3 Methodological notes

3.1 Financial statements and economic and financial ratios

This chapter presents the concepts underlying the balance sheet, profit and loss account and cash flow statement in the STs. These indicators were constructed against the background of the accounting standards in force.

From these concepts, the STs provide a wide range of economic and financial ratios, which are presented in Subsection 3.1.4.[18]

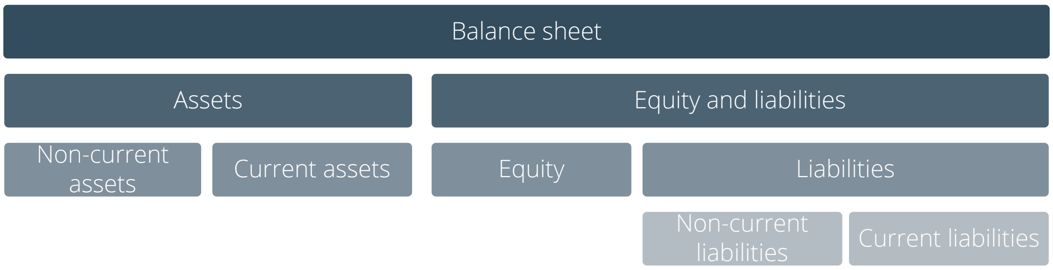
3.1.1 Balance sheet

The information in the balance sheet allows for an analysis of the assets and liabilities of corporations as at the date of closure of accounts (usually the end of the calendar year).

The balance sheet model provided in the STs seeks to harmonise and reconcile the different accounting frameworks applicable at the time the data were disclosed. Thus, on the one hand, it seeks to harmonise the different accounting rules in force during the period (up to 2009 the Plano Oficial de Contabilidade – POC, the Official Chart of Accounts, was in force), mitigating conceptual divergences and differences in presenting the information. On the other hand, it seeks to harmonise the different frameworks for the accounting standards currently in force (Sistema de Normalização Contabilística – SNC, the Accounting Standards System), which propose different reporting templates, depending on the entities matching one of the frameworks (micro-entities, small entities and entities in the so-called "general framework").

The first part of the balance sheet shows the assets, broken down into non-current and current assets. The second part shows the equity items, followed by the liabilities, also broken down into non-current and current liabilities (Figure I.3.1).[19]

Figure I.3.1 • Balance sheet items



Current assets usually comprise potentially receivable assets, sold or consumed in the normal operating cycle of the corporation or in a period not exceeding twelve months after the balance

[18] The definitions of each indicator as well as the respective formulas are provided in Annex 1.

[19] The balance sheet model available in the sector tables can be found in Annex 2.

sheet date. These also include assets held for trading and cash or cash equivalents whose change or utilisation are not limited within the same period. All other assets are non-current assets and include long-term non-financial assets, such as fixed tangible assets, intangible assets and investment property.

Current liabilities include liabilities payable during the regular operating cycle of the corporation or during a period of no more than twelve months after the balance sheet date. These also include liabilities held for trading and other liabilities for which there is no unrestricted right to defer settlement for a longer period. All other liabilities are non-current liabilities.

The operating cycle, as used in the definitions of current assets and liabilities, is defined as the time elapsing between the acquisition of assets for the output and sale of goods and/or provision of services and their payment in cash and cash equivalents. When the duration of the operating cycle cannot be easily determined, it is assumed to be twelve months. For this reason, the current concept includes inventories and trade receivables, for assets, and trade payables, for liabilities, even if received or settled within a period of over twelve months.

These definitions are in the Accounting and Financial Reporting Standard 1 – "Structure and Contents of Financial Statements" of the Portuguese Accounting Standards System. It does not preclude consultation of the original text.

3.1.2 Profit and loss account

The profit and loss account includes information on the activity carried on by enterprises in every fiscal year, identifying the income and expenses (Figure I.3.2) that contributed to the formation of profit or loss (Figure I.3.3).

The profit and loss account model provided in the STs seeks to harmonise and reconcile the different accounting frameworks applicable during the period the data were disclosed. Thus, on the one hand, it seeks to harmonise the different accounting rules in force during the period, mitigating conceptual divergences and differences in presenting the information. On the other hand, it seeks to harmonise the different frameworks within the existing accounting standards (SNC).

In addition, the Bank adopted a structure for the presentation of expenditure and earnings that is broadly different from the models provided for in these rules, leading to the submission of additional indicators.[20]

The additional indicators were selected considering their relevance for the economic and financial analysis of the corporations, in particular: indicators relating to commercial transactions with the external market (purchases and sales and services abroad); total income and expenses; and other items such as output and intermediate consumption. It also includes income indicators that are not in the accounting models, namely gross value added (GVA), gross profit, operating net income, self-financing and operational self-financing. These indicators allow the analysis of a corporation's operating performance by isolating operational activities and comparing these with figures that include other components (financial, financing and tax).

[20] The full structure of the profit and loss account available in the sector tables can be found in Annex II2.

Figure I.3.2 • Income and expenses

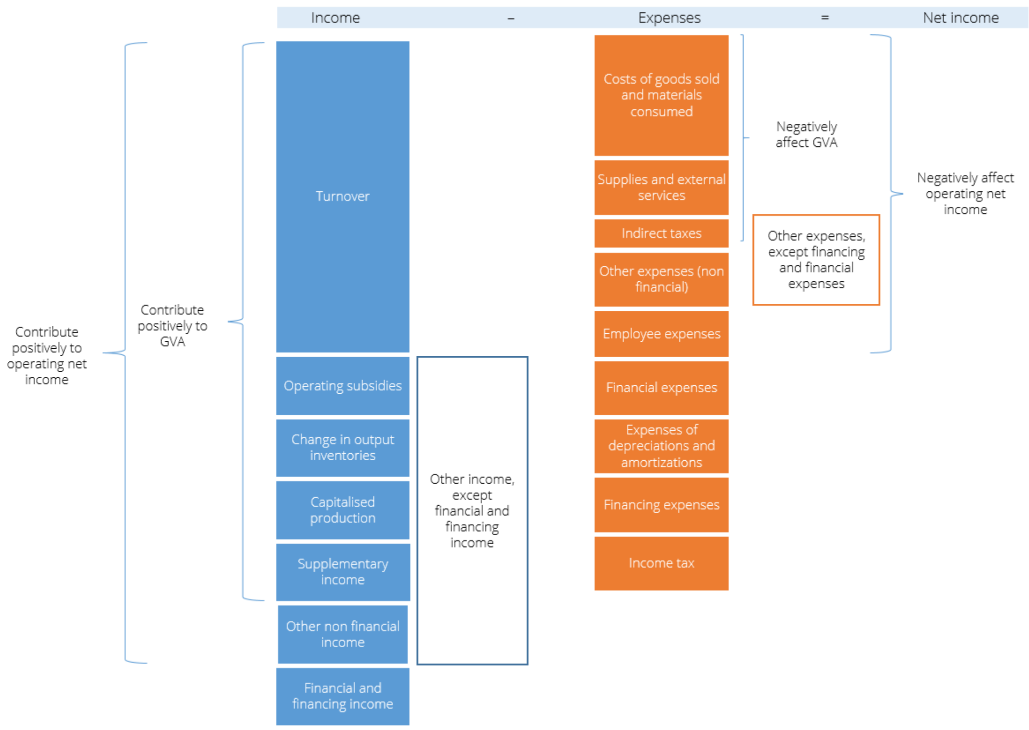
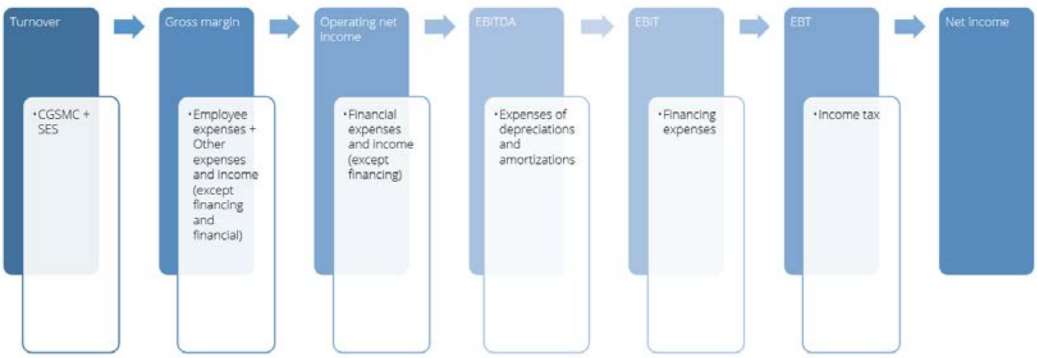


Figure I.3.3 • Profit and loss account



In the profit and loss account, the **gross profit** corresponds to the sale of goods and provision of services less the costs of goods sold and materials consumed (CGSMC) and supplies and external services (SES).

Operating net income corresponds to income from output and sale of goods and/or provision of services that are the object of the enterprise's activity. Therefore, it does not include income and expenses related to the other activities of the enterprises (investing, financing and tax). However, in addition to output and intermediate consumption it also includes other income and expenses from activities more directly associated with that purpose, in particular:

- Employee expenses;

- Expenses and income resulting from the recognition of (net) losses and gains in assets related to productive activity (for instance, impairments related to accounts receivable based on the estimated 'non-receipt' of the values outstanding and adjustments to inventory values);
- Net expenses and income resulting from estimated future losses (such as provisions for on-going legal proceedings);
- Other income and expenses not associated with financing and financial activities, not including, for instance, gains and losses from investments and expenses associated with debt (interest).

Given that this value is determined prior to estimating EBITDA (earnings before interest, tax, depreciation and amortisation), operating net income excludes, not only income and expenses resulting from the financing and financial activities, but also depreciation and amortisation expenses and income taxes.

EBITDA corresponds to the earnings from the enterprises' operating and financial activities, therefore including income and expenses deriving from investments, capital gains or capital losses generated from the sale of financial assets and the dividends obtained.

EBIT (earnings before interest and tax) is determined after EBITDA, considering the effect of expenses net of depreciation and amortisation, which correspond to the book value of the wear of the enterprises' non-current assets, occurring mainly through their utilisation.

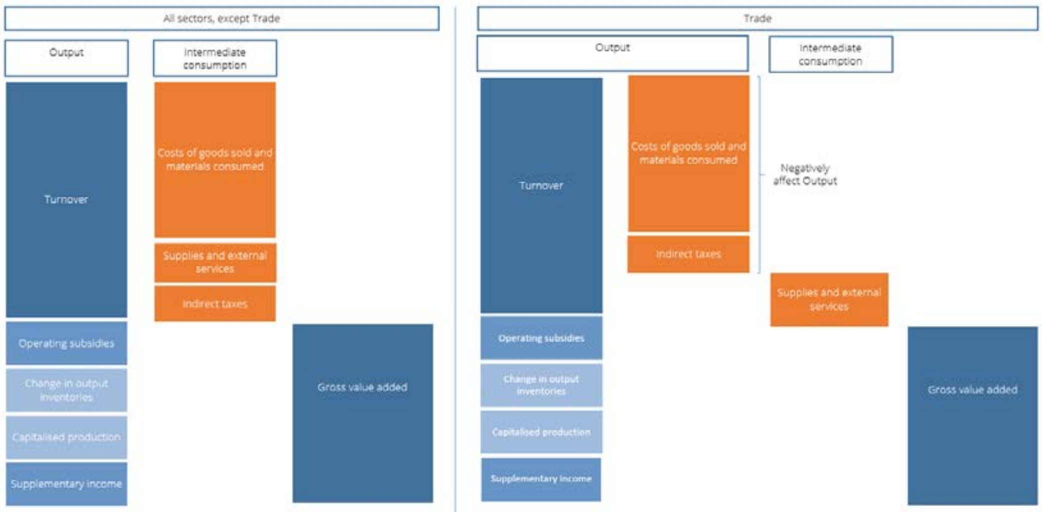
EBT (earnings before taxes) considers the effects resulting from financing expenses not included in EBIT and also not included in the calculation of EBITDA. It therefore includes all the enterprises' income and expenses, except income tax.

Net income is determined after EBT, finally considering income tax. It therefore corresponds to the difference between total income and total expenses registered by the enterprises during the financial year, representing the net (accounting) value that the enterprise obtained from all its activities.

Furthermore, Gross value added (GVA) (Figure I.3.4) corresponds to the difference between output and intermediate consumption, and is equivalent to wealth generated by the enterprises during the period. Output and intermediate consumption are determined as follows:

- For all sectors, except 'trade', the output concept covers turnover, operating subsidies, capitalised production, change in output inventories and supplementary income, whereas intermediate consumption includes costs of goods sold and material consumed, supplies and external services and indirect taxes;
- In the 'trade' sector specifically, output includes turnover, operating subsidies, capitalised production, variation in production and supplementary income, less costs of goods sold and material consumed and indirect taxes; therefore, intermediate consumption specifically includes supplies and external services.

Figure I.3.4 • Gross value added



Self-financing represents net income of corporations, adjusted for some accounting effects. This is an indicator frequently used as an approximation of cash flows, since it excludes from net income the accounting effects that have greater probability of not being converted into cash or cash equivalents.

Operational self-financing corresponds to a detail of self-financing that only includes the components of profit or loss more directly linked to a corporation's operating activities.

3.1.3 Cash flows

Cash flows identify financial flows (cash or cash equivalents) generated or consumed by the enterprises' activities (operating, investing and financing activities) (Figure I.3.).

In the SNC, the cash flow statement includes the complete set of financial statements and is also a mandatory demonstration for entities using international accounting standards (IAS). However, under the SNC, some entities are not covered by the obligation to report the cash flow statement, namely micro-entities and small entities choosing to follow such frameworks.

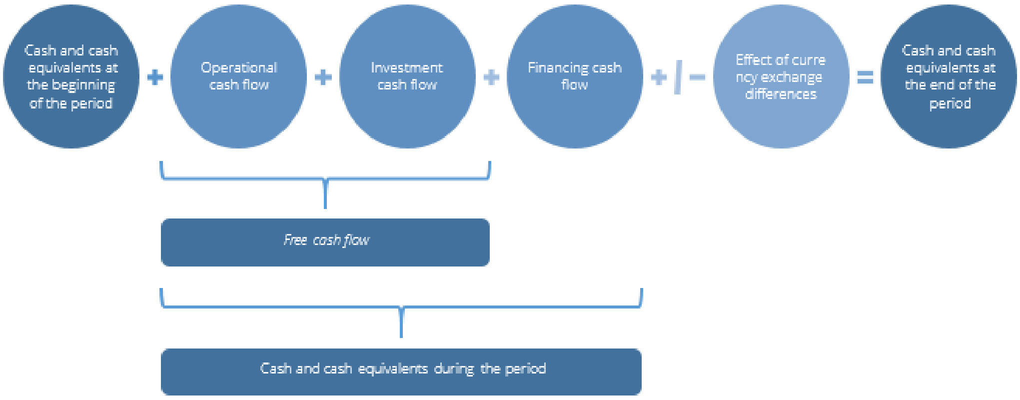
Considering this limitation, the model presented in the Sector Tables does not correspond to the cash flow statement laid out in the Portuguese accounting standards in force (SNC), and is presented in a summarised table.[21] This is chiefly a result of the limitations associated with the process of obtaining data for the enterprises not subject to mandatory reporting of the cash flow statement under the SNC. Its calculation is the result of a combination of two different procedures:

- Direct utilisation of the data reported by the enterprises in the cash flow statement table of IES submission, if such reporting meets the quality standards, (entities in the so-called "general framework" of the SNC and entities using IAS);

[21] The cash flow statement model presented in the sector tables can be found in Annex II2.

For all other corporations, the use of a calculation methodology based on the income and expense items of the profit and loss account and on changes in balance sheet items (micro-entities and small entities under the SNC).

Figure I.3.5 • Cash flow statement - structure



The components making up the cash flow statement presented in the STs are defined as follows:

- The cash flows from operating activities are related to the flow from the usual business operations of the corporation that are not from investing or financing activities; they include, inter alia, cash receipts from customers and cash payments to suppliers and staff;
- The cash flows from investment activities are related to the acquisition and sale of long-term assets and other investments that are not considered cash equivalents; they include, in particular, flows related to the acquisition and sale of non-current assets such as fixed tangible assets, intangible assets, investment property and financial investments, as well as flows from income derived from the mentioned holdings (such as interest and dividends);
- Free cash flow includes the cash flows arising from operating and investing activities and represents the available cash flow, generated by the operating activities and net of investment activities;
- The cash flows from financing activities are related to activities leading to changes in equity and enterprise financing; they include, e.g. flows from loans, principal payments and related costs, as well as flows from capital increases and reductions and other equity instruments and payment of dividends to partners or shareholders;
- The effects of currency exchange differences do not represent cash flows or cash equivalents; they correspond to unrealised gains or losses resulting from changes in the value of foreign currency in the period and reconcile the value of cash and cash equivalents between the start and the end of the period.

These definitions (except for 'free cash flow') reflect the definitions in the Accounting and Financial Reporting Standard 2 – "Statement of cash flow" of the SNC. It does not preclude consultation of the original text.

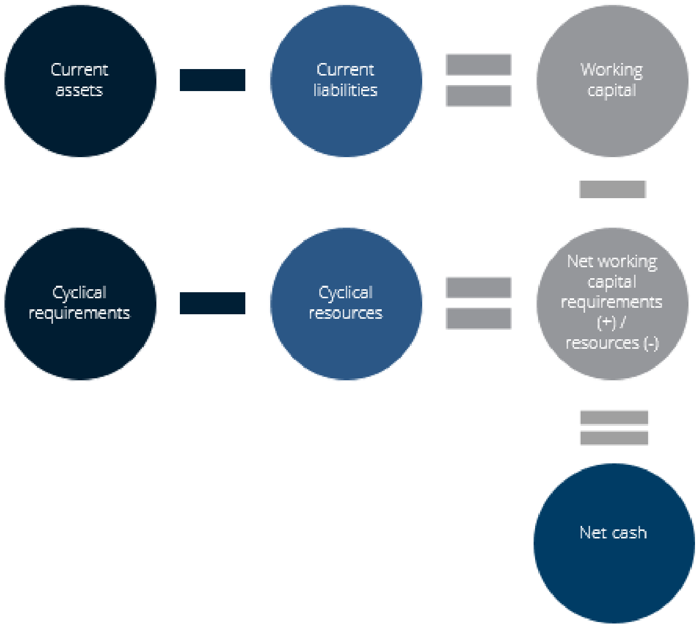
Cash flows are obtained on a cash basis, i.e., they quantify the flows with reference to the date when the financial effects are produced instead of strictly when the economic effects are produced. The balance sheet and the profit and loss account, conversely, are based on the accrued regime: the effects of transactions and other events are recognised when they occur (instead of when the cash or cash equivalent movements are received or paid), and are recorded in the period to which they relate. They involve cash flows, but also the recognition of payment obligations and future resources.

Cash flow information is therefore an additional instrument for the analysis of the available balance sheet and profit and loss indicators, allowing reconciliation between them (namely by comparing income and expenses generated and changes in the financial position).

Cash flow information is also supplemented by a range of financial equilibrium indicators, which are traditionally used in economic and financial analysis, particularly in the context of business cash management.

The relationship between financial equilibrium indicators and the way they are obtained is illustrated in Figure I.3.6.

Figure I.3.6 • Financial equilibrium indicators



Net cash is the difference between net working capital and net working capital requirements (+) / resources (-); if the difference is positive, it means that there is a cash surplus after the operating activities have been financed; otherwise, it means that there is a shortage of resources to finance the activity.

Net working capital corresponds to the difference between current assets and current liabilities and is associated with the identification of the general liquidity level. Therefore, a positive value for this indicator means that the assets with a higher liquidity level are sufficient to cover the liabilities with lower maturity (or to the contrary, if negative).

Net working capital requirements (+) or resources (-) correspond to a narrower liquidity indicator, given that it is directly associated with operating current assets and liabilities. It is derived from the difference between cyclical requirements and cyclical resources.

Cyclical requirements include assets allocated to operating activities, inventories and credit granted to customers (sales and provision of services receivable) and recoverable taxes. **Cyclical resources** include current liabilities associated with operating activities, debts to suppliers (acquisition of goods and services payable) and taxes payable.

A positive difference between the two latter indicators corresponds to the value required by the enterprise to finance its operating activities, i.e., it has net working capital requirements, given that operating liabilities are lower than the operating assets required for operating activities. A negative difference, in turn, indicates that operating liabilities are financing operating activities, and therefore the enterprise has net working capital resources.

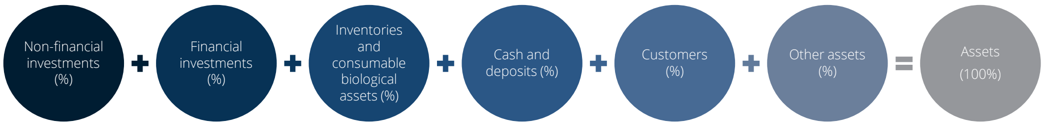
3.1.4 Economic and financial ratios

The economic and financial ratios presented cover a diverse set of categories. These allow for a fairly complete analysis of the corporation and/or aggregate.

The ratios of STs and ESTs have been grouped according to the following structure.

1. **Asset structure**: the economic and financial ratios of this set make up the various asset items in terms of their **share of the balance sheet total**. These indicators make it possible to identify the components of assets that are more or less significant for a given enterprise or aggregate in a given period, making it possible to verify in which assets are the resources, whether obtained or generated, being used.
   The sum of the various items (Figure I.3.7), for the sector's average values or for the enterprise's value, is 100%.

Figure I.3.7 • Asset structure



2. **Funding structure**: These ratios break down the various equity and liability items, in terms of their **share of the balance sheet total**. As a complement to the asset structure indicators, the ratios of this pool portray the most relevant sources of funding in each period for a given enterprise or aggregate. In particular, it is possible to identify whether an enterprise uses more equity or debt and, in the case of debt, whether it is mainly interest-bearing (financial debt) or not (e.g. trade credits). These ratios are used to assess the enterprises' degree of financial dependency vis-à-vis third parties.
   The sum of the various items, for the sector's average values or for the enterprise's value, is 100% (Figure I.3.8).

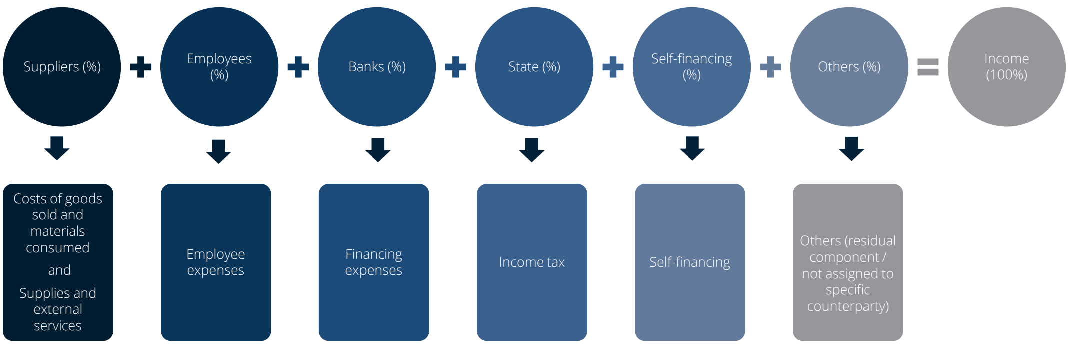
Figure I.3.8 • Funding structure

3. **Composition of the financial debt**: the analysis of the interest-bearing debt (financial debt) is relevant to enterprises, as it allows them to assess risks and the potential leverage effects from this source of financing. In this sense, the economic and financial ratios of this set are intended to complement the information on interest-bearing debt by breaking down their various items in terms of their **share of the total financial debt**. Thus, they make it possible to identify whether corporations that are funded interest-bearing debt make a more relevant use of loans from banks or financial corporations or of the resources coming from corporations within the group. The sum of the various items, for the sector's average values or for the enterprise's value, is 100% (Figure I.3.9).

Figure I.3.9 • Financial debt composition

4. **Income distribution:** the economic and financial ratios of this set are designed to identify how the income generated by the enterprise or aggregate is used (distributed) by the various counterparties, as well as the share of this income that is not distributed (usually retained within the corporation or likely to be subsequently distributed to the partners/shareholders). The entities specifically identified in income distribution are suppliers, employees, banks (including financial corporations and other sources of funding) and the State. The various items proposed for this set are presented in terms of their **share of total income**.
The sum of the various items, for the sector's average values or for the enterprise's value, is 100%. Figure I.3.10 illustrates the indicators that form part of this set as well as the components of the profit and loss account that are linked to each of the indicators presented.

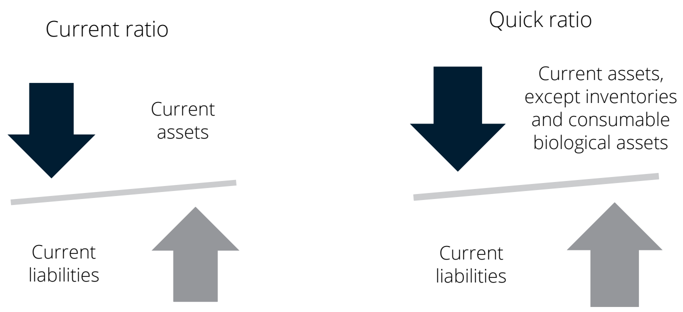
Figure I.3.10 • Income distribution



5. **Liquidity ratios**: liquidity ratios are used to calculate enterprises' capacity to meet their current obligations, based on current assets; Two liquidity indicators are presented: current ratio, which identifies the relationship between current assets and current liabilities; and the

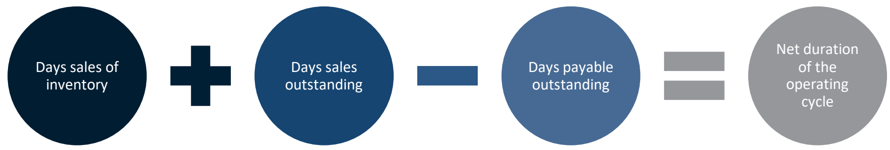
quick ratio, which differs from the previous one by excluding inventories and consumable biological assets (typically less liquid assets) from total current assets (Figure I.3.11).

Figure I.3.11 • Liquidity ratio



6. **Activity ratios**: activity ratios aim to translate how enterprises manage their activity, in particular how they conduct cash and stock management through an analysis of days outstanding. The days outstanding indicators include three scopes of activity management analysis, namely the analysis of days sales outstanding, days payable outstanding and days sales of inventory. In addition, an indicator is provided that results from the combination of the latter three, referred to as the net duration of the operating cycle. This indicator represents the average time taken by corporations from the purchase and possible transformation of inventories up to their sale, through the related cash inflows (collection from sale and payment of purchases of goods and services). Figure I.3.12 illustrates how the net duration of the operating cycle is obtained from the combination of the average maturity indicators.

Figure I.3.12 • Net duration of the operating cycle



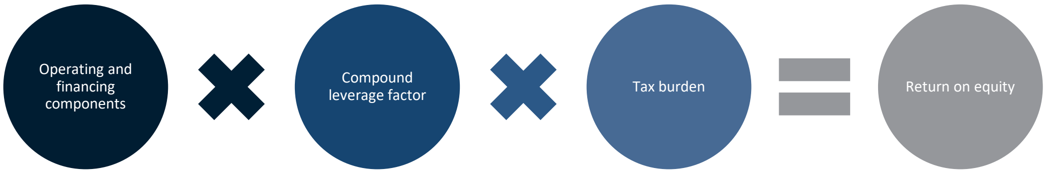
7. **Funding and debt service**: funding and debt service ratios complement the funding sources' indicators, allowing for a more accurate analysis of third party resources, taking into account the enterprise's interest-bearing liabilities and enabling an analysis of the relative importance of such liabilities, the borrowing costs and their impact on earnings. As such, these indicators can be seen complementary to the risk analysis indicators, in particular because they make it possible to identify the corporation's capacity to generate EBITDA, to cope with both the financial debt and the expenditure stemming from this source of financing.

8. **Profitability**: profitability ratios relate profit or loss generated by the enterprises with the financial resources used, and allow assessment, on the one hand, of the enterprise's capacity to

remunerate their investors and, on the other hand, the efficiency of enterprises in generating profit or loss.

In this set, this study also presents the breakdown of return on equity according to the multiplying model, which identifies the impact of the different enterprise business areas (operating and financial, financing and tax) in profitability formation; Figure I.3.13 illustrates the relationship between these indicators.

Figure I.3.13 • Breakdown of return on equity



9. **Risk indicators:** this set of indicators includes indicators that show, for each period, the percentage of corporations at potential risk, due to either their financial structure or the ability to generate positive resources. Four indicators are presented for this purpose:

(1) Corporations with negative EBITDA;

(2) Corporations with financing expenses higher than EBITDA;

(3) Corporations with negative equity;

(4) Corporations with negative net income.