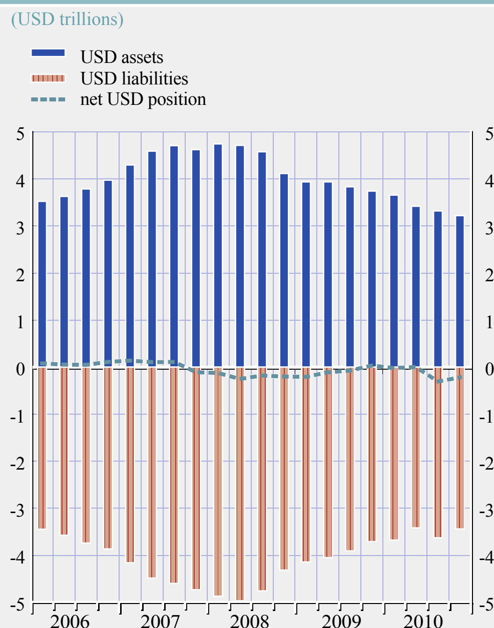
Box 10

US DOLLAR FUNDING NEEDS OF EURO AREA BANKS AND THE ROLE OF US MONEY MARKET FUNDS

Euro area banks have built up sizeable positions in US dollars over the last ten years. According to data from the Bank for International Settlements (BIS), the US dollar assets of euro area banks at the end of the fourth quarter of 2010 totalled approximately USD 3.2 trillion (see Chart A). These positions were accumulated progressively over the last ten years and reached a temporary high between the third quarter of 2007 and the first quarter of 2008. They are largely the result

Chart A Gross and net USD-denominated positions of euro area banks

(USD trillions)



Source: BIS consolidated banking statistics.
Note: Euro area aggregates approximated on the basis of the 12 euro area countries reporting statistics to the BIS.

of search-for-yield types of investment in USD-denominated assets, but also include business expansions into the United States, as well as customer-driven US dollar financing requirements for corporate or project financing. This box looks at the funding consequences linked to these sizeable positions.

Two options are available to any non-US bank for financing its US dollar assets. The first option is to borrow USD currency outright via deposits or debt instruments. Such a financing approach exposes banks to funding (or rollover) risk if the maturity of the assets held differs from that of the liabilities financing them.

The second option is to use foreign exchange (FX) swaps to convert liabilities in domestic or third currencies into funds of the desired denomination. This approach leads to currency risk in cases where there is an unhedged on-balance-sheet mismatch between US dollar assets and domestic currency liabilities.

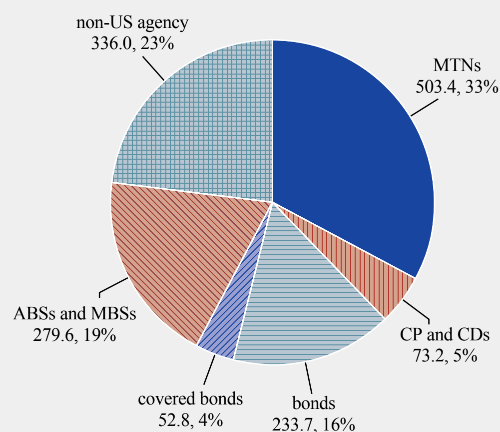
While the first financing option increases liabilities on banks' balance sheets and can therefore be traced by aggregate banking statistics or individual issuance data, the second financing approach relies on off-balance-sheet instruments, the use of which is notoriously difficult to trace in view of the unavailability of statistics with the relevant level of detail. Aggregate statistics illustrate that euro area banks had a structural balance-sheet mismatch before the onset of the crisis, as US dollar assets exceeded US dollar liabilities. This mismatch appears to have been broadly adjusted in 2008, but it re-emerged towards the end of 2009. It signals the existence of financing needs that were probably met in FX swap markets. In the following, this box aims to approximate the size and nature of debt instruments used by euro area banks to finance their USD-denominated assets.

Only a few euro area banks have operations and deposits in the United States. Euro area banks with operations in the United States (and thus with natural US dollar funding needs) and banks that have built up considerable USD-denominated portfolios thus compete for funding with both banks that are trying to diversify their funding sources and banks with a good standing raising US dollar funds at good conditions in markets and serving as counterparties for the basis swaps. These banks attract an investor base that consists mainly of participants in the interbank market, monetary authorities and (US) money market funds.

In the second half of May 2011 approximately USD 1.5 trillion of US dollar-denominated debt instruments issued by euro area banks were outstanding. These figures cover only the Eurobond markets in the case of medium-term notes (MTNs), commercial paper (CP) and certificates of

Chart B Outstanding USD-denominated debt instruments issued by euro area banks

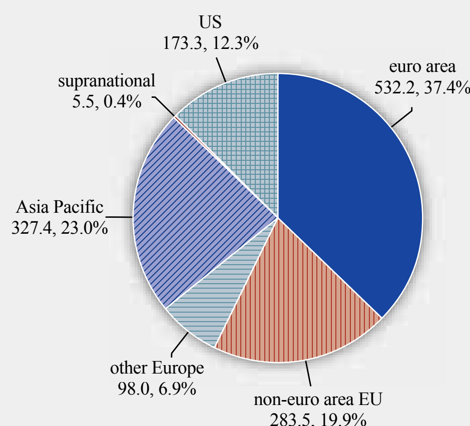
(May 2011; USD billions equivalent at issuance)



Sources: Dealogic and ECB.
Note: As for the short and medium-term segment, Dealogic figures primarily cover the Eurobond markets and therefore do not include short-term paper issued in US markets.

Chart C US prime money market funds' geographical exposure

(Apr. 2011; USD billions and percentages of total assets under management)



Sources: Securities and Exchange Commission and ECB.
Note: SEC figures cover all US prime MMFs.

deposits (CDs), so that the substantial issuance of these instruments in US markets (see Chart B) is not included. 33% of this issuance took the form of short-to-medium-term debt instruments, while 23% and 16% respectively were issued in the form of secured and unsecured debt instruments with longer maturities. The remaining 23% are longer-maturity issues from euro area agencies. Over the period up to the end of 2012, 25% of this outstanding amount of debt is expected to be redeemed, of which half are MTNs, CP or CDs.

Major providers of US dollar funds are prime money market funds (MMFs) in the United States. At the end of April 2011 these funds held USD 1.4 trillion of assets under management, 37.4% (or USD 532 billion) of which were direct or indirect exposures to euro area banks (see Chart C). Broken down by national banking sector, this exposure is accounted for by the following countries: France (18.5% of total US prime MMF exposure), Germany (8.2%), the Netherlands (6.5%), Belgium (1.5%), Italy (1.1%), Spain (1.2%), Austria (0.2%) and Luxembourg (0.1%). The exposures take the form of asset-backed as well as financial company CP, CDs, repurchase agreements against Treasury, government agency or other securities, as well as notes.

US MMFs generally adopt very conservative investment approaches and reduced the average maturity of their portfolios further as a result of recent amendments to SEC rules. They are very sensitive to headline risk (i.e. increased price volatility resulting from negative news coverage) and are prone to swiftly change their investments.

The vulnerability of euro area banks that arises from their substantial US dollar funding needs has only been fully acknowledged since the outbreak of the financial crisis. The vulnerability is linked to the extensive reliance on short-term wholesale financing instruments and the related potential rollover risk. It could materialise under two scenarios. In a first scenario, US MMFs would not renew, or would reduce, their exposures to these euro area institutions

or countries either on account of a run in the wake of one or more MMFs "breaking the buck" (meaning that their net asset value (NAV) drops below USD 1.00) or because investors shun credit or headline risk as a result of bank, country or euro area-specific risks. In another scenario, picking-up economic activity could lead providers of funds to MMFs to reallocate their funds to more attractive investment opportunities outside the MMF sector. The US corporate sector, which currently has significant stocks of cash, provides substantial funds to MMFs and could serve as an investor that is likely to shift its money out of MMFs. Such reversals of flows could put the size of exposures to euro area banks under downward pressure in terms of quantity, or put upward pressure on interest rates paid.