Impact of the EU financial transactions tax on the real economy – analysis of the impact on corporate and sovereign bonds*

Summary

- **The proposed EU financial transactions tax (FTT) rates are 0.1% on equities and bonds and 0.01% on derivatives.**
- **The associated total tax burden may be significant through a number-of-transactions effect (as securities are traded frequently) and a cascade effect (as each trade between investors involves a number of intermediate transactions).**
- **The FTT will increase the cost of funds for the economy and, as result: reduce investment by businesses and households and in turn GDP, and require higher taxes and/or lower public spending**

The proposed tax

The EU proposal for a financial transactions tax (FTT) covers a **broad range of financial instruments** and the tax will be applicable to **secondary market transactions** involving FTT-zone financial institutions (the residence principle) or instruments issued in the FTT-zone (the issuance principle) at a **rate of 0.1% of the value of equities and bonds** and **0.01% of the value of derivatives**.

Financial impact of the FTT

When a FTT is imposed on financial transactions, investors in the financial instruments will require a higher effective return to offset the cost of the tax which arises when trading the financial instruments.

Moreover, the total tax effect on the effective return required by an investor at issuance of a financial instrument will be larger than what the nominal tax rate suggests as a financial instrument is typically traded several times over its life and hence is subject to the tax several times.

The **number of transactions** magnifies the total tax burden as shown in the example below which assumes that:

1) a 4-year bond with a face value of €100 is issued at par and the interest on the bond is 5%.
2) the bond is traded 3 times in the secondary market/OTC – thus, 4 different investors will own the bond prior to maturity.

	Year 1	*Year 2*	*Year 3*	*Year 4*
	Saver 1	*Saver 2*	*Saver 3*	*Saver 4*
Return	€5	€5	€5	€5
FTT cost	€0.1	€0.2	€0.2	€0.1
Rolling FTT cost	€0.6	€0.5	€0.3	€0.1
Bond value	€99.4	€99.6	€99.8	€99.9

In the absence of a FTT, each of the four investors is prepared to pay successively €100 for an annual return of €5.

5% is the return which investors require given their time preferences, trading costs in secondary markets and general market conditions.

*This note is based on LE's study for the City of London The impact of a financial transaction tax on corporate and sovereign debt". http://www.londecon.co.uk/publication/the-impact-of-a-financial-transaction-tax-on-corporate-and-sovereign-debt

This required return does not change when a FTT is introduced. However, as the FTT introduces a new trading cost, each investor is only prepared to pay the face value of the bond less than the tax as otherwise she/he would not achieve the desired 5% return.

Thus, in our example, the last investor (investor 4) is only prepared to pay €99.90 to investor 3 from whom she/he acquires the bond. Investor 4 pays the tax only once as the bond is redeemed at the end of year four and such redemption is not subject to the FTT.

Thus, investor 3 receives only €99.90 when she/he sells the bond to investor 4. However, investor 3 pays the tax twice – once when she/he sells the bond to investor 4 and once when she/he buys the bond from investor 2. Thus, she/he is only prepared to pay €99.70 to investor 2 as otherwise she/he would not achieve the desired return of 5%.

The same is true of investor 2 who is only willing to pay €99.50 to investor 1.

Finally, investor 1, the one who acquires the bond from the issuer is only prepared to pay €99.40 to the issuer for a bond with a face value of €100 because she/he pay €0.10 in tax when selling the bond to investor 2 and she/he receives only €99.50 from investor 2.

The example above assumed that seller and buyer of the bond interact directly with each other. In practice, a number of intermediaries are involved. This generates a **cascade effect**.

Financial stakeholders consulted during the study were unanimously of the opinion that the current EU draft FTT legislation does not exempt much of intermediary activity from the FTT.

Thus, any single transaction between investors in the example above will be subject to the tax multiple times.

For example, the investor selling the bond will do so by selling to her/his bank with which she/he has long-standing relationship.

The bank may then sell the bond to a voice broker who in turn will then sell the bond to another bank.

The latter bank may hold the bond for short time on its books until it is finally sold to another investor.

While the bond is on the books of the intermediaries, they may undertake some hedging transaction(s) to offset the additional risk resulting from the bond being on the books.

Overall, the chain between the original seller of the bond and the final buyer of the bond involves a number of intermediaries.

According to financial sector stakeholders representing both the buy and sell side, a typical chain involves about 5 transactions, which each involving a payment of the FTT by the buyer and the seller.

Thus, one transaction between two investors would result in a tax liability of 100 basis points instead of the 20 basis shown in the detailed example.

Economic impact of the FTT – businesses and the economy

The higher effective yield that issuers of debt instruments (businesses and governments) have to offer to investors to raise the same level of funds as before will raise their cost of funds.

For example, in FTT-zone countries, the overall cost of capital would go up by 45 basis points if the corporate bond is traded 4 times between investors.

This increase in the cost of funds reflects only the impact of the increase in the cost of debt securities. The total increase in the cost of funds will be much larger as the cost of equity and bank loans will also go up. The latter will go up because banks themselves use debt instruments and equity to fund themselves. In addition, the cost of repurchase agreements (repos), a major source of short-term bank funding, will also go up significantly.

Based on previous work on the relationship between the cost of fund and investment by companies, it is estimated that, in the long run, the level of business investment would be 3.6 per cent lower and the level of GDP 1.0 lower. It is important to note that this figure underestimates the total impact because it does not take into account the increase in the cost of funds arising from the application of the FTT on equity and the adverse impact of the FTT on the cost of bank lending to businesses.

Another important point to note is that businesses located outside the FTT-zone will also be impacted if their debt securities are bought and traded by FTT-zone investors.

For example, for non-FTT zone countries such as the UK, where the share of debt financing in total funds raised by businesses is much higher than in continental Europe, the cost of funds for businesses will go up by about 215 basis points.

While this figure is much larger than for FTT-zone countries, it should be noted that, once the impact of the FTT on the cost of equity and banks loans is taken into account, the increase in the cost of funds faced by businesses is likely to be smaller in the non-FTT countries than in the FTT-zone countries (given similar levels of trading for FTT-zone and non-FTT-zone securities).

The smaller impact in the non-FTT-zone countries is due to the fact that only a share of the funding instruments attracts the FTT, i.e., when they are traded in secondary markets by FTT-zone residents, whereas all the funding instruments issued by entities located in the FTT-zone will be subject to the FTT when traded in secondary markets, irrespective of the localisation of the trading parties.

Economic impact of the FTT – governments

The FTT, as currently proposed, will also significantly increase the issuance cost of sovereign debt. For sovereigns based in the FTT zone, the cost would go up by 400 basis points based on the transactions by investors and intermediaries described above.

As in the case of corporate debt, sovereigns from outside the FTT-zone will also face a higher issuance cost as a sizeable proportion of their investor base is in the FTT-zone.

Conclusions

As currently designed, the FTT will have a very significant impact on the real economy. The present note highlights the effect of only one channel through which the FTT will impact on the real economy – debt. The total impact will be larger because the cost of equity and bank loans will also increase, the number of trades between investors assumed in the analysis is conservative and the analysis does not take into account the widening bid-ask spreads that would be observed once the tax is implemented.