AVI-YONAH TESTIMONY FOR HEARING ON PROFIT SHIFTING
US SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
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My name is Reuven S. Avi-Yonah. I am the Irwin I. Cohn Professor of Law and Director of the International Tax Master of Law Program at the University of Michigan Law School. I hold a JD (magna cum laude) from Harvard Law School and a PhD in History from Harvard University. I have over twenty five years of full and part time experience in the tax area, and have been associated with or consultant to leading law firms like Wachtell, Lipton, Rosen & Katz and Cravath, Swaine & Moore. I have also served as consultant to the US Treasury Office of Tax Policy and as member of the executive committee of the NY State Bar Tax Section. I am a former Chair of the AALS Tax Section and of the ABA Tax Policy Committee, a trustee of the American Tax Policy Institute, a member of the Steering Group of the OECD International Network for Tax Research, a member of the American Law Institute and of the American College of Tax Counsel, and a Nonresident Fellow of the Oxford University Center on Business Taxation. I have published eleven books and over 100 articles on various aspects of US domestic and international taxation, and have twenty years of teaching experience in the tax area at Harvard, Michigan, NYU and Penn Law Schools.

I would like to thank Senators Levin and McCain and the Subcommittee staff for inviting me to testify today on the shifting of profits offshore by US multinational corporations and on the tax strategy employed by Caterpillar, Inc. ("Caterpillar") to shift profits from the U.S. to Switzerland.

1. The Caterpillar Profit Shifting Strategy

Caterpillar is "the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives."[1] Founded in 1925, "[f]or more than 85 years, Caterpillar Inc. has been making progress possible and driving positive and sustainable change on every continent."[2]

A major reason for Caterpillar's success has been its ability to service the equipment that it sells worldwide. Caterpillar promises to deliver any replacement part anywhere in the world within 24 hours from when a customer requests it. This logistical feat puts Caterpillar far ahead of its competitors and is also a major source of profitability.[3] While Caterpillar's profit margin on selling equipment is typically below

[1] www.caterpillar.com.
[2] www.caterpillar.com/history.
[3] "Caterpillar Logistics Services, Inc. (Cat Logistics) has leveraged its relationship with parent company Caterpillar Inc. in developing true global supply chain management capabilities. Cat Logistics has grown to be the sixth largest North American based 3PL with $1.1 billion in net revenues in 2003. It has been attracting significant external business; Caterpillar, Inc. now accounts for approximately 50% of the Cat Logistics revenues. Plans are to grow external business at a compound annual growth rate of 26% over the next five years." Evan Armstrong, Caterpillar Logistics, a True Global Supply Chain Manager, Morton, Illinois, January 11, 2005. According to an internal CAT email from 2007, machines can consume

10%, its profit margin on parts is typically over 50%.[4] In some years, 80% of Caterpillar's profits derived from parts sales.[5]

Caterpillar's business model is based on a network on independent dealers, some of whom have been selling the company's products for over sixty years. Currently, there are 178 dealers worldwide, 48 of whom are outside the US, and they employ 162,000 people. Caterpillar's dealer network is tightly controlled from the US, and the company has recently announced that it will centralize its supervision of the dealer network even more tightly than before.

Before 1999, Caterpillar's purchased finished parts business was run primarily from Morton, Illinois, where the company maintains its main parts warehouse.[6] When a part was manufactured in the US or overseas, it would be shipped to Morton, and from Morton it would be shipped either directly to a customer or to a dealer.[7] Caterpillar owned the parts in the Morton warehouse. This business model enabled Caterpillar to control the flow of parts and to ensure that its promise of delivering parts to customers within 24 hours would be kept.

In September 1998, PriceWaterhouseCoopers ("PwC"), Caterpillar's auditor, presented a plan to Caterpillar management that was explicitly designed to reduce Caterpillar's US effective tax rate. The first recommendation in the PwC plan was to restructure the parts business.[8] Under the pre-1999 structure, any profit that Caterpillar made from selling parts directly to customers in the US or overseas was taxed by the US. Moreover, any profit that Caterpillar's foreign subsidiaries made on selling parts they acquired from Caterpillar to their customers was also taxed by the US because it was "Subpart F income" and therefore resulted in a deemed dividend to Caterpillar under IRC sections 951-960. About 85% of the total profits were earned directly by Caterpillar, while the other 15% were Subpart F income.

PwC proposed to set up a Swiss entity, Caterpillar Sarl ("CSARL"), which would be treated as a corporation for Swiss tax purposes but as a partnership for US tax purposes (this was possible under the newly adopted "check the box" regime for classifying foreign entities for US tax purposes). The partners in CSARL were two Swiss subsidiaries of Caterpillar. CSARL would then assume ownership of the parts in the Morton warehouse. If those parts were intended for the US market, CSARL would sell them to Caterpillar at no profit, and Caterpillar would resell them and report the profits on its US tax return like it did before 1999. However, if the parts were intended for customers overseas, CSARL would sell them to independent dealers, which would resell

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profitable replacement parts for up to 20 years, and there was little or no competition for such parts.

[4] According to a PwC study from October 1999, Caterpillar's return on sales on "prime", or equipment, was 2%, while its return on purchased finished parts was 21%.

[5] CSARL 2006 Royalty Rate Study (11/14/05).

[6] In 1999, 83% of Caterpillar's worldwide parts were exported from the US.

[7] The majority of the parts suppliers are in the US. Steines testimony, 3.

[8] PwC, Caterpillar Plan, Appendix C, Solution 1 (September, 1998). Overall, PwC was paid about $55 million for its contribution to reducing Caterpillar's US taxes.

to the non-USA customers, with the bulk of the profit going to CSARL.[9]

The purpose of this structure was to avoid paying US tax on the profits from the sale of parts to non-US customers by eliminating Caterpillar from the supply chain. The parts would be purchased directly by CSARL from suppliers and sold directly by CSARL to the independent dealers overseas, without ownership passing through Caterpillar. This would avoid Subpart F because it does not apply to sales by CSARL to unrelated parties outside Switzerland unless the parts were acquired from a related party (i.e., Caterpillar).

However, physically nothing was changed. The parts were still shipped by the suppliers to Morton and shipped by Caterpillar from Morton to the independent dealers, without any involvement by CSARL.[10] Caterpillar still ran the logistics business as it did before, except that it did so as an agent for CSARL, the owner of the parts destined for foreign markets. CSARL had no warehouse or inventory management system, and the parts business remained "US centric."[11] Moreover, there was no physical distinction at Morton between parts destined for the US market (and therefore sold to Caterpillar at zero profit) and parts destined overseas. All the parts were inventoried by Caterpillar as before, except that a "virtual inventory" was created to track for tax purposes whether any given part was owned by Caterpillar or by CSARL at any given moment.[12] Moreover, if a part intended for the US or overseas was missing, Caterpillar would "borrow" the part from CSARL, or vice versa, and restore it later as new parts came in (of course, without affecting the physical movement of any part).[13] Currently, nearly 70% of the purchased finished parts Caterpillar sells overseas come from the US, and the parts business continues to be led and managed from the US.[14]

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[9] For example, if before the restructuring Caterpillar would buy a part from a supplier for 2 and sell it to a Swiss marketing subsidiary for 8, who would in turn sell to a customer or dealer outside Switzerland for 10, the result would be that Caterpillar would pay US tax on 8 (6 of its own profit and 2 Subpart F deemed dividend from the Swiss subsidiary). After the restructuring CSARL would buy the part from the supplier for 2 and sell directly to a dealer outside Switzerland for 10, and the resulting profit of 8 would belong to CSARL and not be Subpart F income because under Subpart F base company income does not include profits from sales for resale if both transactions are with unrelated parties.

[10] According to Craig Barley, a senior CAT manager, in the early 2000s 85% of Cat's worldwide parts inventory was managed from Morton, and 296 of the 300 employees involved in the parts business were located at Morton. The aim, however, was to increase the inventory managed from Morton to 100%. PWC-PSI-CAT00179037. A February 2012 memo to the board described the "as is" parts business as worldwide suppliers shipping parts to the "master distribution center" in Morton, from which they were shipped to distributors both in the US and overseas. The memo discusses future plans to open more warehouses overseas (e.g., in Dubai) to reduce the shipping costs of this US-centric structure.

[11] Caterpillar board minutes, February 8, 2012. For example, all of the inventory in the Grimbergen facility overseas was controlled from Morton, 5,000 and 8,000 employees involved in the parts business were in the US, and 5 of 8 parts warehouses were in North America. CAT 001896 (Feb. 2012); CAT 0002791 (December 2013). CSARL has 400 employees, or less than 0.5% of Caterpillar's workforce (Steines report, 4).

[12] Physically, the parts were indistinguishable and kept in the same bin. Stiles deposition.

[13] Over time, CSARL also acquired parts from Caterpillar facilities in France and Belgium, which were shipped directly from these facilities to CSARL's customers. The French and Belgian suppliers were reimbursed on a contract manufacturing basis so once again the bulk of the profit was allocated to CSARL as the "entrepreneur" in this transaction.

[14] CAT 001866 (March 7, 2014); Steines report, 5.

This "business restructuring" enabled Caterpillar to shift over $8 billion in the period from 2000 to 2012 from the US to Switzerland without affecting the actual way in which the parts business was run.[15] In fact, it was important to Caterpillar not to change the successful business model of its parts and parts delivery business, and therefore the tax department reimbursed the parts and parts delivery segments of Caterpillar for any added costs resulting from the restructuring. This resulted in maintaining the "accountable profits" of each segment of the business as if the restructuring had not taken place, which was crucial to achieving cooperation since accountable profits formed the basis for setting compensation levels.[16] Nor were any personnel involved in the parts business moved to CSARL when it took over as nominal owner of all the parts in Morton.[17]

In order to defend this restructuring from a transfer pricing challenge by the IRS, PwC calculated a royalty rate of 15% (later reduced to 4% to 6%) to be paid by CSARL to Caterpillar to compensate it for any value inherent in its contribution to CSARL's parts related profits. The royalty rate was based on a comparability study performed by PwC.[18] If this royalty rate could be defended in court, the result would be a successful shift of 85% of the total profit from parts business from the US (30.5% effective tax rate on Caterpillar) to Switzerland (4% effective tax rate on CSARL). The total tax benefit to Caterpillar from this shift over the period from 2000 to 2012 was approximately $2.4 billion.

2. Potential IRS Responses

   There are three potential IRS lines of attack on the Caterpillar restructuring: Economic substance, assignment of income and transfer pricing.

   a. Economic Substance

      The economic substance doctrine was a well-established part of tax law long before it was codified as IRC section 7701(o) in 2010. As developed by the courts, in order for a transaction to be respected for tax purposes, it must satisfy either or both prongs of the economic substance test, which are (a) the subjective prong, i.e., that the taxpayer or its agents believe that the transaction has a valid non-tax business purpose, and (b) the objective prong, i.e., that the transaction has a reasonable possibility of generating a profit regardless of the tax consequences.

[15] Copeland deposition, Rapp deposition.
[16] Springer deposition.
[17] Stiles deposition.
[18] See PwC Transfer Pricing Documentation for Caterpillar, September, 2001. The fixed royalty rate assumes that Caterpillar did not transfer any intangibles to CSARL and therefore was not subject to the "super royalty" rule of IRC sections 367(d) and 482 (which would require an adjustable royalty commensurate with the income attributable to a transferred intangible unless a cost-sharing agreement was in effect).

The IRS could argue that the Caterpillar restructuring fails to meet either prong (under the codified version it must satisfy both). On the subjective prong, the PwC documentation from 1998 onward is clear that the main purpose of the restructuring was to reduce Caterpillar's effective tax rate by removing the parent company from the parts supply chain, thereby avoiding Subpart F deemed dividends and achieving deferral for CSARL's profits.[19] Moreover, a senior Caterpillar executive was asked under oath "was there any business advantage to CAT to have this arrangement put in place other than the avoidance or deferral of income taxation at a higher rate," and he answered in the negative.[20]

On the objective prong, while CSARL's parts business is very profitable, it is hard to see what the non-tax reason could be for changing the structure from sales by Caterpillar to sales by CSARL. The entire restructuring was done so as not to change the business model of the parts business. No significant employees were moved to CSARL, the parts continued to be shipped to and from Morton by Caterpillar, and the physical parts were indistinguishable. Moreover, steps were taken to separate the ownership for tax purposes under the "virtual inventory" from the actual inventory, which remained in Caterpillar. It is true that over time CSARL assumed ownership of more parts that were not shipped through the US, but it is still hard to see what was and is the business purpose of CSARL nominally owning the parts shipped via Morton, including the parts it sells at cost to Caterpillar.

Caterpillar did subsequently try to bolster CSARL against a potential IRS challenge by moving some employees (including a "worldwide parts manager") to Geneva to "provide added entrepreneurial substance" and to "reinforce CSARL's role as entrepreneur for global parts sales."[21] But these late efforts, coming ten years after the restructuring, only reinforce the sense that the original transaction lacked economic substance, especially since the parts business continued to be managed from the US.[22]

Caterpillar could attempt to rebut the IRS challenge by relying on the *UPS* case, an 11th Circuit decision from 2001.[23] In *UPS*, the taxpayer transferred its lucrative package insurance business to an unrelated insurer, which then reinsured it with the taxpayer's affiliate in Bermuda. The net result was to shift the profits of the business (which were very high since UPS almost never loses packages) from the US to Bermuda. The Court of Appeals accepted the taxpayer's argument that since the underlying business was profitable this satisfied the objective prong, without regard to whether the transfer was

[19] See PwC documentation from September 1998, December 1998 and September 1999; see also Caterpillar, Delivering Vision 2020 (2009), which explains the tax advantage of the restructuring.
[20] Perkins deposition.
[21] CSARL 2009 report to audit team (January, 2010); CSARL chronology (2010).
[22] Steines report, 5.
[23] United Parcel Service of America Inc. v. Commissioner, 87 AFTR2d Par. 2001-1051 (11th Cir. 2001).

motivated by anything other than tax considerations. But *UPS* is distinguishable because of the intervening unrelated insurer and because there was nothing left in the US, whereas in the Caterpillar restructuring CSARL remained heavily involved in the US and in fact the Caterpillar and CSARL parts businesses were completely intermingled after the transaction.

In addition, it is far from clear that *UPS* remains good law. There have been many economic substance cases since then which took a broader view of the doctrine, and in particular the recent STARS cases indicate that you cannot imbue a tax driven transaction with economic substance by using profitable investments as part of it because the key question is whether these profits would have been earned without the transaction, which is clearly true in Caterpillar's case.[24]

Thus, in my opinion the IRS would have had a good case to challenge Caterpillar's original restructuring on economic substance grounds.[25]

Prof. John Steines argues in his expert opinion that the IRS is "very unlikely" to be able to prevail in a such an economic substance challenge because "Caterpillar's restructuring is of an entirely different realm [than the typical transaction struck down as lacking economic substance]- a sensible business decision to remove a redundant middleman between supplier and customers fully within the text and spirit of Subpart F."[26] But Caterpillar did not remove the middleman; it remained in the middle in every physical way, so that the substance of the business (managed entirely from the US with 70% of the parts shipped overseas from the US) remained entirely discrete from its form (ownership of all parts by CSARL). This situation is entirely distinct from *UPS*, which Prof. Steines heavily relies on, because in *UPS* nothing remained in the US. Moreover, Prof. Steines ignores the holding of the more recent STARS cases that cast doubt on UPS. Finally, Stanley Surrey, who devised Subpart F, would have been astonished to learn that a transaction designed to shift 85% of the profits from a line of business from the US to Switzerland was "fully within the text and spirit of Subpart F," since Subpart F was designed precisely to combat such tax avoidance by US companies like Dupont who shifted profits from the US to Switzerland.[27]

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[24] Salem Financial Inc. v. United States, No. 1:10-cv-00192 (United States Court of Federal Claims, SEPTEMBER 20, 2013); Bank of New York Mellon Corp. et al. v. Commissioner, 140 T.C. No. 2 (FEBRUARY 11, 2013).

[25] Since the restructuring took place in 1999/2000 these years are presumably closed and barred from further audit.

[26] Steines report, 16.

[27] The legislative history of the codification of the economic substance doctrine does indicate that the IRS will not apply it to cases in which related parties are dealing with each other at arm's length. JCX-18-10, at 152-3; IRS Guidelines for Examiners, July 16, 2012. But a transaction in which 100% of the profit is shifted for 15% compensation can hardly be said to meet this guideline.

b. Assignment of Income

Another basic tax doctrine that like economic substance dates back to the 1930s is assignment of income. Under *Lucas v. Earl* and other Supreme Court cases, a taxpayer cannot separate the income "fruit" from the "tree on which it grew" by assigning it to someone else.[28]

One of Caterpillar and PwC's basic assertions for transfer pricing purposes is that it is not possible to separate the parts business from the underlying sales of equipment (the "prime" business). Caterpillar acknowledged that the "sale of replacement parts is dependent on the sale of machines".[29] PwC stated in 1999 that "the field population of CAT prime products creates the demand for CAT replacement parts."[30] A senior Caterpillar executive testified under oath that product managers were encouraged to design machines "that would enable us to maximize parts sales," which were much more profitable than machine sales.[31] Former Caterpillar CEO Donald Fites has characterized the sale of parts as an "annuity" that flows from the sale of machines.[32]

If that is the case, the IRS could argue that any time Caterpillar sells a machine from the US, it is also economically creating the future stream of income that is generated by selling replacement parts for this machine. In that situation the assignment of income doctrine would assign the profit from the sale of parts to Caterpillar, which sold the original machine. You cannot separate the parts fruit from the machine tree.

c. Transfer Pricing

PwC's restructuring proposal and subsequent documentation were designed to defend Caterpillar against a transfer pricing challenge by arguing that the 15%/6% royalty adequately compensates Caterpillar for whatever value it provides to CSARL.

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[28] Lucas v. Earl, 281 US 111, 114-5 (1930) ("There is no doubt that the statute could tax salaries to those who earned them and provide that the tax could not be escaped by anticipatory arrangements and contracts however skillfully devised to prevent the salary when paid from vesting even for a second in the man who earned it. That seems to us the import of the statute before us and we think that no distinction can be taken according to the motives leading to the arrangement by which the fruits are attributed to a different tree from that on which they grew.")

[29] CSARL Chronology (2010).

[30] PwC, GLOVE economic analysis (October 1999).

[31] Springer deposition.

[32] "Donald Fites has an interesting take on this. He considers the sale of a Caterpillar machine to a customer to be analogous to an annuity that continues to pay dividends over time. Machines must be serviced and will require parts, both of which will generate business for CAT and its dealers over time. During the Great Recession of 2008-2009, this enduring source of revenue was vitally important to both CAT and its dealers because sales of some machines plummeted as much as 62 percent." The Caterpillar Way (2013), p. 120; see also CAT board minutes from February 2012, referring to the sale of parts as an "annuity."

In response to the Subcommittee staff questions, Caterpillar acknowledged that Caterpillar provides CSARL with packaging, warehousing, management of suppliers, consulting on choice of suppliers, visiting suppliers, negotiating terms for purchase and sale of parts, transportation, delivery, quality inspection and customs support. In effect, CSARL does nothing to justify its billions in profits except bear the theoretical entrepreneurial risk, which is minimal since Caterpillar's parts business is so well run. In fact, the main risk borne by CSARL is that something bad will happen to Caterpillar's equipment business, and that too is primarily a risk for Caterpillar.

In exchange for the 15%/6% royalty, Caterpillar provides CSARL with its brand name and well-known trademark, its supplier base, the entire logistics of the parts business, and its well-established distribution network. The IRS can and should argue that 15%/6% royalty is not sufficient. Specifically, the IRS should argue that the shift of 85% of the parts profits from Caterpillar to CSARL represents the transfer of a valuable intangible that is covered by the "super-royalty" rule of IRC section 367(d). Under that rule, any outbound transfer of an intangible must be compensated by a royalty "commensurate with the income" from the intangible, resulting in a shifting of the entire profit back to Caterpillar.

However, it should be noted that the IRS has not generally been successful in transfer pricing litigation and that the Caterpillar business restructuring follows a common model that many other US and foreign multinationals have adopted. Under this model, the entrepreneurial risk is located in a low tax jurisdiction and the production and distribution functions are assigned to low profit contract manufacturers and commissionaires in high tax countries. It is not clear that the IRS can succeed in challenging such structures under current law. This suggests that current law should be changed, which is a job for Congress.

3. Potential Congressional Responses

The obvious response to all attempts by US multinationals to shift profits out of the US is to abolish deferral. If US-based multinationals were taxed currently on all of their foreign source income, whether earned directly or through subsidiaries, Congress could lower the corporate tax rate dramatically and still achieve revenue neutrality. Moreover, because the OECD is currently considering ways to combat Base Erosion and Profit Shifting (BEPS), such a unilateral move by the US is likely to be followed by similar moves by other OECD countries, which need the revenues more than we do, and the resulting race to the top would alleviate any concerns about putting US-based multinationals at a competitive disadvantage.[33]

[33] For a fuller exposition of this argument see Reuven S. Avi-Yonah, Hanging Together: A Multilateral Approach to Taxing Multinationals (2013), available on SSRN.

Such a move seems politically unlikely at present. Thus, it is interesting to consider how Caterpillar would fare under the various competing international tax reform proposals being considered by Congress.

Under President Obama's proposal, all foreign profits of US-based MNEs would be taxed currently at a minimum rate that has not been specified. Presumably, it would be higher than CSARL's 4% effective rate in Switzerland, but lower than the full 35% US rate. This will reduce but not eliminate the potential to shift.

Under Rep. Camp's proposal, Caterpillar would pay tax at between 3.5% and 8.75% on its past profits (payable in installments without interest), and then be able to repatriate them without further tax. Future profits can be repatriated for a tax of 1.25%, except that since the Swiss rate is only 4%, the effective tax rate on "Foreign Base Company Intangible Income" would be raised to 15%. This proposal will also reduce but not eliminate the shifting potential since the US rate will be 25%.

Under Sen. Baucus' proposal, CSARL's past profits would be subject to tax at 20% (payable in installments) and its future profits would be exempt from US tax except to the extent that they fall under one of the two anti-profit shifting options. Under option Z, only 60% of CSARL's profits would be subject to tax because they represent "modified active income." Modified active income is defined as "active foreign market income", which is the aggregate of all items of income "attributable to economically significant activities with respect to a qualified trade or business" and derived in connection with goods sold for consumption or disposition outside the US or services provided outside the US with respect to persons or property located outside the US. "Economically significant activities" means activities performed outside the US by officers or employees who are part of the management and operational functions of the CFC and which make a substantial contribution to the production of the income. "Qualified trade or business" means manufacturing, producing, growing, or extracting property outside the US or providing services outside the US, including making a substantial contribution to a qualified trade or business. CSARL seems to qualify under this definition so 40% of its future income would be exempt from tax even when repatriated.

Under option Y of Senator Baucus' proposal, CSARL's future income would be subject to tax at 80% of the US rate because the proposal includes as subpart F income all income of a CFC (other than income from sales into the US, which CSARL does not have) that is taxed by the foreign jurisdiction at less than 80% of the US rate. Assuming that the new US tax rate is 30%, this means that CSARL's future income would be taxed by the US at 24%. Because of this result I believe Sen. Baucus' option Y is the most promising politically realistic way of combating profit shifting schemes like the Caterpillar restructuring.

4. Conclusion

This series of hearings on profit shifting by major US multinationals has revealed a pattern in which the companies successfully move profits that are economically generated in the US to low-taxed foreign affiliates. The question is what should be done to protect the US corporate tax base and to ensure that US-based multinationals bear a fair share of the tax burden.

In my opinion the best way to address the profit shifting issue is to abolish deferral, since in the context of the OECD BEPS project this can be done on a multilateral basis, which will not put US-based multinationals at a competitive disadvantage. Such a move should be combined with a significant reduction in the US corporate tax rate. But if this option is considered politically unfeasible, the second best option is to adopt Senator Baucus' plan with option Y. That option aligns US international tax law with the laws of our major trading partners and will significantly reduce the ability of companies like Caterpillar to shift profits out of the US.