Section 3 will make the link between financial cycles and the macroeconomic counterpart, and show that financial-cycle divergence was accompanied by growing external imbalances and the disanchoring of domestic savings and investment in euro area countries. The historically low rates associated with the introduction of the euro sparked a credit boom in the latter countries, but the bulk of credit went to the housing sector (which arises the importance of house-price development for describing the credit cycle).

The conclusion from the empirical analysis is that the observed divergence in financial cycles within the euro area was closely associated with capital flows and especially intra-euro area flows. This finding has important policy implications, because it raises the question of whether the macro-prudential policy can be compatible with a currency union characterised by free flow of capital. Section 5 looks at the special challenges that macro-prudential policymaking faces in a heterogeneous monetary union such as the euro area, and discusses the current set up in light of the empirical findings.

1. Financial cycles in the euro area

Understanding the development of the financial cycle is key for the purposes of macro-prudential policymaking. The literature suggests that peaks of financial cycles are closely associated with financial crises, and that the cycle helps detect financial distress in their build-up phase. An analysis of financial cycles for both the euro area and its member states is therefore a natural starting point for discussing the macro-prudential set up of the euro area, especially since the literature on the topic is relatively new and limited.[2]

As far as the empirical representation is concerned, the literature has established two important stylised features of the financial cycle. First, the financial cycle has a much lower frequency than the traditional business cycle. Aikman et al (2012) show that the average length of financial cycles in a sample of seven industrialised countries since the 1960s has been around 16 years, and that financial cycles normally have greater amplitude than business cycles. The length and amplitude of the financial cycle depend on policies adopted (Aikman et al, 2012), but the literature identifies a tendency for financial variables to evolve at a relatively slow pace.

[2] To our knowledge a financial cycle analysis in the Euro area has been conducted only recently by Schüler et al (2015).

1.1 Domestic credit cycles in the euro area and member states

During the euro area•s first decade of life, credit developments in its members diverged significantly (Figure 1). In the so-called euro •South•, bank credit to the non-financial private sector boomed, growing faster than for the euro area as a whole, and doubling in percentage of GDP between 1999 and 2009. In the North, credit tended to grow slowly, stagnate, or decrease over the same period. In Germany, for example, bank credit to the private sector decreased by almost 20 points of GDP from 1999 to 2012. In between these

over the period 1960:Q1 to 2014:Q4.[5] A measure of overall credit to the private sector would be preferable, but quality and availability of data beyond bank credit are not always good enough. However, given the importance of bank intermediation in the euro area, bank credit is especially relevant from a policy perspective.

Figure 2: Estimated cycle in the growth of real bank credit to the private sector

Source: Bruegel based on data from BIS; National Sources; IMF; AMECO.Note: shaded area indicates the period after currency unification.

[5] The aggregate for the euro area as a whole is used as the sum of individual countries' positions.