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# Risk Management

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# Downside of Prudential Regulation: Lower Liquidity

By Ira Jersey

**IN ORDER TO COMPLY WITH BASEL CAPITAL RULES**, many financial institutions had to choose to raise capital and to cut risk weighted assets—including assets that once did not have any risk weighting, but do today. With the implementation of further rules, such as leverage ratios (LR), liquidity coverage ratios (LCR), and net stable funding ratios (NSFR), balance sheets at banks' dealer businesses will likely change even further. Already, trading assets amongst the ten largest U.S. and European firms by trading assets have fallen 17 percent (Exhibit 1) from the 2010 peak. One would suspect balance sheets to be cut further as additional bank rules are implemented.

Rates businesses have been particularly hard hit. From the 2010 peak in trading assets, balance sheets of rates trading books have fallen by nearly one third—some \$200 billion (Exhibit 2). Rates businesses briefly grew as a portion of trading assets in 2011, but over the past two years, fell from over 19 percent of trading assets to less than 16 percent (Exhibit 3). Rates businesses have faced particular pressure due to new regulations concerning over-the-counter derivatives and the leverage ratio—which impact gross balance sheet and do not take into account the risk weight of an asset.

As a portion of revenue, rates businesses have also been shrinking compared with credit and EM businesses (Exhibit 4), which is consistent with the ability of shrinking assets to generate income. Rates basically subsidized other FICC segments in 2008 during the height of the financial crisis with rates totaling 75 percent of FICC revenues.

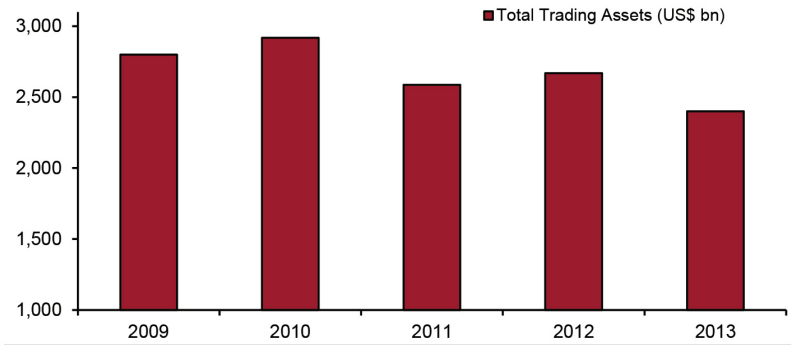
**The implication of the shrinking rates business is that liquidity in some rates related products—including Treasury securities themselves—may be challenged by the smaller balance sheets.** In the pre-Basel III period, dealer balance sheets were relatively elastic so dealers were able to facilitate trading in most fixed income product without dramatic prices moves, unless dealers thought such facilitation would lose them significant revenues. Prices might move around, but the balance sheet was not sticky, particularly for Treasuries and other low risk weighted assets like Agencies and Agency Pass-throughs. If prices fell enough, dealers would be willing buyers of “cheap” paper.

Today it is not as obvious that balance sheets are nearly as elastic. This suggests that in times of mutual fund outflows or risk aversion, markets will become choppier, less liquid and more volatile. The opposite is also true—with smaller balance sheets, dealers do not hold inventory at the levels they once did meaning continued demand will beget continued demand and prices will rise seemingly for little fundamental reason.



## Exhibit 1: Trading assets have been trimmed 17%

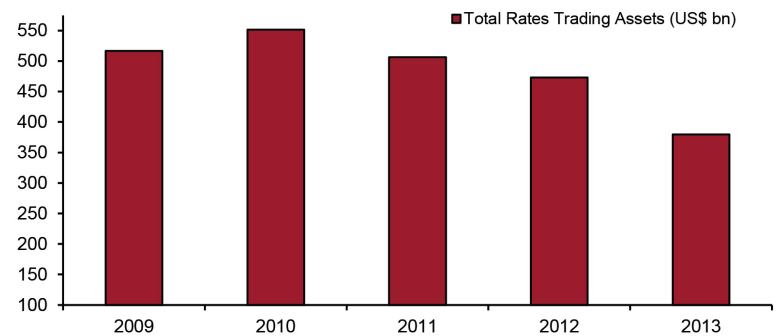
Year-end FICC and Equity Trading Assets for 10 largest US & European banks by trading assets, US\$ bn



Source: Credit Suisse, Company reports

## Exhibit 2: Rates trading assets have fallen by about one third – some \$200 billion

Year-end Rates Trading assets for 10 largest US & European banks by trading assets, US\$ bn



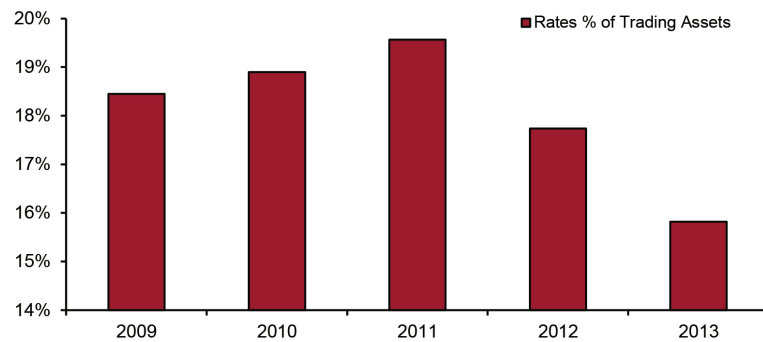
Source: Credit Suisse, Company reports

Source: Credit Suisse, Company reports

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**Exhibit 3: Rates businesses account for less than 16% of trading assets, down from near 20% in 2011**

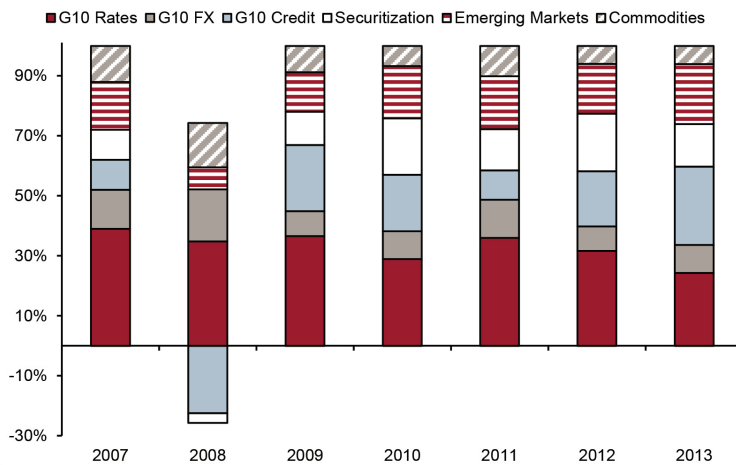
Rates Trading assets as a percent of total trading assets for 10 largest US & European banks by trading assets



Source: Credit Suisse, Company reports

**Exhibit 4: Revenue by FICC business segment, rates shrinking**

For 10 largest US & European banks by trading assets



Source: Credit Suisse, Company reports

In fact, we can empirically see that balance sheets are not very elastic. We use corporates as a case in point because over the last year, dealer balance sheets responded contrary to what one would expect, and indeed hope, from a liquidity perspective. As last year’s heavy bond-fund outflows forced substantial selling of assets on the part of funds, one would have anticipated dealer balance sheets to swell as they stepped up to take down the paper and warehouse the risk as prices fell. This was far from evident, however, as many of the weeks with the most severe outflows from bond funds actually saw dealer balance sheets toward corporates shrink (Exhibit 6).

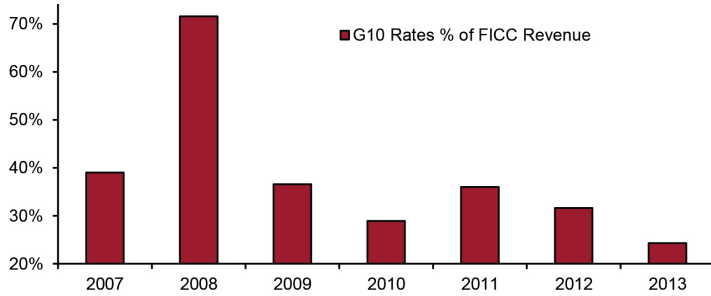
Below we provide a theoretical representation of how dealer balance sheets should react to other market participants’ flows. As noted above, in an ideal environment, if bond funds encounter pressure to liquidate thanks to redemptions, dealers should provide liquidity and be ready to intermediate and warehouse the risk. For a \$1 outflow from bond funds, dealer balance sheets would increase some proportion of that—presented below as \$0.67—over the same timeframe. Similarly, if demand picks up, dealers would be expected to be willing sellers of their inventory, causing balance sheets to contract.

**Last year’s experience (shown in Exhibit 7 as the “New Regime”) suggests that dealers have a reduced capacity to function as safeguards of liquidity.** In reality, we suspect that the relationship may be somewhat steeper—in other words, dealer balance sheets are simply not responsive to large selling on the part of the buy-side, and instead they are more of a pass-through entity of risk than one that warehouses it. Such an environment carries substantial negative implications for broader liquidity, and, correspondingly, the speed of sell-offs. ■

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**Exhibit 5: Rates revenues were 75% of FICC in 2008, down to under 25% today**

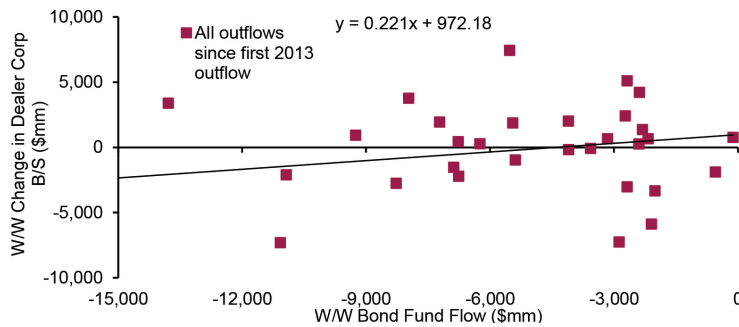
For 10 largest US & European banks by trading assets



Source: Credit Suisse, Company reports

**Exhibit 6: Dealer balance sheets toward corporates failed to expand to accommodate the outflow from bond funds last year**

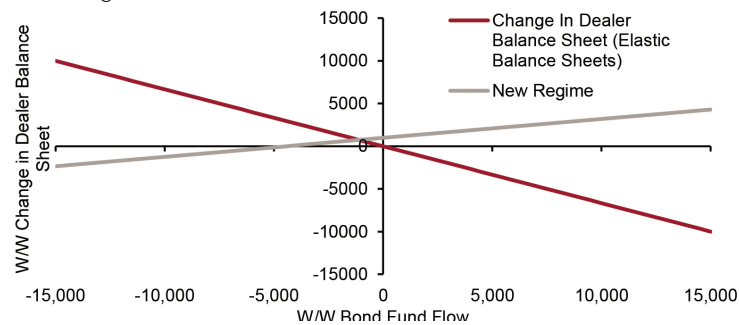
Change in Dealer Balance sheet for weeks with Bond Fund Outflows, from June 2013 to present



Source: Credit Suisse, Company reports

**Exhibit 7: Dealers once had the capacity to expand their balance sheet and buffer fixed income selloffs on buy-side selling – this is true today**

Theoretical representation of Dealer Balance Sheet Elasticity under pre-crisis and the new regime



Source: Credit Suisse, Company reports