Equitable Apportionment and the State Corporate Income Tax: Past, Present and Possible Future

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Abstract

What a tough break for formulary apportionment. We are at a moment when there is apparently a real interest in reforming the federal corporate income tax in a way that, at least in theory, would broaden the base of the tax and encourage exporters. Shifting to the use of formulary apportionment with a single sales factor (SSF) could theoretically achieve these goals and there is at least one well-developed reform proposal on the table. Moreover, over 40 states impose a corporate income tax and they have used formulas for a very long time, and so there is a track record to work with. But this is not – yet – formulary apportionment's moment.

This is the moment for the Destination-Based Cash Flow Tax (DBCFT), which relies on border tax adjustments (BTAs). No doubt, there are many merits to the DBCFT with BTAs relative to a reform that relies on formulary apportionment; this paper addresses one reason that I do *not* believe is particularly strong. The authors of the DBCFT proposal seem to believe that formulary apportionment regimes are subject to relatively simple gaming. Though far from perfect, I will argue that the remedy of equitable apportionment is one means by which a formulary apportionment regime can be made fairly robust.

To this end, I will outline the history of equitable apportionment as used in state corporate income taxes and will argue that the doctrine has developed sensibly. I will then address current controversies involving equitable apportionment and will argue that they are eminently soluble and in any event do not indicate some fundamental weakness. Finally, I will note that the application of equitable apportionment can be refined. In particular, I will sketch out a methodology to improve the functioning of the most difficult part of the formula – the sales factor.

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Introduction

The vast majority of states (44) tax the income of corporations. [2] Many of these corporations earn income from multiple states.[3] Each state levying a corporate income tax (CIT) is obligated, according to the Supreme Court's longstanding interpretation of the dormant Commerce Clause, to tax only that portion of a multistate corporation's income that can reasonably be attributed to that state.[4] Accordingly, states generally employ a formula to divide the income of a multistate business, usually deriving the formula from a model statute, the Uniform Division of Income for Tax Purposes Act (UDITPA). The authors of UDITPA always understood that their formula might result in unreasonable results for some taxpayers.[5] Hence, Section 18 of UDITPA, which is incorporated in some form by all states with a CIT, permits the taxpayer or the tax administrator to use some alternative apportionment method if the results of the standard formula "do not fairly represent the extent of the taxpayer's business activity in this State."

There has been one law review article about Section 18, otherwise known as equitable apportionment.[6] Probably this will come as no surprise. It will take many pages simply to explain exactly what this paper is about, much less why it is important. Yet why should you read on unless there is some payoff?

I will therefore start with three reasons why you should soldier on.

First, because of subtle changes to the state corporate income tax made in many states, equitable apportionment has become more important for state revenue and also more contentious.[7]

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[2] http://www.taxadmin.org/assets/docs/Research/Rates/corp_inc.pdf.

[3] And multistate corporations appear to earn the lion's share of corporate income. Darien Shanske, *A New Theory of the State Corporate Income Tax: The State Corporate Income Tax as Retail Sales Tax Complement*, 66 Tax Law Review 305 (2013) [Henceforth Shanske, New CIT]

[4] See, e.g., Container Corp. of America v. Franchise Tax Bd., 463 U.S. 159 (1983).

[5] See, e.g., William J. Pierce, *The Uniform Division of Income for State Tax Purposes*, 35 Taxes 747 (1957).

[6] That I could find. Gary I. Boren, *Equitable Apportionment: Administrative Discretion and Uniformity in the Division of Corporate Income for State Tax Purposes*, 49 S. CAL. L. REV. 991 (1976). Note that Boren's primary argument is that states should give more guidance as to how they will apply equitable apportionment primarily on fairness grounds. Id. at 1074. This Article will ultimately agree with Boren, but add a compliance rationale as well. Note also that I have not yet found the source of who first called Section 18's provision a provision for equitable apportionment. I think it is the better choice versus "alternative apportionment," which is also used. The import of the notion of "equity" here is that the proposed apportionment is better in terms of what the statute is trying to accomplish and is not merely an alternative.

[7] See, e.g., Cara Griffith, *Because I Said So: Uncertainties With Apportionment,* 68 State Tax Notes 595 (2013); Amy Hamilton, *15 Things You Might Have Missed in All The UDITPA Talk,* 70 State Tax Notes 721(2013).

Second, the European Union is seriously considering reforming its corporate income tax so as to rely on formulary apportionment. And, along with formulary apportionment, comes equitable apportionment.[8]

Third, the United States is currently considering a major reform to its corporate income tax: the Destination-Based Cash Flow Tax (DBCFT).[9] This proposal is complex, but also puzzling. The prominent authors of the proposal explain that it is the equivalent of introducing a Value Added Tax (VAT).[10] Given that the VAT is used in roughly 167 countries, it is hard to understand why the US would adopt a new and complicated new tax rather than adopt the economically equivalent tax that is well understood and generally seen as a success. The answer of course is politics. It seems impossible for the United States to implement a VAT for political reasons. Before proceeding, I must say that this is outrageous.[11]

There are many other questions about the DBCFT.[12] Here is one that has not, I believe, gotten sufficient attention. One of the most vexing – and possibly legally unsound – aspects of the DBCFT is that it relies on border tax adjustments (BTAs), more or less like a VAT.[13] Yet if the reformers are so keen to tax consumption

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[8] Indeed, this proposal was just re-launched, http://europa.eu/rapid/press-release_IP-16-3471_en.htm and would require three-factor apportionment and includes a provision for equitable apportionment: "By exception, where the outcome of the apportionment does not fairly represent the extent of business activity, a safeguard clause will provide for an alternative method of income allocation." Proposal for a COUNCIL DIRECTIVE on a Common Consolidated Corporate Tax Base (CCCTB) (Oct. 25, 2016), at 10. See also Matthias Petutschnig, *Common consolidated corporate tax base. Effects of formulary apportionment on corporate group entities*. Discussion Papers SFB International Tax Coordination, 38. SFB International Tax Coordination, WU Vienna University of Economics and Business, Vienna. (2010); Joann Martens Weiner, *Practical Aspects of Implementing Formulary Apportionment in the European Union,* 8 Fla. Tax Rev. 629 (2007).

[9] Alan J. Auerbach et al., Destination-Based Cash Flow Taxation (February 6, 2017). Oxford University Centre for Business Taxation WP 17/01. Available at SSRN: https://ssrn.com/abstract=2908158.

[10] Id. at *4.

[11] Interestingly, it is not clear that President Trump et al. understand how VATs operate. See Richard Thompson Ainsworth, Trump & VAT: NAFTA, Trade Barriers & Retaliatory Tariffs (December 14, 2016). Available at SSRN: https://ssrn.com/abstract=2919058. Note that if it is true that, for whatever reason, Trump "suffers from VAT envy," then perhaps the toxic politics surrounding the VAT will be overcome once it becomes clear that the various workarounds are so clearly inferior to just imposing a VAT. Robert Goulder, *Diagnosis: Donald Trump Suffers From VAT Envy*, https://www.forbes.com/sites/taxanalysts/2016/12/21/diagnosis-donald-trump-suffers-from-vat-envy/#575bb0c778cc.

[12] See Graetz infra and Avi-Yonah and Clausing, Problems with Destination-Based Corporate Taxes and the Ryan Blueprint (February 5, 2017). Available at SSRN: https://ssrn.com/abstract=2884903.

[13] The more or less matters for whether the DBCFT could satisfy world trade law. Michael J. Graetz, The Known Unknowns of the Business Tax Reforms Proposed in the House Republican Blueprint (February 2, 2017). Columbia Law and Economics Working Paper No. 557. Available at SSRN: https://ssrn.com/abstract=2910569 or http://dx.doi.org/10.2139/ssrn.2910569. Note that formulary apportionment might also pose issues. I have not found a thorough discussion of the issue in connection with formulary apportionment, but my sense is that the issue is less severe, as indicated by the fact that the states have not been challenged on their use of formulary apportionment. After all, formulary apportionment applies the same formula to domestic or foreign

through business entities rather than through a VAT, then why use border adjustments? Another option would be to use formulary apportionment.

The states already have experimented with taxing consumption through taxing entities by means of taxes that are in many ways similar to the DBCFT. The justification for states to have used such expedients is far stronger than that of the federal government. The justification is this: a traditional credit-invoice VAT relies on border adjustments and states will not be able to impose such adjustments because of the dormant Commerce Clause. Also, even if permitted, the states are not equipped to impose a tax on imports because state borders are open.

The proponents of the DBCFT are aware that formulary apportionment is an alternative to BTAs, but seem to dismiss it rather breezily as inferior to DBCFT in terms of tax gaming.[14] This suggests that the EU is about to shift to the use of an American tax innovation so flawed that cutting edge American tax reformers won't touch it. And this even though there is already on the table an excellent proposal to adopt formulary apportionment as part of the US international tax regime (versus transfer pricing).[15]

Without doubt, the state corporate income tax with formulary apportionment can be gamed, but how can the authors be so sure that the current gaming is so severe so as to make taking a chance on the DBCFT worth it?

States have been addressing evasion strategies for a long time, and with some success. A powerful tool in their arsenal has been equitable apportionment. Until we are clear on the ability of equitable apportionment (and other tools) to combat common evasion techniques, then we are not in a sound position to discount formulary apportionment – especially relative to the wholly untested border adjustments proposed under the DBCFT.

This Article will address three issues relating to equitable apportionment. *First*, it will review the history and efficacy of equitable apportionment under state corporate income taxes. This review will conclude that avoidance schemes like the ones outlined by Auerbach et al. would likely fail. Thus, it is not justified to dismiss the potential of formulary apportionment without further argument.

Now, it is the case that equitable apportionment under the corporate income tax is controversial at the moment among state tax practitioners. Recognizing this, the

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firms; the issue with the DBCFT is that the base of the tax is arguably different as to deducting labor costs.

[14] Auerbach et al. supra at 28-29. The listed example will be discussed at length infra. Note that Avi-Yonah and Benshalom also address this criticism briefly here: http://repository.law.umich.edu/cgi/viewcontent.cgi?article=2180&context=articles.

[15] Reuven Avi-Yonah et al., *Allocating Business Profits For Tax Purposes: A Proposal To Adopt A Formulary Profit Split*, 9 Fla. Tax. Rev. 497 (2008). There has been some coverage in the popular press. http://prospect.org/article/progressive-tax-reform-you%E2%80%99ve-never-heard-0

Multistate Tax Commission, guardians of UDITPA, have been working on revising Section 18 and have done so, though the project is ongoing and has not addressed the questions discussed here.[16] Though these controversies are clearly not what Auerbach et al. have in mind, they definitely do have the potential to weaken the case for formulary apportionment. The *second* task of this Article will therefore be to demonstrate how current controversies surrounding equitable apportionment can be sensible resolved. Such resolutions should be helpful for state practitioners trying to apply equitable apportionment and for national reformers considering its potential. In any event, it will be demonstrated that a large amount of the current problem is very specific to the American domestic context and need not reappear in a national or international regime.

Finally, the *third* task of this Article will be to develop a specific theory for how equitable apportionment can be refined so as to improve the functioning of formulary apportionment, especially when the formula in question relies heavily on the sales factor.

I. Equitable Apportionment: History and Assessment

In this Part, I will introduce the history and theory of equitable apportionment.

A. Introducing Formulary Apportionment

In the very beginning there were not many businesses that did business across state lines. As with so much in American law, the law of multistate taxation really begins with the railroads. Railroads did business across state lines and states attempted to tax them. At the time, the primary state and local tax was the property tax. The railroads, as one might expect, were inclined to value their property within a state rather conservatively, focusing on the cost of the trains and tracks and stations independently. Of course a train track on its own is not worth very much; it is only valuable as part of a network – or so the states quite reasonably argued and the Supreme Court agreed.[17]

Once the Court has accepted the proposition that the entire railroad had a unitary value as a business, the next question became how could any one state impose a tax on its share of the interstate business. Here again, the Court was pragmatic and accepted very approximate formulas, such as using the ratio of track miles within a state.[18]

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[16] See, e.g., Amy Hamilton, *MTC Counsel Considers Future Shape of Alternative Apportionment Disputes,* 77 State Tax Notes 437 (2015).

[17] See, e.g., Adams Express Co. v. Ohio State Auditor, 165 U.S. 194 (1897); State Railroad Tax Cases, 92 U. S. 575 (1875); The Delaware Railroad Tax Case, 18 Wall. 208 (1873).

[18] Id.

By the early twentieth century, the states were experimenting with other forms of taxes and other methods of apportionment. For instance, states began to impose taxes on the net income of corporations and began using other kinds of formulas, such as the ratio of property a corporation owns within a state.[19] The Supreme Court therefore had to answer the question whether the flexible rule it had established for railroads under the property tax would carry over to other kinds of taxes and taxpayers. The Court decided, again quite reasonably, that its prior reasoning held good. Thus, for instance, in *Butler Brothers*,[20] the Supreme Court rejected the argument that a dry goods business with offices in different states could evade being treated as a unit with other offices.

Over the ensuing decades, as more and more states began to tax corporate income, they also adopted a wide variety of apportionment formulas. There were family resemblances of course, but there was considerable variety nonetheless.[21] From the perspective of the taxpayers, this diversity in tax structure was somewhat mitigated by two factors. First, the Supreme Court's interpretation of the dormant Commerce Clause had generally held that states could not tax interstate commerce directly. Second, there was a belief that states only had sufficient nexus to impose their corporate income taxes on taxpayers with substantial physical presence within a state.

Both of these assumptions were shattered in 1959 when the Supreme Court decided *Northwestern States Portland Cement C*o. In that case, the taxpayer cement company was exclusively engaged in interstate commerce but, nevertheless, the Court held that an income tax could be levied so long as "the levy is not discriminatory and is properly apportioned to local activities within the taxing State forming sufficient nexus to support the same." [22]

Northwestern States Portland Cement Company moved the business community to action. Congress passed legislation in response to this decision in only a few months. The legislation did two unprecedented things. First, Congress acted to limit the ability of the states to impose income taxes on out of state corporations.[23] Roughly, a state is not permitted to impose an income tax on a corporation that only engages in solicitation within a state. The idea behind what was supposed to be a temporary law was to create breathing room for corporations while Congress studied a broader, permanent solution. To this end, the second remarkable thing that Congress did was to commission a report on state and local taxation.

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[19] Hans Rees' Sons, Inc. v. North Carolina, 283 U.S. 123 (1931).
[20] Butler Bros. v. McColgan, 315 U.S. 501 (1942).
[21] John A. Swain, A Brief History of UDITPA and The Corporate Income Tax Uniformity Movement, 49 State Tax Notes 759 (2008).
[22] Nw. States Portland Cement Co. v. Minnesota, 358 U.S. 450, 452 (1959); Charles E. McClure, The Difficulty of Getting Serious About State Corporate Tax Reform, 67 Wash. & Lee L. Rev. 327, 336-37 (2010) (recounting history).
[23] This is Public Law 86-272, which is still with us.

The resulting Willis Committee report collected extremely valuable information about how state tax systems were currently operating and in particular noted the lack of uniformity.[24] The Committee also arrived at a very sensible solution, namely to impose a uniform system of apportionment on the states. As to what the formula should be, the Committee also made a reasonable choice: a two factor formula, property and payroll. A sales factor was omitted because the committee believed it was most difficult to implement. [25]

The states were not keen to have a federal solution imposed upon them.[26] In order to forestall legislation, states adopted the Uniform Division of Income for Tax Purposes Act (UDITPA).[27] UDITPA was the result of a project undertaken by the Nation Conference of Commissioner on Uniform State Law Commission in the 1950s and completed in 1957. The model law synthesized and revised current state practice, but, most of all, offered uniformity. "[B]y 1967, 19 states and the District of Columbia had adopted UDITPA."[28] This was sufficient to head off Congressional action.

B. UDITPA and the Sales Factor

Unlike the proposal from the Willis Committee, UDITPA used three factors to apportion income – the third factor being sales. Despite its difficulty, this was a sensible decision. After all, the property and payroll factors are likely to be similar for most businesses and act to apportion income to the states that are producing a good or a service. This is fair enough, as surely the state providing the governmental services to sustain, say, a factory, should receive a share of the income that that factory generates. At the same time, the state that is the market for the factory's products also has a claim since it is providing the governmental services that help maintain the market that is generating the income. Without a sales factor, the producing states would essentially get all of a multi-state corporation's income apportioned to them. If productive assets, and net income from those assets, were evenly distributed across states, then this might not matter much, but they are not and hence the import of the sales factor.

Unfortunately, UDITPA's approach to the sales factor contained a deep, if understandable flaw. As to sales of tangible personal property, UDITPA had the simple rule that the sales were to be included in the numerator of a state if "the property is delivered or shipped to a purchaser . . . within this state."[29] This is the right rule and gives credit to the market states.

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[24] Special Subcommittee on State Taxation of Interstate Commerce of the Committeeon the Judiciary, State Taxation of Interstate Commerce, H. R. Rep. 1480, 88th Cong. 2d Sess. (1964).
[25] Vol 4 at 1135, 1144-50. See also McLure, The Difficulty supra __.
[26] History in this paragraph drawn from Swain, supra.
[27] Many of these same states went a step further and entered into the Multistate Tax Compact, which included UDITPA.
[28] Swain, supra at 763.
[29] Section 16(a).

Alas, as to sales of anything *other* than tangible personal property, UDITPA Section 17 states:

> Sales, other than sales of tangible personal property, are in this state if:
> (a) the income-producing activity is performed in this state; or
> (b) the income-producing activity is performed both in and outside this state and a
> greater proportion of the income-producing activity is performed in this state than in any other state, based on costs of performance.

In other words, UDITPA establishes a rule that favors producing states when it comes to sales of intangible property and services. To be charitable, this decision should be seen against the backdrop of an economy where such sales were less important. Furthermore, this decision should be seen as solomonic vis a vis the choice of the Willis Committee not to have the sales factor at all. UDITPA essentially grants the market states something, but only as to sales of tangible personal property which, presumably, are easier to track.

Though understandable, shifts in the economy have made this flaw in the design of the sales factor more serious. Sales of intangibles and of services are a larger part of the economy relative to sales of tangible personal property.

There is another reason that this flawed decision has become more important and that is because most states have increased the weight of their sales factor – indeed there is a very strong trend to use only the sales factor.[30] This is single sales factor (SSF) apportionment.

Given the administrative challenges posed by SSF and the fact that using this formula now gives no credit to the producing states, one might wonder why states have embraced it so strongly. States have chosen to SSF because they believe it will spur economic development. Here is an extended – simple – example of why this could be so.

Suppose California has the traditional three factor formula and, Orange, a corporation with which California has nexus, has $1 billion in profits. Orange owns 20% of its total property in California, has 30% of its employees in California, and makes 10% of its sales in California. Since each factor is weighted equally, the blended ratio ((10% + 20% + 30%) / 3) is 20%, meaning that Orange is taxable on $200 million in profits in California. Remember, this is not what Orange owes, just what California can tax. If California has a 10% CIT rate, then Orange owes $20mn.

[30] Shanske, New CIT 312-13.

Now suppose California switches to SSF, as it indeed has. Since Orange only has 10% of its sales in California, under an SSF regime California can only tax $100 million of Orange's income (as compared to $200 million under the traditional 3-factor formula). Now consider another corporation, call it OnlineDepot. It has 5% of its employees in California, 5% of its property in California, but 20% of its sales in California. Under the traditional system, California could only reach 10% of OnlineDepot's income ((5% + 5% + 20%) / 3), but now California can tax 20%, i.e., just its sales factor. Hence California is shifting the weight of its CIT to importers versus exporters – at least that is what this shift is supposed to do in theory and thereby, also in theory, encourage in-state job creation.

At least this is the theory. Whether SSF leads to economic development in practice is another matter. I am skeptical if for no other reason than the trend to SSF among the states means that no state is getting an advantage.[31] For our purposes, it does not matter whether or not SSF is actually a spur for economic development, as it is surely not going anywhere.

Once one understands this rationale, one might then ask if SSF is permissible. The primary argument against it is that it is improperly advancing in-state business interests. The Supreme Court rejected that argument in *Moorman* in 1978.[32] The Court reasoned that ruling against the SSF would constitutionalize a defensible policy decision. If SSF were unconstitutional, what about double weighting the sales factor? Or what about interpreting the sales factor in a way that advantaged local businesses? The Court eschewed this path.

C. UDITPA Section 18 – Equitable Apportionment

UDITPA contains a safety valve provision; in its original form it states:

> If the allocation and apportionment provisions of this Act do not fairly represent the extent of the taxpayer's business activity in this state, the taxpayer may petition for
> or the [tax administrator] may require, in respect to all or any part of the taxpayer's business activity, if reasonable:
> (a) separate accounting;
> (b) the exclusion of any one or more of the factors;
> (c) the inclusion of one or more additional factors which will fairly represent the taxpayer's business activity in this state; or
> (d) the employment of any other method to effectuate an equitable allocation and apportionment of the taxpayer's income.

Naturally, how to interpret this provision raised many questions. Over the ensuing decades it seems, at least to this observer, that courts and commentators arrived at

[31] For more, see Shanske, New CIT 314-15.
[32] Moorman Mfg., Co. v. Bair, 437 U.S. 267 (1978).

some sensible answers. What follows is what I take to be the consensus view as to several of the questions posed by Section 18. Mostly, these are descriptions of the majority view that I agree with.[33]

First, Section 18 empowers revising the results of formulary apportionment even in cases when the results of the formula are within constitutional bounds.[34]

Second, because equitable apportionment requires a deviation from the results of the standard formula, the burden of proof should be on the party – state or taxpayer – requesting an equitable adjustment. The recently revised version of the model MTC Regulations interpreting Section 18 codifies this insight.[35]

Third, despite the word "unusual" in MTC regulations interpreting Section 18 and some comments made by its principal drafter,[36] equitable apportionment is appropriate even in cases that are not unusual. For example, consider the riddle posed by the treasury functions of a large corporation such as Microsoft. Microsoft is, of course, primarily in the software business, but its large treasury function generates so many receipts that their inclusion in the numerator and denominator of the sales factor amounts to a significant shift in apportionment from states in which Microsoft sells software to the state that houses its headquarters (i.e., Washington). The California Supreme Court held that in this circumstance equitable apportionment was appropriate even though the challenge posed by treasury functions is hardly unusual.[37] The recently revised version of Section 18 codifies this sound insight as well.[38]

Fourth, a major factor in many equitable apportionment cases involves qualitative assessments.[39] Returning to the treasury example, the California Supreme Court found equitable apportionment because "Microsoft's treasury functions are qualitatively different from its principal business."[40]

Fifth, the role of quantitative assessments is also important but more vexed. Once again, in the treasury cases it seems clear, and appropriate, that the scale of the

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[33] For similar analysis, see generally Rick Handel, *Suggestions for Guidance on the Use of UDITPA Section 18,* 74 State Tax Notes 383 (2014).
[34] For this point and all other points about the current doctrine see Hellerstein, Hellerstein & Swain Sec. 9.20. This issue is at 9.20[3][a].
[35] See current Section 18(c), http://www.mtc.gov/getattachment/Uniformity/Article-IV/Model-Compact-Article-IV-UDITPA-2015.pdf.aspx
[36] Pierce, supra.
[37] Microsoft v. FTB, 139 P.3d 1169 (2006).
[38] Hearing Officer's Report, supra, at 16. This is not to say that in many recurring cases that the promulgation of regulations would not be preferable. See id. at 17-18 (making this point) and the revised version of Section 18. Note that the results of specific regulations must still themselves be subject to equitable apportionment if the results misfire in some way.
[39] See generally Cara Griffith, *Proving Distortion With Alternative Apportionment,* 67 State Tax Notes 343 (2013).
[40] 139 P.3d at 1179.

distortion mattered.[41] Further, as a matter of constitutional law, the Court has many times suggested, and occasionally held, that the size of a distortion is too great.[42] This is despite the fact that the Court, sometimes in the same breath, acknowledges that there is no baseline.[43] A California appellate court recently permitted equitable apportionment in a case involving General Mills and its proceeds from hedging transactions. The court in that case first noted a qualitative difference between the two lines of business, though one slighter than in *Microsoft*. Then the court noted a quantitative distortion caused by including the hedging transactions that was also much smaller – and yet the court found equitable apportionment appropriate.[44]

My point here is not to criticize this decision, just to note that quantitative distortion does matter in combination with a qualitative assessment. It seems to me that *General Mills* is a close case, but let's take what I would suggest is a much less close case. Imagine a very profitable producer of software purchases a low margin supermarket chain in order to reduce liability in a high tax jurisdiction. Under existing precedent – at least in many jurisdictions – a taxing agency should be strongly situated to argue that these two lines of business should be separately accounted for because they are both qualitatively and quantitatively different.

Sixth, equitable apportionment is often, but not always, held to permit forced combination of taxpayers.[45] Note that the question is a tricky one in connection with the specific language of UDITPA 18, but there is no obstacle to a state permitting forced combination.[46] There is also no obstacle to states requiring combined reporting in the first instance, which is the current trend among the states and is the best expedient.[47]

D. Assessment

Given the complexities created by having forty plus slightly different corporate income tax regimes, there is little question that opportunities for corporate tax planning abound. Assessing the scale of the evasion is difficult and unsatisfactory

[41] See id. For an interesting attempt at quantifying scale, see Handel Pt II.
[42] See, e.g., *Container Corp. of Am. v. Franchise Tax Bd.*, 463 U.S. 159, 184 (1983) (noting the relatively small size of the purported distortion).
[43] See, e.g., id. at 182 ("Both geographical accounting and formula apportionment are imperfect proxies for an ideal which is not only difficult to achieve in practice, but also difficult to describe in theory.").
[44] General Mills Inc. v. FTB, 208 Cal. App. 4th 1290 (1st Dist. 2012).
[45] See Hellertein, Hellerstein & Swain ¶ 8.11[2][a]. For an interesting recent example see Media General Communications, Inc. v. South Carolina DOR, 694 S.E.2d 525 (2010) (the taxpayer requests combination and the court agrees that the DOR has authority to do so). See generally Cara Griffith, *Because I Said So: Uncertainties With Apportionment,* 68 State Tax Notes 595 (2013) (summarizing cases).
[46] See Griffith supra for examples.
[47] Shanske, New CIT, at 324-27.

across several dimensions.[48] Still, the most recent analysis of state corporate income tax performance found "very little tax sensitivity" as to economic activity.[49] That is, not a lot of real economic decisions were being influenced by the state corporate income tax. On the other hand, tax revenues were found sensitive to policy decisions including as to tax rates and rules to combat evasion.[50] This means that states could raise more money by raising tax rates and by making evasion harder; these avenues can succeed precisely because of the first finding, namely that real economic decisions were not much influenced by state corporate income taxes.

Another indication that formulary apportionment is not so easily evaded is provided, I believe, by the summary of the development of the doctrine of equitable apportionment. At least as to litigated controversies, it appears that the courts (and revenue authorities) have arrived at workable doctrinal solutions that countered at least arguably aggressive taxpayer positions. To see this, let's present the two examples from Auerbach et al.

> [Strategy One]
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> Under a formulary apportionment system, a highly profitable company could sell its products in a fully arms-length transaction to a much less profitable retail company in a low-tax jurisdiction. As a result, only the low rate of tax would be applied to the company's high profits. The retail company could sell on the goods into a high tax jurisdiction and face tax at a higher rate, but this would only apply to its relatively low profit. The overall tax liability may then be considerably lower than if the original company had sold directly into the high tax jurisdiction.[51]
>
> [Strategy Two]
>
> A third common strategy for profit shifting under the existing system is to place highly valuable intangibles in low tax jurisdictions. Other companies within the multinational group that are located in high tax countries may then pay royalties or license fees to the company that owned the intangible asset in return for their use. These payments receive tax relief at the high rate of tax and are liable to tax on the receipt at the low rate of tax.

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[48] Jennifer Blouin, Defining And Measuring Tax Planning Aggressiveness, 67 National Tax Journal 875 (2014); see also McLure's critical comments on Donald Bruce et al., *On the Extent, Growth and Efficiency Consequences of State Business Tax Planning*, in TAXING CORPORATE INCOME IN THE 21ST CENTURY 226, 232-34 (Alan Auerbach et al. eds. 2007).

[49] See Kimberly A. Clausing, The U.S. state experience under formulary apportionment: are there lessons for international reform?, 69 Nat'l Tax J. 353 (2016).

[50] Clausing supra.

[51] Auerbach et al. 28-29.

Strategy Two, the strategy of using a holding company for intangibles has a long history, as is the history of taxpayers losing their cases based on this strategy at the state level. Without going down the rabbit hole of possible counters here, especially because this is not a weakness pinned to formulary apportionment regimes, it should be noted that the states have done very well in countering this strategy. Most obviously, there are variations of the economic substance doctrine.[52] Many states have also succeeded in asserting nexus with the intangible holding company and thereby taxing its profits.[53] Many states require combined reporting, which obviates the problem entirely, while others have enacted statutes that disallow particular inter-company expense deductions.[54] There is also the possibility of forcing combined reporting under equitable apportionment.

What then of Strategy One, which involves the use of an intermediary firm in a low tax jurisdiction? Note that the strategy is envisioned in a way that makes it a very hard case for a court. If this is a "fully arm's-length transaction," then where indeed is the equity in unsettling it? Yet if this is a fully arm's-length transaction between *affiliated* firms, then there is a clear reason to recharacterize the transaction and perhaps order combination.

But what if the firms are truly unrelated and their transactions are fully arm's length? First, we might fairly ask how many firms are really in a position to shift the presence of their sales in this way. To be sure, there are plenty of firms that choose to do business through independent retailers, but how many businesses that currently do business directly with their customers would (or could) shift to relating to their customers through a truly independent firm? And this is assuming that the intermediary retailers are set up to take delivery of inventory in another country and then ship the goods into the country where the ultimate sale is to take place.

But the key point is that the history of equitable apportionment indicates that courts could plausibly recharacterize the destination of sales as the ultimate destination state. Indeed, courts have already done so in interpreting the location of sales for purposes of the sales factor in some cases.[55] These cases are controversial because of the statutory language of UDITPA,[56] but the *conceptual* argument is not so muddled: the sales factor is supposed to attribute sales to the market state and thus the relevant location of a sale is its ultimate destination. Furthermore, the *jurisprudential* means of ascertaining the intended final location of a sale is also a

[52] See Hellerstein, Hellerstein & Swain Sec. 7.17 (discussing cases).
[53] See, e.g., Geoffrey v. South Carolina Tax Commission, 437 S.E. 2d 13 (1993).
[54] Hellerstein et al. 7.17[3].
[55] See, e.g., Parker Banana, 391 So. 2d 762, 763 (Fla. Dist. Ct. App. 1980).
[56] As Hellerstein and Swain put it, the statutory argument can go either way. Sec. 9.18[1][a]. Administratively, not looking through to the ultimate destination is surely easier, though, as a policy matter the ultimate destination is what matters and "most courts that have considered the issue have adopted the ultimate-destination rule rather than the place-of-delivery rule." Id. This trend would surely be even stronger if we were considering tax motivated arrangements for delivery.

task that courts seem suited to undertake, especially with the help of well-crafted regulations. For instance, there are currently several sets of regulations that attempt to use market based sourcing for services and intangibles. In California, the regulations use a waterfall concept for locating such sales, with the information generally retained by a taxpayer as part of their business records high up on the ladder.[57] A wholesaler in Nevada surely has some record of how many units it ships to retailers in California.

II. Current and Potential Controversies Involving Equitable Apportionment

One might say that this is all well and good, but it is ironic that I am advocating for equitable apportionment at a moment when its use is seen as particularly problematic. This is a cogent concern, but it can only be addressed through explaining the nature of the current controversies. We have already discussed one controversial issue, which is the use of equitable apportionment to require combined reporting. As already explained, the importance of this issue is receding, but, in any event, I believe the stronger argument is that courts should be able to require combined reporting under current law. Certainly, there is nothing stopping a government from giving courts this power.

There are three other issues. The first issue involves courts requiring taxpayers to use an alternative method to calculate their sales factor to remedy the faulty construction of UDITPA Section 17. We will see that, as with combined reporting, this is not a major issue. The second and third issues, which are related, are more challenging. The second issue is that equitable apportionment in the context of the single sales factor is incoherent. It is incoherent because the single sales factor is not trying to assess where income is produced and therefore there is no basis on which to revise an apportionment formula one way or another. The third issue is that because of this incoherence certain results of the SSF could be found to be unconstitutional.[58]

A. Controversies About Calculating the Sales Factor

As explained above, the original sales factor rule under UDITPA mandated that sales of tangible personal property be sourced to the destination of the sale, whereas services and intangibles would be sourced (as a general matter) to the state where the services or intangible were produced.[59] This was clearly the wrong rule because the whole point of the sales factor is to give credit to market states,[60] though getting the rule right for intangibles and services mattered much less when UDITPA was drafted in the 1950s. Given the poor rule, the best approach is to change the rule and many states are doing so.

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[57] CAL. CODE REGS. tit. 18, § 25136-2.
[58] Hearing Officer's Report at 10.
[59] Compare UDIPTA § 16 with UDITPA § 17.
[60] Swain, *supra* note __, at 300.

Yet what is to be done in the states that have not yet changed the rule? Consider the facts of *Vodafone*.[61] Vodafone sells mobile phone services. For six years, it computed its sales factor for purposes of Tennessee's corporate income tax using the "primary-place-of-use" method, which is basically what it sounds like. Vodafone determined its sales made to Tennessee addresses and put that number in the numerator of a fraction that had its total sales in the denominator.[62] A large accounting firm (PwC) advised Vodafone that this methodology was not required by the statute. This was because Tennessee followed UDITPA and mobile phone service is not tangible personal property, and hence the cost of performance rule of Section 17 of UDITPA should apply.[63] The resulting difference in the Tennessee numerator was dramatic, a drop from about $1.4 bn to about $150 mn.[64]

The theory of the sales factor clearly indicates that Vodafone's original methodology was correct and yet the statute just as clearly mandated an incorrect result. The question the Tennessee Supreme Court had to decide was whether this was an appropriate case for equitable apportionment.[65] The court decided that it was.

This seems to me to be a close case. The taxpayers argued that this is the absurd result clearly required by the statute and that using equitable apportionment in such a case is tantamount to rewriting the statute, to essentially establish the theoretically correct rule in states where the legislature has not acted to do so.

It seems indisputable that the best result here is for legislatures to act, which they are and which is why this specific issue is shrinking. Yet I also think that the courts that have ruled against taxpayers did so with considerable justification. One key fact in many of these cases is that taxpayers initially filed their taxes using a common sense metric to gauge sales into a state. The cases arose out of refund actions. Thus it was clear to taxpayers what it is the sales factor is attempting to measure and it was also reasonably straightforward for these taxpayers to provide a ratio consistent with what the sales factor is trying to measure.[66] It would be a different case, I think, if the taxpayer were, for instance, a provider of cloud-based enterprise services that just followed plain language of the statute and did not apportion any sales to a state that was not the location of most of its income producing activities. Such a hard case is more the kind of case that UDITPA's incorrect, but seemingly simpler rule, could be seen as meant to address.

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[61] Vodafone v. Roberts, 486 S.W. 3d 496 (2016). I simplify the facts somewhat.
[62] Id. at 499, 502.
[63] Id. at 500.
[64] Id. at 508.
[65] Note that Tennessee's statute arguably gives the Department of Revenue more authority than the standard Section 18 provision. Id. at 524.
[66] Of course, many other taxpayers presumably could also have gotten it right the first time, but instead just followed the text of the statute and so have gotten the benefit of the faulty rule and avoided scrutiny. This horizontal equity issue is why the statute needs to be changed and also why *Vodafone* is a close case.

There are a few further noteworthy points about *Vodafone*. As already explained, the whole justification for apportionment is that there is no baseline for determining where income is created in connection with a unitary business. Yet, as also already explained, the taxpayers in cases like *Vodafone* had no particular problem providing a rough estimate as to where their sales were generated for purposes of the sales factor. This is not surprising, as knowing where sales occur is something you would expect businesses to keep track of even in the absence of taxes. In the next section I will consider whether there is something important about apportioning an income tax only through sales that should influence how equitable apportionment is to operate going forward.

Another interesting facet of *Vodafone*-type decisions is that there is not really a qualitative component. Vodafone is a mobile phone business and this case was about how to apportion its sales. The problem was simply that the number that the original formula arrived at was too low. Vodafone was not helped by the fact that it had readily computed a different number, but why did this first number seem so much more compelling? The answer is that we understand the policy behind the sales factor and have a common sense understanding of Vodafone's business.

In sum, close and peculiar cases such as *Vodafone* ought not undermine the potential use of equitable apportionment. The primary reason is that there is a clear statutory fix and there will be fewer and fewer such cases as states modernize their sourcing rules.

B. Controversies about the Current Purpose of Equitable Apportionment

One prominent commentator has stated, that "[f]rom a tax policy perspective, the single sales factor is virtually indefensible."[67] If this is so, then what kind of result is worse than indefensible and in need of correction? Or, as another prominent commentator has explained, Section 18 does not function at all because "it would be easy to put an economist on the stand and say that a formula that completely disregards all of a company's property and payroll does not fairly reflect the business activity in the state."[68] Yet another prominent commentator takes the next logical step and argues that states should be prepared to default back to the traditional three-factor formula in some cases.[69] To be sure, this question only bedevils the use of formulary apportionment and equitable apportionment when they use SSF, but this is still a big problem as SSF seems to be the wave of the future within the United States and, much more conjecturally, as national policy if the idea

[67] Hearing Report (Pomp) at 10.
[68] Amy Hamilton, MTC Alternative Apportionment Group Grappling With Sourcing Issues,79 State Tax Notes 705 (2016) (quoting former MTC Chair Bruce Johnson).
[69] See Rick Handel, Using UDITPA Section 18 in South Carolina and Beyond, 77 State Tax Notes 349 (2015).

of a reform of the corporate income tax is to better tax consumption (and spur the economy).[70]

One answer to what equitable apportionment in the age of SSF for could be for it to undo extreme results relative to what the three factor formula would arrive at. Indeed, the Supreme Court has occasionally expressed preference for multi-factor formulas because single factor formulas are prone to extreme results, where extreme means the results of a formula resulting in too much income being apportioned to one state.[71] The current jargon would be that such a formula violates the requirement of external consistency. I will argue that the feared extreme results do not violate the constitutional requirement of external consistency, nor are they unfair in a way that requires correction using equitable apportionment.

Yet if SSF is defensible, even when it yields an "extreme" result, then the cases in which equitable apportionment is appropriate would be different (if there are any) in the SSF world, as would the methodology for adjusting an apportionment result. The first step in our analysis will thus be to consider how the tax policy behind SSF could be defended. Once we locate a policy rationale for SSF, then we will see that this rationale easily passes constitutional muster and is sufficiently analytically robust to explain when there is or is not a need for equitable correction.

i. Theory of the New State Corporate Income Tax

In order to make traction on thinking about the nature of equitable apportionment in the age of SSF, we need to step back and consider just what kind of tax the state CIT has become.

a. The New State Corporate Income Tax as a Kind of Sales Tax

Building upon a seminal argument made by Charles McLure,[72] I have argued at length elsewhere that there is an important way in which the double shift to SSF and market-based sourcing of sales have changed the nature of the CIT.[73] The simple argument is as follows. The more a corporation, say Amazon, sells in a given state, the more of its income will be taxable in that state. Say the state is California and the CIT rate is 10%, then Amazon is paying a 10% tax on the net income from its sales into California.

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[70] And therefore less of an issue in the European context where there is a satisfactory consumption tax regime and the new harmonized corporate income tax is supposed to tax corporate income and, accordingly, uses three factors. Note that this does not mean that the means of implementing the sales factor cannot be improved and thus the argument of Part __ is still relevant.
[71] Hearing Officer's Report at 10.
[72] Charles E. McLure Jr., The State Corporate Income Tax: Lambs in Wolves' Clothing, in The Economics of Taxation 327 (Henry J. Aaron & Michael J.Boskin eds. 1980).
[73] Shanske, New CIT, at 321-22.

To be sure, matters are not so simple.[74] For those readers unwilling to go farther without elaboration of my earlier argument, here is its analytic core. The argument is that, based on reasonable assumptions, corporations experience increased CIT liability at the *margin* as a product of increased sales rather than profits.

Here is an example to illustrate the point. Corporation Z has a 10% SSF in California and earns $20,000,000 on $100,000,000 in sales nationally. Assuming that California has a 10% CIT rate, then Corporation Z's tax liability in California is $200,000. Now suppose that Corporation Z makes $1,000,000 in new sales in California, on which it will earn $100,000 in net income (a return of 10%). What happens to Corporation Z's CIT liability to California? It is now $218,911 (10.89% [higher sales factor] * $20,100,000 [higher net income] * 10%). If not for SSF, how much would Corporation Z owe California? Only $201,000 or (10% * 10% * $20,100,000). And so almost 95% of Corporation Z's higher liability to California is attributed to its new sales in California and not to its higher profits. This makes sense because the full value of its new sales went into the sales factor relative to the net income from the sale.

It should be noted that several odd features of current state retail sales taxes actually make the sales tax administered through the corporate income tax a *better* sales tax. Current retail sales taxes do not generally tax the sales of services or intangibles, but these sales are taken into account for the sales factor. Furthermore, federal constitutional law currently prevents states from imposing their complementary use tax on many sales from remote vendors, but states can generally include the net income from these sales in their CIT base.

There are many reasons why states might want to impose a better consumption tax. The most obvious – if controversial – set of reasons is that consumption taxes are superior to income taxes. The primary argument for this is that consumption taxes, unlike income taxes, do not tax savings.[75]

Even if one is not convinced of the general superiority of consumption taxes, one might believe that such taxes are a good idea for states and local governments. There are at least two possible reasons for this. First, one might believe that consumption taxes are better than income taxes because consumption is less mobile than income. That is, wealthy people are less flexible in where they consume than in where (or when or if), formally, they earn their income. Thus states would do better to tax a less mobile base.[76]

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[74] I go into the various complexities in greater depth here. See Shanske, New CIT, at 344-48.
[75] See, e.g., Joseph Bankman & David A. Weisbach, *The Superiority of an Ideal Consumption Tax Over an Ideal Income Tax*, 58 STAN. L. REV. 1413 (2006).
[76] See, e.g., Charles E. McClure Jr., *The Tax Assignment Problem: Ruminations on How Theory and Practice Depend on History*, 54 NAT'L TAX J. 339 (2001).

Second, one might believe, regardless of the relative benefits of the two taxes for states, that American states should tax consumption because the federal government does not do so. Because the federal government is not taxing this base, the states can impose substantial taxes upon it without motivating excessive tax evasion. The argument for this has two steps.[77]

First, a fundamental tenet of tax economics is that the amount of deadweight loss generated by a tax increases at the square of the tax rate. The jargon is convoluted, but the intuition is simple. Consider how much trouble you would go to to avoid a 5% tax. Now imagine how much more trouble you would go to to avoid a 20% tax. You might not do anything to avoid a 5% tax, but you would do a lot to avoid the 20% tax – hence the exponential growth.

The second step requires making the observation that different taxes can be evaded in different ways. I can avoid paying income tax by deferring the sale of appreciated assets, but this does not help me avoid paying sales tax on my new car. I can evade the sales tax by purchasing from a remote vendor online, but this does not help with the income tax. The fact that different taxes can be evaded along different margins has the following implication in the federal system as currently in operation. When the states try to collect more revenue by piggybacking on the federal income tax, they are essentially increasing an already high tax rate and spurring additional evasion. By contrast, when states raise revenue with the sales tax then they are raising money using relatively low tax rates that do not cause as much evasion.[78]

In sum, there are many sound reasons for states to wish to improve their sales taxes through modifying the structure of their CITs.

Still, it must be conceded that the new CIT is a poor type of consumption tax. For one, it only reaches consumption through corporations. For another, it only reaches consumption through corporations with net income. As to this second oddity, the income tax base is both narrower and broader than the consumption tax base in two ways. First, the income tax base is broader because it does not permit expensing of capital business inputs.[79] Yet the income tax base is narrower because it does permit deducting wages.[80] I am certainly not arguing that this is not a big problem

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[77] Argument drawn from: David Gamage, *How Should Governments Promote Distributive Justice?: A Framework for Analyzing the Optimal Choice of Tax Instruments*, 68 TAX L. REV. 1, 56-63 (2014); David Gamage, *The Case for Taxing (All of) Labor Income, Consumption, Capital Income, and Wealth*, 68 TAX L. REV. 355, 375-381 (2015).

[78] David Gamage and I have recently argued that it is the federal government rather than the states that bears the brunt of the evasion caused by piggy backing on the income tax, which is one reason we believe states have been in no hurry to wean themselves off the income tax. David Gamage & Darien Shanske, Tax Cannibalization and Fiscal Federalism in the United States, Northwestern University Law Review, Forthcoming. This does not mean that it would not be better for the states to do so anyway. Furthermore, and as we argue, it certainly means that the federal government has incentive to get states to rely more on consumption taxes.

[79] Formally, though note the many ways the income tax permits accelerated depreciation.

[80] Note that DBCFT does allow deducting wages, a significant point that we will return to.

or that these two tendencies cancel each other out, but such oddities should not prevent us from seeing the new CIT as increasingly a consumption type tax. After all, as noted above, the typical U.S. retail sales tax does not reach huge swathes of consumption, namely services and intangibles, while also over-taxing certain sectors because of pyramiding, but we would not say that these pathologies mean that the retail sales tax is not a consumption tax. Rather, we say that it is a poor consumption tax.

And running a consumption tax through net income can be rationalized as a matter of political economy. There is a deep intuition that unprofitable entities should not pay tax,[81] and thus once the decision has been made to collect the tax at the entity level then it is hard not also to include an income component. Consider the recent Texas experience with the Margin Tax; the intellectual coherence of the tax is undermined by permitting firms essentially to choose the margin on which they will be taxed.[82] A similar California proposal did not contain such a sacrifice to purity; that proposal was DOA.[83]

As to only taxing the sales of corporations, this can be rationalized as a sub-optimal but not crazy attempt to ease administrability by only imposing the tax on larger taxpayers (at least formally). Take Texas' newish Margin Tax, a new hybrid-type business tax that does not tax only corporations but all businesses, but only those businesses with total revenue over $600,000.[84] Choosing to tax only corporations can thus be seen as attempting to accomplish the same result.[85]

b. Back to Doctrine: Equitable Apportionment is Not Needed to "Correct" SSF

Now that we have a handle on a theoretical justification for the new CIT, we should see how this helps with the doctrinal concerns that many have expressed. To demonstrate the core problem and its resolution, I will rely on a simple hypothetical.[86] A corporation produces all of its products for consumption out of state. Businesses or consumers in another state consume 100% of its product. Imagine a big market like California and its consumption of Alaskan oil or a new kind of flip-flops produced in Texas. Can it be that California gets to apportion to itself 100% of this multistate corporation's income?

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[81] See, e.g., Elisabeth Gugl and George R. Zodrow, *The Efficiency Of "Benefit-Related" Business Taxes*, Oxford Working Paper Series 32 (2014) (citing James Hines).

[82] Specifically, a firm can choose total revenue minus cost of goods sold (i.e., close to subnational subtraction method VAT) or total revenue minus compensation (i.e., an inversion of the correct calculation) or 70% of revenue or total revenue minus $1mn (a boon to small business). https://www.comptroller.texas.gov/taxes/publications/98-806.php.

[83] Kirk J. Stark, *Houdini Tax Reform: Can California Escape its Fiscal Straitjacket?*, CALIFORNIA POLICY OPTIONS 1 (Nov. 2010).

[84] Texas Taxation Code Sec. 171.002(d).

[85] To be sure, given the advent of the LLC and other planning structures, this is an increasingly poor choice.

[86] See, e.g., Handel, using UDITPA, supra, also in conversation.

The potential constitutional problem is that it looks like California is trying to tax too large a portion of this corporation's income. Say we are discussing a Texas corporation that makes flipflops. Surely Texas has some claim on the firm's income, as the original three-factor formula implied. By taxing 100%, California looks like it is taxing more than its fair share.[87] Indeed, the legislative history of SSF in California, as elsewhere, clearly implies that California adopted SSF strategically, reckoning that it would get a higher portion of taxes from firms that import into the state.[88] The Court has even explained that it looks at single factor formulas with particular skepticism.[89]

The problem for equitable apportionment is essentially the same. The taxpayer might concede that California's formula is constitutional because of the Court's reluctance to constitutionalize a particular approach to the apportionment of corporate income. Nevertheless, the taxpayer would argue that equitable apportionment is meant to deal with cases where a result is unfair even if constitutional. At the heart of the petition for equitable apportionment would again be the observation that surely the origin state is contributing *something* towards the production of income.

I think the taxpayer in a case like this should lose both the constitutional argument and the petition for equitable apportionment. One way to see why this is so is by considering New Hampshire's Business Enterprise Tax.[90] The BET is a subnational

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[87] At least sometimes the Court would call this particular violation of the dormant Commerce Clause a violation of "external consistency." This particular version of the Court's explanation is worth noting at length, as it explains that the test also applies to unusual taxes and puts a large burden on the taxpayer.

> In order to prevail [an external consistency] challenge, an income taxpayer must prove "by 'clear and cogent evidence' that the income attributed to the State is in fact 'out of all appropriate proportions to the business transacted ... in that State,' [Hans Rees' Sons, Inc. v. State of North Carolina] 283 U.S. [123], at 135 [51 S.Ct. 385, 389, 75 L.Ed. 879 (1931)], or has 'led to a grossly distorted result,' [Norfolk & Western R. Co. v. Missouri State Tax Comm'n,] 390 U.S. [317], at 326 [88 S.Ct. 995, 1002, 19 L.Ed.2d 1201 (1968)]." Moorman Mfg. Co., 437 U.S., at 274, 98 S.Ct., at 2345. We conclude that the same test applies to apportionment of a VAT. Trinova must demonstrate that, in the context of a VAT, there is no rational relationship between the tax base measure attributed to the State and the contribution of Michigan business activity to the entire value added process. See Container Corp., supra, 463 U.S., at 180-181, 103 S.Ct., at 2948-2949.

Trinova 832-33.

[88] See, e.g., http://repository.uchastings.edu/cgi/viewcontent.cgi?article=2319&context=ca_ballot_props (ballot argument for Prop 39).

[89] Container Corp, 463 U.S. at 182-83 ("Some methods of formula apportionment are particularly problematic because they focus on only a small part of the spectrum of activities by which value is generated. Although we have generally upheld the use of such formulas, see, e.g., Moorman Mfg. Co., supra; Underwood Typewriter Co., supra, we have on occasion found the distortive effect of focusing on only one factor so outrageous in a particular case as to require reversal.").

[90] New Hampshire General Statutes, Ch. 77-E.

addition method value added tax (VAT).[91] All consumption taxes seek to tax consumption; each type sets about its task in a different way. The typical US retail sales tax attempts only to impose a tax at the moment of consumption.[92] A *subtraction* method VAT is built on the insight that some business has gross receipts from each sale for consumption.[93] Thus,

Gross Receipts – Business Purchases = Consumption Tax Base.

An addition method VAT tinkers with this equation. Rather than subtract business inputs from gross receipts, the addition method VAT reasons that the difference between gross receipts and business purchases must consist in profits and wages, thus:

Profits + Wages = Consumption Base.

This is basically how the BET works; it is a small tax on the consumption base calculated using the addition method. The BET still needs to be apportioned and uses a blend of the traditional three factors.[94]

But what if New Hampshire had opted just to use the sales factor on the theory that this factor best locates where consumption is happening? This is what California had proposed to do with its subtraction method VAT.[95] And Texas' new Margin Tax, which is an odd approximation of a subtraction method VAT, also uses SSF.[96]

Or take the DBCFT, it does allow a deduction of labor expenses,[97] just like a CIT, as well as immediate expensing, which is different from a CIT, but not that different from a CIT with accelerated depreciation. The DBCFT makes the choice to allow for the deduction of labor costs, which is not how one would set up a subtraction method VAT, for a sensible and principled reason: countering the tendency for consumption taxes to be regressive. One can counter this aspect of the tax by taking the consumption funded by labor income out of the base and then taxing it separately at progressive rates.[98] And this is what DBCFT proposes to do.[99] In any

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[91] Daphne A. Kenyon, *A New State Vat? Lessons From New Hampshire*, 49 National Tax Journal 381 (1996); Jennifer Weiner, *How Does New Hampshire Do It? An Analysis of Spending and Revenues in the Absence of a Broad-Based Income or Sales Tax*, NEW ENGLAND PUBLIC POLICY CENTER RESEARCH REPORT 11-1 at 32 (2011).

[92] As does the standard credit-invoice method VAT, which is much effective than the typical US RST in combating pyramiding.

[93] See Kenyon supra, see also Justice Kennedy's opinion in Trinova Corp. v. Michigan Dep't of Treasury, 498 U.S. 358, 363 (1991).

[94] Sec. 77-E:4.

[95] See Stark supra.

[96] Texas Tax Code section 171.106(a).

[97] Auerbach et al., supra.

[98] History of this idea in Weisbach, *A Guide To The Gop Tax Plan – The Way To A Better Way*. The DBCFT thus only reaches economic rents, which is why, in the end, it resembles the CIT to a considerable extent.

event, this theoretical insight, illustrates just how vexing it is to describe a particular tax as a consumption tax or income tax. In the case of the DBCFT, it is a kind of consumption tax, but only if one looks at the tax system in aggregate.

Returning to our problem, if a state adopted the DBCFT with SSF as part of a larger move to a progressive consumption tax, why should that option be foreclosed just because the DBCFT itself resembles the CIT and is, in fact, a tax on (some) of the profit of corporations (and other firms)? Assuming that such an expedient should not be foreclosed as a matter of constitutional law and supposing for the sake of argument that the DBCFT is the baseline, then the CIT in its current form is just an imperfect DBCFT because it does not permit complete expensing.[100]

As a matter of doctrine, one could argue that this conclusion follows a fortiori from the Court's most recent – not really recent (1991) – pronouncements in the area. In *Trinova*, the Supreme Court considered Michigan's Single Business Tax (SBT), which was an addition method VAT. The tax used the traditional three-factor apportionment formula. Taxpayers objected that for this kind of tax there was not sufficient uncertainty to justify using the three-factor formula. The Court responded that locating "value added" is no more certain than income and thus the state could use a formula.

The Court also held that using the sales factor was fair. The taxpayer had argued that it was one thing to use property and payroll to calculate the location of its profits and wages, but its sales into Michigan were not relevant.[101] About this, the Court stated:

> We have . . . already concluded that sales (as a measure of market demand) do have a profound impact upon the amount of an enterprise's value added, and therefore reject the complete exclusion of sales as somehow resulting in more accurate apportionment. We further reject this critique because it cannot distinguish application of the three-factor formula to a VAT from application to an income tax. . . . [A]s we responded to a similar argument in *Moorman Mfg. Co.*, whatever the merit of Trinova's argument that sales do not contribute to value added "from the standpoint of economic theory or legislative policy, it cannot support a claim in this litigation that [the State] in fact taxed profits not attributable to activities within the State during the yea[r 1980]." 437 U.S., at 272.[102]

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[99] Of course, one can and should tinker with the labor taxes part of the tax system when one has a VAT as well, and so I don't see why this counts as a plus for the DBCFT.
[100] And thus taxes more than economic rents.
[101] Note that the sales factor was by far the largest.
[102] Trinova Corp. v. Michigan Dep't of Treasury, 498 U.S. 358, 382–83 (1991).

Given that the Court has permitted the use of three factors for a VAT-type tax in part because it cannot be distinguished from an income tax as a matter of constitutional law, it is hard to see why the holding of *Moorman*, which permits a SSF for purposes of the corporate income tax, should be disturbed if a state takes the position that only taxing sales is all it wants to do. Using SSF for a VAT-type tax is actually more consonant with the theory of a VAT.

Of course, in the hypothetical we are considering, California is imposing a corporate *income* tax. Thus it seems relevant whether the apportionment formula results in a fair representation of *income*. But I do not think the name of the tax – or the state of its development - should be dispositive of the constitutional or equitable analysis. We have already seen that the institution of SSF fundamentally changes the CIT so that it more resembles these other kinds of entity-level taxes that explicitly label themselves more in consumption tax terms. If SSF for a tax like the BET seems obviously acceptable under *Moorman* and *Trinova*, then it should for the CIT with SSF was well.

Here is another way to see why relying on labels is not satisfactory. Consider the following stylized story. A state is impressed by the arguments for a state-level consumption tax, but decides that it cannot impose a credit-invoice VAT as is done in the rest of the world without federal support.[103] The state is also hemmed in by the fact that taxpayers have grown used to not paying tax on retail sales of services or intangibles, as is common under most state RSTs. Therefore the state imposes a subtraction or addition method VAT, modeled on the current New Hampshire BET or former Michigan SBT. The new tax uses SSF. We can call it, in honor of California's doomed proposal, the BNRT.

Businesses complain about the BNRT being paid by companies that are not profitable. Progressive groups complain that the BNRT is regressive. Accordingly, the BNRT is changed so that it is now only paid by profitable corporations – that is a deduction for labor is allowed on top of the deduction for business inputs. In other words, we end up where we are now with the state CIT – more or less - except the consumption concept came first and the income concept second. Why should limiting the reach of a state consumption tax mean that the state cannot continue to use SSF if it changes the base of the tax in this way? Alternatively, why should it matter that the actual taxes we are considering are moving in the opposite direction (maybe), that is, from a "pure" CIT to an income tax/consumption tax hybrid?

Indeed, the standard way of teaching the personal income tax is to explain that it is an income tax with numerous consumption tax elements. The fact that the federal income tax has both aspects does not prevent us from interpreting it in a purposive manner in two different ways. Thus we can use traditional income tax principles to think through whether a transaction has actually generated income even while we

[103] Or returning, to the DBCFT proposal, suppose the federal government would like to impose a consumption tax, but for political purposes cannot impose a credit-invoice VAT.

can consider whether a given savings vehicle is the kind of thing Congress intended not to be taxed as income.

In sum, finding against the use of SSF in our simple scenario would be inconsistent with the rationale of the cases upholding use of apportionment, the sales factor and the single sales factor. It would require the Court (or a court) to prioritize one label for a tax over another, with little justification, and in spite of the fact that the burden is on the taxpayer to show a gross distortion by clear and cogent evidence. Furthermore, because the tax is as much a tax on sales refracted through income as it is a sale on income refracted through sales, it is hardly inequitable for a state simply to rely on the sales factor result.

But if equitable apportionment is *not* to be used to correct the extreme results of SSF, then what is it to be used for? That will be the topic of Part III, but first some counters to the argument of this subpart should be addressed.

c. Objections

There are many possible objections to this line of analysis. First, this rationale finds no place in the actual laws propagating SSF. Thus it might not seem so equitable to use a rationale for the tax that the actual legislators did not consider. This is fair enough and certainly it would be better if legislators did do so explicitly, but the objection is not fatal. After all, there is no ambiguous language here. What could legislators do to more explicitly signal their interest in shifting the corporate income tax to a consumption tax beyond shifting to SSF and correcting the sourcing rules for sales other than tangible personal property?

And, as for legislative history, the arguments for SSF on economic development grounds are essentially the same arguments proponents make for shifting to consumption taxes. That is, the proponents argue that it would be better for the economy if we shift the burden of taxation from from property and payroll to sales, which is to say, consumption.

In any event, these problems are certainly not fundamental. Should a state – or the federal government – choose to do so then it can be made perfectly clear that the government is, in its way, trying to tax consumption and that the results of SSF should not be found suspect even if they diverge dramatically from a result of the three factor formula.

A second objection might argue that the taxpayer always loses, that SSF is just a big tax base grab, but this is not so. Sometimes states will likely have less income apportioned to themselves through use of SSF and that too should be left alone. If a state were to claim that SSF does not accurately represent the activity of a business

in a state because of that corporation's extensive property and payroll within the state, then the state should lose.[104]

A third objection observes that the examples used so far were too easy. What if there were a direct and clear contradiction between the income tax and consumption tax rationales for the new CIT? Here is an important example where this tension exists: intermediate goods, sold from business to business, say machine parts old by one corporation to another to use in its factory. Clearly these sales generate income for the corporation selling the machine parts. Just as clearly, on a consumption tax rationale, these sales should not be included in the consumption tax base because they do not constitute consumption. If these sales are included, then it leads to "pyramiding," to a tax on a tax depending on how many transactions occur. All consumption taxes try to eliminate this problem.

Presumably there can be little dispute that the explicit tax base rule that includes the income from these sales must win out. Indeed, to the extent that a CIT allows accelerated depreciation for capital assets means that there is already some rough justice here vis a vis the consumption tax base. As already explained, almost all taxes are impure or poorly designed. The income tax component of the tax directs us to tax intermediate goods, while the sales factor component of the tax directs us to care only about the market for these goods.

To conclude this Part, the current issues swirling around equitable apportionment are soluble and, in any event, do not represent fatal weaknesses with formulary apportionment. The current EU proposal uses three factors and, since the EU already has a well-functioning consumption tax, it does not need a corporate income tax that mimics one. Furthermore, should, for instance the US, opt for the use of SSF, then there is no reason that equitable apportionment cannot be used to adjust formulas that misfire. Still, it might be wondered whether formulary apportionment with SSF could work better. I think it could; outlining how this could be done is the topic for the last Part.

III. The Sales Factor of the Future

In the previous Part, I explained why new thinking about the nature of the state CIT can inform constitutional and statutory analysis, particularly as to cases that seem to result in states apportioning too much income to themselves. Our example was an extreme case of a state getting to apportion 100% of a multistate corporation's income to itself. I argued that, at least in theory, this result was not infirm if there really was just a single market state. Yet if equitable apportionment is not for

[104] Faber imagines a state making such an argument on the basis of *Vodafone*. Peter L. Faber, Inequitable Apportionment: A Bad Precedent in Tennessee, 80 State Tax Notes 277 (2016). This seems unduly alarmist. As explained above, the original version of Section 17 at issue in *Vodafone* was manifestly in tension with the purpose of the sales factor. In this imagined horrible, a low sales factor for an instate exporter is exactly consistent with the policy behind the sales factor. For similar analysis, see Handel, Using UDITPA.

correcting apportionment results when the result yielded by SSF is very far from that provided by a more traditional formula, then what is it for? Note that clearly equitable apportionment is still useful in the various ways surveyed in Part I above. For instance, equitable apportionment could be used to force combined reporting or to separate out different lines of business. And so the more precise question is whether equitable apportionment has any special role in connection with the sales factor given the analysis in Part II above?

The answer is yes and this Part will develop the argument. The first step is to remember that the sales factor was not used by Willis Committee in part because it was the most difficult to calculate. Yet the sales factor was retained because of the interests of market states and now has swallowed up the apportionment formula altogether in more and more states. There is no dispute that the sales factor remains the most elusive and manipulable of the factors – either through paper manipulation or through actual changes on the ground. Because it is so malleable, the sales factor is potentially a big issue even when a government has retained the traditional three-factor formula, as in the current EU proposal.[105]

In this Part, I will explain how equitable apportionment can be useful in shoring up the sales factor. The first stop in the argument is to outline the problem.

A. Sales Factor Past

Kimberly Clausing has recently found that the shift to a greater use of the sales factor results in reduced revenues generally, a finding that is consistent with that of other researchers who conducted similar studies based on complex regressions.[106] Elliott Dubin of the MTC found similar results when he modeled state tax capacity after a state switched to SSF.[107] I have found two states that actually publish data on apportionment factors. This information also indicates that the sales factor is typically the lowest factor, potentially much lower.

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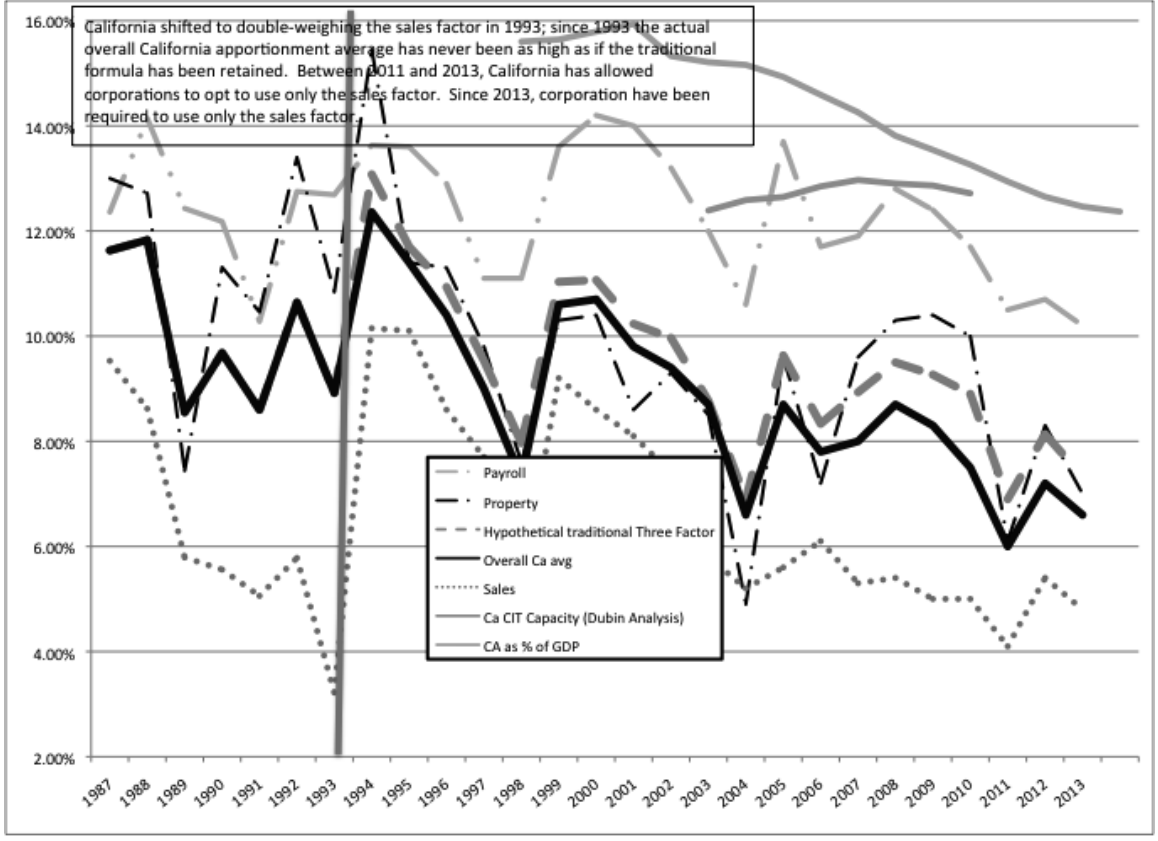
[105] Note that, an admittedly implausible, way further to counter gaming would be to randomize the formula used in a given year. Suppose there were four options: property and payroll, traditional three factor, double-weighted sales factor and single sales factor. All firms would need to calculate all factors every year, with the actual formula to be chosen randomly, say on January 1st of the succeeding year (so on January 1, 2017 the formula would be chosen for purposes of the 2016 CIT). Because of the diversity of formulas currently in use, most multi-state corporations already need to calculate all three factors every year and so the administrative burden would not be too much greater than currently. Changing the formula would have the effect of dampening the incentive to manipulate the sales factor in particular while still, at least theoretically, implicitly taxing property and payroll less than under the traditional formula.

[106] See Clausing supra ("Higher sales weights are associated with lower revenues in specifications 1,4,5, and 6 with 95 percent confidence, in specification 2 with 89 percent confidence, and always have a negative sign. Taking the average sales weight coefficient from this table, this implies that moving from an equal-weighted formula to one that double-weights sales is associated with a share of corporate tax revenue in GSP that is about 2.5 percent lower.").

[107] Elliott Dubin. *Changes in State Corporate Tax Apportionment Formulas and Tax Bases*, STATE TAX NOTES 563, 563 nn. 3-4 (February 22, 2010)



Here is the story from California.

Chart 1: The Sales Factor in California[108]

Note that not only is the sales factor the lowest factor, but it is far lower than what one would expect it to be either considering California's share of national GDP or the more complicated model used by Dubin. [109]

The date from Pennsylvania tell a similar, though not identical, story.

Chart 2: The Sales Factor in Pennsylvania[110]

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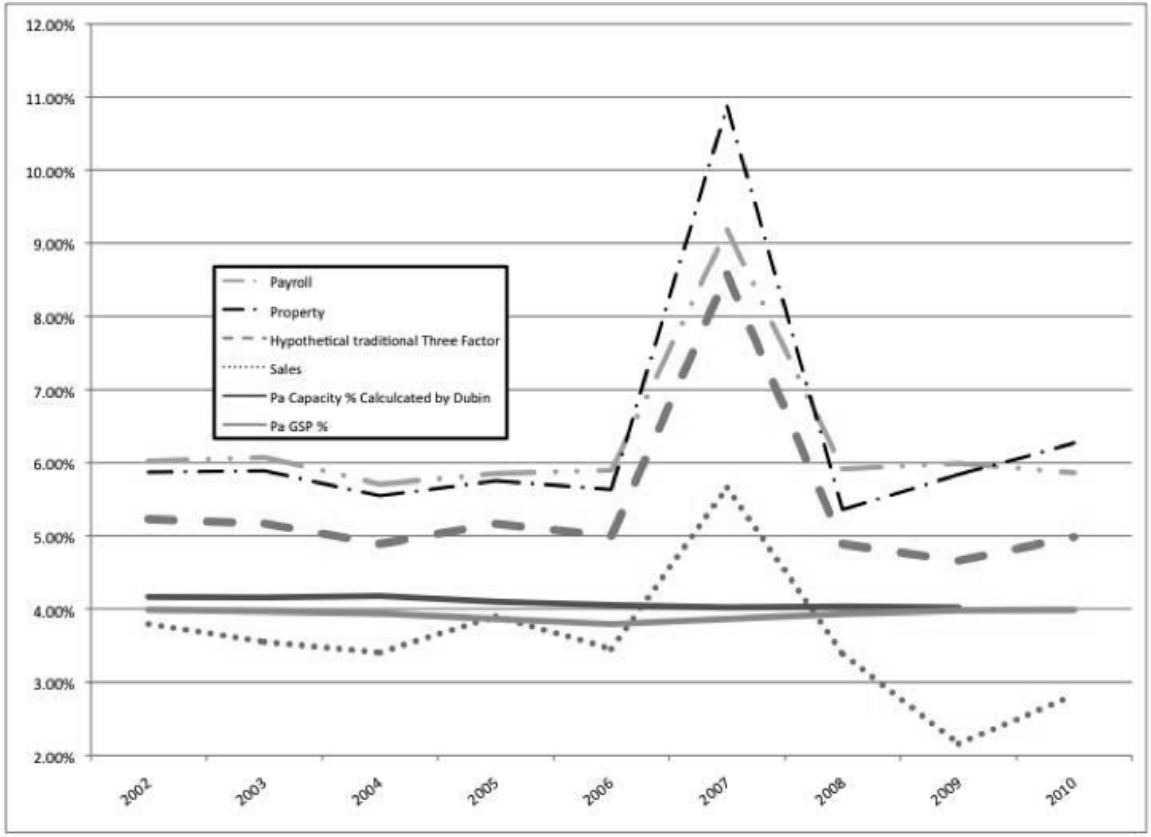
[108] Every year the California Franchise Tax Board (FTB) publishes an annual report, and at the end of each annual report is a statistical appendix that presents the last year's apportionment factors. See Reports, Plans, and Statistics, State of Cal. Franchise Tax Bd. (2013), https://www.ftb.ca.gov/aboutftb/plans_reports.shtml [hereinafter Annual Reports]. For the past several years this data was presented in Table C-5. Note that Shackelford and Slemrod use international data to make similar estimates based on economic fundamentals for the US should it shift to formulary apportionment. Douglas Shackelford & Joel Slemrod, The Revenue Consequences of Using Formula Apportionment to Calculate U.S. and Foreign-Source Income: A Firm-Level Analysis, 5 Int'l Tax & Pub. Fin. 41 (1998). The data from the states and from the evidence from economists suggests that projections based on economic fundamentals are likely to be optimistic, especially as concerns the sales factor.

[109] See discussion infra.

[110] Pennsylvania also publishes data on apportionment annually. I have included data for all the years available. See, e.g., Pennsylvania Department of Revenue, Bureau of Research, Tax Year 2010 Statistics on Corporate Net Income Tax Capital Stock / Foreign Franchise Tax (Sept. 2015), at Table 7.



What can explain the sales factor's relative underperformance? No explanation strikes me as convincing other than tax planning. Clausing notes that one explanation could involve nexus rules, and this is a possibility as to what Clausing is measuring, which is revenue.[111] That is, it is possible that states are not receiving as much CIT on sales into a state because many of the corporations making the sales lack nexus with the state. Yet the data on the factors collected by the states are for all corporations that pay the tax; the corporations without nexus – or do not think they have nexus – are not included. Thus it seems like the issue is with corporations that do have nexus reporting a lower overall apportionment figure. It makes sense that the issue would be the factors rather than nexus because most states treat economic presence as sufficient for nexus under a CIT and it is implausible that the major taxpayers that make most of the sales would not know that.

Public Law 86-272 is also not a plausible explanation because this federal statute denies states jurisdiction to impose the CIT at all on an interstate business that only engages in solicitation within the state. Firms shielded by PL 86-272 are not reporting apportionment factors.[112]

Perhaps Section 17 is the culprit. Remember, it is Section 17 that essentially allows corporations to locate their sales of services or intangibles in the state of origin. This is the wrong rule, but it is not clear why this would lead to a suppression of the sales factor generally and over time. Given the strengths of California's economy,

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[111] ___.

[112] But yes effects sales factor through throwback rules, but that would only increase the sales factor, perhaps over what the baseline economic position of a state would indicate.

one might have thought that Section 17 would have provided a boost to California's sales factor. In any event, as mentioned above, the equivalent of Section 17 has been corrected in many states, including California, and so we will find out if the sales factor is rejuvenated. I suspect not.

There are two points I would like to take away from the data. First, though the matter is necessarily murky, it appears that the sales factor is the weakest link in the traditional formula, at least in part because of its relative malleability. Second, in considering the sales factor – and all the factors – we understood that basic economic data provided a sort of baseline. We will now consider whether further development of the baseline could be helpful in strengthening the sales factor.

B. Additional Background: Theories of Tax Compliance

An intuitive line of thinking about tax compliance asserts that uncertainty is good for the tax collector. Consider the secrecy surrounding the method the IRS uses for choosing which taxpayer to audit.[113] In fact, there is general evidence that taxpayers have an aversion to uncertainty and this suggests that taxpayers might overcorrect to avoid an uncertain outcome.[114]

There is also a specific reason that the corporate taxpayers we are concerned with should be uncertainty averse. As of July 2006, there is Financial Accounting Standards Board Interpretation No. 48 (FIN 48). FIN 48 requires all public companies and some private companies to take into account tax uncertainty by holding reserves. For positions more likely than not to pass muster (over 50%), the taxpayer must assign some probability to the chance of failure (say 40%) and multiply that percentage by the maximum tax benefit. The resulting number must be recorded as a FIN 48 liability. Any tax benefit less likely than not to succeed is to be recorded as entirely a liability.[115] Thus, as one leading practitioner put it:

> FIN 48 creates a new model: Unless the planning yields a highly certain result, there can be no financial statement recognition for the uncertain planning.[116]

One might expect that FIN 48 has therefore reduced the incentive for taxpayers to engage in tax planning and there is some evidence, anecdotal and otherwise, to that effect.[117] There is evidence on the other side concerning the continued aggressive use of planning by corporate taxpayers, including reading between the lines of cases

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[113] Sarah B. Lawsky, Modeling Uncertainty in Tax Law, 65 Stanford Law Review 241 (2013).
[114] Id. at 271.
[115] Dubin 823; see also FIN 48 Interpretation.
[116] Charles F. Barnwell, State Tax Planning – What's Left, State Tax Notes 861 (2009).
[117] Dubin 826. "Although the overriding goal of FIN 48 was to increase transparency and promote more accurate financial reporting, it seems as though it has also increased state tax compliance because the number of businesses entering income tax voluntary disclosure agreements in the NNP doubled from 2003 to 2006."

like *Vodafone*. This makes sense for many reasons, including that taxpayers can still enjoy some of the benefit of an uncertain position so long as it is more likely than not and even unlikely positions can be enjoyed once the statute of limitations expires.[118] In any event, given the difficulty of defining one's terms or of hypothesizing what tax would have been collected if not for tax planning, the point is not that we know for sure that there are risk averse corporate taxpayers,[119] just that it is likely that some taxpayers are *more* risk averse.

The traditional line of thinking about tax and uncertainty, along with the limited evidence about FIN 48, indicates that governments have fallen into a very advantageous position relative to taxpayers on account of the uncertainty surrounding SSF and formulary apportionment. The last thing the government should do now is offer more guidance that reduces the uncertainty. This conclusion does not actually follow from careful thinking about tax compliance.

The first reason that uncertainty is not to be simply espoused is grounded in principles of fairness, rule of law and tax morale. This was basically Boren's point forty years ago and it remains sound.[120]

The second reason is that uncertainty can only nudge taxpayers towards compliance if a proper result is *more* certain.[121] If tax authorities maintain that equitable apportionment should be available both on an income and consumption tax rationale, then that is not providing a less uncertain option.

The third reason is that this uncertainty is making it necessary for all taxpayers to engage in more tax planning, which is socially wasteful.[122]

The fourth reason is that the uncertainty is a blunt object and does not screen out compliant taxpayers from non-compliant ones.[123] Again, this is because there is no easier route.

So the compliance literature counsels towards states explaining how they will apply equitable apportionment. The next subsection will explain how they might do so in connection with the sales factor. The intuition here is to leverage what we have observed about cases like *Vodafone*; calculating the sales factor is not, in fact, like

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[118] Barnwell, supra at 861-62. For another list of planning possibilities, see list at Donald Bruce et al., *On the Extent, Growth and Efficiency Consequences of State Business Tax Planning*, in TAXING CORPORATE INCOME IN THE 21ST CENTURY 226, 232-34 (Alan Auerbach et al. eds. 2007).
[119] Jennifer Blouin, Defining And Measuring Tax Planning Aggressiveness, 67 National Tax Journal 875 (2014); see also McLure's critical comments on the Bruce et al. study supra.
[120] See Boren supra; see also Dominic de Cogan, Tax, Discretion and the Rule of Law in The Delicate Balance: Tax, Discretion and the Rule of Law (Evans, Freeman & Krever eds. 2011)
[121] Lawsky, supra, at 270-71.
[122] Leigh Osofsky, The Case Against Strategic Tax Law Uncertainty, 64 Tax Law Review 501 (2011).
[123] Leigh Osofsky, Who's Naughty and Who's Nice? Frictions, Screening, and Tax Law Design, 61 Buff. L. Rev. 1059 (2013).

"slicing a shadow." In general, corporations should be able to do a pretty good job of it using their ordinary books and records. To be sure, things are not always that simple. There is a reason that the Willis Committee recommended against using the sales factor. It is the easiest factor to manipulate and now, with SSF, taxpayers have enormous incentive to do so. Apparently, per the limited data that we have, they are doing so. Yet we just explained that there are presumably many taxpayers that would prefer not to create uncertainty through being aggressive with their sales factor analysis. But how will they know whether their calculations are conservative or aggressive? Or, put another way, how will either taxpayers or revenue authorities know whether there is something amiss that may (or may not) trigger equitable apportionment?

A. A More Certain Route

Take corporation X, which is uncertainty averse and eager to be compliant with the least possible cost. The outside accountants report to the tax director that the apportionment factor that they have arrived at is 10%. How should the tax director respond? If the question were about federal taxes and the accountants reported an effective rate of 15%, then the tax director would know that this rate is lower than the nominal rate (35%), but higher than that of many major taxpayers. The director would want to know, and could find out, the more specific rate of other firms in the same business. This would also provide some context. The director could then ask about the analytic steps that reduced the effective rate and query the soundness of each.

In the apportionment context, the situation is much murkier. There is no formal benchmark for sales into a state for a given firm, and it is doubtful that other firms in the industry will share their apportionment factors. But perhaps we can make a little progress. Let's return to the chart of California's experience with the factors.

Chart 3: California and the Sales Factor Again

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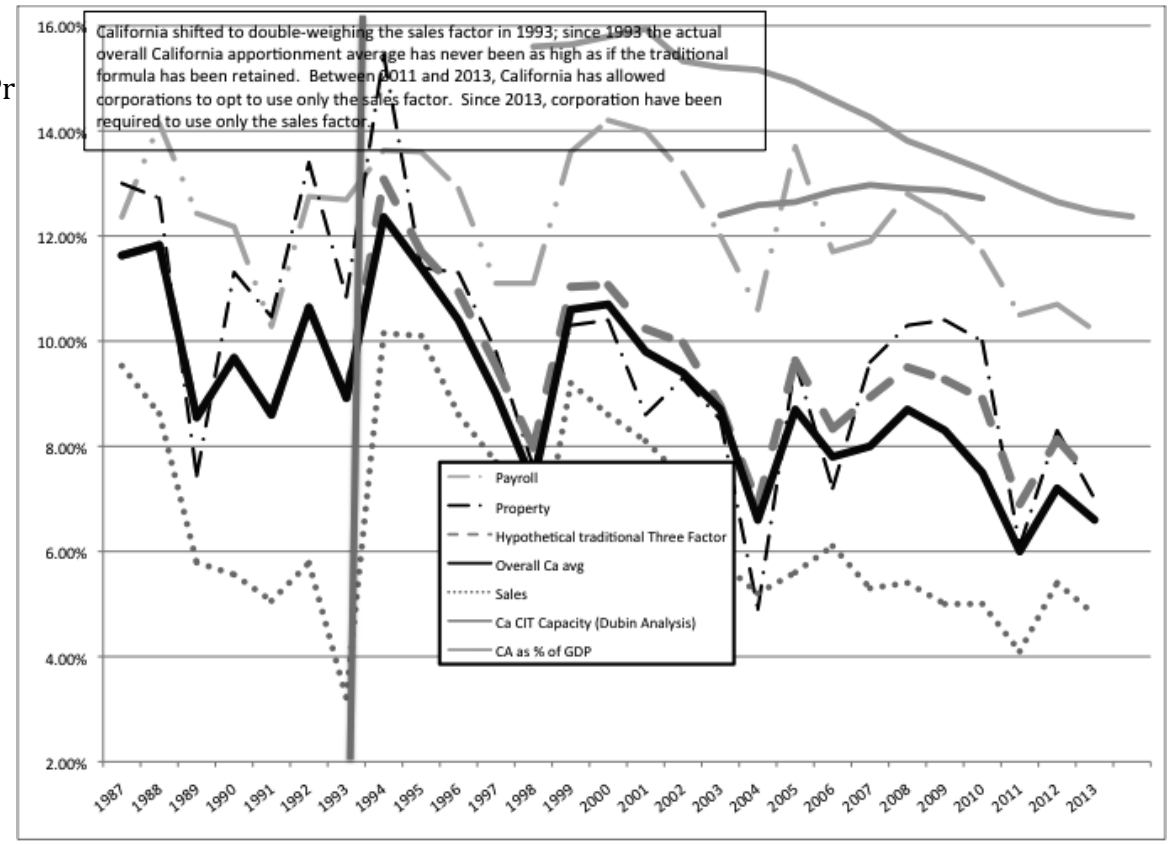

There are two lines that are meant to show what we might expect California's overall apportionment factor to be. One is a simple ratio of California's GDP to US GDP. The other is a number derived by Elliott Dubin of the MTC. The number Dubin arrived at for California's total corporate income tax capacity is actually a sum of industry shares calculated by the federal government, which means that much more refined estimates of sales into a state are possible. Wait, so the federal government calculates the state of sales by industry? Alas, not exactly, but there is data, along with a methodology, that can bring us closer at least to an industry benchmark.

The Economic Census provides data on the value of sales by industry and state every five years.[124] Alas, as Dubin explains, these sales are by *origin* of the sale and not destination. However, this data can be broken down by very small industry subsector, such as "Hotels."[125] Hotels provide a service that, by definition, is not likely to cross state lines and so the Economic Census could provide a reasonable approximation of a sales factor for a multistate corporation such as Hilton.

For instance, relying on the economic census, California had 14.73% of all hotel sales in 2012,[126] as compared to its 13.23% share of GDP.[127] Using the same procedure, Alabama accounts for 0.76% of sales in hotels, while it accounts for 1.17% of GDP. Clearly 15% is not necessarily a better benchmark than 13%, but it

[124]http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_00A1&prodType=table

[125] Note that this is not part of the ACIR/TPC/Dubin methodology, but the author's own observation/contribution.

[126] Comparing 2012 NAICS code 72111 for California with that of the US as a whole.

[127] BEA, GDP by State.

does suggest that it would be odd for the hotel sector in general to come in with a California sales factor that is well below California's share of GDP. Suppose there were two – and only two – national chains of hotels, Hilton and Marriott. Suppose as well that Hilton knows that it has 75% of the California market. Suppose that the two hotel chains otherwise split the rest of the national market 50-50. In this situation, one can reverse engineer what Hilton's California sales factor should be so that the total sales factor for the state should be 15%.

Table 1: An Example of Approximating a Sales Factor

Hotel Industry			Notes
Total Ca Sales	$	1,500,000.00	15% per Economic Census
Total US Sales	$	10,000,000.00	
Hilton			
Total Ca Sales	$	1,125,000.00	75% of $1.5mn
Total US Sales	$	5,375,000.00	Ca sales plus half of remaining sales
Hilton's Ca Sales Factor		20.93%	
Marriott			
Total Ca Sales	$	375,000.00	25% of $1.5mn
Total US Sales	$	4,625,000.00	Ca sales plus half of remaining sales
Marriott's Ca Sales Factor		8.11%	

No doubt this is a very simplified example. A taxpayer is unlikely to have such a precise number for market share. Furthermore, at least some hotels are wholly instate enterprises, which means they do not apportion at all. If such businesses are a large share of the market then this weakens the argument that the sales of interstate firms should approximate the census results. These are good points and it is certainly why this methodology does not produce results that should bind taxpayers. Rather, taxpayers, who possess knowledge of their market share can back out a benchmark number from publically available data and assess where they are. On the other side, tax administrators can look at the sales factors for a given industry and compare it to the census and wonder if further analysis should be undertaken if the deviation appears unaccountably large.

The procedure just outlined about will only go so far because most of the sales we are interested in will be interstate and so Dubin uses a more involved procedure for all industries. This procedure was first developed by the U.S. Advisory Commission on Intergovernmental Relations, then used again by the Tax Policy Center.[128]

[128] Elliott Dubin. *Changes in State Corporate Tax Apportionment Formulas and Tax Bases*, STATE TAX NOTES 563, 563 nn. 3-4 (February 22, 2010) (noting sources).

The BEA tracks the input and output of industries. For some industries the output is the end user. For other industries, the output is to some other industry. In order to come up with an apportionment percentage, one needs to assess how many end users are in a given state if the product is consumed. Alternatively, one needs to assess how much industry is in a state if an input is to be used in business. As for final users, this methodology assumes that the final users track the share of that state's GDP. Note that this measure can be refined insofar as we have some data on particular consumption patterns per state. As for intermediate users, we have data from the BEA on the state by state distribution of various industries.[129]

Two examples will hopefully make this procedure clearer. First, take food and beverage purchases. According to the BEA, over 99% of purchases from food and beverage stores are for final consumption.[130] This is a category for which we do not need to worry about intermediaries. We could just say that consumption for this industry should track state GDP, which seems sensible and so California's factor should be 13.23% and Alabama's 1.17%. However, using the BEA's personal expenditure data for 2012,[131] we get a 1.40% factor for Alabama and an 11.92% factor for California.

What about an intermediate good, like fabricated metal? According to the BEA, 16.52% of fabricated metal is used in the construction industry.[132] Going back to the 2012 Economic Census, construction materials consumed in Alabama were 1.33% of the national total, while such costs in Ca were 9.92% of the national total.[133] Note that this percentage of total sales to California is significantly less than California's share of GDP (13.23%). By contrast, Texas, with just under 9% of GDP, accounted for 10.54% of construction materials cost in 2012. So, as to an interstate manufacturer of fabricated metal, we can say that we would expect about 10% of the 16.52% of its sales to the construction industry to be apportioned to California. The BEA Input-Output tables of course account for all 100% of the output of an industry and so what would be required would be to repeat this procedure and add the percentages to get an estimate of what the total sales factor for a state should be.

Though imperfect, how could this information be operationalized? Suppose the department of revenue of a state explained this methodology and stated that it would expect that the sales factor for a given industry should come in within 50% of

[129] Rather than rely on where industries are located in the input-output tables, one could instead use where an industry's payroll is located, as was done by the ACIR.
[130] BEA 2012, The Use of Commodities by Industries, Before Redefinitions (Producers' Prices), IOCode 445.
[131] BEA 2012, Total personal consumption expenditures (PCE) by state (millions of dollars)
[132] BEA 2012, The Use of Commodities by Industries, Before Redefinitions (Producers' Prices), IOCode 332.
[133] EC0723A1: Construction: Geographic Area Series: Detailed Statistics for Establishments, cost of materials, components and supplies.

the benchmarks it generated.[134] (If 50% seems too generous, note the results of Chart 1 above, which indicate that currently, at least in California, there is over a 100% discrepancy between what the overall economic data suggest and the actual results.) The department of revenue would explain that it would consider petitioning for equitable apportionment should the discrepancy be inexplicable – and even if the calculations that result in the lower apportionment were themselves correct.

Assuming that a state has so acted, then the tax director can compare the benchmark sales factor for an industry with the sales factor that she is about to use for her corporation's taxes. Suppose the factor her accountants have arrived at is substantially lower than what the benchmark would indicate. As with her effective tax rate, she can ask why. Perhaps the census or BEA category is a poor fit for her firm.[135] Perhaps there is a lot of wholly instate businesses in the industry and so this makes the national data inapposite. Perhaps it can be demonstrated that the sales factor calculation was wholly straightforward, with no significant assumptions, which could be possible for many businesses. These would all be very good reasons and even a risk averse tax director could embrace a low sales factor.

Yet other scenarios are possible. Perhaps further discussions reveal that the key reason for the divergence was a decision made about the nature of the corporation's primary product. As to the new sourcing regulations for services and intangibles, there is lots of room for reasonable disagreement. The director could choose to embrace the reasonable interpretation that reaches the best tax result. On the other hand, the director might observe that if every firm in the industry were to embrace this interpretation, then the industry-wide sales factor would fall far below the benchmark. Such a result would attract the attention of the revenue authority and this discrepancy, if sufficiently large in individual cases, could be grounds for equitable apportionment, even if a court were to agree with the taxpayer about the best construal of the sourcing regulation.

The benchmark would not be operating like a safe harbor because there is no assurance that it provides the right result in a given case. The benchmark would also not provide a "sure shipwreck" because we have canvassed the many reasons why even a substantial deviation from the benchmark is acceptable. A sure shipwreck is a result that is explicitly rejected by the government.[136] In general taxpayers will cluster in a safe harbor and fly away from a sure shipwreck, though the range of where they will flee will be much broader. At the risk of torturing the analogy, it seems to me that the proposed benchmark serves the role of lighthouse

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[134] The 50% fudge factor is taken from Daniel Shaviro, The Optimal Relationship Between Taxable Income and Financial Accounting Income: Analysis and a Proposal, 97 Georgetown Law Journal 423, 475 (2009).

[135] Though note that the BEA data gets pretty granular, at least at five year intervals, which gets down to "over 425 industries and commodities and 13 final use categories." http://www.bea.gov/industry/pdf/industry_primer.pdf.

[136] Susan C. Morse, Safe Harbors, Sure Shipwrecks, 49 U.C. Davis L. Rev. 1385 (2016).

amidst the fog. It provides orientation in a murky situation; it will not lead to the clustering of a safe harbor but will lead to some more channeling than a sure shipwreck. Specifically, those taxpayers most interested in safety have been provided with some additional rough guidance. Assuming there is heterogeneity in taxpayer appetite for risk and that there are corporate taxpayers in particular looking to reduce risk, then this guidance, limited as it is, could have significant implications. *Equitable apportionment is the means by which this expectation concerning apportionment factors can be enforced.*

There are numerous objections one might lodge against this approach. For instance one might doubt that a significant percentage of corporate taxpayers might respond to this vague guidance. Yet, as explained above, there is evidence of risk aversion both among taxpayers in general and corporations in particular. If the empirical proposition is wrong, it does not seem like this proposal would have cost the states very much.

Another objection could emphasize just how many assumptions have gone into these benchmarks and thus taxpayers must be given large leeway in the results they arrive at. Because this is so, they cannot provide meaningful guidance. Yet, at least based on the information and analysis provided above, the discrepancy between the results benchmarks and actual sales factor might be as large as 100%. Again, it will be an empirical matter whether or not the benchmarks channel risk averse taxpayers in a meaningful way, but reducing the deviation by 50% would be significant based on the California data.

The point can be put another way. Currently there are regulations that guide corporations on sourcing their sales for purpose of the sales factor. For instance, the California regulations use a cascade of different presumptions depending on the type of item sold. At the bottom of some of these waterfalls is the ability to use the percentage of California's population if nothing else will work.[137] Clearly, the use of population stems from the same intuition as the one outlined here as to what a rough benchmark should be. Yet the methodology outlined here a bit more precise and should, at the very least, be the method that corporations use to arrive at a "reasonable approximation" when more direct methods are unavailing. The additional proposal to marry reasonable approximation to equitable apportionment simply directs taxpayers who calculate their sales factor using a more direct method to double check to see that their work is reasonable. If it does not seem so, then

[137] 18 Cal. Code Reg. 25136-2(b)(5) definition of reasonably approximated; (c)(1)(B) use of reasonably approximated at bottom of waterfall for services. The current version of the proposed model sourcing regulations from the MTC also incorporates relative population calculation in limited circumstances. See also Reg. IV.17.(d).(3)(B)3.c.i, ii, and iii. http://www.mtc.gov/getattachment/Uniformity/Project-Teams/Section-17-Model-Market-Sourcing-Regulations/Sec-1-17-Draft-Regulations-as-of-7-28-16-with-8-10-16-modifications-v2.pdf.aspx. Appropriately, the General Counsel of the MTC, Helen Hecht, has flagged the use of population as one issue to consider in revising Section 18. Amy Hamilton, Hecht Lists.

they might be subject to equitable apportionment unless they have good reasons why the reasonable approximation arrives at a not so reasonable result.

Another objection worries about the integrity of the national data if it were to be employed in this way. This claim is particularly strong as to concentrated industries and those results that would rely directly on economic census data. The problem is more severe in concentrated industries because they are more likely to overcome the coordination problem and/or the stakes for each firm to direct activities to lower tax states could be significant. In a more diversified industry each corporation would have less incentive. The problem is more severe with the census because the census relies on surveys returned by the businesses; the BEA Input-Output data also uses information from the census, but also uses data from other sources and thus would be harder to manipulate.[138]

It is an empirical question how big a problem this might turn out to be. I believe that the answer is that it is not likely to turn into a big problem. Most business taxpayers do not need to apportion under a state corporate income tax. Of those that do, most are not candidates for equitable apportionment because the required calculations are straightforward. For the handful of large firms in concentrated industries for which such a strategy is even conceivable, it would require a lot of forethought to manipulate the input-output tables, as those are not by geography but by function. It is hard to imagine a memo coming out of the tax department asking the department that responds to the census to shave off some sales made to other businesses that tend to be located in high tax states. Hard to imagine, but not impossible. Certainly if state CITs were to be much higher than they are currently are, say 35%, it would seem a great deal more imaginable. Though note that even then the lack of uniformity among the states might make divining a winning distortion pattern difficult. A further complication is that any beneficially skewed census results will not be available until many years in the future. In short, we would have to see, but this does not seem like a problem so severe and certain that this expedient should not be considered.[139]

Conclusion

Let me conclude by framing the argument of this paper somewhat differently and more broadly. Fact 1: People do not like paying taxes. Fact 2: No law can anticipate all fact patterns. Fact 3: People will engage in all manner of ways to avoid paying taxes, some of which might be formally acceptable. As to Fact 3, a tax system might adopt – and ought to adopt – numerous strategies. Certainly, there should be better laws when possible so as to minimize evasion, but the expedient of just writing

[138] BEA, Concepts and Methods of the U.S. Input-Output Accounts (Updated Apr. 2009), Ch. 3.
[139] The states could also work to develop other measures, such as one based on sales tax receipts, which would work at least for those industries whose products are subject to the sales tax. I don't know the data available in the EU, but this is an expedient that would make sense to explore there as well.

more law must run out. See Fact 2. At that point, one option is to trust in the sound judgment of courts to administer standards in a manner that both protects the integrity of the tax system and the rights of taxpayers. It seems to me that the authors of the DBCFT proposal did not have much faith in the potential of courts and instead opted to legislate away the problem of evasion. Leaving aside that this problem will pop up again somewhere in the system, see Fact 2 again, I have demonstrated that such dismissal was not justified in connection with formulary apportionment.

The current issues dogging equitable apportionment and formulary apportionment generally can and should be overcome. In particular, we have the means of setting up relatively fine-grained rules of thumb for the location of sales, and the US states should explore providing these rules. As a backstop to the sales factor rules and other issues, we have equitable apportionment. Thus the history and theory of equitable apportionment indicates that the EU would not be enacting a tax policy lemon should it proceed with the CCCTB. And, assuming the DBCFT is not enacted, the federal government could do worse than consider a move to a formulary system.