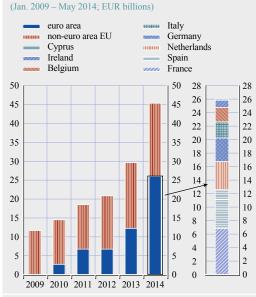
## **DEVELOPMENTS IN MARKETS FOR CONTINGENT CAPITAL INSTRUMENTS**

As part of the phase-in of Basel III risk-weighted capital and leverage requirements, there is a potential for growth in the use of hybrid debt instruments. The quantitative risk-weighted capital requirements for the Tier 1 (T1) and total capital ratios are significant – implying a 1.5 percentage point capital ratio requirement using additional Tier 1 (AT1) capital (or hybrid debt), as well as a 2.5 percentage point requirement for Tier 2 (T2) capital instruments. At the same time, the leverage ratio needs to be met using Tier 1 capital with no restrictions on AT1 instruments. Under the European transposition of Basel requirements (CRD IV), all AT1 instruments are required to have specific write-down or conversion features, as demonstrated by contingent convertible bonds (CoCos). It is therefore not surprising that there has been a significant recent pick-up in CoCo issuance by euro area banks.

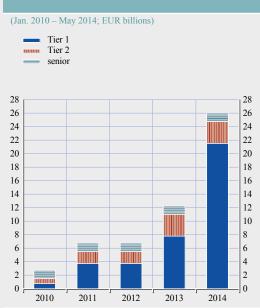
The CoCo market in Europe is relatively recent but not entirely new. EU banks have issued since 2009 a variety of contingent capital instruments in the amount of approximately €45 billion, of which €26 billion were issued by banks in the euro area (see Chart A). Banks' CoCo issuance activity picked up strongly in 2013 and in the first five months of 2014, partly driven by banks' efforts to issue CRR/CRD IV-compliant instruments. This is also reflected in the increasing share of AT1 instruments (see Chart B). In addition to the public CoCo issuances, some banks from countries under financial assistance programmes received state aid and recapitalisation in the form of CoCos that are owned by the state.

## Chart A Outstanding amount of EU banks' publicly issued CoCos



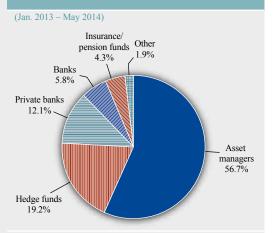
Sources: Dealogic, Bloomberg and ECB calculations. Note: The chart does not include CoCos subscribed by the government as part of state-aid measures.

## Chart B Euro area banks' cumulative CoCo issuance by type



Sources: Dealogic, Bloomberg and ECB calculations. Note: The chart does not include CoCos subscribed by the government as part of state-aid measures. While on aggregate this nascent market segment is growing, the European CoCo market is by no means homogeneous and instruments differ in terms of their main features, including their loss-absorption mechanism, trigger levels, maturity or legal basis. Looking at the composition of CoCos by regulatory treatment, the majority of euro area banks' CoCo issuances are AT1 instruments. However, some European banks also issued Tier 2 instruments for different reasons such as national regulatory objectives or credit rating objectives. Regarding the loss-absorption triggering mechanism, most of the CoCos issued by euro area banks have been designed to meet AT1 criteria, with triggers based on common equity Tier 1 (CET1) ratios and with varying trigger levels, although they are mostly set at a minimum level of 5.125%. However,

## Chart C CoCo investors by type for issuances since 2013



Sources: Dealogic, Bloomberg and ECB calculations. Note: Based on a sample of CoCo issuances representing 50% of total (public) issuance by EU banks since the start of 2013.

in some cases, CoCos have much higher triggers, even above 8% CET1. The loss-absorption mechanism for the majority of outstanding CoCos issued by euro area banks is principal writedown (permanent or temporary), although recent issues were dominated by CoCos with equity conversion triggers.

This growth in bank issuance clearly has a counterpart in growing investor demand. A CoCo investor base has developed, including a growing share of real money investors (see Chart C). This provides welcome stability to the investor base, encompassing now (according to market reports) predominantly asset managers and banks, in addition to "fast money" from private banks and hedge funds. The CoCo market is global in terms of the investor base geography.

The market started as a predominantly US dollar-denominated issuance market, but a growing euro-denominated market is catching up. CoCo structures remain complex and no trend towards standardisation is apparent to date. While less surprising for instruments issued before the agreement on the transposition of the Basel III framework into EU law, the kick-start of CoCo issuances following the June 2013 finalisation of the CRR/CRD IV package showed national regulators making ample use of the discretion granted to them, while not supporting greater harmonisation of structures.

While these state-contingent write-down possibilities offer a welcome addition to loss-absorption capacity, the complexity of CoCos is a non-negligible risk for this asset class with potential systemic relevance. CoCo investors are exposed to three main risk drivers: (i) the probability of conversion; (ii) the nature of the conversion (permanent or temporary write-down or conversion into equity); and (iii) the risk of coupon deferral or cancellation.

Two main systemic risks are relevant. First, with heterogeneous properties, the liquidity of this market could be tested in the event of correlated selling. The thickness of different tiers of a bank's capital structure becomes relevant in this regard, with the tiers being (from the most junior to the most senior capital instrument) CET1, CoCo AT1, Coco T2 and non-CoCo T2.

The thickness of each layer beyond potential regulatory minima defines how much more losses an institution can weather before the following more senior layer of capital would see losses. Second, moral hazard risks associated with the issuing bank may be relevant. CoCos can set incentives for banks to overstretch their risk-taking, gambling on the upside of risky exposures without cushioning this risk-taking with additional equity capital. A structural moral hazard risk inherent in CoCos may also be a potential subordination to equity.

The increasing signs of hunt-for-yield behaviour, combined with redirected capital flows from emerging markets to Europe, have benefited this growing market, pushing up valuations. This, in turn, may have allowed banks to raise cheap capital to bolster their balance sheets and improve their leverage ratios. It is however unclear whether current valuation levels internalise all the risks of these complex instruments. A reassessment of risks could not only hamper the buildingup of bank capital structures, it could also negatively affect bank funding costs.