdf; regulations were finalized as part of general regulations relating to GILTI, T.D. 9866, on June 21, 2019, https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-12437.pdf. The assignment of income, deductions, and taxes to baskets begins at the lowest-tier subsidiary and then assigns to successively higher tiers.

goods to foreign manufacturers, or buying goods from a foreign supplier for resale abroad. It might also be possible to sell to an unrelated foreign firm with advertising and marketing requirements and price restrictions to accomplish round tripping. A firm could also buy from a foreign supplier for resale abroad.

Proposed regulations issued in March 2019 were aimed in part at establishing the sales were foreign. For example, the regulations required that sales of property (excluding intangibles) are for foreign use only—if they are not subject to domestic use within three years of manufacture, assembly, or processing outside the United States prior to domestic use. No sales to unrelated domestic parties will qualify even if destined for use abroad. Intangible property is for foreign use only if the end users are outside the United States.[76]

FDII also encourages more high-margin tangible investment in the United States to increase the base for FDII (just as GILTI encourages low-margin manufacturing abroad). At the same time, FDII would be available to firms with no manufacturing or employees in the United States.

As indicated above, one of the major concerns about FDII is that it would probably violate the WTO rules against export subsidies. FDII might also be viewed abroad as a harmful tax regime (similar to some patent boxes), although it might be noted that its objective is to remove tax as a factor in locating intellectual property, as is the case of the OECD BEPS-compliant patent boxes. However, FDII has a mechanical rule rather than being based on transfer pricing and no nexus requirement (i.e., no direct connection against the cost of developing the intangible and revenue, and thus may be noncompliant).[77] Germany also has a provision for a royalty barrier that disallows a deduction for royalties paid to related firms that benefit from noncompliant patent box regimes.[78] Loss of a deduction for royalties would more than offset the benefit of FDII in that case.

Options for Revision

As noted under the discussion of GILTI, the potential for FDII violating WTO as an export subsidy had already led some observers to argue that FDII should never have been enacted. Bringing together tax rates for U.S. and foreign locations could also be reached by eliminating both the FDII and GILTI deductions, as noted in the section on GILTI. If GILTI were also imposed on a per-country basis, the incentive for locating intangibles abroad rather than in the United States would largely be eliminated, especially now that the United States has tax rates at or below those of most developed countries. Revenues might be used for other purposes (for example, allowing intangibles to be brought back to the United States without paying tax, a provision originally contained in the Senate version of H.R. 1). A related option would be to restrict both GILTI and FDII treatment to tax havens or low-tax countries.

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[76] REG-104464-18, Issued March 6, 2019, at https://www.federalregister.gov/documents/2019/03/06/2019-03848/deduction-for-foreign-derived-intangible-income-and-global-intangible-low-taxed-income. See also Mindy Herzfeld, "Status Check on TCJA Guidance," *Tax Notes Federal*, July 29, 2019, pp. 654-658, Mindy Herzfeld, "Locating Sales: FDII Regs Address Questions OECD Workplan Must Answer," *Tax Notes International*, June 24, 2019, pp. 1281-1285. See also Julia Ushakova Stein, "Proposed FDII Regulations Bring Some Clarity," *Tax Notes International*, April 8, 2019, pp. 147-151.

[77] "Taxpayers Should Prepare Now for GILTI and FDII," *Worldwide Tax Daily*, January 29, 2018. For a discussion of the OECD BEPS initiative, see CRS Report R44900, *Base Erosion and Profit Shifting (BEPS): OECD Tax Proposals*, by Jane G. Gravelle. Note that the United States agreed to four minimum BEPS standards, among them harmful tax practices, which would include patent boxes.

[78] Robert Goulder, "Achtung! U.S. Tax Reform Stumbles Over German Royalty Barrier," *Tax Notes International*, January 22, 2018, pp. 375-378.

Another option is to make FDII elective so that if U.S. firms face retaliation from countries denying royalty deductions, they could have an option to forgo the deduction (an election that is country-by-country would provide more flexibility).

Proposals introduced in the past to move to a territorial system would have provided reduced rates on royalties, which may or may not violate the BEPS agreement, but probably would not have been viewed as an export subsidy. They were proposed for a different purpose, to provide relief from firms that had formerly shielded active royalties from the U.S. tax through excess foreign tax credits, based on the expectation that foreign tax credits would largely disappear. Since the United States retains significant taxation abroad with foreign tax credits, one option would be to add active royalties back to the foreign tax credit basket that contains GILTI.

Finally, FDII relies, as does GILTI and BEAT, on a formulaic treatment. Formulas simplify the tax law and reduce disputes with the tax authorities, but a move away from a formulaic treatment might allow FDII to be redesigned to be BEPS compliant by establishing nexus. And if it were limited to royalties it might also avoid violating both BEPS and WTO.

BEAT

BEAT was aimed at profit shifting out of the United States via outbound payments and may be seen as particularly targeted to U.S. subsidiaries of foreign parents (although it applies to any related firm payments). For example, a U.S. subsidiary of a foreign parent might pay excessively large royalties for rights to use intangible assets as well as higher than arm's length prices for goods and services, while also having more of the debt and interest deductions, all with the objective of minimizing income subject to U.S. tax (which was perhaps a greater issue when the United States had a 35% tax rate).[79]

Many comments have been made about the lack of a credit for foreign taxes under BEAT. BEAT might therefore be triggered for companies that have a lot of foreign-source income from high tax countries along with relatively modest base erosion payments (enough to trigger BEAT). In that case, BEAT acts primarily as a tax on foreign-source income rather than achieving the objective of limiting profit shifting through outbound payments.

BEAT also excluded cost of goods sold from its base (except for surrogate firms[80] that inverted after November 9, 2017), along with the exclusion for services if valued at cost. Both treatments have led to some criticism. By completely excluding cost of goods sold, it is possible to effectively avoid including royalties in the base by embedding them in inventory. That is, when a U.S. firm is paying a foreign related firm from tangible property to sell and also paying a royalty for distribution rights or rights to use a logo, the royalty could be eliminated and the price of the goods increased. Thus, royalties will be taxed only if separated, or for firms that do not keep inventory. Other planning possibilities may be associated with the exclusion of costs of goods sold, including supply chain restructuring.[81]

[79] A number of uncertainties, including measuring gross receipts and defining the related group, are discussed in Jasper L. Cummings, "Selective Analysis: The BEAT," *Tax Notes*, March 26, 2018.

[80] These are firms that inverted and are not taxed as U.S. firms; these would be firms with between 60% and 80% of ownership.

[81] Planning possibilities arising through the exclusion of cost of goods sold have been discussed in the general comments referenced earlier, and also by Bret Wells, who first proposed the general idea of taxing payments to related parties. See "Get With The Beat," *Tax Notes*, February 19, 2018, pp. 1023-1032.

An issue of extensive debate is whether the cost component of services with a markup can be excluded.[82] The statute states that services using the service cost method with no mark-up can be excluded as a base erosion payment. Some see that and other relevant information from the legislative history as indicating that any service with a markup, whether eligible for the cost method or not, would be included in BEAT in its entirety. Others argue that only the markup would be included.

Proposed regulations issued in December 2018 indicated that the cost of services under the service-cost method would be excluded from BEAT even if there is a mark-up. The regulations did not provide relief, and perhaps could not given the statutory language, for the inclusion in the base of GILTI without a foreign tax credit.[83]

The proposed regulations also provided rules relating to financial institutions. One rule that has received particular attention is the exclusion of payments with respect to total loss-absorbing capacity (TLAC) required by the U.S. Federal Reserve. Payments of interest to foreign banks (generally parents of U.S. subsidiaries) that have made loans to cover TLAC would be excluded from BEAT.[84] Final regulations issued in December 2019 expanded that treatment to branches, but also required the payments to be excluded from the denominator of the base when

[82] See Lowell D. Yoder et al., "The New Base Erosion Minimum Tax," McDermott, Will and Emery, January 17, 2018, at https://www.mwe.com/en/thought-leadership/publications/2018/01/the-new-base-erosion-minimum-tax; Andrew Velarde, "Failing BEAT's Services Cost Method Exception Could Cost Big," *Tax Notes International*, January 29, 2018, pp. 419-421 reports on a District of Columbia Bar Community of Taxation event hosted by Jones Day in Washington, DC. The Velarde article notes that tax counsel for the House Ways and Means Committee Loren Ponds indicated that the whole payment is included, as did Jennifer Acuna, counsel for the Senate Finance Committee. David Noren of McDermott, Swill & Emery said some legislative history supports only the markup being included. Marty Sullivan, "Economic Analysis: Can Marked-Up Services Skip the BEAT," *Tax Notes*, February 5, 2018, pp. 705-709 argues that services with a markup will be taxed in full, but Manal Corwin et al., "A Response to an Off-Beat Analysis," *Tax Note*s, February 12, 2018, pp. 933-936 said that services cost will be excluded even if a markup used. Ryan Finley, "BEAT Clear on Markup Question, Former Treasury Official Says," *Worldwide Tax Daily*, February 16, 2018, reports that Mike McDonald of Ernst and Young and formerly of the Treasury Department indicates the cost component can be excluded even if the component eligible for services is required to be marked up. Alexander Lewis, "Officials Differ on Importance of BEAT Legislative History," *Tax Notes Today*, February 16, 2018, reporting on the same conference discusses a dispute about whether a colloquy between Sens. Hatch and Portman on the Senate floor on December 1, 2017, might justify a deduction for the cost component and should be considered part of the legislative history. Mark Prater, staff member of the Senate Finance Committee, said that the Conference Report makes it clear that the exclusion applies only to services with no markup. Barbara Angus, staff member of the Ways and Means Committee, said the colloquy should be considered, but the article does not indicate that she took a position. Martin Sullivan, "Marked-Up Services and the BEAT Part II," *Tax Notes*, February 26, 2018, pp. 1171-1175, responding to the previous critique of his earlier article by Manal Corwin et al., argues the entire payment is taxed if it contains a mark-up. In a related discussion at the earlier conference, Andrew Velarde, "Failing BEAT's Services Cost Method Exception Could Cost Big," *Tax Notes International*, January 29, 2018, pp. 419-421 also reports on a discussion about whether tax accounting could be changed to treat services the same as inventory (as a reduction in gross receipts) allowing services to be excluded under BEAT. This issue was raised by Viva Hammer, staff member of the Joint Committee on Taxation, but David Noren indicated that a subcontractor service fee was in the scope of BEAT. Joseph Calianno of BDO USP LLP argued that economically similar transactions should be treated the same, but Kevin Nichols, from the Treasury Office of International Tax Counsel, indicated that the tax code's existing rules on inventory should be referenced and do not include services in cost of goods sold.

[83] REG-104259-18, at https://www.irs.gov/pub/irs-drop/reg-104259-18.pdf. See Mindy Herzfeld, "Status Check on TCJA Guidance," *Tax Notes Federal*, July 29, 2019, pp. 654-658. This article indicated that the regulations had created more confusion by including noncash payments in nonrecognition transactions to BEAT.

[84] This provision was identified as one that among those highlighted in a *New York Times* article by Jesse Drucker and Jim Tankersley, "How Big Companies Won New Tax Breaks From the Trump Administration, December 30, 2019, https://www.nytimes.com/2019/12/30/business/trump-tax-cuts-beat-gilti.html.

determining whether a firm met the BEAT threshold.[85] Critics have also identified this regulation as one that does not have a basis in the statutory language.[86]

Proposed regulations issued December 6, 2019, allow a taxpayer to choose to forgo deductions to reduce BEAT payments below the threshold.[87]

Issues have been raised about whether individual payments will be aggregated, an issue important to financial institutions (i.e., whether interest payments will be assessed on a net or gross basis), applying to other payments as well (for example, where a services hub pays for foreign related party services but also receives a payment for services provided to foreign related parties).[88] The final regulations did not allow netting unless the law otherwise specifically permits it.[89] There are related issues about the extent to which BEAT applies to ordinary transactions. Some have noted that BEAT includes nonabusive commercial transactions such as repos (short-term repurchase agreements for securities) and securities lending but not derivatives. Some have expressed concerns that routine lending between groups thus may be penalized. BEAT can have important effects on intragroup interest payments made by banks, securities dealers, and other regulated financial intermediaries. Firms may also try to replace intragroup debt with leases, convertible debt, or short-term debt.[90]

The final regulations also allowed for BEAT payments' exclusion for transactions that are not recognized through reorganizations, perhaps in part to not discourage movement of intellectual property back to the United States, and treated partnerships as the aggregation of partnerships rather than a single entity for purposes of applying the BEAT to payments.[91]

There are also no look-through rules to the final suppliers. For example, if a services payment is made to a related party that in turn subcontracts with an unrelated party for part of the services, the entire payment to the related party would be included in the base (that is, there is no recognition that part of the services were supplied by an unrelated party). Lack of a look-through rule would encourage the domestic corporation to make separate contracts with the unrelated party to minimize the amount of payment included in BEAT.[92]

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[85] T.D. 9885, December 2, 2019, https://www.irs.gov/irb/2019-52_IRB.

[86] Testimony of Professor Rebecca Kysar, before the House Ways and Means Committee, *TCJA's Business Tax Provisions: Design Flaws and Undemocratic Implementation*, February 11, 2020, https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Kysar%20Testimony.pdf.

[87] IRS, REG-112607-19, "Additional Rules Regarding Base Erosion and Anti-Abuse Tax," 84 *Federal Register* 67046, December 6, 2019, at https://www.federalregister.gov/documents/2019/12/06/2019-25745/additional-rules-regarding-base-erosion-and-anti-abuse-tax.

[88] According to some experts, it appears that interest will be included on a gross basis, which could produce significantly tax liability under BEAT for banks. See Lowell D. Yoder et al., "The New Base Erosion Minimum Tax," McDermott, Will and Emery, January 17, 2018, at https://www.mwe.com/en/thought-leadership/publications/2018/01/the-new-base-erosion-minimum-tax; Yalman Onaran, "How Trump's Tax Overhaul Could Hit Big Foreign Banks," Bloomberg, December 29, 2017, at https://www.bloomberg.com/news/articles/2017-12-29/trump-s-tax-overhaul-may-punish-foreign-banks-with-u-s-units.

[89] See Lee A. Shepard, "Troubleshooting the Final BEAT Regulations," *Tax Notes*, January 6, 2020, pp. 9-20.

[90] See Lowell D. Yoder et al., "The New Base Erosion Minimum Tax," McDermott, Will and Emery, January 17, 2018, at https://www.mwe.com/en/thought-leadership/publications/2018/01/the-new-base-erosion-minimum-tax; Lee A. Sheppard, "Corporate Borrowing After Tax Reform," *Tax Notes*, January 29, 2018, pp. 565-69, reporting on a conference on BEAT and interest restrictions. See also Lee A. Sheppard, "News Analysis: Can a DISC Beat?" *Tax Notes*, March 5, 2018, pp. 1312-1319. The last article also discusses the possibilities of avoiding BEAT by setting up an IC-DISC (an interest charge domestic international sales corporation) to receive payments.

[91] See Lee A. Shepard, "Troubleshooting the Final BEAT Regulations," *Tax Notes*, January 6, 2020, pp. 9-20.

[92] Lowell D. Yoder et al., "The New Base Erosion Minimum Tax," McDermott, Will and Emery, January 17, 2018, at

Another criticism of BEAT is that it has too high a threshold ($500 million in revenue) for applicability, an amount that is 10 times the size of the threshold for the Treasury regulations aimed at earnings stripping.[93]

A general criticism of BEAT is that it is not targeted to abuse but simply captures all payments of a certain type (which may be a reason it is incompatible with international agreements).[94]

Moreover, because it is a minimum tax, it is most likely to apply to firms with thin margins, that is, with a lot of costs relative to profits, since a large amount of deductible base erosion payments compared to taxable income leads to effects of BEAT.[95]

Options for Revision

There are a number of revisions to BEAT that might be considered, some that lose revenue and some that raise revenue. Most follow from the various issues that have been raised. These might include allowing a foreign tax credit, and including payments for goods but allowing a deduction for the cost component (which would address the embedding of royalties), with a parallel treatment for services.

Interest payments might be removed from the BEAT coverage, substituting a worldwide allocation of interest (that is, allowing a U.S. firm to deduct only the share of interest in the United States consistent with its share of worldwide income or assets). Such a provision was originally in both the House and Senate versions of H.R. 1 and was dropped in conference.

A more general proposal for BEAT is to restrict the tax to payments to tax havens or low-tax countries. Another approach is to substitute stricter transfer pricing rules for BEAT.

Thin Capitalization

A number of comments have been made about ways to avoid the proposed interest restrictions. One possibility is that financial institutions that tend to have positive net interest can lease assets, and the rental payments on those leases would be deductible. Other possibilities are to substitute floating-rate debt that has lower interest rates for fixed-rate debt along with a hedge.[96] Firms affected can also make the choice to borrow outside of the United States or to issue preferred equity.

Although thin capitalization rules are applied generally, an important target is multinational firms where the incentive to locate interest deductions in higher-tax countries has been an issue. A provision more specifically targeted to international profit shifting that was in addition to the general thin capitalization rules, providing a restriction on the U.S. firm's share of debt (based on

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https://www.mwe.com/en/thought-leadership/publications/2018/01/the-new-base-erosion-minimum-tax. See also Lee A. Shepard, "Troubleshooting the Final BEAT Regulations," *Tax Notes*, January 6, 2020, pp. 9-20 for a discussion.

[93] Bret Wells, "Get With The Beat," *Tax Notes*, February 19, 2018, pp. 1023-1032. The Treasury press release from April 4, 2016, regarding the new regulations is at https://www.treasury.gov/press-center/press-releases/Pages/jl0405.aspx. Wells also indicates that BEAT plus the interest deduction limits make these regulations unnecessary, although they would apply to smaller firms that are not affected by BEAT.

[94] See Stephanie Soong Johnston, "EU Commission Mulls 'All Options' in Wake of Final U.S. Tax Bill," *Tax Notes*, December 26, 2017, p. 60.

[95] This point is made by James P. Fuller and Larissa Neumann, "U.S. Tax Review," *Tax Notes International*, February 5, 2018, pp. 533-547.

[96] Lee A. Sheppard, "Corporate Borrowing After Tax Reform," *Tax Notes*, January 29, 2018, pp. 565-69.

either a measure of income or assets), was contained in both the House and Senate bills but not included in the final version.[97]

As noted earlier, the thin capitalization rules are coordinated with BEAT by treating disallowed interest as associated first with unrelated party and net operating losses (NOLs), a provision that strengthens the effect of BEAT.

One uncertainty is whether GILTI will be included in the earnings base, which includes items attributable to the taxpayer's business, since GILTI is not associated with the domestic business.[98] Proposed regulations indicate that GILTI will be included in income, but the deduction for both FDII and GILTI will reduce taxable income. The taxable income limitation will not affect taxable income.[99]

Options for Revision

A major option that may be considered is to restore the worldwide interest allocation measure, probably in the form of an allocation based on income.

Deemed Repatriation Tax

A number of comments have been made concerning the deemed repatriation, which imposes a tax of 15.5% on cash equivalents held abroad and 8% on other unrepatriated earnings. One concern is that the proposed definition of cash equivalent is overly broad.[100] Under Treasury Notice 2018-07,[101] the IRS stated that it intends to treat as cash a number of financial instruments—such as options contracts, futures contracts, and non-bona fide hedging transactions—held overseas and tax them at 15.5%. Commentators have questioned whether this treatment is overly harsh, as some of these financial instruments may not be liquid or may serve a nonspeculative business purpose.

A second concern is that the downward attribution rules may unintentionally result in the inclusion of income in the deemed repatriation tax.[102] A reading of the 2017 tax revision legislative language along with the changes in the downward attribution could increase the number of taxpayers being defined as a U.S. shareholder of a CFC (and subject to the deemed repatriation tax) above the level intended by Congress, according to the American Institute of Certified Public Accountants (AICPA).

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[97] Arguments have been made that the asset basis used in the Senate version would be difficult to implement because of lack of data. See Robert Goulder, "Tax Reform and the Desirability of Interest Barriers," *Forbes*, December 16, 2017, at https://www.forbes.com/sites/taxanalysts/2017/12/16/tax-reform-and-the-desirability-of-interest-barriers/#4c93cc914e1c.

[98] Raymond Wynman and Andrew Wai, "Interest Expense Limitation and the New I.R.C. § 163(j): Not Just a Foreign Concept Anymore," February 13, 2018, https://gtmtax.com/knowledge/interest-expense-limitation-new-i-r-c-%C2%A7-163j/.

[99] REG-106089-18, https://www.irs.gov/pub/irs-drop/REG-106089-18-NPRM.pdf.

[100] Alison Bennett, "Repatriation Tax on Derivatives: Hard on Financial Companies," *Daily Tax Report*, January 10, 2018.

[101] The full notice can be viewed at https://www.irs.gov/pub/irs-drop/n-18-07.pdf.

[102] Andrew Velarde, "AICPA Lobbying for Downward Attribution Transition Tax Relief," *Tax Note International*, March 19, 2018.

Another concern that has been raised is the dates used to calculate the base for the deemed repatriation tax.[103] Specifically, setting the base as the higher measured base on two testing dates, (November 2, 2017, and December 31, 2017) could result in an overstatement of cash positions (subject to the higher 15.5% tax rate) if tax expenses incurred during the year were not booked prior to the earlier testing date or if cash was transferred abroad (via a loan from a U.S. parent) for a pending acquisition. This issue, however, was recently addressed in IRS guidance providing that foreign taxes would be allocated between the two portions of the tax year (through November 2, 2017, and to the period following ending on December 31, 2017).[104]

Another issue related to the testing dates is the effect on taxpayers that use a different tax year than the calendar year (such as Microsoft, with a year ending on June 30, or Apple, with a year ending on September 30). The measuring point for determining the aggregate cash position is greater than the average of the end of the two taxable years ending before November 2, 2017, or the end of the last tax year beginning before January 1. Since the dividend exclusion takes effect on January 1, 2018, these firms can avoid additional cash accumulations by paying out any increase as dividends.[105]

Some individuals will likely be subject to the deemed repatriation tax, as a result of owning 10% or more of a foreign corporation, though they do not appear eligible to claim foreign tax credits.[106] Finally, the constitutionality of the deemed repatriation has been questioned by a set of researchers.[107]

Options for Revision

The legislation provides the Secretary with the authority to define cash equivalents. The basic idea was to distinguish liquid (cash and its equivalents) and illiquid (e.g., plant and equipment) assets. Drawing the line with respect to financial assets is complex. For example, the Treasury guidance excluded bona fide hedging transactions (which have the purpose of reducing risk). The regulatory process is ongoing, and although Congress could define specific assets by legislation, a regulatory approach is more flexible.

Limiting the downward attribution rules to only corporations may be an appropriate way to address the scope of the rules if they were primarily introduced to limit corporate inversions.

Another option is to generally revisit the treatment of individual shareholders under the deemed repatriation tax as well as under other rules (such as GILTI), especially when foreign tax credits are not allowed.

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[103] Letter from Pamela Olson, PriceWaterhouseCoopers, to Dana Trier, Esq., Treasury Deputy Assistant Secretary-Tax Policy, February 5, 2018; and Ryan Finley, "Treasury Has Limited Authority on Transition Tax, Officials Say," *Worldwide Tax Daily*, February 27, 2018.

[104] IRS Notice 2018-26, April 2, 2018, https://www.irs.gov/pub/irs-drop/n-18-26.pdf.

[105] See Stephen E. Shay, "Treasury Can Close a Potential Loophole in the Treatment of Deferred Foreign Income in the Tax Cuts and Jobs Act—Will It Act?," December 26, 2017, at https://dash.harvard.edu/bitstream/handle/1/34596007/Shay_12_26_17.pdf?sequence=1; Lynnley Browning, "Tax Law Quirk Could Help Apple and Microsoft Lower Their Bills," *Bloomberg*, April 3, 2018.

[106] Lee A. Sheppard, "News Analysis: Individuals and the Repatriation Tax," *Tax Notes Today*, March 12, 2018; Letter from Meyer H. Fedida and Daniel I. Hanna to Editor, *Tax Notes Today*, March 5, 2018; and Charles M. Bruce, *Tax Reform Bill (H.R. 1) and Americans Abroad: What Happened? What's Next?* American Citizens Abroad, December 22, 2017, at https://www.americansabroad.org/tax-reform-bill-hr1-and-americans-abroad-what-happened-whats-next/.

[107] Mark E. Berg and Fred Feingold, "The Deemed Repatriation Tax-A Bridge Too Far?" *Tax Notes*, March 8, 2018.

The issue of two testing dates might be addressed with a facts and circumstances consideration of any cash movements and investments (in assets or acquisitions).

The transition tax was the subject of numerous notices regarding the calculation of the transition tax, with proposed regulations issued in late 2018 and final regulations in February 2019. An important issue in the regulations was defining cash and noncash assets in certain circumstances, and the regulations did not include assets in inventory that may be viewed as liquid as cash.[108]

Anti-Inversion Rules

The 2017 tax revision changes in attribution rules are likely to result in more CFCs than under prior law.[109] Specifically, with downward attribution of the shares of the foreign subsidiary to the U.S. subsidiary, the foreign subsidiary becomes a CFC, and the U.S. shareholder could be subject to the deemed repatriation tax. Although it is thought that the change in the attribution rules was intended to block decontrolling transactions made after an inversion, commentators expect a broader reach to other corporate structures unrelated to inversion transactions.[110] In addition, certain CFC income will also likely be included as income for the deemed repatriation tax due to the downward attribution rule.

Although the new law included some anti-inversion measures proposed in the past (such as the thin capitalization rules) as well as other measures to restrict inversions, the new law did not include other measures proposed in the past (and currently in H.R. 5108 and S. 2459), such as treating firms that merge with 50% ownership and/or firms with 25% of business income in the United States, or firms managed and controlled in the United States as U.S. firms.

Options for Revision

As noted above, Congress might consider whether to revisit the scope of the downward attribution rules. Additional measures to discourage inversions might be considered, including proposals described above and codifying the regulations treating certain related party interest as equity.

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[108] T.D. 9846, at https://www.federalregister.gov/documents/2019/02/05/2019-00265/regulations-regarding-the-transition-tax-under-section-965-and-related-provisions. See also See Mindy Herzfeld, "Status Check on TCJA Guidance," *Tax Notes Federal*, July 29, 2019, pp. 654-658; Andrew Velarde, "No Apparent Bombshells in Final Transition Tax Regs," *Tax Notes International*, January 21, 2019, pp. 277-279; and Andrew Velarde and Alexander Lewis, "Transition Tax Regs Offer Limited Relief on big-Ticket Items," *Tax Notes International*, January 21, 2019, pp. 274-276.

[109] Lee A. Sheppard, "News Analysis: Corporate Borrowing After Tax Reform," *Tax Notes Today*, January 29, 2018.

[110] Jasper L. Cummings, "Selective Tax Act Analysis: Subpart F and Foreign Tax Credits," *Tax Notes*, January 29, 2018. See also Jeffrey L. Rubinger and Summer Ayers LePree, "The (Unintended?) Consequences of Tax Reform on Inbound Financing," *Tax Notes*, March 12, 2018, pp. 1511-1516.

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