

## DEBT OF NON-FINANCIAL CORPORATIONS: CONSOLIDATED AND NON-CONSOLIDATED MEASURES

The level of debt in the corporate sector relative to GDP increased significantly in the run-up to the financial crisis, before beginning to stabilise during the early years of the crisis, and it has been diminishing modestly since 2012 (see Chart A). However, the aggregate euro area debt figures for non-financial corporations (NFCs) mask substantial differences in the debt ratios across countries and firms. The indebtedness of NFCs can influence investment activity owing to its effect on firms' debt servicing burden. Moreover, the level of debt may impact on NFCs' access to external financing as it can affect the credit standards set by banks. The debt level also affects NFCs' capacity to withstand shocks, and this can have spillover effects on other parts of the euro area economy.<sup>1</sup>

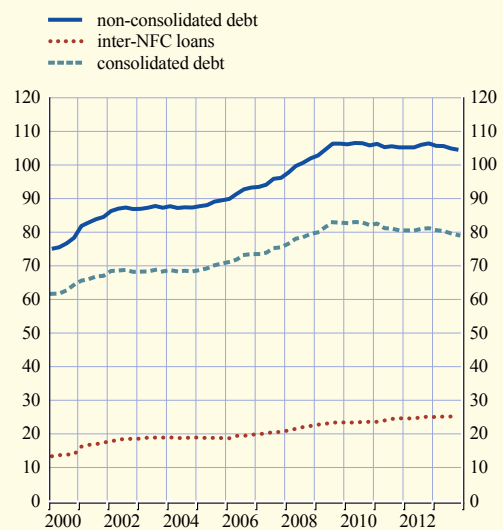
NFC debt can be analysed using either consolidated or non-consolidated data. Consolidated data comprise only debt financing provided by other sectors, whereas non-consolidated data include also intra-sectoral positions (e.g. inter-company loans). In the light of the recent availability of consolidated (in addition to non-consolidated) data on NFC debt in the quarterly euro area accounts, this box compares the two approaches to debt measurement, both from a conceptual point of view and as regards their policy implications.

### Usage of different debt definitions

The first decision to be made when measuring NFC debt concerns which of the instruments from among the various components of NFCs' total financial liabilities are to be included in the calculation. In ECB publications the measurement of NFC debt takes into account loans, debt securities and pension reserves.<sup>2</sup> This means that trade credit, for instance, is not included.<sup>3</sup> Once the instruments have been selected, a decision must be made as regards the consolidation method: unlike consolidated data, non-consolidated data on NFC debt includes financing flows

Chart A Debt of NFCs in the euro area

(as a percentage of nominal GDP; four-quarter sums)



Sources: Eurostat and ECB.

1 See also the Task Force of the Monetary Policy Committee of the European System of Central Banks (2013), "Corporate finance and economic activity in the euro area: Structural Issues Report 2013, *Occasional Paper Series*, No 151, ECB, August 2013.

2 See, for example, the ECB quarterly statistical press release entitled "Euro area economic and financial developments by institutional sector" available on the ECB's website at <http://www.ecb.europa.eu/press/pr/stats/ffi/html/index.en.html>. Pension reserve liabilities arise from the direct pension commitments of employers, i.e. if they are not outsourced to an autonomous pension fund. The macroeconomic imbalance procedure definition of private debt excludes this category.

3 The exclusion of trade credit from existing debt definitions reflects data quality issues in a number of countries. With the implementation of the new European System of Accounts 2010 and as a result of the new ECB Guideline on financial accounts ((ECB/2013/24), OJ L 2, 7.1.2014, p. 34), trade credit will become a mandatory separate statistical item from end-2014.

and positions arising within the NFC sector, e.g. loans extended by companies to other companies resident in the same country.<sup>4</sup> There is evidence of loans, in significant amounts, being extended between resident corporations belonging to the same enterprise group. But in addition, loans between corporations belonging to different groups (i.e. without a significant capital link) may be granted for a number of reasons, such as to support a supplier, or for pure investment purposes.<sup>5</sup> With a few exceptions,<sup>6</sup> the ECB, the European Systemic Risk Board (ESRB) and the European Commission in its implementation of the macroeconomic imbalance procedure (MIP) have until recently relied on non-consolidated debt measures. The European Commission switched to the consolidated debt concept in its “Alert Mechanism Report 2014” under the MIP, exploiting the newly available consolidated data for all EU countries on an annual basis. Furthermore, the recent availability of consolidated NFC debt data, in addition to non-consolidated debt data on a quarterly basis for the euro area and for almost all Member States, means that analyses can benefit from both measurement concepts.

### Conceptual considerations

From a conceptual point of view, the choice between consolidated and non-consolidated debt measurement is not clear-cut, and can serve different analytical purposes. Consolidated debt measures the amount of funds received by a sector from all other (both resident and non-resident) sectors. As such, this approach provides an overview of the inter-sectoral flow of funds.

For assessing debt sustainability, as well as the refinancing or credit risk of NFCs, the debt positions occurring between NFCs should also be taken into account, thus supporting the use of non-consolidated debt measures in such analyses. However, sector account concepts do not allow any distinction to be made between debt within one company group and debt between NFCs belonging to different groups. The two are very different in nature and pose different issues as regards, for instance, debt sustainability. Intra-group lending can be very significant, with large cross-country heterogeneity. Thus, it should ideally be analysed separately from debt owed to unrelated NFC creditors.

On the other hand, an argument in support of non-consolidated debt measurement is that derived indicators, such as the leverage ratio, show debt in relation to total equity or assets, which are available only on a non-consolidated basis. Acknowledging the relative merits of the two concepts, in its implementation of the MIP, the European Commission, for example, continues to use non-consolidated measures of debt as an additional indicator. Similarly, the ECB, in a recent analysis of corporate indebtedness, used both non-consolidated and consolidated data.<sup>7</sup>

### Cross-country data, comparability and statistical issues

Non-consolidated data are, in principle, more comparable across economies, because for national accounts statistical purposes the consolidation of inter-NFC debt only refers to the consolidation of debt between NFCs resident in the same country. Therefore, the comparability of consolidated data can be affected by different shares of domestic inter-NFC financing across countries.

4 In this box the term “consolidated” follows the European System of Accounts definition referring to consolidation at NFC sectoral level. In accounting, “consolidated” statements are usually defined by reference to a company group.

5 However, these latter cases seem to be relatively minor compared to the evidence of significant intra-group lending.

6 Some proxies for consolidated debt measures have been used especially when comparing the euro area economy with that of the United States.

7 See the article entitled “Deleveraging patterns in the euro area corporate sector”, *Monthly Bulletin*, ECB, February 2014.

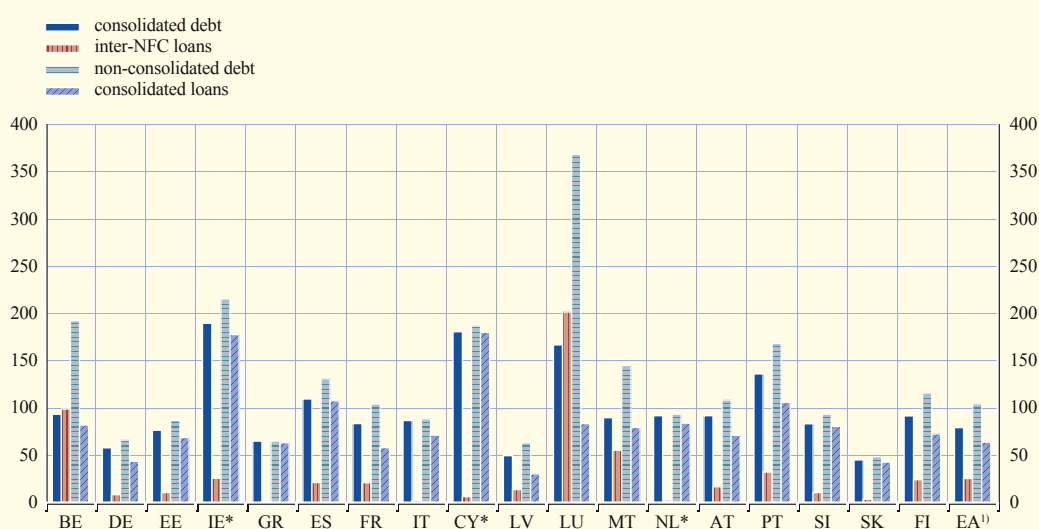
(In principle, the latter can be assumed to be generally lower for small and integrated economies<sup>8</sup>). Non-consolidated data may therefore be preferable when comparing debt levels across euro area countries or the aggregate euro area debt level with that of individual countries.

According to the available data, however, the share of domestic inter-NFC lending (as measured by the inter-NFC debt-to-GDP ratio) is highest for some of the smaller countries. The highest inter-NFC financing ratios are recorded in Belgium, Luxemburg and Malta, a phenomenon probably related to particular structural features in these countries,<sup>9</sup> while larger countries report relatively low ratios (see Chart B). Moreover, non-consolidated debt figures show a higher cross-country variance than consolidated debt figures, due to the high variability of inter-NFC loans across countries. Some of this cross-country variation is likely to reflect statistical measurement issues, in particular the two points described below.

**1) Different concepts of statistical units:** the level of granularity applied in the statistical definition of an NFC in relation to the enterprise group affects the debt measurement results. The more individual enterprises are identified within enterprise groups, the higher the number of NFCs that are recorded separately and the higher the potential intra-enterprise group financing and the non-consolidated NFC debt. Conversely, countries using higher levels of aggregations of NFCs as statistical building blocks record significantly lower levels of inter-NFC debt. Work has started on improving the comparability of country practices in this respect.

**Chart B Measures of NFC debt and inter-NFC debt**

(as a percentage of nominal GDP; four-quarter sums)



Sources: Eurostat and ECB.

Notes: 1) For the euro area, consolidated debt and inter-NFC loans are not comparable with country data. Latvia is not included in the euro area aggregate as the data refer to Q3 2013.

\*For Ireland, Cyprus and the Netherlands inter-NFC loans are based on annual financial accounts for 2012 and consolidated debt is calculated as non-consolidated debt minus annual inter-NFC loans.

8 In the euro area accounts aggregates the euro area is treated as a single economy and inter-NFC loans include all loans between NFCs resident in any euro area Member State.

9 Structural features such as the attractiveness of these countries for multinational groups relate inter alia to favourable tax treatments.

**2) Different coverage of inter-NFC loans:** most countries do not have complete coverage of NFC balance sheets in their statistical sources and the necessary estimation of missing data may affect the quality of estimates for inter-NFC debt.

### Conclusions

Overall, given the relative merits and shortcomings of each debt concept, the monitoring of both is advisable. The quarterly euro area accounts and the financial accounts are generally presented on a non-consolidated basis. Consolidated debt measures can, however, be derived for NFCs by subtracting inter-company loans from non-consolidated debt measures.<sup>10</sup> Data based on both debt measurements are published by the ECB at a quarterly frequency. Further improvement of the data and comparability is expected with the ongoing review of the euro area accounts in the context of the implementation of the revised statistical standard, the European System of Accounts 2010.

<sup>10</sup> Debt securities cannot yet be consolidated as inter-NFC holdings data are not yet available; they are in any case much less important than inter-NFC loans. Based on annual financial accounts, inter-NFC debt securities holdings are estimated to account for less than 0.5% of GDP in almost all euro area countries.