

Box 9

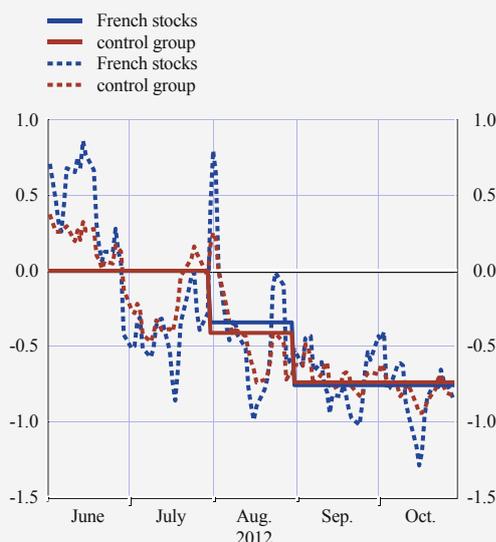
RECENT EVIDENCE ON TAXING FINANCIAL TRANSACTIONS

With the financial crisis, there has been renewed political interest in financial transaction taxes (FTTs) – a notion with origins dating back to a proposal by James Tobin some 35 years ago.¹ Indeed, within the European Union, 11 countries have expressed a commitment to introducing such a tax in some form. Notwithstanding any prospective benefits, notably for government revenues, the imposition of such taxes also entails costs. In particular, FTTs might have

1 See Tobin, J., “A Proposal for International Monetary Reform”, *Eastern Economic Journal* (Eastern Economic Association), 1978.

Chart A Bid-ask spreads for comparable French and Dutch stocks

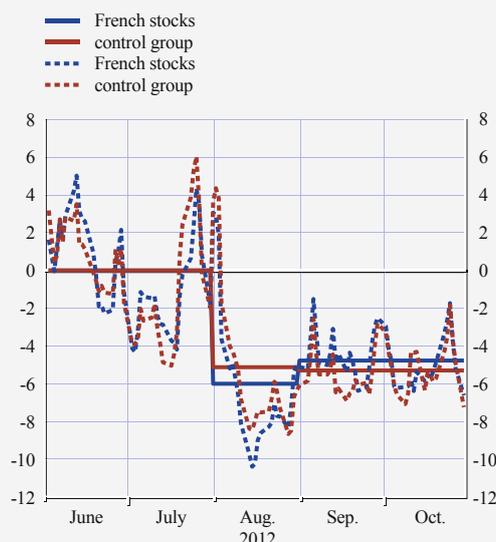
(basis points)



Sources: Thomson Reuters and ECB calculations.
Notes: The charts plot the cross-sectional averages (dashed lines) for the treated group (in blue) and the control group (in red) minus their respective pre-event averages over time. Three-day moving averages. The bold lines indicate the sub-period averages for June/July, August and September/October.

Chart B Intraday volatility for comparable French and Dutch stocks

(percentages; annualised volatility)



Sources: Thomson Reuters and ECB calculations.
Notes: The charts plot the cross-sectional averages (dashed lines) for the treated group (in blue) and the control group (in red) minus their respective pre-event averages over time. Three-day moving averages. The bold lines indicate the sub-period averages for June/July, August and September/October.

implications for the activity and functioning of affected financial market segments. Whilst in principle the existing literature could shed some light on the potential costs and benefits of such taxes, in practice most empirical evidence is more than a decade old, or relates to rather illiquid emerging markets, thereby limiting its applicability to the current European setting.

Recent evidence is available from an FTT introduced for French equities on 1 August 2012. The French FTT consists of a levy of 20 basis points on the purchase of shares of French companies with a market capitalisation of €1 billion or more. Importantly, the tax only applies to outright transfers of ownership (implicitly exempting intraday trading activity) and includes exemptions for trading related to market-making. While both the scope and the implementation of this FTT are quite different from draft proposals for a European-level equivalent, this specific example can nonetheless provide illustrative insights into prospective impacts.

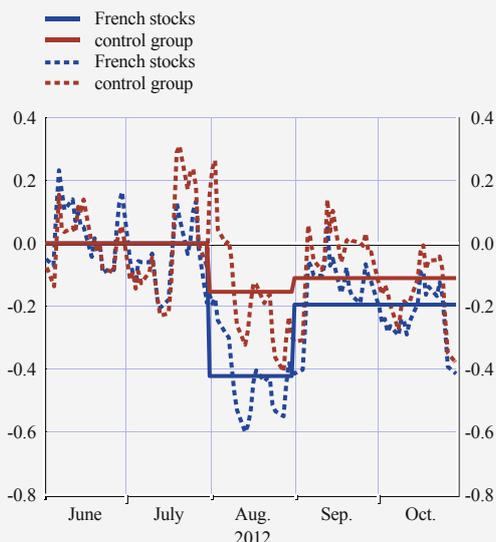
Comparing outcomes for the group of affected French stocks with those for similar Dutch stocks that are traded on the same market but not subject to the FTT yields some interesting insights.² Evidence suggests that the FTT had no significant permanent impact on either intraday return volatility or the bid-ask spread, given that both lines do not diverge notably after the 1 August implementation (see Charts A and B).³ The absence of any decrease in market liquidity is most likely a consequence of the exemption of market-making activities.

2 For a more detailed exposition of methodology, see Colliard, J-E. and Hoffmann, P., "Sand in the chips? Evidence on taxing transactions in modern markets", *ECB Working Paper Series*, forthcoming.

3 Due to seasonality in trading activity in August, the permanent impact is judged as the difference between September/October and June/July.

Chart C On-exchange trading volumes for comparable French and Dutch stocks

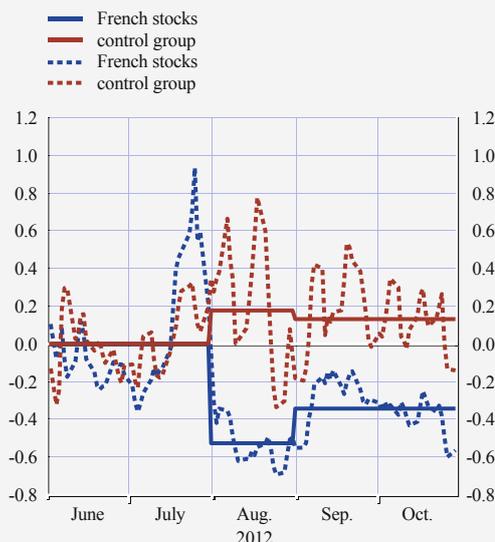
(as a percentage of the average for June-July 2012)



Sources: Thomson Reuters and ECB calculations.
Notes: The charts plot the cross-sectional averages (dashed lines) for the treated group (in blue) and the control group (in red) as percentage of their respective pre-event averages over time. Three-day moving averages. The bold lines indicate the sub-period averages for June/July, August and September/October.

Chart D Over-the-counter trading volumes for comparable French and Dutch stocks

(as a percentage of the average for June-July 2012)



Sources: Thomson Reuters and ECB calculations.
Notes: The charts plot the cross-sectional averages (dashed lines) for the treated group (in blue) and the control group (in red) as percentage of their respective pre-event averages over time. Three-day moving averages. The bold lines indicate the sub-period averages for June/July, August and September/October.

The FTT's impact on trading volume nonetheless differed considerably across different market segments (see Charts C and D, where the causal impact of the FTT is given by the difference between French stocks and the control group). While the volume on Euronext, the main listing exchange for the stocks considered, displayed a slight decline of about 10%, off-exchange trading – including over-the-counter (OTC) trades and volume executed in dark pools, which account for a significant proportion of the overall reported trading volume – dropped by around 40%. Interestingly, much of this decline was driven by a decrease in very large transactions.

This striking difference across market segments suggests that the adopted liquidity safeguards were significantly less effective in protecting off-exchange activity. While also being subject to the market-making exemption, the less formal nature of liquidity provision in the OTC market implies that an occasional liquidity provider may have been crowded out by the tax.

Overall, these findings highlight how such taxes might have differing liquidity and market functioning impacts across market segments. The evidence suggests that an FTT introduced in France last year led to a significant decline in transactions in the OTC market, with a concomitant reduction in liquidity provision in this market segment. Clearly, such taxes entail the prospect of budgetary benefits.⁴ At the same time, impacts of a more widespread application of such taxes on market activity in the absence of adequate safeguards for liquidity provision might embed prospective financial stability risks.

⁴ European Commission estimates suggest that budgetary benefits of €4.5-6.5 billion in revenues could accrue from taxing all transactions in EU27 equities without any exemptions (see http://ec.europa.eu/taxation_customs/taxation/other_taxes/financial_sector/).