EUROPEAN CENTRAL BANK
EUROSYSTEM

Debt of non-financial corporations

Explanation of alternative measurement concepts

Macroeconomic measures of debt are based on the financial accounts of a country or economic area, as these provide comprehensive data on the financial assets and liabilities of the economy broken down by institutional sector (i.e. households, non-financial corporations, financial corporations and government). In the EU, the financial accounts are compiled according to the concepts and definitions laid down by the European System of Accounts 2010 (ESA 2010), which ensures comparability across countries.[1] For the non-financial corporation (NFC) sector, several measures are used to analyse debt. These measures are used by the European Central Bank (ECB), the European Systemic Risk Board (ESRB) and the Bank for International Settlements (BIS) for economic and financial stability analysis. The European Commission uses debt measures for households and non-financial corporations to calculate private sector debt for the macroeconomic imbalance procedure (MIP) surveillance mechanism.

The differences between alternative measures of NFC debt concern (a) their coverage of debt instruments; and (b) their coverage of debt *within* the sector, i.e. whether or not funds lent between NFCs are consolidated at the sectoral level. The availability of the underlying data at quarterly or annual frequency may also be a factor in the choice of measure.

Differences regarding the inclusion of financial instruments

In general terms, debt is defined as all liabilities that require payment of interest or principal by the debtor to the creditor.[2] Measures of the debt of non-financial corporations (NFCs) all include liabilities from **loans received** and **debt securities issued**. The inclusion of other, similar financial instruments depends on analytical requirements and data availability/quality considerations:

- **Trade credit,** i.e. credit extended directly by suppliers of goods and services to their customers, is generally recognised as an important, short-term financing tool for NFCs. As trade credit is often granted by other NFCs, it is more important for measures of non-consolidated debt than for consolidated debt (see also below). It is not included in the MIP definition of private debt.
- **Pension scheme liabilities** of NFCs vis-à-vis their (current and former) employees represent in some countries, depending on the national pension system, large liabilities which are similar to other debt components as they require predetermined, legally enforceable payments in the future. This item is also not included in the MIP definition of private debt.

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1 In particular, the ESA 2010 defines institutional sectors and financial instruments (such as loans and debt securities), and how the latter are to be recorded. Unlike other accounting standards, the ESA 2010 requires liabilities from debt securities to be recorded at market value.

2 See, for example, the System of National Accounts 2008 (2008 SNA), paragraph 22.104. The SNA 2008 is the international statistical standard and the basis for the ESA 2010.

- None of the debt measures consider **financial derivatives** or **other accounts payable** (i.e. payment obligations which arise as a result of timing differences, for example in relation to taxes payable) as a component of NFC debt, as the recording of such liabilities is not fully comparable across countries. Any "off-balance sheet" positions are also excluded, as they are not recorded in the national accounts.

Consolidation – the treatment of lending between NFCs

Debt of NFCs can be measured on a consolidated basis (excluding lending between resident NFCs) or on a non-consolidated basis (including lending between resident NFCs). Non-consolidated debt does not distinguish between financing between resident NFCs belonging to different groups and intra-group lending, e.g. between a parent company and a subsidiary resident in the same country. While intra-group lending would ideally be analysed separately from debt owed to unrelated creditors, international statistical standards and thus euro area financial accounts do not provide for such a breakdown. Users thus need to decide whether to use consolidated or non-consolidated debt, or both.[3]

- **Consolidated debt** measures the amounts of funds received by NFCs from all resident non-NFC sectors and from non-resident sectors, thus providing an overview of the flow of funds between resident NFCs and other sectors.
- **Non-consolidated** debt measures the same amounts plus the funds received from other resident NFCs and is therefore helpful in assessing the sustainability of NFCs' debt as well as their refinancing or credit risk.

Overview of concepts, use and availability of measures of NFC debt

	Use	**Liabilities included**	**Treatment of debt between NFCs**	**Available at:**
Quarterly, non-consolidated NFC debt	**ECB, quarterly statistical press releases:** – Euro area households and non-financial corporations – Euro area economic and financial developments by institutional sector **ECB, Economic Bulletin** (Table 3.7)	Loans Debt securities Pension schemes[1] Trade credit	Includes debt between resident[2] NFCs (does not distinguish between debt between NFCs belonging to different groups and intra-group debt).	Euro area: Debt Debt-to-GDP ratio Country data: Debt Debt-to-GDP ratio
Quarterly, consolidated NFC debt	**ESRB Risk Dashboard**	Loans Debt securities Pension schemes[1]	Excludes all loans[3] between resident[2] NFCs.	Euro area: Debt Debt-to-GDP ratio Country data: Debt Debt-to-GDP ratio
Annual, consolidated NFC debt	The European Commission's headline indicator for the MIP refers to private sector debt, i.e. the sum of households' and NFCs' consolidated debt.	Loans Debt securities	Excludes all loans and debt securities between resident[2] NFCs.	(see Eurostat's website: NFC loans, debt securities)

[3] Acknowledging the relative merits of the two concepts, the European Commission, for example, in its implementation of the MIP, continues to use a non-consolidated measure of debt as an additional indicator. Similarly, ECB analyses of corporate indebtedness consider both non-consolidated and consolidated data.

Annual, non-consolidated NFC debt	The European Commission's additional indicator for the MIP refers to private sector debt, i.e. the sum of households' and NFCs' non-consolidated debt	Loans Debt securities	Includes debt between resident[2] NFCs (does not distinguish between debt between NFCs belonging to different groups and intra-group debt).	

1: Liabilities of NFCs vis-à-vis their employees (current and former) resulting from pension commitments. These liabilities arise from non-autonomous pension funds where the NFC is directly responsible for the pension scheme. In addition, if an NFC has outsourced a pension scheme to a pension fund but retains the legal responsibility for a deficit in funding, the underfunding is a liability of the NFC.

2: "Resident" in the case of country data means resident in the same country, whereas for euro area aggregates residency refers to the euro area (i.e. the euro area aggregate for quarterly, consolidated NFC debt excludes loans between NFCs resident in different euro area countries as well as between NFCs resident in the same country).

3: Lending between NFCs is mostly in the form of loans. Debt securities are not yet consolidated as intra-NFC holdings data are not yet available with sufficient backdata.