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THE FINANCIAL TRANSACTIONS TAX VERSUS (?) THE FINANCIAL ACTIVITIES TAX

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Abstract: In both Europe and the United States, there has been much recent debate regarding whether, in response to the 2008 financial crisis, one should enact a financial transactions tax (FTT) or a financial activities tax (FAT) – commonly viewed as mutually exclusive alternatives. This article evaluates these two alternative instruments, focusing on recent proposals by the European Commission and the International Monetary Fund. It concludes that the case for enacting an FAT is considerably stronger than that for an FTT, mainly because the FAT focuses on a broad “net” measure, rather than a narrow “gross” measure, of financial sector activity.

The article further concludes that a rationale for the FTT not emphasized by the European Commission – its addressing wasteful over-investment in the activity of seeking trading gains at the expense of other traders – could conceivably support its enactment, though it is uncertain that the social benefits would exceed the costs. The issues raised by this alternative rationale are independent of whether or not an FAT has been enacted. Finally, the desirability of enacting an FTT may be affected by broader political economy constraints on revenue-raising and on the pursuit of greater tax progressivity by alternative (including clearly superior) means.

JEL Classifications: G20, H20, H21, H23, H25

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1. Introduction

On her deathbed, Gertrude Stein reportedly asked “What is the answer?” but, upon hearing no reply, added “In that case, what is the question?” (Malcolm 2005, 164). In evaluating what new tax instruments, if any, to levy on the financial sector in the aftermath of the 2008 financial crisis, we would do well to emulate Ms. Stein’s focus on the importance of what question is being asked. We need to know what purposes are to be served by a tax on the financial sector before we can evaluate how best to advance these purposes.

The European Commission, in its recent proposal that the European Union adopt a financial transactions tax (FTT) that is directed mainly at secondary securities trading,¹ is commendably clear about the objectives that a financial sector levy might serve. It mentions (1) raising revenue, (2) ensuring an “adequate (fair and substantial)” contribution from the financial sector, (3) “reducing undesirable market behavior and thereby stabilizing markets,” and (4) achieving coordination between different Member States’ internal taxes (European Commission 2011a, 3-4).²

In my view, however, the Commission is less persuasive in arguing that these considerations support enacting an FTT – in particular, relative to the alternative it identifies, which would be to enact instead some variant of a financial activities tax (FAT), as recently proposed by the Staff of the International Monetary Fund (IMF).³ I will argue that the considerations identified by the Commission – some of which are more compelling than others – along with broader tax policy objectives, strongly support enacting an FAT (at least, assuming no other alternatives), while raising serious questions about an FTT’s desirability. Indeed, the case that a properly designed FAT is superior to the FTT is sufficiently compelling – not to mention unrebutted by the Commission’s analysis – as to leave one wondering exactly why the Commission came out as it did. As for the FAT, which to date has been somewhat under-explained, I will expand on, and in at least one respect modify, the IMF Staff’s analysis, while also explaining how one might combine the most appealing features of the alternative versions that it describes.

As it happens, however, there is potentially a decent rationale for enacting an FTT – albeit, one that does not relate to extracting a “fair contribution” from the financial sector or to easing the risk of another 2008-style economic crisis. Instead, this rationale relates to investors’ incentive to seek trading gains at the expense of rival investors, whether by acting faster than their rivals on new information, or by special talent (or luck) in “anticipating what average opinion expects the average opinion to be” (Keynes 1964 ed., 156). The competitive pursuit of trading gains can verge on being a zero-sum game. Moreover, even where some social benefit results from speeding the process whereby markets incorporate new information into asset prices, the private gain from being one microsecond faster than one’s rivals may so greatly exceed this benefit as to

¹ An FTT proposal has also recently been introduced in the U.S. Congress, by Congressman DeFazio and Senator Harkin. See Wall Street Trading and Speculators Tax Act, H.R. 1333 and S. 1787, 112th Cong., 1st Sess. (November 2, 2011).

² A further objective is to create international momentum towards the general adoption of FTTs. See Committee on Economic and Monetary Affairs, European Parliament (2012, 7).

³ A number of countries have also adopted other bank taxes, often aimed at some measure of bailout risk and expected bailout cost. I will generally ignore these provisions herein, because their consideration has effectively been proceeding on a separate track from that of the FTT and FAT.

make a tax on the activity potentially appealing – at least, if the substantial design obstacles that an FTT would face can be sufficiently well addressed to create optimism about its good effects’ outweighing its undeniable social costs.

Given how little this possible rationale for an FTT has to do with the main objectives identified by the European Commission,⁴ I believe that the “FTT *or* FAT” question is misguided. I will argue that an FAT should be enacted in any event – leaving aside further alternatives that one might identify – for reasons pertaining to under-taxation of the financial sector and the incentives for bad risk-taking that it offers. But the case for a suitably redesigned FTT should rise or fall on wholly separate grounds, and largely without regard to whether an FAT is in place.

The remainder of this chapter proceeds as follows. First, I discuss the FTT and FAT models that have featured in historical and more recent discussion, including by the Commission and the IMF. Second, I evaluate the objectives cited by the Commission, along with further relevant tax policy objectives, and assess their relevance to the “FTT versus FAT” choice that is currently being debated in Europe. Third, I discuss the alternative rationale that potentially supports adopting an FTT. Finally, I offer a brief conclusion.

2. The FTT and the FAT: a brief overview

a. Prior intellectual history of the FTT

Financial transaction taxes have a long and varied history. They are commonly traced back to a proposal by James Tobin (1972, 88-92; 1978) that countries impose special taxes purely on one type of financial transaction: “spot conversions of one currency into another, proportional to the size of the transaction (1978, 155). As it happens, the Commission’s FTT proposal would exempt currency conversions, which are the sole target of the so-called Tobin tax, while applying to transactions that the Tobin tax would not have reached – in particular, selling securities, such as corporate equities and bonds, on secondary markets (i.e., only after their initial issuance).

Thus, the Commission’s proposal is actually closer to being a securities transactions tax (STT) than either a Tobin tax or an all-purpose FTT on *all* financial transactions.⁵ This idea has considerably older antecedents. As early as 1808, English stamp duties on legal documents transferring title to property, including land or stock, started to be based on the value of the property being transferred (Her Majesty’s Revenue and Customs 2011, 9), making them a recognizable FTT precursor. John Maynard Keynes (1935), after noting that England thus imposed transfer taxes on securities trades, argued that the United States as well should adopt “a

⁴ While the European Commission (2011a, b, and c) did not mention any such rationale for enacting an FTT, the Committee on Economic and Monetary Affairs of the European Parliament, in its 2012 Draft Report mending the EC’s work, notes (at 15) investors’ “turn from long-term investments to short termism” as an additional rationale. In addition, the FTT that was recently proposed in the U.S. has been rationalized by its sponsors on grounds that are considerably closer to the line of argument that I suggest. Thus, for example, it is called the “Wall Street Trading and Speculators Tax Act,” and its lead House sponsor, Congress DeFazio, emphasizes that Wall Street is a “gambling casino” and that an FTT would “rein in speculation on Wall Street.” See Boak 2011.

⁵ As is discussed below, what makes the European Commission’s proposal not just an STT is its also applying to derivative transactions.

substantial Government transfer tax on all [such] transactions ... with a view to mitigating the predominance of speculation over enterprise in the United States” (Keynes 1964 ed., 160).⁶

At first glance, Keynes’ and Tobin’s analyses are very similar, despite addressing markets for distinct financial assets.⁷ Nonetheless, one can discern at least a slight difference in their emphasis. Both rely on Keynes’ (1964 ed., 156) famous comparison of financial investment to a newspaper’s beauty contest in which “the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view.” The analogy reflects that, for purposes of short-term asset trading, fundamental value (based on the risk-adjusted present value of expected long-term cash flows) may matter less than “what average opinion expects the average opinion [regarding resale value] to be” (id.).

Given this distinction between long-term fundamental value and short-term trading value, Keynes (1964 ed., 158) proposed to “appropriate the term *speculation* for the activity of forecasting the psychology of the market, and the term *enterprise* for the activity of forecasting the prospective yield of assets over their whole life.” He argued that speculation will often predominate in financial markets, especially if trading is easy and cheap, and that this effectively turns financial markets into casinos, in which luck and mood shifts drive the action, and asset prices fail to function as good signals of fundamental value. “When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done” (159). By contrast, a world in which one could not trade so cheaply and readily “would force the investor to direct his mind to the long-term prospects and those only” (160), thus strengthening the relationship between asset prices and fundamental value.

With speculation playing so central a role in financial markets, Keynes argued that Wall Street’s degree of “success ... [in] direct[ing] new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of *laissez-faire* capitalism – which is not surprising if I am right in thinking that the best brains of Wall Street have been in fact directed towards a different object It is usually agreed that casinos should, in the public interest, be inaccessible and expensive. And perhaps the same is true of Stock Exchanges” (1964 ed., 159).

Tobin (1978, 157-158) similarly saw currency exchange markets as working well in one sense but not another. They were highly efficient “in a mechanical sense: transactions costs are low, communications are speedy, prices are instantaneously kept in line all over the world, [and] credit enables participants to take large long or short positions at will or whim.” However, their efficiency in the “deeper economic-informational sense” was “very dubious.” With little available factual basis for confidently (much less reliably) projecting proper long-term currency

⁶ The U.S. in fact currently levies very modest STT-like securities transaction fees to fund operations of the Securities and Exchange Commission, but these are typically ignored by analysts because they are so low.

⁷ This similarity reflects, of course, Keynes’ enormous intellectual influence on Tobin, whom the New Palgrave Dictionary of Economics calls “the leading proponent of Keynesian economics in the second half of the twentieth century” (Hester 2008).

value relationships, “the markets are dominated – like those for gold, rare paintings, and – yes, often equities – by traders in the game of guessing what other traders are going to think.” This created episodes of severe short-term currency price volatility, leading to the transmission to domestic economies of “disturbances originating in international financial markets. National economies and national governments are not capable of adjusting to massive movements of funds across the foreign exchanges, without real hardship and without significant sacrifice of the objectives of national economic policy with respect to employment, output, and inflation” (154). An “internationally agreed uniform tax” on currency trades, based on the value being traded, might reduce volatility by “throw[ing] some sand in the well-greased wheels” (158) through the expected reduction in transaction volume via the tax-induced increase in trading costs.

Similar though Keynes’ and Tobin’s analyses are, there is one potentially significant difference, at least in emphasis. Tobin rested his case for the Tobin tax on the claim that it would reduce market volatility. Thus, one could in principle refute his argument by demonstrating empirically that it would not in fact increase asset price stability. Moreover, while he shared Keynes’ concern about speculation’s impact on efficient resource allocation, as manifested in his skepticism about financial markets’ efficiency in the “deeper economic-informational sense,” he deployed this more as a response to concern that the Tobin tax might undermine efficient price revelation than as an affirmative motivation for the tax.

Keynes (1964 ed., 161), while mentioning asset price and resulting macroeconomic “instability due to speculation,” did not so closely link the diagnosis and the proposed cure, given the issue of resource misallocation. Accordingly, his argument for an STT might more readily survive empirical refutation of the claim that it would increase asset price stability. And the question of whether it would actually succeed in improving the extent to which financial markets “direct new investment into the most profitable channels in terms of future yield” (158) might be hard either to confirm or rebut empirically. Indeed, there is not even general agreement about the importance of secondary stock market prices, with some arguing that they “play no basic informational role in the economy,” (Stiglitz 1989, 107) and do not significantly affect real resource allocation (Stout 1988, 645-651).

There also is a distinction between Keynes’ and Tobin’s explanations of exactly how it is that short-term, beauty contest-driven trading undermines the aspects of financial market performance that they respectively emphasize. In general, lower trading volumes and longer holding periods are logically linked, all else equal, since, if you are trading less, then you presumably are holding the financial assets in your portfolio, on average, for longer periods. But they are conceptually distinct. As it happens, Tobin cares about trading volume, which he believes (as we will see, with at best mixed empirical support) leads to sharper price fluctuations, including via price bubbles and panics. Keynes, by contrast, appears to be focusing more on average holding periods.

A possible reason for this focus, if one shares Keynes’ concern about the distinction between “speculation” and “enterprise,” is as follows. Except insofar as one anticipates profiting from a given stock’s actual cash distributions, whether from dividends or the ultimate liquidation proceeds, one cannot help being subject to the “beauty contest” problem, even if one waits for fifty years to sell. After all, the value that potential buyers (as well as lenders) will ascribe to the stock will always reflect the ongoing influence of “what average opinion expects the average

opinion to be” (Keynes 1964 ed., 156). Keynes’ claim accordingly must be that, the longer you first hold the stock before seeking to sell it, the greater the likely effect of new information about fundamental value, even with ongoing noisy random variation from the beauty contest’s vicissitudes. Thus, people who expect to hold stocks for longer will pay greater attention to ”enterprise” and fundamental value, even if they can never ignore the concerns of “speculation.” A further argument, frequently made but not as yet attracting consensus either for or against it, is that the prevalence of speculation may worsen corporate governance, by encouraging both the shareholders who might otherwise more carefully monitor managers, and the managers themselves, to embrace “short-termism” at the expense of focusing on long-term value enhancement (see, e.g., Stout 1995, 687).

These various considerations suggest caution about too swiftly embracing Keynes’, as well as Tobin’s, grounds for advocating an FTT, even if one believes (as I do) that the beauty contest metaphor offers an important and convincing insight into how financial markets actually function. The journey from undermining one’s confidence in financial markets’ efficiency in the “deeper economic-informational sense” (Tobin 1978, 158) to embracing a particular policy response may not be as clear as Keynes and Tobin suggest.

b. Efficiency problems with an FTT

Even if an FTT has desirable qualities for the reasons identified by Keynes and/or Tobin, it also has significant defects from the standpoint of efficiency. Indeed, without a significant positive rationale, the efficiency arguments against adopting it would be extremely compelling. In particular, consider the following overlapping points:

--An FTT applies to transactions’ gross proceeds, rather than to their net proceeds. Thus, suppose I first buy 100 shares of Siemens stock for €10,000, and then sell the same shares for the same amount. Under an STT, I will be taxed twice, despite not having gained any profit. An STT thereby discourages economic activity without (at least directly) advancing the distributional aim of making those who have fared better pay more. By contrast, taxes on net proceeds – for example, income taxes and value-added taxes (VATs) – while also discouraging economic activity, have at least the advantage of directly serving this distributional goal.

--An FTT imposes cascading taxes on inter-business transactions. That is, the more that the production process involves taxable sales from one business to another before the ultimate sale to a customer, the greater the tax burden that a given product faces. For good reason, member states in the European community have mainly rejected such taxes since the rise of the VAT in the 1950s. Economic theory confirms that, under plausible conditions, production efficiency is maximized, without any loss of the ability to achieve desired distributional goals, by not imposing such taxes (see generally Diamond and Mirrlees 1971).

--Taxing sale transactions, while not taxing the decision just to hold particular financial assets, creates needless inefficiency unless (as Keynes and Tobin indeed argue) the sales impose external costs on others, or else are correlated with otherwise unobserved ills that merit tax discouragement. In complete markets where everyone is a price-taker and there always are available counterparties, a would-be buyer or seller is seeking to improve his or her own expected welfare and is not adversely affecting that of anyone else. In thin markets, where

counterparties at a “fair” price are hard to find, one’s willingness to buy or sell may actually create positive externalities for others, by enabling them to transact more easily at such a price. Thus, unless there is more to the story, tax-penalizing sales is hard to rationalize.

--Realization-based income taxes already discourage sales of appreciated assets, which may yield taxable gain to the seller that could otherwise be deferred or even permanently avoided. Accordingly, if taxing sales is undesirable, an STT does not merely start from zero in undesirably discouraging them, but may actually worsen preexisting distortions with respect to appreciated assets. (On the other hand, the STT may offset inefficient income tax encouragement of sales of loss assets.)

--Depending on their design, STTs risk being highly avoidable in at least two dimensions. The first is location. If there is an STT on sales in Country X but not on those in Country Y, taxpayers may find it a lot easier to change the sale location than such more substantively meaningful choices as where individuals live or where tangible business activity occurs. Sweden recently learned this the hard way when its FTT, within a period of four years, induced more than half of all domestic securities trading to move to London (Wrobel 1996).

--The second dimension in which an STT is potentially highly avoidable pertains to the rules for defining both (a) particular financial instruments and (b) taxable transactions such as sales. Now that transactions using derivatives have become extremely common – for example, the use of swaps that depend on the performance of Siemens stock in lieu of actually buying or selling such stock – an STT is unlikely to be very effective unless the taxation of derivative transactions is adequately aligned with that of the “primary” transactions that they may replace.

To illustrate, suppose that, in the absence of an STT, I would borrow €10 million and use the funds to buy Siemens stock. If the STT only applied to literal sales, I could wholly avoid it, while replicating the economics of this transaction as follows. Presumably with a financial firm such as a bank as my counterparty, I could simply arrange a swap based on a notional principal amount (NPA) of €10 million. On the transaction date, no cash would actually change hands (leaving aside the likelihood that the counterparty would insist on my posting collateral to secure my potential liability under the swap). On the swap settlement date, I would owe the bank an amount equal to the interest that I would have owed on an actual €10 million loan during the swap term. The bank would owe me the dividends and appreciation that €10 million of Siemens stock would have yielded during the swap term. Accordingly, I would end up in exactly the same position (leaving aside transaction cost differences) as if I had actually made a debt-financed purchase of €10 million of Siemens stock, yet there would not have been an actual (or at least literal) sale.

--STTs, like income and wealth taxes but unlike consumption taxes such as VATs, discourage investment and saving. They are thus subject to the same critique as income taxes for arguably creating needless distortion without necessarily making possible greater progressivity (see, e.g., Shaviro 2004; Bankman and Weisbach 2006; Shaviro 2007). However, even if one favors taxing investment and saving, it is unclear (barring rationales such as those advanced by Keynes and Tobin) why one would favor this particular mechanism, rather than one, such as a wealth tax or an income tax, that depends on the amount saved or the return to saving, rather than on the gross amounts involved in sale transactions.

--Relatedly, STTs can be expected to increase the cost of capital when firms seek to raise funds by issuing tradable securities. Even if the initial issuance is not taxed, investors can be expected to anticipate that the tax will affect resale prices.

c. The FTT proposed by the European Commission

The Commission's FTT clearly was "designed with an eye to [addressing] known weaknesses in FTTs ... [in particular] by ensuring that its scope is broad along a number of dimensions" (Vella, Fuest, and Schmidt-Eisenlohr 2011, 3). However, breadth aimed at addressing avoidability is only one of the two main design principles that one can infer by examining the EC proposal's main features. The other is an aim of attempting to create both the appearance and the reality of a tax that falls on the "financial sector" – a term that, as I will discuss in section 3, requires a bit of unpacking – while ostensibly ensuring that households and small-to-medium-sized business enterprises will "hardly be affected" (European Commission 2011b, Article 5).

Addressing avoidability – The Commission's STT broadly defines covered financial transactions to include, not only the trading of equity and commercial debt, but also the "conclusion or modification of derivatives agreements" and the "purchase/sale or transfer of structured products" along with securitizations (European Commission 2011b, Article 3.3.1). The proposal also uses a broad definition of financial institutions, which must be involved in a given transaction in order for the tax to apply. The covered institutions include not just conventional banks (other than the European Central Bank and national central banks, which are exempted). but "investment firms, organized markets, credit institutions, insurance and reinsurance undertakings, collective investment undertakings and their managers, pension funds and their managers, holding companies, financial leasing companies, special purpose entities and other persons carrying out certain financial activities on a significant basis" (id.).

Among the proposal's most notable features is its use of residence-based jurisdiction. Past FTTs, such as the one that worked out so poorly for Sweden in the 1980s, have typically applied to transactions that were executed domestically – meaning that all one had to do to avoid them was move the place of sale abroad. The Commission's STT, by contrast, would apply on a residence basis. Thus, if any party to a given financial transaction is "established in the territory of a Member State," the tax applies. Such establishment is itself defined broadly. It includes, not only financial institutions that are registered in a given EU country, or are authorized to act (say, as banks) there, or that have headquarters in an EU country, but also to firms that otherwise would be treated as foreign, but that have a branch in an EU country. However, EU residence for purposes of the FTT apparently does not extend to foreign firms that have separately incorporated EU-resident subsidiaries but choose to transact through other affiliates.

EU-resident financial institutions, as defined for purposes of the proposal, generally would face the tax no matter where a given transaction was executed.⁸ Moreover, if an EU resident (such as an individual) participates in a financial transaction that exclusively uses non-EU financial institutions, those institutions will be treated as residents for purposes of the transaction, and thus will have to pay the tax (European Commission 2011b, Article 3.3.1).

⁸ The Council Directive states, however, that "in case the person liable to pay the tax was able to prove that there is no link between the economic substance of the transaction and the territory of any Member State," the tax may not apply. European Commission 2011b, Article 3.3.1.

A follow-up draft report by the Committee on Economic and Monetary Affairs of the European Parliament extends the FTT's proposed reach, such that it also applies to any transaction that "involves a financial instrument issue by legal entities registered in the Union (Committee on Economic and Monetary Affairs 2012, 10). Thus, if an American stockbroker sells Siemens stock to an American investor on the New York Stock Exchange, at least ostensibly the transaction is subject to the EU's FTT. Likewise, if non-Europeans use derivatives, such as a swap, in which one of the party's payments is computed with reference to stock in a company that is incorporated in Europe, the FTT likewise ostensibly applies (11). In either case, however, actual collection of the tax appears unlikely.

Ignoring the enforcement problems that may be associated with requiring tax remittance by financial institutions that operate outside the EU, the stated breadth of application could indeed reduce the tax's avoidability. However, one would certainly expect non-EU persons to react by shifting away from the use of EU financial institutions to execute their deals. Thus, for example, U.K. banks that compete with their rivals in the U.S. and Hong Kong to attract business from non-EU individuals around the world will presumably find themselves at a disadvantage. In addition, the fact that multinational corporate entities can avoid the tax by using their non-EU rather than their EU-based affiliates to conduct transactions may prove to be a significant gap (see Vella, Fuest, and Schmidt-Eisenlohr 2011, 4).

One of the trickier questions posed by the proposal is how to determine the taxable amount in a transaction using derivatives. For a sale of, say, €10 million of equity, the taxable amount is, of course, €10 million, to which a tax at a rate of 0.1 percent (i.e., €10,000) is supposed to apply to each taxpayer (European Commission 2011c, Article 8). However, since (as discussed below) transactions between entities that are members of the same corporate group are subject to the STT, in these cases transfer pricing issues will be posed. With derivatives, however, determining the taxable amount is not so easy.

Suppose, in a simple example, that two parties effectively did the €10 million swap involving Siemens equity that I described above. Unsurprisingly, the taxable amount would be the €10 million NPA (see European Commission 2011b, section 3.3.2). The Commission recognizes, however, that things will not always be this simple. "For example ... the notional amount of a swap could ... be divided by an arbitrarily large factor and all payments multiplied by the same factor" (id.). In the above case, this might involve, say, an NPA of €1 million and requiring each party to pay at ten times the rates used in the preceding simple example. This type of problem would be dealt with through as yet undetermined "special provisions" (id.).

Things are not always so straightforward, however. Without presuming to anticipate all the ways in which sophisticated financial engineers could package economic returns that effectively depend on the performance of €10 million of Siemens stock (or something that is correlated with it), one can be confident that many possibilities will present themselves. What is more, in a world where the same financial bet can be expressed in so many different ways,⁹ it may often be impossible to identify or even define the "true" underlying financial transaction.

⁹ Consider, for example, the put-call parity theorem, which "states that given any three of the four following financial instruments - a zero-coupon bond, a share of stock, a call option ("call") on the stock, and a put option ("put") on the stock - the fourth instrument can be replicated" (Knoll 2008, 95).

The Commission's proposed response to this problem is twofold. First, "[w]here more than one notional amount is identified, the highest amount shall be used for the purpose of determining the taxable amount" (European Commission 2011c, Article 6). The standards for determining the suitable list of possible NPAs remain to be considered. Second, presumably to respond to the concern that this might result in unduly tax-disfavoring derivative transactions that could be decomposed in multiple ways, the tax rate for such transactions is only 0.01 percent (*id.*, Article 8), or one-tenth that which otherwise applies. This appears to mean that the tax on the above sale of €10 million in Siemens stock can be reduced from €10,000 to €1,000 by replacing it with the swap.¹⁰

The Committee on Economic and Monetary Affairs of the European Parliament (2012, 18), in a draft report amending the original EC proposal, explains the lower tax rate for derivative transactions as follows: "In the case of derivatives, the estimation of their value being much more difficult, the decision to opt for the notional value – which can be significantly higher than the real market value of a derivative – justifies the choice of a lower rate." This, however, does not entirely make sense. For example, consider the swap described above that involved €10 million in Siemens stock versus the interest on €10 million. In principle, each side of this swap should initially be worth zero. However, this is a net value, rather than a gross value, measure, and net value generally is irrelevant under the FTT. After all, a wholly debt-financed explicit purchase of €10 million in Siemens stock also has a net value of zero, and yet would be taxed as a €10 million transaction.

The Committee may have in mind the fact that, in many cases where the parties enter into derivative transactions, they may not actually be seeking to substitute for deals that would have involved the full notional principal amount. Instead, they may be seeking to hedge particular economic risks cheaply, such as by paying a modest premium for a position that has a positive expected (though contingent) payout. In such a setting, charging the full "normal" tax rate based on a given NPA might be viewed as imposing very high effective tax rates on the "true" underlying transactions. Unfortunately, however, the fact that similar-looking derivative transactions may actually be substitutes for very different "primary" transactions makes it extremely difficult for an FTT to replicate the tax burdens that might have been deemed appropriate if derivatives did not exist.¹¹

Seeking to direct tax burdens to the "financial sector" – The Commission's aim of directing both actual and perceived tax burdens to the "financial sector" could not have been accomplished simply by making financial firms the only parties that remit STT payments. After all, only businesses are required to remit VAT payments to the tax authorities, yet VATs are widely

¹⁰ However, this assumes that the swap is not characterized for STT purposes as instead or even *also* a sale. See European Commission 2011b at 3.3.1 ("[T]he scope of the tax is also not limited to the transfer of ownership but rather represents the obligation entered into, mirroring whether or not the financial institution involved also assumes the risk implied by a given financial instrument ('purchase and sale').")

¹¹ The FTT variant that recently was proposed in the U.S. approaches derivatives differently than does the FTT proposal. While treating the issuance of a derivative as taxable, the U.S. proposal makes no effort to determine notional principal amounts, and instead simply applies its general 0.03 percent rate to the fair market value of (and payments made under) derivative instruments. See S. 1787 and H.R. 1333, *supra*, proposed section 4475(b), (e)(1)(D) through (F), and (h). In cases like the above-described Siemens swap, the proposed U.S. version therefore would permit taxpayers greatly to lower their FTT liabilities by substituting derivatives transactions for "actual" ones.

understood as taxing households based on their consumption. However, two further sets of design features appear to reflect the EC’s stated distributional aim. The first pertains to exclusions from the reach of the proposed FTT, while the second pertains to what might perhaps be regarded as a surprising category of inclusions.

As noted above, the proposal exempts spot currency transactions, thus “preserv[ing] the free movement of capital” (European Commission 2011b, Article 3.3.1). In addition, in keeping with the aim of keeping “citizens and business ... outside the scope of the FTT,” it excludes the primary issuance of debt and equity securities. It is unclear how broadly this exclusion applies, such as in situations where the underwriters in an initial public offering take on a lot of new stock before deciding how much of it they plan to sell promptly. However, even with a broadly defined exclusion for securities sales that are related to primary issuance, the tax would be expected to impose a burden on such issuance, since the amount that primary purchasers are willing to pay presumably will reflect the prospect of a future tax upon resale.

Also exempted, presumably to limit the tax burdens directly imposed on households, are “insurance contracts, mortgage lending, consumer credits, payment services, etc.” (European Commission 2011b, Article 3.3.1). One wonders, however, if creative tax planners could use these exclusions to avoid the reach of the FTT. Consider, for example, that credit default swaps are economically akin to insurance, since they offer the holder a payoff if the debtor fails to pay. Could insurance-like financial products that financial institutions and their customers trade, and that the proposal presumably is intended to reach, therefore be designed to escape the STT? This might require the cooperation of an EU host country if, in applying the exclusion, “insurance” is defined in terms of being subject to conventional national insurance regulation. But a country that thus decided to cooperate with aggressive tax planners might view itself as benefiting from the opportunity to attract transactions and business. In effect, it would be engaging in tax competition with the rest of the EU by not actually levying the same tax as other countries, even if it formally appears to be doing so.

This brings us to the perhaps surprising inclusions. If two or more EU-resident financial institutions participate in a given transaction, each is fully taxable. Thus, if one European bank sold €10 million in Siemens stock to another, apparently each would pay €10,000 of tax. More complicated transactions with, say, ten financial industry participants would lead to the imposition of ten taxes. Even in a relatively simple deal, this could turn out to matter a lot. For example, suppose I sell Siemens stock to you (where we are both EU residents) and each of us uses a broker. Will three taxes be imposed, rather than one, if I first transfer the stock to my broker, who then transfers it to your broker, as intermediate stages in the transaction?¹²

Moreover, the rule taxing all financial industry participants applies, not just to arm’s length deals between unrelated firms, but also to transactions taking place between entities of a group (European Commission 2011b, Article 3.3.1) – perhaps including distinct branches, such as those in different countries, rather than just separately incorporated affiliates. The proposed FTT would therefore create cascading taxes within the financial sector that could not be avoided

¹² In a letter directed to clients, the English law firm, Clifford Chance, describes what it views as a common scenario in which a simple stock sale might lead to the imposition of six, rather than just three, taxes. See Clifford Chance (2011) at 2.

through common ownership. This arguably is a design virtue in one sense, since it avoids creating inefficient tax incentives for consolidation. But it is a vice in another sense, since it strengthens the presumably inefficient cascading tax.

d. The FAT variants discussed by the Staff of the International Monetary Fund

I now turn to the alternative of enacting a financial activities tax (FAT), instead of an FTT. Purely on the level of rhetoric, it is difficult to imagine a question that initially sounds as tedious and intuitively unconvincing as that of whether we should tax financial “transactions” or “activities,” and thus endorse the F-blank-T acronym with the T in the middle, or the A. In fact, however, the key element of the choice between the two taxes can be presented a lot more crisply than this. An FTT targets the *gross* proceeds, while an FAT targets some variant of the *net* proceeds (i.e., the gross proceeds minus specified cash outlays), that financial firms generate through their business activities.

Suppose that we were evaluating this tax design choice with respect to the food industry, rather than financial institutions. Then the question would be whether retail stores, wholesalers, farmers, and the like, should be taxed on their gross sales proceeds (including those arising from transactions between separate entities within the food industry),¹³ or only on some net measure of industry-wide profits or value added. We should keep in mind, however, that this is a question of tax design, not of whether taxes should be higher or lower. While the gross proceeds tax would nominally have a much larger tax base, it presumably would use a much lower statutory rate if the two alternatives were meant to impose the same overall burden on the industry and/or to raise the same amount of revenue.

Bizarre though this proposed gross proceeds tax on the food industry may appear,¹⁴ it should help to make more intuitive the key difference between an FTT and an FAT. An FTT aims at a transactional measure of overall gross activity in the financial sector; an FAT, at its profits or (in an accounting if not a social sense) its value added.

What, in greater detail, might an FAT look like? Here we once again encounter the “Gertrude Stein issue” that I noted at the start. That is, the answer depends on the question, which initially is why one would consider imposing a tax on profits that is particular to the financial sector. After all, income taxes generally apply to all industries (although, as we will see, they define the “profit” concept differently than do the FAT variants that have recently been prominently discussed).

¹³ If transactions between food industry entities were not taxed, then the tax on its gross sales proceeds from transactions outside the sector would cause it to resemble a retail sales tax just on the food industry. The main difference would be its reaching food sales that were production inputs to other industries, rather than just sales directly to consumers.

¹⁴ Conceivably, however, one could imagine there being plausible motivations for a gross proceeds tax on the food industry. Suppose, for example, that the industry imposed negative externalities – relating, perhaps, to its environmental effects or to the publicly borne healthcare costs resulting from obesity or poor diets, and that no more direct measure of the harm being caused than sector-wide transactional activity was available. In that scenario, one would want to impose taxes to compensate for the externalities even if the food sector was merely breaking even. In the absence of a better proxy, the gross proceeds tax might be worth considering despite its undesirable imposition of a cascading tax on transactions within the food industry sector.

In this regard, it is best to go to the source. Contemporary discussion of the FAT, including in particular its acronym and name, dates from an important recent publication by the Staff of the IMF, published in June 2010 in response to a request from the G-20 leaders that the IMF describe a “range of options ... as to how the financial sector could make a fair and substantial contribution toward paying for any burden associated with government interventions to repair the banking system” (Staff of the IMF 2010, 4). The report argues that an FTT “does not appear well suited to the specific purposes set out in the mandate from G-20 leaders (id. at 19).¹⁵ It therefore advances three alternative FAT variants, each with a distinct design reflecting particular purposes.

The IMF’s three models, which it calls FAT-1, FAT-2, and FAT-3, are not wholly distinct choices like Doors 1 through 3 in the famous TV game show, “Let’s Make a Deal.” Rather, they relate to each other more like Matryoshka dolls, one nested inside another. FAT-1 is the broadest, while FAT-2 and 3 employ narrower bases so that they can target particular elements of the FAT-1 base that it would include non-distinctively.

FAT-1 – This is essentially a special or modified VAT on the financial sector, albeit using a distinctive methodology. To explain it, suppose we start from a standard VAT, which is a tax on “sales of real goods and services less purchases of non-labor inputs” (Staff of the IMF 2010, 66). Thus, a grocery store would include all of its proceeds from sales to consumers, while effectively deducting (in the form of a credit that would be computed at the VAT rate) its outlays to other VAT-paying businesses. However, the wages that it paid would not be deducted – reflecting that its workers, unlike the businesses to which it made deductible payments, would not face VAT liability on the amounts received. Likewise, financial flows, such as interest payments that the grocery store made to banks that had helped fund its operations, would neither be deducted by the store nor included by the banks.

The VAT, given that it taxes “value added” in the sense of sales minus purchases without regard to wages or financial flows, is “implicitly a tax on the sum of wages and ‘profits’ defined in cash flow terms (that is, with full expensing of investment and no deduction for financial costs” (Staff of the IMF 2010, 66). “Profits” in this sense refers to returns in excess of the normal rate of return on investment, which effectively is exempted by allowing the business’s capital outlays to be expensed.

VATs normally do not apply to financial sector firms, reflecting that financial flows, such as interest payments, generally are excluded from it. The FAT-1, however, is designed to extend to the financial sector the basic VAT concept of taxing the sum of its wages and profits in the above

¹⁵ The IMF Staff Report offers three reasons for considering the FTT ill-suited to the G-20 leaders’ mandate: (1) the volume of financial transactions is not a good proxy for the firm-level benefits and societal costs resulting from the prospect of financial firm bailouts; (2) the FTT “would not target any of the key attributes – institution size, interconnectedness, and substitutability – that give rise to systemic risk” potentially necessitating bailout; and (3) the real incidence of the tax might fall on consumers, rather than on earnings in the financial sector. Staff of the IMF 2010, 19-20.

sense.¹⁶ Despite this conceptual overlap, however, the FAT-1 not only requires a different methodology than a plain-vanilla VAT, but (as we will see) is rationalized differently.

Why do VATs – along with retail sales taxes (RSTs), which many U.S. states and localities impose – generally ignore financial cash flows, such as interest payments on a loan? Within the business sector, this combination of exclusion on the lender side and non-deductibility on the borrower side has zero net impact if borrowers’ and lenders’ tax rates are the same. For example, if Siemens pays Deutsche Bank €10,000 of interest and both pay tax at a 25 percent rate, the net tax revenue produced from bringing this cash flow within the reach of the German VAT would be zero: Deutsche Bank’s €2,500 tax liability would be offset by Siemens €2,500 tax recoupment.¹⁷ Exempting this inter-business transaction is therefore a wash.

But what about the fact that, for VAT purposes, Deutsche Bank does not merely get to ignore financial flows in computing its liability, but in fact is entirely tax-exempt? If all that Deutsche Bank did was to engage in inter-business transactions, the VAT exemption would actually raise revenue. After all, if it were a full-fledged VAT taxpayer, then, in addition to paying tax and getting credits with respect to financial cash flows that (net of the effects on business counterparties) are a wash, it would also get refunds or credits for purchasing non-financial inputs, such as buildings and desks. In sum, therefore, VAT exemption is a detriment to financial firms, rather than a benefit, insofar as they are purely engaged in business-to-business transactions.

Why, however, doesn’t the VAT apply to transactions between financial (and other business) firms and households? Suppose, for example, that I pay interest on a vacation loan to a bank, which would lead to VAT liability if I had been paying for the vacation itself. Here the problem is that imposing the VAT on interest flows between businesses and consumers would beg the question of what a “consumer” is. At least from the normative standpoint that underlies support for consumption taxes such as the VAT, one could argue that no one is really a “consumer” with respect to saving (or dissaving) and thereby earning a positive (or negative) financial return. After all, earning or paying interest is not itself an act of consumption, and consumption taxes typically aim at neutrality with respect to the timing of consumption, an aim that generally requires ignoring time value-based returns to saving (see Shaviro 2004, 104).

If the financial sector served simply as an uncompensated middleman between households that were borrowers and those that were savers, handing along interest payments from the former to the latter without getting paid for this service, then the VAT exclusion for financial transactions would still be immaterial. After all, by definition, as an uncompensated middleman, the sector would have neither wages nor profits. But of course this is not the case. Even the simplest

¹⁶ See Staff of the IMF 2010, 66 (states that “it would be appropriate” to design the FAT-1 similarly to the basic VAT concept).

¹⁷ Since after-tax interest rates presumably reflect supply and demand, one might further expect nominal or pre-tax interest rates to adjust to the choice of tax rule, such that, at equilibrium, Siemens and Deutsche Bank, and not just the tax authorities, would end up in the same after-tax position either way. The main reason an income tax, unlike a consumption tax such as a VAT, cannot so readily ignore inter-business interest flows even if all parties tax rates are the same, is that the borrower’s interest expense may need to be capitalized rather than deducted – for example, if it contributes to creating a durable asset. Thus, inter-business interest flows may yield net tax revenue in an income tax system that would be overlooked if they were ignored.

community bank generally charges a higher interest rate on loans than it offers on savings deposits, not just due to default risk, but also because of the services that it renders in its middleman role. In effect, it is bundling its service fee with the interest charge that one might naively have thought merely reflected the time value of money.

Even this bundling might not matter if we sufficiently believed that households' financial transactions have zero consumption content. But such a characterization would be highly questionable. Suppose I have a choice between saving in two banks. The first one offers free checking and free ATM use, but pays me a low interest rate. The second charges me for both services, but offers me a higher interest rate. There is a powerful argument that the convenience of being able to write checks and get money from an ATM contributes to my consumption. It allows me to do things much more conveniently and with less time and effort.¹⁸

If banks charged separately stated fees for all services provided that offered consumption value to their customers, it would be conceptually simple to subject these fees to the VAT, without permitting the payer to deduct or credit them. But with bundling plus the difficulty of identifying the consumption component of using financial services, real world VATs (as well as RSTs) have generally settled for simply exempting the financial sector. Thus, they get a VAT subsidy insofar as consumer transactions are concerned, and also an overall or net subsidy if this tax benefit outweighs the detriment from exempting business-to-business transactions.¹⁹

Less widely recognized is the fact that financial firms may get a similar tax subsidy for consumer transactions under the income tax. This subsidy results from their ability to give their customers implicit deductibility for consumer fees, such as for the personal convenience of using checks and ATMs, by using bundling in the form of offering what would otherwise be below-market interest on the money deposited in checking and savings accounts. Tax experts often ignore this point, perhaps by reason of being unduly fixated on the question of whether financial firms are expressly tax-exempt or not (notwithstanding that VAT exemption is a detriment with respect to business-to-business transactions). In practice, however, it is plausible that the net income tax subsidy to the financial sector exceeds that under the VAT, assuming similar rates under the two taxes, given that financial firms can deduct (or at least capitalize) their outlays for non-financial inputs.

With all this in mind, let's return to the FAT-1, which aims to impose a VAT-like tax on financial sector wages and profits. How does one accomplish this technically, given the bundling problem? One way would be to require that financial sector firms include and deduct all cash flows, such as interest payments but also loan principal, rather than just (as with VATs and RSTs) including cash flows from transactions that involve "real" rather than financial goods and services (Staff of the IMF 2010, 66). This would prevent bundling from affecting financial firms' FAT-1 liability, since the same tax would apply without regard to the choice between financial and non-financial labels on cash flows. For convenience, I will call this the cash flow tax version of FAT-1.

¹⁸ Arguably, the point is better described as relating to the value of untaxed leisure. The convenience of being able to write checks and get money from ATMs increases my opportunities to derive untaxed imputed income from enjoying leisure.

¹⁹ A recent study by a major accounting firm argues that banks' tax exemption under EU VATs actually disadvantages them on balance, by reason the business-to-business issue. Price Waterhouse Coopers 2011.

However, one could also implement the FAT-1 by using a tax base for financial firms that was somewhat like a broad-based corporate income tax, such as in ignoring flows of loan principal, but with the following adjustments: (a) wage non-deductibility, (b) expensing for all outlays to other businesses, including those that would be capitalized under the income tax, and (c) the allowance of an interest-like deduction with respect to the taxpayer's equity. Providing an interest-like deduction for equity that reflected the "normal" rate of return would ensure that only profits above this rate of return, plus the amount of the financial sector's wages, would remain in the tax base. One could call this the ACE ("allowance for corporate equity") version of the FAT-1.

One could further modify the ACE version of the FAT-1 by having a notional time value of money deduction apply to corporate debt as well as equity, in lieu of providing deductions for actual interest paid or accrued. (However, for banks that paid below-market interest, such as on retail checking and savings accounts, one would need to limit the deduction to the amount actually paid, as a device for indirectly including the offsetting implicit service fees.) For financial instruments that paid more than the notional time value of money, this would make the distinction between debt and equity, and thus the question of whether a given payment to financial instrument holders constituted interest or a dividend, irrelevant for purposes of applying the FAT-1. One could call this the ACC ("allowance for corporate capital") version of the FAT-1.

No matter which of these versions is used, there is an important respect in which the FAT-1 would *not* merely result in effectively extending the VAT to financial firms. Assuming that non-financial firms did not get a refund (under either the VAT or the FAT-1) for their payments to financial firms, the FAT-1 would impose a net tax on inter-business transactions. As the IMF Staff Report makes clear, the rationale for this – leaving aside the issue of untaxed personal consumption from financial transactions – would be to extract from the financial sector a "fair and substantial contribution toward paying for any burden associated with government interventions to repair the banking system" (Staff of the IMF 2010, 4). In effect, the idea is that the detriment of over-taxing (or indeed increasing existing VAT over-taxation of) business-to-business financial services is outweighed by the benefit of addressing VAT (and income tax) under-taxation of business-to-consumer financial services. The Report proposes that concern about cascading tax liabilities on inter-business transactions be addressed by "charg[ing] the FAT at lower than the generally prevailing VAT rate in order to limit the damage" (id. at 67).

One problem with the FAT-1, however, is that, in addition to not directly targeting the behavior that gives rise to the possibility of bailout, it also only imperfectly offsets business-to-consumer under-taxation (given the business-to-business over-taxation problem). Accordingly, even if its rate was set in such a way as to raise exactly the right "excess" amount of revenue from the financial sector as a whole (i.e., relative to simply offsetting the sector's VAT and income tax subsidies), liability under the FAT-1 would be in a sense misallocated.²⁰

Thus, the FAT-1 is certainly not a first-best financing mechanism for requiring a "fair and substantial contribution" from the financial sector. The case for it would have to rely on one's

²⁰ Several countries, such as France, Denmark, and Italy, have taxes that at least resemble the FAT-1 by taxing the payroll of financial sector firms or of VAT-exempt firms generally.

inability to do better in targeting the creation of bailout risk. As I discuss next, the case for using the FAT-2 or the FAT-3, in lieu of the FAT-1, rests on the possibility that, by narrowing the base in a particular targeted way, one could lower the general efficiency costs and/or better address the bailout risk problem.

FAT-2 – The FAT-2 takes on this challenge as follows. Suppose that we want to charge the financial sector for expected bailout costs plus the value of its VAT and income tax subsidies (via the effective exclusion of consumer services), but that we cannot do so in a first-best fashion, by directly taxing the very things that we have in mind. Then at least we might take comfort if we could design the tax to create as little inefficiency as possible.

From this standpoint, consider the idea of taxing what economists call rents. As I have explained elsewhere: “In lay terminology, rents are what you pay your landlord each month. Economists, however, use the term to denote ‘payments to resource deliverers that exceed those necessary to employ the resource’ An example would be Michael Jordan, back in the day, when he could earn \$30 million per year playing basketball and no more than, say, \$100,000 doing anything else with his time. The existence of this \$29.9 million excess of what Jordan could earn by playing basketball over the next best use of his time potentially has an important tax policy implication. If he planned to work [with the same intensity] in any event, at whatever occupation paid him the most, one could tax away all of the extra return (leaving only, say, an extra cent) and he still would play basketball rather than doing anything else. A very high tax would therefore result in no economic distortion of behavior, contrary to what one normally expects” (Shaviro 2009a, 22).

The FAT-2 reflects the premise that it would therefore be highly efficient to tax financial sector rents. To be sure, this is equally true for rents derived outside the financial sector. However, non-financial sector rents already face the VAT in most countries, and in any case the IMF Staff was specifically charged with exploring how taxes might be increased on the financial sector. What is more, the staggering growth of this sector’s profits and high-end compensation over the last two decades has prompted the widespread belief that rents are rife here (see, e.g., Cassidy 2010). Indeed, a recent paper estimated that, in recent years, rents have accounted for between 30 and 50 percent of the wage differential between the financial sector and other sectors in the economy (Philippon and Reshef 2009, 2).

How does one design a tax on financial sector rents with the FAT-1 as the starting point? Recall that, as a VAT-like instrument, it is a tax on the “sum of [financial sector] wages and ‘profits’ defined in cash flow terms,” (Staff of the IMF 2010, 66). Suppose we change the FAT-1 tax base (whether in the cash flow tax, ACE, or ACC version) by making wages deductible. Then, transition issues aside,²¹ you have a tax just on “‘profits’ defined in cash flow terms” – that is, on extra-normal rates of return. While these can arise in practice even without an *expected* above-normal rate of return, in cases where the taxpayer ends up winning a risky bet, suppose that risky outcomes even out under the long run (and that taxpayers can effectively average out their high and low rate of return years, for purposes of the tax). Then what remains is a tax on truly above-

²¹ In addition to taxing rents, the FAT-2 (as well as the FAT-1) could result in taxing old capital that was on hand when the tax first began to apply. Old capital may return positive cash flows that either FAT reaches, without cost recovery if that is limited to new (i.e., post-effective date) capital.

normal rates of return – that is, on rents. So the FAT-2 could seemingly be narrowed into a tax on financial sector rents (rather than rents plus wages) simply by modifying it to treat all wages as deductible.

However, modifying the FAT-1 by making *all* wages deductible would create two problems. First, owners of financial sector firms who were generating extra-normal profits could remove these profits from the FAT tax base simply by paying the money out to themselves as wages. Second, high-end wages to financial sector employees (whether they are owners or not) may themselves represent the very rents that we want to tax. Accordingly, the proposed FAT-2 would not permit *all* wages to be deducted. Instead, it would allow deductions only for some measure of “ordinary” wages, such as those paid to rank-and-file workers, that are thought not to reflect the payout of financial sector rents.

The IMF Staff Report (2010, 68) concedes that identifying labor rents “is extremely difficult in practice ... [suggesting] that a pragmatic approach would need to be adopted. This might be done, for instance, by comparing the earnings of top earners in the financial sector with those of top earners in other sectors.” In effect, deductions for wages paid to highly compensated employees’ wage deductions would be limited to some measure of what it was thought that people with similar qualifications (such as education levels), working with similar intensity in other professions, typically were working. Thus, roughly speaking, FAT-2 wage deductions for paying compensation to investment bankers might be limited to the levels that were attributed, say, to similarly experienced lawyers.²²

FAT-3 – A focus on financial sector rents naturally induces one to ask why they have apparently been so high in recent decades. A number of explanations are possible. For example, financial sector rents may reflect barriers to entry in the rarefied world of high-end finance, and/or they may result from financial firms’ use of opacity to confuse and dupe customers about the value of particular financial products and the prices for and availability of economically comparable products.

A further possibility, however, is that financial sector profits often reflect fake rents rather than actual ones socially, in the same sense that I could generate “rents” from playing roulette at the casino if I could bet someone else’s chips, pocketing all the winnings when the ball landed on red, but not having to pay for the chips when it landed on black. This resembles what financial firms increasingly did in the years leading up to the 2008 financial crisis. Through means such as the placing of highly leveraged bets on appreciating assets such as real estate and stocks, they “widely follow[ed] ‘nickels in front of a steamroller’ strategies, under which one earns extra-normal returns most of the time but occasionally experiences dramatic losses” (Shackelford, Shaviro, and Slemrod 2010, 787). The bets were effectively “heads I win, tails you lose” in character, given that, if the downside tail risk eventuated (such as via declining stock or real estate prices) people other than the financial sector bettors themselves – either the taxpayers who paid for bailouts, or everyone who was hurt by a resulting macroeconomic downturn – would bear enormous losses (Shaviro 2009b, 13).²³

²² Iceland recently enacted an FAT-2, with a tax rate of 5.45 percent.

²³ In addition, financial sector employees with incentive compensation may have made “heads I win, tails you lose” bets in which shareholders bore a significant downside.

Countering financial firms' socially dangerous incentive to place "heads I win, tails you lose" bets is primarily the job of financial regulatory policy, as well as of bank taxes (such as those explicitly financing bailout or resolution funds) that depend on some measure of the systemic risk that a given actor or set of actions appears to pose. However, the FAT-3 operates from the premise that these rules will be imperfect, and that the mechanism for extracting a "fair and substantial contribution" from the financial sector can contribute at this dimension as well.

To this end, the IMF Staff proposes modifying the FAT-2 tax base so that, rather than reaching *all* profits, as defined relative to the normal rate of return, it would tax only very high profit rates (IMF Staff Report 2010, 68). The underlying premise would be that such extra-high profits are indirect evidence of tail risk that the bettor is not bearing. Accordingly, under the FAT-3, the cost of capital deduction, as computed under an ACE or ACC approach, might be, say, 15 percent, rather than something that (depending on actual market interest rates) might well be only one-fifth to one-third as great.

This by itself would not do anything to focus the tax's impact on risky bets, which depends instead on the somewhat distinct issue of refundability when a financial sector firm falls short of achieving a taxable return. To make this point more clearly, suppose we start by returning to the FAT-1, in its cash-flow version. If positive net cash flows (as defined under its rules) are taxable, then presumably – reflecting common practice under existing VATs – then negative net cash flows would be refundable. Thus, under a 10 percent FAT-1, if a firm with €1 million in net cash flows (as computed under the system's rules) would pay tax of €100,000, then one with a net cash flow of negative €1 million would receive €100,000. This would cause the FAT-1 to apply symmetrically to taxpayer bets that could either win or lose, reflecting that risk discouragement is not among its aims.²⁴

Now suppose that we switch to the ACE (or ACC) version of the FAT-1, under which flows of loan principal are ignored, but a cost of capital deduction is allowed for corporate equity (or all firm capital). Presumably, refundability would apply with regard to cost of capital deductions no less than actual negative cash flows, given the lack of any change in the tax's actual scope. This presumably would continue to hold if we switch to the FAT-2. After all, merely because one is allowing "ordinary" wage deductions in order to focus the tax on rents does not imply departing from the FAT-1's neutrality as between risky investments, on the one hand, and those that have a relatively fixed expected positive return.

What makes the FAT-3 different in this regard is *not* increasing the tax-free rate of return to a much higher level, such as 15 percent, but rather eliminating the tax's gain-loss symmetry, or more generally its linear rate structure. Note that the FAT-3 surely would not provide a refund to financial firms earning less than the tax-free rate of return. Thus, suppose that, under an FAT-3 with a tax rate of 20 percent, a given financial firm has corporate equity of €100,000 and net cash flow (as computed for FAT-3 purposes, with only ordinary wages being deducted) of either (a) €40,000 or (b) zero. If the tax-free rate of return was 15 percent, leading to an exempt return deduction in the amount of €15,000, then under (a) the firm would pay tax of €5,000, but under

²⁴ Under an income tax, loss refundability can lead to tax planning games to generate payments for the government based, for example, on fake tax losses that reflect taking advantage of the realization requirement. Under a cash flow based tax, however, this is not as great a problem.

(b) it presumably would not get any refund.²⁵ Otherwise, it would turn into a subsidy for financial firms that earned merely normal returns.

To achieve the FAT-3's goal of discouraging risk-taking, on the view that high observed profit rates by financial firms are associated with hidden tail risk that implies loss externalization, all that one needs is some version of this gain-loss asymmetry (or more generally, having a non-linear tax rate that rises in some fashion with the ex post rate of return). Making financial firms' profits tax-free until they reach the "extraordinary" (such as 15 percent) level is seemingly unnecessary, and means that some rents would escape the tax even though the logic underlying the FAT-2 is in no way refuted by positing that there is also a "fake rents" problem of the sort targeted by the FAT-3. I would therefore advocate doing less to narrow the FAT-2 base than the IMF Staff suggests in its discussion of the FAT-3. All that one needs to provide, in order to discourage risky betting that may reflect hidden tail risk, is some sort of mechanism for applying a higher tax rate to large rates of return than to smaller or negative ones. For example, though without any implication that this is necessarily the best way of doing it, one could simply provide that the ACE or ACC deduction for the normal rate of return was nonrefundable.

e. Combining the IMF's FAT Proposals and Considering Alternatives to Them

As the previous section showed, there are distinct rationales for the FAT-1, the FAT-2, and the FAT-3. However, these rationales are not logically inconsistent with each other. Indeed, one may believe that each has some degree of validity, and thus that any FAT that one supported for adoption should have elements of each.

Suppose we conclude that the financial sector is both (a) deriving true rents that can efficiently be taxed away, and (b) placing socially undesirable "heads we win, tails you lose" bets that yield high observed profitability when the hidden tail risk fails to eventuate. Then one might want both to tax all observed above-normal returns and to have a non-linear tax rate that either rises with profitability (perhaps with a degree of multi-year averaging) or that treats losses (or ACE / ACC deductions that create or increase losses) unfavorably. We could call this system the "FAT-2-3."

Even having done this, however, one might still want to address, through the FAT-1, any remaining net subsidies to the financial sector. This, in turn, might support taxing, not just financial sector profits, but also any wages that were deductible under the FAT-2. Arguably, however, the FAT-1 tax rate should be lower than that for the FAT-2-3, given the cascading problem when it applies to business inputs, as well as the FAT-1's imperfect fit with the subsidies that it offsets.

This idea of imposing a multi-rate "FAT 1-2-3" may sound more complicated than it actually is. All it would require, once the FAT 2-3 had been designed, is imposing a tax, at a rate below those generally applicable under the FAT 2-3, on the amount of ordinary wages that was deductible under the 2-3 component.

²⁵ The FAT-3 might, however, allow carryovers of unused tax-free rate of return deductions as between taxable years, thus providing the equivalent of income averaging. This would serve to focus it on firms that had average returns above the target level, rather than from firms that had volatile annual cash flows or limited ability to engage in self-help by shifting cash flows between adjoining years.

To illustrate, suppose that the tax rate under the FAT 2-3 was 20 percent (leaving aside the non-linear rate features that discouraged risk-taking), and that one wanted a tax rate of only 10 percent on the FAT-1 component of financial sector ordinary wages. Suppose further that a given financial firm had net cash flows, for FAT-2-3 purposes, of €20 million, but also had paid €15 million of wages that were deductible in making this computation. The tax under the FAT-1-2-3 would equal €4 million on the FAT-2-3 part of the base, plus €1.5 million on the wage component, for a grand total of €5.5 million. Indeed, though this is perhaps just a semantic point, one could define the FAT-2-3 as merely a special case of the FAT-1-2-3, in which the tax rate for the ordinary wage base happens to be set at zero.

In evaluating whether the tax rate for the ordinary wage base component should be positive, one important question is what other means could be used to address the financial sector's net subsidy. One alternative approach might be to impose a higher corporate tax rate on financial sector firms or activities than on the rest of the corporate sector. However, this would build on top of the inefficiencies associated with the existing corporate income tax. A second approach might be to tackle the VAT and income tax exclusions more directly, within one or both of those systems. There is in fact an extensive literature on this issue.²⁶ Even short of identifying a fundamental fix, one might consider lesser measures, such as imputing, for income tax purposes, a minimum interest rate on checking and savings accounts.²⁷

3. The various alternative rationales for financial sector taxation

With this FTT and FAT background in place, let us now consider the underlying objectives that increased financial sector taxation might serve. I will start with those identified by the European Commission, and then move on to other rationales that may also be relevant.

a. Raising revenue

The first objective identified by the European Commission is to raise revenue. In this respect, there is no doubt that an FTT can be a powerful tool, at least if avoidance is sufficiently addressed. For example, the European Commission (2011a, 9-10) suggests that its FTT proposal might raise at least €16.4 billion if its tax rate was 0.01 percent, and at least €73.3 billion if its tax rate was 0.1 percent.²⁸

An FAT can potentially raise comparable revenue, although this would require significantly higher statutory tax rates.²⁹ For example, the FAT-1 tax base might cover about 3 to 4 percent of GDP in the European Union, and the FAT-2 tax base about 2 percent (see IMF Staff Report

²⁶ See, e.g., Bradford 1996; Grubert and Mackie 2000; Schenk 2010.

²⁷ To aid the political feasibility of imputing a minimum rate to low-interest checking accounts, the tax might be collected from the bank, rather than the depositor. This presumably would have the same economic incidence as requiring inclusion by the depositor, although it might change the applicable marginal tax rate.

²⁸ The Joint Committee on Taxation reportedly estimated that the DeFazio-Harkin FTT proposal would raise more than \$350 billion during the years from 2013 through 2021 (an average of almost \$40 billion per year), with a tax rate of only 0.03 percent. See Miller 2011.

²⁹ The European Commission (2011a, 5) concludes that the FTT has greater revenue potential, but this is based on comparing the FTT to an FAT "at an illustrative tax rate of 5%," which it states would raise between €9.3 billion and €9.3 billion "depending on assumptions on relocation and design." This likely refers to something like FAT-1.

2010, 70).³⁰ Since GDP in the EU exceeded €12 trillion in 2010, and presumably should continue growing even with ongoing recessionary concerns, it is not unreasonable to posit overall tax bases in the neighborhood of €500 billion for FAT-1 and €250 billion for FAT-2. Thus, even with significant behavioral and tax planning responses, either instrument might be able to raise revenues in the general neighborhood of those available from an FTT, without setting the statutory rate at anything approaching confiscatory levels.

It would be a mistake to consider the FTT's potentially high revenue yield, relative to the statutory rate applied, as evidence in its favor. As has been noted elsewhere: "Supporters [of FTTs] often tie this feature to the oft-quoted tax policy mantra favoring 'broad-based, low-rate' taxes over narrow-base, high-rate taxes. But the logic behind this mantra does not apply to any and all broad-based taxes, regardless of their underlying efficiency properties. Thus, for example, economically well-informed proponents of retail sales taxes generally agree that 'broadening' the base by including business-to business sales, rather than just those to consumers, and thus creating a gross receipts (or turnover) tax, would reduce, rather than increase, economic efficiency, by generating a cascading tax on economic production by multiple non-integrated firms" (Shackelford, Shaviro, and Slemrod 2010, 797). Likewise, "broadening" the income tax base by making it a tax on gross, rather than net, income would likely not be an improvement, even though it might permit one to raise the same revenue with a nominally much lower rate.

More generally, revenue-raising capacity as such is not where discussion of the FTT's and FAT's relative merits should focus. After all, if one simply wanted to raise as much revenue as possible, there are myriad ways of doing so. Consider, for example, a per-person head tax on each resident individual, or else a tax based on the number of letters in each taxpayer's name. Instruments like these could surely raise vast amounts of revenue, but nonetheless they rightly generate little support. The aim is not just to raise revenue, but to do so in a manner that is reasonably appealing from the twin standpoints of efficiency and distribution. This, however, requires examining objectives other than just revenue-raising.³¹

The Commission may conceivably have in mind a point about revenue-raising potential that takes account of political considerations. Suppose that greater tax revenues are needed, but that grave political obstacles impede obtaining them by any rational means (or perhaps, as has recently been the case in U.S. politics, by any means whatever). Then the fact that an FTT could raise billions of Euros at an extremely low statutory rate, while also garnering plaudits as a supposed "Robin Hood tax,"³² might count seriously in its favor. Even if one believed that various alternatives (such as the FAT) are better, they might reasonably be viewed as politically

³⁰ I base this estimate on roughly eyeballing the range of GDP percentages for various EU countries. In the United Kingdom, for example, the FAT-1 would cover an estimated 6.1 percent of GDP, and the FAT-2 2.7 percent. By contrast, for Germany, with its less prominent financial sector, these percentages are 3.6 percent and 1.5 percent, respectively. See IMF Staff Report 2010, 70.

³¹ In support of viewing the FTT's estimated revenue effects positively, the Committee on Economic and Monetary Affairs of the European Parliament (2012, 15-16) cites a recent report by Stephany Griffith-Jones and Avinash Persaud (2012), asserting that the EC's proposed FTT could actually have positive effects on GDP growth (on the order of 0.25 percent annually), rather than the negative effects conceded in the EC's study. This estimate is based on the view that the FTT will have such favorable effects as reducing systemic risk, providing funding for needed government outlays, and permitting other distortive taxes to be reduced.

³² See <http://robinhoodtax.org/>, a pro-FTT website that labels the FTT as the "Robin Hood tax."

irrelevant if their relative chances of enactment were too low. The Commission does not state any such argument, however.

b. Ensuring a fair and substantial contribution from the financial sector

This aim, mentioned by both the IMF Staff and the European Commission, arguably requires more explanation than either has given it. I therefore offer some general observations before turning to the FTT and FAT in particular.

(i) What is the “financial sector”? – Just as only people, not intangible legal entities such as corporations, can actually bear the corporate tax (see Shaviro 2009a, ix), so the “financial sector” cannot itself contribute “substantially,” much less “fairly,” to the public fisc. Calls for fiscal contributions from this sector surely pertain to some set of individuals, but which ones?

The answer to this question may initially seem clear. Calls for the financial sector to pay are surely aimed, at least in the main, neither at its customers (whom the European Commission expressly wants to hold harmless) nor even at diversified shareholders who may happen to hold a smattering of the firms’ shares within their broader stock portfolios. Rather, the primary target presumably is the people who control financial firms and/or work for them as high-level, highly compensated employees. Members of this group have been an inescapable cultural, political, and economic presence in Europe and America for decades now, alternately (or perhaps simultaneously) attracting public fascination, emulation, envy, anger, and disgust. Consider the film *Wall Street*’s notorious Gordon Gekko, as well as the “Masters of the Universe” in Tom Wolfe’s novel *Bonfire of the Vanities* – both dating from 1987 – or, from 2009, the white-hot controversy on both sides of the Atlantic Ocean regarding bonus payments to executives at recently bailed-out financial firms.

There is potential ambiguity, however, regarding whether our concern about fair and substantial tax contributions from members of this group, taking account of the bailout side of the equation, is meant to apply at the individual or group level. New financial sector “Masters of the Universe” are continually cycling in to replace the old, as the business schools spew out more graduates and the sated minions of prior economic cycles retire to their newly purchased country estates. Thus, if one is concerned about, say, beneficiaries of the 2008 bailouts, a tax that took effect in 2014 might simply come too late to extract a “fair contribution” from them. Backward-looking taxes typically have at best a short time window in which they can really hit their targets, unless they are explicitly retroactive. Only if we are concerned about the possible next wave of bailouts, and about making particular actors bear the ex ante expected cost rather than the ex post realized cost, does this problem become less critical.

(ii) What are the precise grounds for favoring a “fair and substantial contribution” from the relevant financial sector actors? – Unobjectionable though it may be to require that the people whom we identify with the financial sector make a “fair and substantial contribution,” it still is important to specify exactly why. At a minimum, this inquiry may be needed in order to assess whether a given tax instrument can satisfy the underlying objective.

The reference to a “fair” contribution unmistakably sounds in equity or distributional concerns, rather than those of efficiency. Obviously, the fact that the people who are meant to be evoked

by the “financial sector” are generally at the very top of the income scale contributes at least atmospherically to the appeal of requiring a fair contribution from them. Handing them bailout funds that are then recouped from the mass of average taxpayers may fail to resonate as an attractive distributional outcome. However, the issue is not just one of progressivity versus regressivity, or else we would focus on ensuring that rich people in general bear enough of the cost of bailouts (or of government spending generally). It therefore appears clear that something like the benefit theory of taxation, which holds that people should pay for the particular benefits that they derive from the government’s activities – or perhaps the “polluter pays” approach to assigning liability for harm – is playing a primary role here.

I myself am unpersuaded that benefit tax principles, as opposed to an “ability to pay” approach (or, better still from my standpoint, utilitarianism and related welfare economics), should govern distributional analysis of tax policy. I also believe that the “polluter pays” approach to assigning liability for harm is best rationalized in terms of efficiency, rather than on distributional grounds. The aim is to give potential polluters the right incentives with regard to potentially harm-causing activity. But even for people who differ from me in that they subscribe to principles of distributive desert that are not entirely welfare-based, implementing such principles through a tax on the financial sector is inherently challenging. While I have already noted the difficulty of aiming backward and imposing burdens on malefactors (or even mere freeloaders) who may already have left the scene, there is also a potential difficulty associated with aiming forward.

This is the problem of transition. Suppose the financial sector is receiving huge subsidies, due to the under-taxation of financial services to consumers under the VAT and the income tax, along with the prospect of unfunded bailouts. This would certainly be expected to increase the size of the financial sector. However, it would not necessarily increase the returns earned by particular financial sector owners or high-ranking employees. After all, if capital and highly compensated labor are free to flow into the financial sector so long as the returns there are higher than elsewhere, presumably they will do so until equilibrium is reached through elimination of the disparity in available returns.

To be sure, such an analysis may need to be modified if we posit that people in the financial sector are earning rents. But insofar as it holds, increasing the tax burden on the sector might only reduce the returns being earned by people in the sector when it was first announced. The smaller financial sector that remained once the reduction of sectoral subsidies had induced exit would not necessarily feature smaller returns for the people who were still there.

Such a shrinking of the financial sector would clearly be desirable on efficiency grounds, if subsidies have made it too large. And this might be all the more true if one views the financial sector’s extraordinary growth over the last two decades as reflecting some broader malfunctioning or even pathology of our economic system that is not entirely explicable in terms of the subsidies. But one should clearly distinguish this line of argument from that of demanding “fair” contributions on equity grounds.

How should one think, from a purely distributional standpoint, about making the financial smaller and/or (if this was feasible through the FTT or FAT) less astoundingly hyper-profitable at the top? A conventional economic analysis might suggest that the best approach is simply to focus on overall wealth distribution as the factor to balance (when necessary) against

considerations of efficiency, rather than focusing for distributional purposes on the size of any particular sector or the structure of economic returns within it. But if one is skeptical that the decades-long rise of the financial sector entirely reflects the standard story of markets, driven by the preferences of rational actors, directing resources to their highest and best uses, then one may come to view the efficiency failures that arguably have helped to produce a bloated and over-rich financial sector as having broader negative distributional externalities that ought to be addressed if possible.

The conclusions that I derive from this discussion are as follows. Despite the equity-based rhetoric of the phrase “fair and substantial contribution,” the underlying concerns are mainly about efficiency – in particular, giving market actors appropriate incentives (such as when they make risky bets) and addressing resource misallocations by reason of subsidies to the financial sector. However, there also are plausible distributional reasons for favoring a smaller financial sector, and one in which the returns are not so staggeringly concentrated at the top. These distributional concerns suggest that it should not particularly matter whether a new tax on the financial sector targets the right set of individuals (defined in terms of who received “unfair” benefits) as one age cohort succeeds the next in the sector’s front lines.

(iii) Assessing the FTT and the FAT with respect to “fair contribution” – Enactment of either the FTT or the FAT could result in a smaller financial sector. In other respects, however, the taxes may differ significantly in their likely distributional effects. Starting with the FTT, if selling financial assets and issuing derivative financial instruments is newly tax-discouraged, the size of the financial sector may decline insofar as it is engaged in providing related services. However, as the IMF Staff (2010, 20-21) notes, “a large part of the burden may well be passed on to the users of financial services (both businesses and individuals) in the form of reduced returns to saving, higher costs of borrowing, and/or increases in final commodity prices It is not obvious that the incidence would fall mainly on either the better-off or financial sector rents.” The IMF Staff further notes that shifting of the incidence of the FTT from people in the financial sector to consumers “is more likely the more general the adoption of the tax, since that helps industry pass on the cost to its customers” (id. at 20). The European Commission, despite arguing that households and small-to-medium-sized business enterprises will “hardly be affected” by the FTT (2011b, Article 5), elsewhere concedes that a “large part of the burden would fall on direct and indirect owners of traded financial instruments” (2011a, 11).

The FAT has considerably more promise from the distributional standpoint of targeting big players in the financial sector.³³ In particular, to the extent that it focuses on rents (which is at least the intended effect of FAT-2), those deriving the rents appear likely to bear the tax burden. If they are already earning above-normal returns, then presumably they are extracting what the market will bear, and cannot react to the tax by demanding even higher pre-tax returns. However, the FAT’s application to compensation that does not reflect the earning of rents,

³³ It may be only fair to point out that a problem noted by the IMF Staff (2010, 20) in relation to the FTT – that a tax instrument’s “cumulative, cascading effects” when it applies to inter-business transactions “can be significant and non-transparent” – potentially applies to the FAT as well, given that it might apply in cascading fashion to inter-business transactions between financial and non-financial firms. Again, this problem would not be entirely eliminated by “charg[ing] the FAT at lower than the generally prevailing VAT rate in order to limit the damage” (id. at 67) and thus creating overall balance between cases of aggregate under-taxation from a VAT-equivalence standpoint (in the absence of cascading) and those of over-taxation.

including high-end compensation identified by FAT-2 that in fact merely reflects “returns due to high productivity would likely be passed on to purchasers of financial services” (IMF Staff 2010, 23).

c. Reducing undesirable market behavior and thereby stabilizing markets

The European Commission (2011a, 5) argues that “the FTT might be an appropriate tool to reduce excessive risk-taking to the extent that short-term trading and highly leveraged derivative trading creates systemic risks.” By contrast, it views the FAT as “only ... an indirect measure to tackle [excessive] risk-taking.”

With respect to the FAT, the actual question of interest is not direction versus indirection, but rather the magnitude of the expected effect from having nonlinear rates. So long as a risky investment is treated asymmetrically, such that it bears a higher expected tax liability than it would if certain to achieve exactly its expected return, it is being tax-discouraged. However, the magnitude, and indeed the basic significance, of the response is admittedly open to question. What is more, insofar as the FAT tax rates are symmetric, they could conceivably induce increased pre-tax risk-taking by financial firms.

With respect to the FTT, it is far from clear whether systemic risk would in fact decline. The European Commission emphasizes the tax discouragement of trading strategies that may increase volatility. To similar effect, others note that an FTT “may reduce activity by ‘noise traders,’ who trade on spurious information such as past price movements and are thought to destabilize markets However, it may also suppress activity by informed traders and arbitrageurs, whose trading tends to push prices towards their fundamental values” (Matheson 2011, 20).

More generally, the problem is that, with thin, incomplete, or otherwise imperfect markets, both positive and negative externalities from trading activity may be rife. Thus, theoretical models suggest that “volatility may either rise or fall upon introduction if an STT, depending on the market microstructure” and that the tax suffers from an “inability ... to discriminate between discouraging stabilizing and destabilizing trading activity” (id.). If one knew that the STT would disproportionately drive from the marketplace those engaged in “bad” trading, rather than “good” trading, there might be grounds for optimism. But if we could tell apart the two types of trading, then a better approach still might be just to tax (or regulate) the “bad” part of the marketplace.

Absent the ability to thus discriminate, it is hard to be sure whether the tax has a greater discouraging effect on the “good” trading or the “bad.” Presumably for these reasons, empirical studies generally fail to support the view that an STT can be expected to reduce either short-term price volatility or the occurrence of price bubbles and crashes (id. at 20-21). And even just anecdotally, it is clear that bubbles and crashes can plague asset markets in which trading is costly, and thus relatively sporadic. A case in point is the U.S. real estate market in the first decade of the twenty-first century. In sum, therefore, there is little clear support for the European Commission’s hope that the FTT would help to stabilize markets.

d. Achieving coordination between different Member States’ internal taxes

A final ground advanced in support of the European Commission's FTT proposal is that it might help in achieving coordination between different Member States' internal taxes. Even if the enactment of an FTT is otherwise a bad idea, this consideration may have some merit insofar as, in the alternative, various Member States enact their own FTT variants. Uniformity would at least limit tax competition and national variation between applicable FTTs within the European Union. However, FTTs and similar instruments are not currently very widespread within the European Union, although the French government recently indicated that it plans to enact one unilaterally, and Germany has indicated that it may follow suit. Yet the U.K., which has Europe's largest financial sector, appears quite unlikely to follow suit.

Even if particular countries at least briefly bite the bullet of acting unilaterally, the adoption and retention of significant national-level FTTs may tend to be discouraged by concern about tax competition. Again, the recent Swedish experience suggests that initial exuberance may rapidly fade if restructuring to avoid the tax is rife. On balance, then, it is not clear how strongly this factor weighs in favor of the Commission's proposal, at least if one is otherwise agnostic about the desirability of having any FTT at all.

e. Other relevant considerations

A number of other considerations may be relevant to evaluating the decision whether to enact an FTT, an FAT, or neither. They include at least the following:

VAT and income tax under-taxation of the financial sector – Assuming that this problem cannot be addressed more directly, such as through the VAT and income tax themselves, the FAT has an important advantage over the FTT in responding to it. Whereas the FTT only reaches specified transactions, such as securities trading and (at a much lower tax rate) derivatives transactions under the European Commission's proposal, the FAT applies to financial sector activities generally.

Income tax bias in favor of debt relative to equity – Existing corporate income taxes generally favor debt over equity, in particular by providing that corporate taxpayers can deduct interest expense but not dividends (see Shaviro 2009a, 33). The FTT might exacerbate this bias. Although securities that are traded in secondary markets would generally be subject to the FTT whether classified for income tax purposes as debt or as equity, the latter instruments tend to be traded more.

Tax competition from outside the taxing jurisdiction – As noted above, even an EU-wide FTT would discourage the use of European financial sector companies by non-EU persons to conduct taxable securities trades and derivatives transactions. By contrast, the FAT-2, at least to the extent that the tax base succeeded in identifying rents, should not have this effect, given that higher-ups in the resident financial sector firm presumably would bear it. On the other hand, the FAT-2 could discourage the organizers of potentially taxable firms from choosing European residence.

Defining taxpayers – While the FTT may create serious problems in identifying taxable transactions, it is likely to be less problematic than the FAT with regard to identifying taxpayers. As noted earlier, the European Commission's proposal identifies potential taxpayers extremely

broadly (see European Commission 2011b, Article 3.3.1), reflecting that the stakes are lowered by the fact that only the taxable transactions engaged in by these entities would lead to FTT liability. Under the FAT, by contrast, a financial sector firm (or branch within a firm) presumably is taxable with respect to all of its relevant activities. Accordingly, the classification stakes may be higher under the FAT than the FTT, and the cost of error more significant. In this regard, particular difficulty may arise from the facts that “financial [and other] institutions with different designations often perform overlapping functions and sell overlapping products” (Shackelford, Shaviro, and Slemrod 2010, 794). Moreover, one needs to address the existence of “predominantly non-financial firms with financial units” (id.). On the other hand, countries that exempt financial firms from VATs have apparently not found this a prohibitively difficult task.

Progressivity in the presence of political constraints – I argued earlier that, while the FTT ought not to be preferred to the FAT on the ground that it can offer a higher revenue yield relative to the statutory rate being applied, political constraints on rational revenue-raising might make this an advantage after all. The same point potentially applies to aims of increasing the progressivity of the overall tax system. The FTT is very far from being an optimal mechanism for increasing progressivity, if that is the only reason for it, given the various unmitigated distortions that it causes if one is unpersuaded by the efficiency arguments for it. Moreover, it would likely be less progressive in incidence than the FAT-2, since it does not target high-end financial sector rents. However, if all other progressive tax changes are assumed to be politically unavailable, the FTT might be considered better than nothing, at least if one believes that it is borne by investors, who tend to be relatively affluent.

4. Over-investment in seeking trading gains as a possible rationale for a redesigned FTT

Efficiency analysis in tax policy often proceeds from the assumption that taxpayers will have suitable incentives, when guided by pre-tax profitability, unless there are very clear and tangible externalities, such as those resulting from financial firms’ “heads I win, tails you lose” betting opportunities, or from industrial pollution. At least one potentially important type of externality is often ignored. Suppose I espy two economic opportunities, but can only pursue one of them. The first would offer an economic reward worth €10 million, but if I don’t secure it, someone else will. The second would offer an economic reward worth €9 million, but if I don’t secure it, then it will simply go unclaimed. If the costs I would incur to get either (as well as the probability of success) are the same, I will presumably seek the first reward. But this would cause aggregate social returns to be €9 million lower, all else equal, than if I had chosen to pursue the second reward. The fact that the first reward but not the second would, in effect, come out of someone else’s pocket is an externality that I have no reason to care about.

The reason for commonly ignoring considerations of this kind is that, outside the tidy boundaries of a hypothetical, they may be prohibitively difficult to identify and measure. Externalities are rife in the world around us, but we cannot take account of them all. Moreover, the general economic success, over many decades, of free market economies relative to those that, by reason of being more centrally managed, limit competition between businesses that are seeking to fill the same niche, may be viewed as supporting the intuition that ignoring externalities of this kind leads to reasonably good results overall.

Nonetheless, there are settings where it may be desirable to take account of the externality that results when people compete for the same prize. One recent example is the literature arguing that high-return labor markets increasingly are winner-take-all “tournaments” in which many compete for rewards that only a few can win, and that this has important tax policy implications, such as its strengthening the case for progressive redistribution and/or highly graduated marginal income tax rates.³⁴

Likewise, in the literature on the economics of information, a famous and influential paper by Jack Hirshleifer (1971) notes that the socially optimal level of intellectual property protection is strongly affected, and potentially greatly reduced, by the occurrence of patent races. In a patent race, multiple inventors are competing to be the first person to perfect and publish a given type of invention that many people have realized might be feasible. If I get there first, just one day ahead of the runner-up, I will receive the entire patent reward, even though the social benefit from my efforts is limited to that from people’s getting the information a day sooner (see generally Stiglitz 1989, 103).

Now consider financial market profits from securities trading. Each trade, insofar as it just reflects differing predictions regarding future value, ends up having a winner and a loser. In the Keynes beauty contest scenario, the game has no aggregate social value (other than from people’s enjoying it as a consumption activity), and merely leads to zero-sum transfers from the losers to the winners. But even if public securities trading also helps to ensure the proper allocation of resources through the ongoing incorporation of new information into securities prices, there is a Hirshleifer element to the profit from being the person who is the first to discover and trade on new information that affects value. That is, the private gain exceeds the social gain under the very same analysis as that applying to patent races. It is clear, moreover, that huge resources are devoted to seeking trading profits (see, e.g., Summers and Summers 1989, 271; Stout 1995, 670-677).

Suppose we therefore conclude that it would be socially desirable to tax-discourage and thereby reduce the effort that people invest in the pursuit of trading gains. If the thing that we actually want to discourage cannot be observed directly, we might instead choose to tax proxies that are correlated with it in practice. If trading securities more rather than less (in terms of the value traded) is indeed an empirically robust proxy for the socially excessive pursuit of trading gains, then the FTT could yield social benefit at this margin even if the act of trading itself does not have negative externalities in the aggregate.

In my view, this line of argument may indeed establish a plausible motivation for enacting an FTT. So may Keynes’ argument, discussed earlier, if one believes that more frequent trading (and thus shorter average holding periods) worsens resource allocation or promotes damaging short-termism. As noted above, however, these arguments are hard to assess definitively. Moreover, even if one does accept them, the next step is weighing the expected efficiency gain against such efficiency costs of the FTT as its discouraging trades that the parties would value,

³⁴ See, e.g., Frank and Cook (1995), McMahon and Abreu (1998), and the discussion in Shaviro (2011, 840-841).

imposing cascading taxes within the business sector, and inducing wasteful tax avoidance behavior.³⁵

One also could perhaps devise alternative means of pursuing the Hirshleifer and Keynes objectives. One possibility might be to have the income tax rate on gains from selling publicly traded financial assets start relatively high, and decline gradually with the length of the holding period. U.S. federal income tax law does indeed do this in one respect: by imposing a long-term capital gains rate (currently 20 percent) with respect to capital assets that have been held for at least a year, whereas a 35 percent top rate applies with respect to assets held for less than a year. The capital gains tax then entirely disappears if one holds the stock (or any other appreciated asset) until one's death. This approach, however, uses only two specific time windows, each involving a very sharp discontinuity. One could imagine replacing it with an approach – just for publicly traded stock – under which the applicable tax rate declines more smoothly and gradually.³⁶

No matter how the FTT analysis comes out, however, it has little evident relationship to the risk of future financial crises, to any of the other main grounds advanced by the European Commission in support of an FTT, and to the question of whether or not an FAT has been enacted. Thus, the best case for enacting an FTT lies outside the “FAT or FTT” framework that has dominated much recent discussion, particularly in Europe.

5. Conclusion

There are several good grounds for raising taxes on firms in the financial sector. In particular:

- Various financial services to consumers are treated preferentially by income taxes and VATs.
- The financial sector as a whole is implicitly subsidized by the prospect of bailout if financial firms' failure endangers national or global macroeconomic performance. Bank regulation, along with bank taxes other than the FTT and FAT, may fail to entirely solve this problem, even if they ameliorate it.
- The key actors in financial firms may often have opportunities to derive rents that can be efficiently and progressively taxed.
- These same actors may often have the opportunity (despite financial sector regulation) to benefit from choosing investments that offer extra-normal returns most of the time while occasionally experiencing dramatic losses that will end up being someone else's problem.

Insofar as these concerns could be addressed by enacting either an FTT or an FAT, I have argued herein that the case for an FAT is much stronger. The variant I propose, which (for want of a better name) I call the FAT-1-2-3, would tax financial firms' ordinary wage base at a low rate, and their profits at a higher rate that was in some sense nonlinear so as to discourage risk-taking.

³⁵ Sheppard and Sullivan (2009) regard the issue as similarly uncertain. For a more favorable view, however, see Baker (2008).

³⁶ Among the difficulties that this approach would involve is the question of how to net capital losses against different-period capital gains.

A final point of interest concerns the almost entirely separate case for an FTT that is rationalized as a mechanism for discouraging the socially excessive pursuit of trading profits. Here the case for imposing a tax on securities values traded would rest on the view that this is a decent proxy for the actual underlying concern, rather than on the claim that the trading itself imposes net negative externalities. However, the question of whether an FTT that was thus rationalized would be desirable on balance depends on how one assesses the tradeoff between its potential benefit and its undoubted efficiency costs, as well as by the availability and merits of alternative tax instruments.

Finally, the desirability of enacting an FTT may be affected by broader political economy constraints on revenue-raising and on the pursuit of greater tax progressivity by alternative means. Even if the FTT is clearly inferior to other tax changes that could similarly raise revenue and reduce wealth inequality, it might conceivably be not only better than doing nothing, but also the best tax instrument that was realistically available.

References

Baker, Dean. 2008. The Benefits of a Financial Transactions Tax. Washington, D.C.: Center for Economic and Policy Research.

Bankman, Joseph and David A. Weisbach. 2006. The Superiority of an Ideal Consumption Tax Over an Ideal Income Tax. 58 Stanford Law Review 1413-1456.

Boak, Josh. 2011. Wall St. Trading Could Generate Taxes. Politico, October 4, available on-line at <http://www.politico.com/news/stories/1011/65140.html> .

Bradford, David F. 1996. Treatment of Financial Services Under Income and Consumption Taxes. In Henry J. Aaron and William G. Gale (eds.), Economic Effects of Fundamental Tax Reform. Washington, D.C.: Brookings Institution Press, at 437-464.

Cassidy, John. 2010. What Good is Wall Street? New Yorker Magazine, November 29, available on-line at http://www.newyorker.com/reporting/2010/11/29/101129fa_fact_cassidy .

Clifford Chance. 2011. Financial Transaction Tax: Update. Client briefing, October, available on-line at http://www.cliffordchance.com/publicationviews/publications/2011/10/financial_transactiontaxupdate.html

Committee on Economic and Monetary Affairs, European Parliament. 2012. Draft Report on the proposal for a Council directive on a common system of financial transaction tax and amending Directive 2008/7/EC. February 10.

Diamond, Peter A. and James A. Mirrlees. 1971. Optimal Taxation and Public Production: I – Production Efficiency. 61(1) American Economic Review 8-27.

European Commission. 2011a. Commission Staff Working Paper: Executive Summary of the Impact Assessment, accompanying the document, Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September.

European Commission. 2011b. Explanatory Memorandum: Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September.

European Commission. 2011c. Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September.

Frank, Robert H., and Philip J. Cook. 1995. *The Winner-Take-All Society: How More and More Americans Compete for Ever Fewer and Bigger Prizes, Encouraging Economic Waste, Income Inequality, and an Impoverished Cultural Life*. New York: The Free Press.

Griffith-Jones, Stephany, and Avinash Persaud. 2012. Financial Transactions Taxes. Available on-line at

http://www.thestrasbourger.eu/art/uploads/files/3835_EN_Financial%20Transaction%20Taxes_Griffith%20Jones%20and%20Persaud_February%202012.pdf.

Grubert, Harry, and James Mackie. 2000. Must Financial Services Be Taxed Under a Consumption Tax? 53 *National Tax Journal* 23-40/

Her Majesty's Revenue and Customs. 2011. Stamp Tax Manual. Available on-line at <http://www.hmrc.gov.uk/so/manual.pdf>.

Hester, Donald D. 2008. "Tobin, James (1918–2002)." In Steven N. Durlauf and Lawrence E. Blume (eds.), *The New Palgrave Dictionary of Economics* (2nd ed.). New York: Palgrave MacMillan.

Hirshleifer, Jack. 1971. The Private and Social Value of Information and the Reward to Inventive Activity. 61 *American Economic Review* 561-574.

Keynes, John Maynard. 1935. *The General Theory of Employment, Interest, and Money*. San Diego: Harcourt Brace & Co. (1964 ed.).

Knoll, Michael S. 2008. The Ancient Roots of Modern Financial Innovation: The Early History of Regulatory Arbitrage. 87 *Oregon Law Review* 93-116.

Malcolm, Janet. 2005. "Someone Says Yes to It." *New Yorker*, 13 June, pages 148-165.

Matheson, Thornton. 2012. Financial Sector Taxation and the Ongoing Financial Crisis. [Article in this volume.]

Matheson, Thornton. 2011. Taxing Financial Transactions: Issues and Evidence. IMF Working Paper, Fiscal Affairs Department.

McMahon, Martin J., and Alice G. Abreu. 1998. Winner-Take-All Markets: Easing the Case for Progressive Taxation. 4 *Florida Tax Review* 1-81.

Miller, Zeke. 2011. Democrats Push Financial Transactions Tax, Say It Would Raise \$350 Billion. *Business Insider*, November 7, available on-line at

http://articles.businessinsider.com/2011-11-07/politics/30368817_1_tax-rate-small-tax-commonsense-tax .

Philippon, Thomas, and Ariell Reshef. 2009. Wages and Human Capital in the U.S. Financial Industry: 1909-2006. National Bureau of Economic Research Working Paper 14644.

Price Waterhouse Coopers. 2011. How the EU VAT exemptions impact the Banking Sector.

Schenk, Alan. Taxation of Financial Services (Including Insurance) Under a U.S. Value-Added Tax. 63 *Tax Law Review* 409-442.

Shackelford, Douglas A., Daniel N. Shaviro, and Joel Slemrod. 2010. Taxation and the Financial Sector. 63 *National Tax Journal* 781-806.

Shaviro, Daniel N. 2011. 1986-Style Tax Reform: A Good Idea Whose Time Has Passed. 131 *Tax Notes* 817-842.

Shaviro, Daniel N. 2009a. *Decoding the U.S. Corporate Tax*. Washington, D.C.: Urban Institute Press.

Shaviro, Daniel N. 2009b. *The 2008 Financial Crisis: Implications for Income Tax Reform*. NYU Law School, NYU Center for Law, Economics, and Organization, Working Paper No. 09-35.

Shaviro, Daniel N. 2007. Beyond the Pro-Consumption Tax Consensus. 60 *Stanford Law Review* 745-788.

Shaviro, Daniel N. 2004. Replacing the Income Tax With a Progressive Consumption Tax. 103 *Tax Notes* 91-104.

Sheppard, Lee A. and Martin A. Sullivan. 2009. Should the U.S. and U.K. Enact a Securities Transfer Tax? *Tax Notes*, September 14, pages 1055-1062.

Staff of the International Monetary Fund. 2010. *A Fair and Substantial Contribution by the Financial Sector: Final Report for the G-20*. June.

Stiglitz, Joseph E. 1989. Using Tax Policy to Curb Speculative Short-Term Trading. 3 *Journal of Financial Services Research* 101-115.

Stout, Lynn A. 1988. The Unimportance of Being Efficient: An Economic Analysis of Stock Market Pricing and Securities Regulation. 87 *Michigan Law Review* 613-709.

Stout, Lynn A. 1995. Are Stock Markets Costly Casinos? Disagreement, Market Failure, and Securities Regulation. 81 *Virginia Law Review* 611-712.

Summers, Lawrence H. and Victoria P. Summers. 1989. When Financial Markets Work Too Well: A Cautious Case for a Securities Transactions Tax. 3 *Journal of Financial Services Research* 261-286.

Tobin, James. 1972. *The New Economies: One Decade Older*. Princeton, N.J.: Princeton University Press.

Tobin, James. 1978. A Proposal for International Monetary Reform. *4 Eastern Economic Journal* 153-159.

Vella, John, Clemens Fuest, and Tim Schmidt-Eisenlohr. 2011. The EU Commission's Proposal for a Financial Transaction Tax. 8/11/11 draft, forthcoming in *British Tax Review*.

Wrobel, Marion G. 1996. *Financial Transaction Taxes: The International Experience and the Lessons for Canada*. Available on-line at <http://dsp-psd.tpsgc.gc.ca/Collection-R/LoPBdP/BP/bp419-e.htm>.