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Agenda

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Taxing financial transactions: who pays the bill?

The European Commission has proposed a tax on financial transactions, but its potential economic impact is still uncertain and subject to debate. We contribute to this debate by considering how the proposed tax might be expected to affect the EU economy, and where the burden of the tax would lie

The European Commission has proposed a financial transaction tax (FTT) for the EU in order to 'ensure that financial institutions make a fair contribution to covering the costs of the recent crisis'.[1] This raises the important questions as to who, in practice, would pick up the burden of such a tax and, more generally, what the potential impacts of the tax on the real economy might be. As any reduction in GDP will reduce revenues collected from other sources, such as labour, corporate and consumption taxes, the significance of the impact on annual GDP also creates uncertainty about whether the net impact of the FTT on overall tax revenues will be positive.

This article contributes to the debate by considering these issues in some detail, drawing on the analysis presented in two recent Oxera studies on the potential economic impact of the proposed FTT, undertaken for the Association for Financial Markets in Europe, the Italian Association of Financial Intermediaries, and the Nordic Securities Association.[2]

The proposal for an FTT

On September 28th 2011, the European Commission adopted a proposal for an FTT, setting out the details of the tax as summarised in the box below. This proposal gained the support of the European Parliament on May 23rd 2012, although support from Member States is mixed.

Alongside the proposal for an FTT, the Commission provided an economic impact assessment, which found that the tax could have a material negative impact on annual EU GDP, estimated at around 0.53%.[3] On May 4th 2012, the Commission published seven additional explanatory notes, including one summarising the results of further analysis of the macroeconomic impact of the tax. The results of the new analysis suggested that the detrimental impact of the FTT on the EU economy would be smaller than initially estimated, at around 0.28% of annual GDP.[4]

What would the tax look like?

The high-level characteristics of the proposed tax are as follows.

- ***Tax rate*: for each side of a securities transaction, a tax rate of 0.1% is to be applied; for each side of a derivatives transaction, a tax rate of 0.01% is to be applied.**
- ***Taxable event*: every trade involving an EU citizen and a financial institution (EU or otherwise); every trade involving an EU financial institution.**
- ***Exclusions*: there are minimal exclusions for certain types of EU citizen and certain types of financial instrument.**

The definition of 'financial institution' is broad and includes, for example, pension funds, holding companies, credit institutions, insurance and re-insurance undertakings, and other bodies 'carrying out certain financial activities on a significant basis'.

The scope of the tax is also broad in terms of financial instruments covered. For example, the scope is not limited to trades in organised markets, but includes over-the-counter transactions.

Source: European Commission (2011), 'Proposal for a Council Directive on a Common System of Financial Transaction Tax and Amending Directive 2008/7/EC', COM(2011) 594 final.

The difference in results is driven primarily by two changes: the new analysis no longer expects the FTT to have any impact on investment financed through retained earnings or bank lending; moreover, it uses a lower effective tax rate, of 0.14%.

These changes have the effect of reducing the expected impact of the tax, in terms of the impact on both EU GDP and the revenues raised. However, as explained below, a detailed review of the Commission's impact assessment suggests that the impact of the FTT may have been underestimated.

Who pays the tax and who bears the burden?

Although the tax will be collected from financial intermediaries, they are not necessarily the ones that would ultimately bear the burden. As acknowledged by the Commission, 'a large part of the burden would fall on direct and indirect owners of traded financial instruments'.[5] Such owners include companies (which use securities to raise capital and hedge risk); investors such as pensioners and mutual funds (which hold securities to save for the future); and insurance companies (which hold securities to reduce the cost, and hence price, of insurance contracts).

Economic studies have found that the burden of the tax would lie primarily with investors and companies,[6] on the basis that an FTT increases the cost of transactions in securities and derivatives, and that—in line with economic theory for competitive markets—an increase in costs would be passed on to the end-consumers.[7] This effect is taken into account in the Commission's analysis. The markets for financial transactions are generally considered competitive, which means that most, if not all, of the tax would be passed on from traders to investors (through lower post-tax returns) or companies (through a higher pre-tax cost of capital), implying that the direct burden of the tax would not be borne by traders.

Impact on the financial services sector

Financial intermediaries would not, however, go untouched by the tax. Introducing any tax on financial transactions may shrink the EU financial sector for the following two reasons.

- First, the proposed FTT will increase the cost of undertaking financial transactions in the EU, with the risk that financial activity within the EU declines. As it is the end-users of securities who ultimately bear the cost of the tax, a reduction in financial activity could mirror a reduction in investment, hedging and savings by companies and investors (which is what could drive a negative impact on the EU economy). Another consequence is that the size of the EU financial sector could shrink.

- Second, the highly mobile nature of both capital and the financial services sector means that, in response to any regional FTT, there may be relocation of activity. In the case of the Commission's proposals for an EU-wide tax, non-EU investors and companies would be able to avoid the tax by using non-EU financial institutions rather than EU financial institutions. EU investors and companies may also be able to reduce their exposure to the tax by using non-EU financial institutions. This may create an incentive for EU financial institutions to relocate outside the EU. There may also be an incentive for investors to favour non-EU companies ('capital flight') owing to the imposition of the tax.

Impact on companies and investors

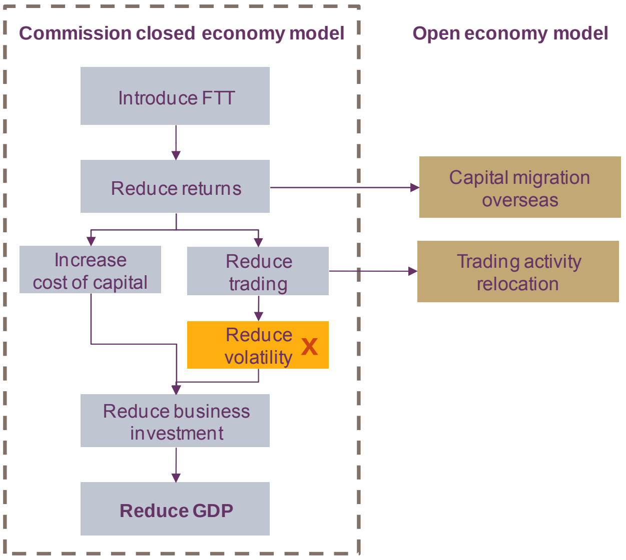
The burden of the tax would be shared between end-investors and companies, with the split dependent on the extent to which end-investors can allocate capital to investments that are not subject to the tax, as a substitute for investments that are subject to it. In practical terms, this is the extent to which investors would be likely to switch to bank savings or non-EU investments—both of which would be affected by the tax, but to a lesser extent than EU investments.

The international nature of financial markets and the availability of alternative investment opportunities suggest that, for EU companies to continue to attract investment finance, they would need to raise the rates of return offered by their investment opportunities relative to comparable investments that are not subject to the FTT. The impact on the cost of capital for EU companies would be amplified because the market price of a company's stock is determined by the willingness-to-pay of the marginal investor, who will typically be more able to switch to alternative investment opportunities than the average investor.

It is not only the cost of raising equity finance that would be affected by the tax. For many firms, other sources of investment finance, such as bank loans and retained earnings, would also become more costly, for the following reasons.

- **Equity and corporate bonds**: the proposed FTT would increase the transaction costs for trading equity and corporate bonds, and thereby lower the expected net (post-transaction costs) return to investors—investors would demand a higher gross return on their capital from the company as they expect to be taxed when they sell their security. The higher gross

Figure 1 How the tax affects the economy



Source: Oxera (2011), 'What would be the Economic Impact of the Proposed Financial Transaction Tax on the EU?', prepared for The Association for Financial Markets in Europe, the Italian Association of Financial Intermediaries and the Nordic Securities Association, December.

return to capital restores the net (post-transaction costs) return to investors. This would increase the cost of capital for companies, which could discourage them from making investments, leading to lower capital accumulation and hence lower GDP. The logic behind the impact is illustrated in Figure 1 above, which also illustrates how, in an open economy such as the EU, the FTT can be expected to have an impact on GDP through the relocation of capital and/or financial institutions.

- **Retained earnings**: the impact of the FTT on retained earnings as a source of finance depends on whether the company is listed, expects to be listed, or never expected to be listed.[8]

  - *If the company is listed, current owners will demand the same higher (gross) return on capital investment from retained earnings as they would from new equity finance raised on a stock market.* Capital investment financed from retained earnings increases the value of the company, without a corresponding increase in the number of shares, resulting in an increase in the price of the firm's shares. Owners of shares can realise this increased value by selling their shares. The purchasers of these shares do not base their decisions on whether the prior investment by the firm was made from retained earnings or from new equity. Therefore, in the same way as for those investors who purchased only existing shares, an FTT reduces the net return that shareholders can expect to earn on investment funded from retained earnings.

  - *If the company might list in the future (within the expected life of any investments being made—eg, funded by venture capitalists), investment can also be affected by the FTT.* If investors expect the company to be listed in the future, the value of their investment depends on the expected initial public offering share price, with the amount of time before listing also being a factor. To the extent that the proposed FTT affects the price of shares in the primary market, albeit indirectly (the primary listing price will factor in the expected share price in the secondary market, which would be directly affected by the proposed financial tax), the FTT would reduce the value of any investment, even for (currently) non-listed companies.

  - *If the company never expects to be listed, the tax is not expected to have an impact on financing sourced from retained earnings.* However, other sources of investment financing—namely equity, corporate bonds and bank lending—may still be affected by the tax. Strictly speaking, it is the trading of shares by a financial institution rather than the listing that triggers the tax. As a result, shares in unlisted companies that are bought or sold by a financial institution are also expected to be subject to the tax.

- **Bank lending**: an FTT would be expected to increase the cost to banks of providing loans to businesses, for example by increasing the cost of trading derivatives and using repurchase agreements to manage risk and short-term cash flows. In addition, to the extent that banks raise finance in the corporate bond market to enable them to make loans, the increase in the costs of those bonds would feed through into higher costs and, therefore, potentially higher prices (interest rates) charged to borrowers.

Concluding remarks

The European Commission's analysis represents a first step in assessing the impact of the FTT. It considers how the FTT might affect equity-financed investment and what impact this could have on EU GDP. However, the latest model produced for the Commission is based on an underestimate of the effective securities tax rate and an underestimate of the proportion of the investment financing that could be affected by the tax.

As explained above, it is not only investment financed through corporate equity and debt that would be affected by the FTT, but, for many companies, the cost of investment financed through bank loans and retained earnings would also increase. Furthermore, as it is the trading of shares by a financial institution rather than a company's stock-market listing that triggers the tax, the impact would not be restricted to listed companies.

More generally, the assumptions underlying the Commission's estimate of the impact on GDP are not consistent with those underlying its estimates of the tax revenue collected. In particular, the revenue analysis includes an estimate of the expected revenue from taxing derivative transactions—expected to account for about two-thirds of the revenue—and derivative transactions are not considered in the GDP impact model. The revenue analysis also assumes a higher effective securities tax rate of 0.2% than the tax rate of 0.1% that was used in the Commission's GDP model.

It is helpful to put GDP impact estimates into context by comparing them with expected tax revenues. The Commission's analysis finds that 'a transaction tax generating tax revenue of 0.1% of GDP would [result in] a 0.2% decline in real GDP'.[9] Therefore, in order to produce the tax revenues that the Commission predicts in its proposal, of €57 billion per annum,[10] which is about 0.45% of the annual EU GDP,[11] the negative impact on GDP is likely to be in the order of 0.9% of GDP.[12]

With such a significant potential negative impact on GDP, there is a risk that the imposition of the tax could actually reduce total tax revenues from the economy, as other tax receipts (eg, from income tax, corporation tax, etc) could decline by more than the receipts from the new tax. Given this risk, there is a case for a more thorough impact assessment being undertaken before a well-informed decision could be made about the proposed FTT.

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[1] European Commission (2011), 'Proposal for a Council Directive on a Common System of Financial Transaction Tax and amending Directive 2008/7/EC', COM(2011) 594 final, p. 3.
[2] Oxera (2011), 'What would be the Economic Impact of the Proposed Financial Transaction Tax on the EU?', December. Oxera (2012), 'What would be the Economic Impact on the EU of the Proposed Financial Transaction Tax? Review of the European Commission's Latest Commentary', June.
[3] European Commission (2011), 'Proposal for a Council Directive on a Common System of Financial Transaction Tax and Amending Directive 2008/7/EC', COM(2011) 594 final. European Commission (2011), 'Executive Summary of the Impact Assessment', p. 10.
[4] European Commission (2012), 'Technical Fiche: Macroeconomic Impacts', May.
[5] See European Commission (2011), 'Impact Assessment', volume 1, p. 53.
[6] See, for example, Shackelford, D., Shaviro, D. and Slemrod, J. (2011), 'Taxation and the Financial Sector', forthcoming in J. Alworth and G. Arachi (eds), *Taxation Policy and the Financial Crisis*, Oxford University Press.
[7] Ten Kate, A. and Niels, G. (2005), 'To What Extent are Cost Savings Passed on to Consumers? An Oligopoly Approach', *European Journal of Law and Economics*, **20**:3.
[8] Strictly speaking, it is the trading of shares by a financial institution rather than the listing that triggers the tax. As discussed below, this means that shares in unlisted companies that are bought or sold by a financial institution are also expected to be subject to tax.
[9] Lendavi, J., Raciborski, R. and Vogel, L., (2012), 'Securities Transaction Taxes: Macroeconomic Implications in a General-equilibrium model', European Economy, Economic Papers 450, March, p. 2.
[10] European Commission (2012), 'Technical Fiche: Revenue Estimations', May.
[11] The International Monetary Fund estimates that the GDP of the EU in 2010 was approximately €12,300 billion. International Monetary Fund (2012), World Economic Outlook Database, April.
[12] This is because there is a ratio of 2 between the tax revenue (0.1%) and GDP impact (0.2%).

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Leonardo Mautino: tel +44 (0) 1865 253 000 or email l_mautino@oxera.com

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