

# **FINANCIAL ACCOUNTING AND FINANCIAL STATEMENT ANALYSIS**

## **PRINCIPLES AND STANDARDS**

## FINANCIAL ACCOUNTING AND FINANCIAL STATEMENT ANALYSIS

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## **1. The financial reporting environment**

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### **1.1 The financial statements**

Financial accounting is considered to be the language of business. It is a medium by which the business activities of an organisation are made known to the external world. It is not possible to explain in detail every activity of a business succinctly. Hence, financial statements are used to disseminate information about the organisation. The main objective of financial statements is to provide a 'true and fair view' of the operations of the business to their readers. Thus, all organisations make their activities known through their financial statements.

Please note that this is an introductory chapter. The entire gamut of financial accounting is like a telescope. The initial chapters contain a crisp introduction to the terminology and later chapters explain these terms in detail. The reader is therefore requested to read through the terms such as balance sheet, etc. and be comfortable with them. For a better understanding of balance sheet, income statement, cash flow statement etc., the financial statements of the Bosch Group (a German industrial company) are provided in an appendix at the end of this chapter. You may go through this appendix and try to understand various items. Do not worry too much if you do not understand some things. They will be explained in detail in later chapters.

There are three principal financial statements: the balance sheet, the statement of comprehensive income and the statement of cash flows. These are also known as the basic financial statements. Apart from these, there is also the statement of changes in equity, as well as explanatory notes. Preparation of these statements is governed by different rules. These rules are of a generic nature. However, the specific rules may vary from country to country.

The rules for the preparation of these statements are governed by the following three broad sets of codes:

1. Laws governing corporate reporting.
2. Regulations of the body controlling the securities market.
3. Guidelines of the professional accounting bodies.

As an analyst, you will be looking at the statements as presented by the firm. It is assumed that you will not be playing any major role in the detailed preparation of these statements. It is therefore necessary to be aware of the various items found in these statements as well as the rules for presentation and the underlying principles used in their preparation. We will examine these, one after the other.

### ***1.1.1 The balance sheet (or statement of financial position)***

Among the financial statements, the balance sheet is considered to be the most important financial statement. It is prepared at the end of the financial year. The financial year is also known as the fiscal year, the accounting period, the accounting year, etc. However, the entire process of capturing the financial information is done with a view to facilitating the preparation of this statement. A balance sheet has two sides, or two main parts, namely the asset side and the liabilities and stockholders' equity side. The liabilities and stockholders' equity side is further divided into liabilities and stockholders' equity.

**Assets** represent the resources owned or controlled by the firm. They are classified into two categories: fixed and current assets.

**Fixed (or non-current) assets** are those permanently used by the firm in its activities. They include buildings, equipment, investments in associates, etc. These assets are long-lived. They were acquired for the purpose of using them in the production of goods or services. As such, they are generally not resold and stay in the firm until they are out of service.

**Current assets** are composed of inventories, short-term (less than 1 year) claims, and cash. These assets are generated by the firm's activity. They do not stay a long time in the enterprise but are permanently replaced by other similar assets in the course of the business.

**Liabilities** represent the claims of individuals who do not have an ownership relationship with the firm such as, for example, banks. They include borrowings and debts to suppliers. Liabilities may be classified into financial liabilities, operating liabilities and provisions.

- **Financial liabilities** are debts resulting from a financing decision (borrowings).
- **Operating liabilities** include debts to suppliers. They result from the functioning of the enterprise. Depending on business practices, debt to suppliers may be more or less important. In many countries payments to suppliers are deferred by several weeks or months. Debts to suppliers are significant in such countries. Short-term (less than 1 year) liabilities and long- and medium-term liabilities (more than 1 year) are generally presented separately.
- **Provisions** are liabilities of uncertain timing or amount. They are recognised to cover future outflows that will probably result from risks and uncertainties.

**Equity** is the residual claim against the firm's assets after deducting liabilities. It represents wealth put into the firm by the stockholders plus what has been generated as surplus by the business in the past.

Equity is a measure of the owners' wealth invested in the enterprise:

$$\text{Equity} = \text{Assets} - \text{Liabilities}$$

## Financial accounting and financial statement analysis

The balance sheet is thus a numerical representation of the basic accounting equation, which is given by:

$$\text{Assets (A)} = \text{Liabilities (L)} + \text{Equity (E)}$$

Assets and liabilities are reported using the generally accepted accounting principles (GAAP). There are rules like reporting at cost, providing for drop in value of assets, etc. which are governed by various principles. The rules and regulations governing them will be discussed in greater detail in later chapters.

Thus we find that the balance sheet is a financial statement that gives the relationship between assets, liabilities and stockholders' equity. The values of the different assets, in the balance sheet, are reported at a given point in time. These values change from moment to moment, but the basic accounting equation is maintained. Thus, balance sheet is a point concept.

The balance sheet is prepared at the end of specified time periods. Every business has to prepare this, usually at the end of each year. Apart from the annual balance sheet, in many countries, market authorities require that firms prepare balance sheets more frequently.

One may also find that most firms prepare a statement of proposal for the appropriation of the available earnings. The main purpose of this statement is to explain how the accounting surplus generated by the firm will be distributed among stockholders and other beneficiaries and what amount is going to be retained within the business.

Given below is a sample balance sheet of a company. Note that this is an abridged balance sheet that is given here only for the reader's understanding. A detailed balance sheet along with other schedules will be given in the appendix to this chapter.

## Financial accounting and financial statement analysis

<b>Assets</b>	Millions CU	<b>Liabilities &amp; stockholders' equity</b>	Millions CU
<b>Current assets</b>		<b>Current liabilities</b>	
Cash & equivalents	8.83	Trade & other payables	15.08
Other liquid assets	5.28	Notes payable	18.68
Trade & other receivables	19.47	Taxes payable	1.46
Inventories	12.31	Accrued liabilities & deferred income	4.80
Prepayments & accruals	1.38	<b>Total current liabilities</b>	<b>40.02</b>
<b>Total current assets</b>	<b>47.27</b>	<b>Long-term liabilities</b>	
<b>Fixed assets</b>		Long-term debt	7.17
Property, plant & equipment	32.65	Employee benefit liabilities	3.76
Other fixed assets	9.32	Deferred taxes	2.64
Intangible assets	10.76	Provisions	4.60
<b>Total fixed assets</b>	<b>52.73</b>	<b>Total long-term liabilities</b>	<b>18.17</b>
		<b>Equity attributable to the parent</b>	
		Share capital	10.00
		Retained earnings	30.81
			40.81
		<b>Minority interest</b>	<b>1.00</b>
		<b>Total equity</b>	<b>41.81</b>
<b>Total assets</b>	<b>100.00</b>	<b>Total liabilities &amp; equity</b>	<b>100.00</b>

### 1.1.2 The statement of comprehensive income

The second important financial statement prepared by a firm is the statement of comprehensive income. This statement aims to report the impact of the operations of the organisation during a particular period. To a lay person, this represents the net effect of the operations of the business. It conveys whether the organisation has earned a surplus during a particular period or not. It also explains the performance of the firm during a particular period. This is a flow concept.

The statement of comprehensive income is composed of two parts:

- the income statement,
- the statement of other comprehensive income.

The income statement includes "revenues" and "expenses". Revenues are wealth increases generated by the activities of the enterprise, which meet the necessary conditions for recognition in the profit or loss of the period. Examples of revenues are sales, interest received... Expenses are wealth decreases that were incurred to earn these revenues. They include consumptions of raw materials, employee costs, depreciation, interest paid, taxes, etc.

The basic principle contained in an income statement is that the profit or loss is the difference between the revenues and expenses of the period. This is known as the matching principle. Here, revenues<sup>1</sup> are matched with all the expenses<sup>2</sup> that were incurred to earn them. The profit or loss of the period is also called "net income".

**Profit (loss) or Net income = Revenues - Expenses**

Some wealth increases and decreases that occurred during the period are not recognized in the income statement because they don't meet the conditions necessary to be included in the profit or loss of the period. An example of such wealth increase is the revaluation surplus. International accounting standards allow companies to revalue their tangible fixed assets periodically<sup>3</sup>. The resulting revaluation surplus cannot be recognized in the profit or loss of the period because of its lack of reliability (the revalued amount does not result from a transaction, it is estimated by the company or by an expert). Such wealth variations are included in the "statement of other comprehensive income".

After adding other comprehensive income to the profit or loss, we obtain the "total comprehensive income".

**Total comprehensive income = Profit or loss + Other comprehensive income.**

Until 2008, generally accepted accounting principles did not require the preparation of the statement of comprehensive income. Only the first part of this statement (the income statement) was presented as a component of the company's financial statements. Items that form part of other comprehensive income were included in the statement of changes in equity, together with changes resulting from transactions with the company's owners.

Since 2009, only owner changes are detailed in the statement of changes in equity. Non-owner changes must be presented in the statement of comprehensive income.

Owing to the continuing nature of a business, it is imperative that the performance is reported to the various stakeholders at regular intervals. Because of the need for a reporting period, the concept of the matching principle has been introduced. This means that revenues, expenses and other comprehensive income of a particular period are matched to arrive at the surplus generated during the reporting period. The reporting period is normally one year.

According to international accounting standards (IFRS), the statement of comprehensive income can be presented:

- either in a single statement,
- or in two statements: an income statement + a statement of other comprehensive income.

Below are examples of the two presentations.

- 
- 1 Strictly speaking, revenues are income generated by the activities of the enterprise (sales of goods and services, interest received, etc.). Other components of income are "gains" (*cf.* Chapter 2).
  - 2 Expenses are outflows from delivering or producing goods, providing services, or carrying out other activities that constitute the entity's ongoing major or central operations.
  - 3 Revaluation of fixed assets will be studied in "Balance sheet" (§ 1.1.3).



## Financial accounting and financial statement analysis

### Presentation in a single statement

	Millions CU
Sales	80'000
Cost of sales	(45'000)
Gross profit	35'000
Other income	8'000
Distribution costs	(15'000)
Administrative expenses	(8'000)
Other expenses	(5'000)
Finance costs	(3'000)
Profit before tax	12'000
Income taxes	(3'000)
<b>Profit for the year (net income)</b>	<b>9'000</b>
Exchange differences	(800)
Change in revaluation surplus	2'500
Gains on property investments	400
<b>Other comprehensive income</b>	<b>2'100</b>
<b>Total comprehensive income</b>	<b>11'100</b>

### Presentation in two statements

	Millions CU
Sales	80'000
Cost of sales	(45'000)
Gross profit	35'000
Other income	8'000
Distribution costs	(15'000)
Administrative expenses	(8'000)
Other expenses	(5'000)
Finance costs	(3'000)
Profit before tax	12'000
Income taxes	(3'000)
<b>Profit for the year (net income)</b>	<b>9'000</b>

	Millions CU
<b>Profit for the year</b>	<b>9'000</b>
Exchange differences	(800)
Change in revaluation surplus	2'500
Gains on property investments	400
<b>Other comprehensive income</b>	<b>2'100</b>
<b>Total comprehensive income</b>	<b>11'100</b>

## Financial accounting and financial statement analysis

In many countries Generally Accepted Accounting Principles (GAAP) do not specify any particular format for the presentation of revenues and expenses. But, owing to the customs of various enterprises, some sample formats have come into effect. Below are examples of such formats.

	N	N-1
Sales		
– Cost of goods sold		
= <i>Gross Profit</i>		
+ Other operating revenues		
– Operating expenses		
= <i>Operating income or Earnings before interests and taxes – EBIT</i>		
– Interest		
= <i>Earnings before taxes</i>		
– Income taxes		
= <i>Earnings before exceptional items</i>		
± Exceptional items		
= <i>Profit for the year</i>		

	N	N-1
Sales		
– Cost of goods sold		
= <i>Gross Profit</i>		
+ Other operating revenues		
– Operating expenses		
= <i>Operating income or Earnings before interests and taxes – EBIT</i>		
– Income taxes		
= <i>Net operating profit after taxes – NOPAT</i>		
– Interest		
= <i>Earnings before exceptional items</i>		
± Exceptional items		
= <i>Profit for the year</i>		

In the statement of comprehensive income, expenses are classified either by nature or by function.

The first method consists in aggregating expenses according to their nature (purchase of goods, transport costs, salaries, depreciation...). This presentation is traditionally used in Continental Europe.

With presentation by function, expenses are classified as part of cost of sales, distribution costs or administrative expenses. This presentation is traditional in Anglo-Saxon countries. It may provide more relevant information than classification by nature but, in many cases, the allocation of expenses to functions requires considerable judgment.

## Financial accounting and financial statement analysis

Below are examples with both presentation formats.

Operating expenses classified by nature			Operating expenses classified by function		
	N	N-1		N	N-1
<b>Revenue</b>	X	X	<b>Revenue</b>	X	X
Other operating income	X	X	Cost of sales	(X)	(X)
Changes in inventories of finished goods and work in progress	(X)	X	<b>Gross profit</b>	X	X
Work performed by the enterprise and capitalised	X	X	Other operating income	X	X
Raw material and consumables used	(X)	(X)			
Staff costs	(X)	(X)	Distribution costs	(X)	(X)
Depreciation and amortisation expense	(X)	(X)	Administrative expenses	(X)	(X)
Other operating expenses	(X)	(X)	Other operating expenses	(X)	(X)
Profit from operations	X	X	Profit from operations	X	X
Finance cost	(X)	(X)	Finance cost	(X)	(X)
Income from associates	X	X	Income from associates	X	X
<b>Profit before tax</b>	X	X	<b>Profit before tax</b>	X	X
Income tax expense	(X)	(X)	Income tax expense	(X)	(X)
<b>Net profit or loss before exceptional items</b>	X	X	<b>Net profit or loss before exceptional items</b>	X	X
Exceptional items	X	(X)	Exceptional items	X	(X)
<b>Profit for the year</b>	X	X	<b>Profit for the year</b>	X	X

When analysing the statement of comprehensive income, it is very important to identify recurring and non-recurring items. Recurring items represent operations that will continue. Non-recurring items are the items that should not continue. There are broadly three categories of non-recurring items:

- exceptional items
  - discontinued operations
  - changes in accounting estimates.
- 1) **Exceptional** items are unusual or infrequent. Consider for example an enterprise whose main customer goes bankrupt. In the income statement of the purchaser, the resulting loss will be classified as exceptional because of its unusual size.
  - 2) An income (loss) from discontinued operations arises when the enterprise decides to discontinue a segment of the business. This part is then sold off. Once the decision to sell off is taken then the income and expenses of that division are computed and reported separately.

### **Example: Income statement presentation for discontinued operations**

Income from continuing operations	10'000
Provision for taxes	<u>-2'000</u>
Income from continuing operations (after tax)	8'000
Discontinued operations:	
Income from discontinued operations (net of taxes)	2'000
Loss on disposal of division, including provision for operating losses during the phase out period	<u>-1'000</u>
Profit for the year	<u>9'000</u>

- 3) The third major non-recurring item is the effect of changes in accounting estimates or accounting policies. This may happen either owing to a change in accounting principles or to a change in the method of applying them. An example of such a change is a change in the rates and method of depreciation and amortisation. Sometimes enterprises change the method of depreciation from straight-line to diminishing balance method or vice-versa. In those cases also the effect of such a change should be clearly disclosed. The accounting treatment of such changes will be presented in detail in "Data analysis". Please note that, generally, accounting changes do not affect the consolidated cash flow.

Thus, the analyst has to look into the nature of the income model to really determine the long-term implication of a particular item of revenue or expense.

### ***1.1.3 The cash flow statement***

The cash flow statement is the third financial statement prepared by a business entity. It explains where the cash has come from during a particular period, how that cash has been utilised and what has been the residual effect of all these transactions on the cash balance of the firm.

The cash flow statement also provides information on the various financing means and investing activities undertaken during a particular period. It starts with the cash from operations. This is called the internal source of cash. This is normally reported on a net basis. The other disclosures are carried out on a gross basis. In other words, all the financing and investing activities are reported in full detail, without netting out.

The cash flow statement will be studied in detail in section 3.

### ***1.1.4 The statement of changes in equity***

According to the IASB and several other standard setting bodies, firms must prepare a statement of changes in equity.

Prior to 2009, this statement detailed all changes in equity that occurred during the period, in particular:

- capital transactions with owners,
- distributions to owners (dividends),
- net income for the period,
- gains or losses recognised directly into equity,
- etc.

Since 2009, the statement of changes in equity describes only changes arising from transactions with owners (mainly capital increases/repayments and dividends). These changes are monetary (i.e. they result in a cash inflow or outflow).

All other changes (i.e. net income and gains or losses recognized directly into equity) are shown in the statement of comprehensive income and no longer detailed in the statement of changes in equity. These changes are non-monetary (they have no impact on cash flow).

## Financial accounting and financial statement analysis

Below is an example of this statement:

in millions of CU	Share capital	Share premium	Retained earnings	Currency translation differences	<b>Total</b>	Minority interest	<b>Total equity</b>
<b>Stockholders' equity at 1.1.N-1</b>	363	1,308	480	4	<b>2,155</b>	<b>645</b>	<b>2,800</b>
Issue of share capital	100	420			<b>520</b>		<b>520</b>
Total comprehensive income for year N-1			120	-57	<b>63</b>	<b>60</b>	<b>123</b>
Dividends			-75		<b>-75</b>		<b>-75</b>
<b>Stockholders' equity at 31.12.N-1</b>	463	1,728	525	-53	<b>2,663</b>	<b>705</b>	<b>3,368</b>
Effect of accounting policy change			-33		<b>-33</b>	<b>-17</b>	<b>-50</b>
<b>Stockholders' equity at 31.12.N-1 (restated)</b>	463	1,728	492	-53	<b>2,630</b>	<b>688</b>	<b>3,318</b>
Capital repayment	-73				<b>-73</b>		<b>-73</b>
Dividends			-50		<b>-50</b>		<b>-50</b>
Total comprehensive income for year N			160	178	<b>338</b>	<b>80</b>	<b>418</b>
<b>Stockholders' equity at 31.12.N</b>	390	1,728	602	125	<b>2,845</b>	<b>768</b>	<b>3,613</b>

The relationship between comprehensive income and other changes in equity can be described as follows:

	Changes in equity		Financial statement
	Increases	Decreases	
<b>Transactions with owners (monetary changes)</b>	Issue of share capital (new contributions)	Capital repayment Dividends	Statement of changes in equity
<b>Total comprehensive income (non-monetary changes )</b>	Net income (if profit) + Increases of equity with no effect on net income : <ul style="list-style-type: none"> <li>• increase of the revaluation surplus</li> <li>• some currency translation differences</li> <li>• etc.</li> </ul>	Net income (if loss) + Decreases of equity with no effect on net income : <ul style="list-style-type: none"> <li>• decrease of the revaluation surplus</li> <li>• some currency translation differences</li> <li>• etc.</li> </ul>	Statement of comprehensive income

### 1.1.5 The notes to financial statements

As we have seen earlier, the main purpose of financial statements is proper disclosure of accounts. Notes to financial statements, sometimes known as *notes to accounts* or *footnotes*, therefore assume great importance. In all the statutes that govern disclosure requirements, notes to financial statements are considered to be an integral part of those financial statements. These notes to financial statements normally have three sub-divisions.

- description of accounting policies;
- information required by accounting standards;
- additional information necessary for a fair presentation of financial statements.

The notes to financial statements deal with the accounting policies used when preparing the financial statements. Typically, they specify the methods used in valuation of fixed assets, depreciation, treatment of items such as pension plans, etc. Sometimes they also provide information on the changes in the valuation of marketable securities, changes due to debt parameters, treatment of taxes, tax credits, deferred commitments, etc.

This statement is very useful for the analyst carrying out a time series or cross sectional analysis of performance. It is very important to ensure that the accounting policies followed by different organisations that are being evaluated are comparable, and that such policies remain unchanged through time. Prior adjustments will have to be made to financial statements to bring them onto a common basis. Only then is any meaningful analysis possible.

The notes to financial statements must in particular provide information on contingencies. Contingencies represent the events that may occur and affect the earnings of the firm. As we have seen, the liabilities in the balance sheet are based on past events that have given rise to a claim on the firm. There may be future events that may give rise to a claim on the firm. There may be items where the actual claim may not be clear. Let us take an example. The firm has given a guarantee for a loan taken by an employee from a bank. If the employee pays back the loan then there is no liability for the firm. If the employee defaults, then the firm has to pay the loan. Thus, until the loan is repaid this claim will exist, but it is not a definite event. If, for example, the employee happens to default, then the firm becomes liable. This is a simple example of a contingent liability.

Contingencies are expected to represent the losses that have a significant chance of occurring but that are not probable. International accounting standards (IFRS) include disclosure requirements on such contingencies. Nevertheless firms have discretion in reporting these contingent liabilities. One major item that is expected to be reported in such notes is the exposure of the firm to derivatives trading. If the firm has an exposure to derivatives, it is expected to report the maximum possible loss in the case of an adverse movement in the price of the underlying security or commodity. Apart from this, certain significant risks and uncertainties must be disclosed.

For any analyst, this section represents potential landmines for the organisation, which can change the entire picture about it. The notes to the accounts also provide additional information that is not presented in other financial statements but which is necessary for a fair presentation of the financial situation of the enterprise. Disclosure requirements are defined by accounting standards and by bodies that regulate capital markets.

The annual report also includes various statements such as the auditors' report, directors' report on the firm, schedules regarding its employees, time series data on the firm, etc. You will therefore find that the financial statements, along with other data, form the most important information required by any analyst.

### ***1.1.6 The relation between business activities and financial statements***

Financial statements are indispensable documents that are used to analyse the performance of any firm. These statements represent the 'true and fair view' of the operations of the firm. There must therefore be a direct link between the financial statements and the business activities.



The balance sheet gives the relationship between the investing activities and the financing activities of the business. Any firm first gets money from stockholders and creditors, and then buys assets. It then proceeds to produce goods or generate services. These products or services earn revenues. The firm buys raw materials, the services of labour and incurs other expenses. From the revenues or from other financing activities it pays the claims of the creditors, buys more machinery and distributes part of the surplus to the stockholders.

The first part of business activities is called the financing and investing activities. The balance sheet therefore tells us the details of where the money has come from (sources of funds) and where it has gone (application of funds). In other words, it tells us which are the sources of financing of the firm's assets and where the firm has invested the funds. The liabilities and stockholders' equity side represents the financing activities. The asset side represents the investing activities of the firm. Although the financial statements do not provide details of the machinery, machines are reported in convenient groups to facilitate analysis.

The income statement is the statement of the firm's operating activities. The revenues generated by the various activities of the business are therefore given in some detail here. These revenues are matched with the expenses incurred to earn these revenues. The operating activities are therefore captured in monetary terms in the income statement. When we add the statement of gains and losses from non-operating activities, the picture is complete.

So, we now have the complete picture of the financing activities, investing activities, and operating activities as well non-operating activities, captured in monetary terms in these financial statements.

## **1.2 Financial reporting issues**

### ***1.2.1 Uses of financial statements***

Financial statements are mainly used by external entities. There are a large number of entities wanting to use accounting information. Important users are employees, government, investors, creditors, banks and special interest groups.

Equity investors are mainly interested in finding out the risk – return relationship of their proposed or existing investment. As the financial statements provide an authentic picture of the past, equity investors use these for all their major decisions. Equity investors and analysts not only use the basic financial statements but also make extensive use of notes to accounts and other supplementary schedules to read between the lines. In Anglo-American countries, standard setting bodies generally recognise equity investors as the primary users of accounting information, and therefore all their rules are made to fit the needs of this group. In other countries, the pre-eminence of investors is not recognised so clearly, but in practice the financial statements of large companies are primarily directed to serve the needs of this category.

## Financial accounting and financial statement analysis

Creditors form another important group of users of financial information. They do not own the firm and are only interested in ensuring it will meet their claims. They may run a certain risk of default, but do not gain if the firm makes a huge surplus. Creditors therefore analyse financial information in detail to assess the creditworthiness of the business. They may consider the firm's profitability as well as its cash flows.

Nowadays firms study the financial statements of competing business entities in depth. These give them some idea of the financial muscle of their competitors. How much competition can this business take? Can it survive a price war? Can it withstand a take-over bid? What are its strengths and weaknesses? Answers to these questions can be obtained by studying its financial statements.

Recent years have seen a lot of activity in the area of mergers and acquisitions. If anything, their numbers will only go up. To identify a target, the initial analysis is done using the target's financial statements only.

Once the decision to go ahead with the process is taken, other issues like the swap ratio, price, valuation, etc. will follow. The first step is a 'what if' analysis to project the merged entity's financial statements. The second step is to work out whether the merger will actually benefit the stockholders of the acquiring firm. For this purpose, present financial statements are the basic building blocks.

Apart from these major interest groups, governments as well as regulatory bodies such as the capital market regulators, banking sector regulators, and anti-monopoly commissions also use financial statements for their decision-making. These financial statements are also widely used by labour unions to negotiate with firms.

### ***1.2.2 International differences in accounting***

Accounting encompasses two dimensions: recognition and valuation. Recognition is the process by which the effects of transactions and events are incorporated into financial statements, whereas valuation is the process of assigning an amount to a particular item in the financial statements.

Accounting techniques and basic principles are the same throughout the world. Nevertheless, there are differences among countries in the way these principles, especially those relating to valuation, are applied.

#### ***1.2.2.1 The two accounting models***

Most specialists agree that there are two main accounting models:

- the Anglo-American model,
- the Continental European model.

These two models result from several factors that influence accounting:

- **The prevailing mode of financing**

In Anglo-American countries, the main purpose of accounting is to provide information useful to the financial market, whereas in Continental Europe the tradition is to give higher importance to the needs of other users, such as banks, employees, the state and the public in general. For many authors, this difference is a consequence of different financing modes: In the US and the UK firms are financed mainly by stockholders, while banks are the main suppliers of funds in Continental Europe.

- **The legal system**

There are two types of legal system:

- the common law system,
- the code law system.

The common law system is in use in Anglo-American countries. In this system, legal rules are developed case by case; there is no general regulation that must be applied to all cases. Company law is kept to a minimum and there is no legal provision about accounting. Accounting regulation is generally in the hands of professional organisations in the private sector.

By contrast, the code law system in use in most countries of Continental Europe is characterised by a wide set of detailed rules. Accounting regulation is in the hands of the government or one of its agencies and accounting rules are often embodied in the law.

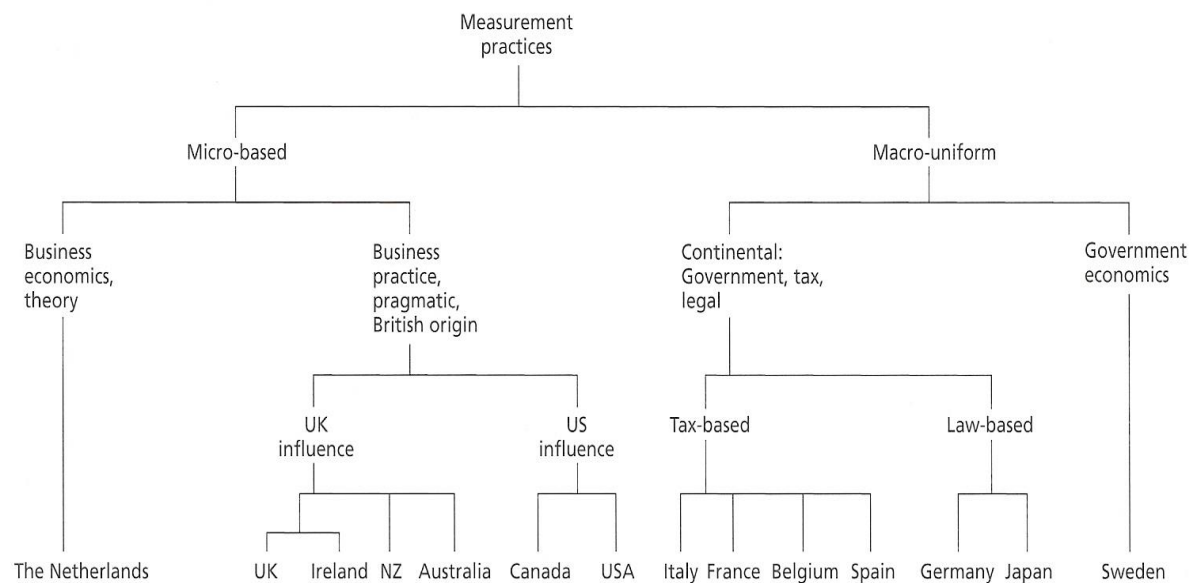
- **The influence of taxation**

In most countries of the Continental European model, taxes are based on accounting income. Only expenses that have been recognised in the income statement can be deducted from taxable income. If, for example, a company depreciates an asset over 10 years in its financial statements, it cannot use a shorter period for fiscal purposes. The consequence is that companies tend to underestimate earnings in order to avoid taxes.

By contrast, in the Anglo-American world, accounting and taxation are generally clearly separated. A company can perfectly well depreciate an asset over 10 years in its financial statements and over 5 years for fiscal purposes, provided that fiscal authorities admit these periods. In these countries, firms do not need to align accounting choices to fiscal rules; they can report higher accounting profits without incurring additional taxes.

This difference must be kept in mind when comparing performances of companies located in countries that belong to different accounting models.

The two accounting models are reflected in the Nobes' classification of accounting systems, which opposes "micro-based" (i.e. Anglo-American) to "macro-uniform" (Continental European) countries.



Adapted from Nobes C., *International classification of financial reporting*, Croom Helm, London, 1984.

### 1.2.2.2 Accounting harmonisation and the IASB

Accounting regulation has, for a long time, been specific to each country. Things began to change in the last decades of the twentieth century, with the globalisation of financial markets and economies. As large companies developed internationally, they became more and more dependent on foreign sources of finance. This made apparent the need for some harmonisation of accounting practices throughout the world.

The harmonisation process began with the creation of the International Accounting Standards Committee (IASC) in 1973. The IASC was created by the professional accounting organisations of 9 countries. Its objective was to formulate and publish accounting standards and, more generally, to work for the improvement and harmonisation of accounting regulations. In 2000, the IASC changed its structure and became the **International Accounting Standards Board (IASB)**. The growth of the IASC/IASB has been rapid as the IASB now has about 120 members from almost all countries in the world.

The IASB publishes the **International Financial Reporting Standards (IFRS)**. Those published before 2000 are still called International Accounting Standards (IAS), although officially, the term "IFRS" designates both categories. Each standard is devoted to a particular issue as, for example, inventories (IAS 2), intangible assets (IAS 38) or stock-options (IFRS 2).

Despite its international nature, the IASB remains under the influence of organisations from Anglo-Saxon countries (especially the US). This explains why the IFRS is representative of the Anglo-American model of accounting.

## Financial accounting and financial statement analysis

As a private organisation, the IASB does not have the power to enforce its standards. Nevertheless, its influence on accounting regulation has been considerable, owing to several factors:

- 1) national standard setters generally take the IFRS as the model when they elaborate their own standards,
- 2) a number of developing and newly-industrialised countries have adopted the IFRS as their national accounting standards,
- 3) the European Union has decided to make the IFRS mandatory for all listed companies from 2005 onwards.

Because of this process, national differences in accounting tend to fade, at least for large listed companies. The next harmonisation step will consist in achieving the convergence of IFRS and US standards (US GAAP).

## 1.3 Appendix

Note: Below is an extract from the annual report of the Bosch Group (a German industrial company).

### Income statement

for the period from January 1 to December 31, 2016

Figures in millions of euros

	Note	2016	2015
<b>Sales revenue</b>	1)	<b>73,129</b>	<b>70,607</b>
Cost of sales		-47,711	-46,675
<b>Gross profit</b>		<b>25,418</b>	<b>23,932</b>
Distribution and administrative cost	2)	-14,776	-13,787
Research and development cost	3)	-6,954	-6,378
Other operating income	4)	1,816	3,932
Other operating expenses	5)	-1,994	-3,068
Profit from entities consolidated using the equity method		-175	-44
<b>EBIT</b>		<b>3,335</b>	<b>4,587</b>
Financial income	6)	2,528	2,987
Financial expenses	6)	-2,496	-3,085
<b>Profit before tax</b>		<b>3,367</b>	<b>4,489</b>
Income taxes	7)	-993	-952
<b>Profit after tax</b>		<b>2,374</b>	<b>3,537</b>
of which attributable to non-controlling interests	8)	425	344
of which attributable to parent company		1,949	3,193

01

## Statement of comprehensive income

for the period from January 1 to December 31, 2016

Figures in millions of euros

	2016	2015
<b>Profit after tax</b>	<b>2,374</b>	<b>3,537</b>
Change from marketable financial instruments recognized in other comprehensive income	330	38
of which attributable to non-controlling interests	16	14
transferred to profit or loss	16	-149
of which attributable to non-controlling interests	-10	-2
Adjustment item from currency translation of entities outside the euro zone	-18	924
of which attributable to non-controlling interests	-17	66
<b>Items that will be reclassified to profit or loss</b>	<b>328</b>	<b>813</b>
of which entities consolidated using the equity method	3	-1
Remeasurement of pension provisions	-509	811
of which attributable to non-controlling interests	-1	
<b>Items that will not be reclassified to profit or loss</b>	<b>-509</b>	<b>811</b>
of which entities consolidated using the equity method		
<b>Other comprehensive income</b>	<b>-181</b>	<b>1,624</b>
<b>Comprehensive income</b>	<b>2,193</b>	<b>5,161</b>
of which attributable to non-controlling interests	413	422
of which attributable to parent company	1,780	4,739

**02**

## Statement of financial position

for the year ended December 31, 2016

### ASSETS

Figures in millions of euros

	Note	12/31/2016	12/31/2015
<b>Current assets</b>			
Cash and cash equivalents	10)	4,753	3,707
Trade receivables	11)	14,364	13,240
Other financial assets	12)	2,376	1,833
Income tax receivables		396	300
Other assets	13)	1,778	1,504
Inventories	14)	9,895	9,651
		<b>33,562</b>	<b>30,235</b>
<b>Non-current assets</b>			
Financial assets	15)	12,067	11,534
Income tax receivables		159	81
Property, plant, and equipment	16)	19,085	18,142
Intangible assets	17)	12,174	12,490
Investments measured at equity		93	152
Other assets		207	161
Deferred taxes	7)	4,528	4,471
		<b>48,313</b>	<b>47,031</b>
<b>Total assets</b>		<b>81,875</b>	<b>77,266</b>



## Financial accounting and financial statement analysis

### EQUITY AND LIABILITIES

Figures in millions of euros

	Note	12/31/2016	12/31/2015
<b>Current liabilities</b>			
Trade payables	18)	6,885	6,184
Other financial liabilities	19)	2,683	2,195
Income tax liabilities		241	233
Other liabilities	20)	6,112	5,494
Income tax provisions		107	109
Other provisions	20)	4,027	3,663
		<b>20,055</b>	<b>17,878</b>
<b>Non-current liabilities</b>			
Financial liabilities	19)	5,702	5,343
Other liabilities	20)	236	247
Pension provisions	21)	11,841	11,262
Income tax provisions		828	816
Other provisions	20)	4,937	4,841
Deferred taxes	7)	2,192	2,455
		<b>25,736</b>	<b>24,964</b>
<b>Equity</b>	22)		
Issued capital		1,200	1,200
Capital reserve		4,557	4,557
Retained earnings		28,540	26,948
Unappropriated earnings		138	142
Non-controlling interests		1,649	1,577
		<b>36,084</b>	<b>34,424</b>
<b>Total equity and liabilities</b>		<b>81,875</b>	<b>77,266</b>

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## Statement of changes in equity

Figures in millions of euros

	Retained earnings				
	Issued capital	Capital reserve	Earned profit	Treasury stock	Currency translation
<b>1/1/2015</b>	<b>1,200</b>	<b>4,557</b>	<b>25,368</b>	<b>-62</b>	<b>418</b>
Comprehensive income					858
Dividends					
Transfer to retained earnings			3,051		
Other changes					
<b>12/31/2015</b>	<b>1,200</b>	<b>4,557</b>	<b>28,419</b>	<b>-62</b>	<b>1,276</b>
Comprehensive income					-1
Dividends					
Transfer to retained earnings			1,811		
Other changes					
<b>12/31/2016</b>	<b>1,200</b>	<b>4,557</b>	<b>30,230</b>	<b>-62</b>	<b>1,275</b>

Other comprehensive income			Unappropriated earnings	Equity parent company	Equity non-controlling interests	Group equity
Securities	Other	Total				
<b>729</b>	<b>-3,993</b>	<b>-2,846</b>	<b>102</b>	<b>28,319</b>	<b>1,222</b>	<b>29,541</b>
-123	811	1,546	3,193	4,739	422	5,161
			-102	-102	-291	-393
			-3,051			
	-109	-109		-109	224	115
<b>606</b>	<b>-3,291</b>	<b>-1,409</b>	<b>142</b>	<b>32,847</b>	<b>1,577</b>	<b>34,424</b>
340	-508	-169	1,949	1,780	413	2,193
			-142	-142	-283	-425
			-1,811			
	-50	-50		-50	-58	-108
<b>946</b>	<b>-3,849</b>	<b>-1,628</b>	<b>138</b>	<b>34,435</b>	<b>1,649</b>	<b>36,084</b>

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## Statement of cash flows

Figures in millions of euros

	Note 23)	2016	2015
EBIT		3,335	4,587
Depreciation and amortization		4,244	4,359
Increase in pension provisions and non-current provisions		5	888
Gains on disposal of non-current assets		-135	-100
Losses on disposal of non-current assets		88	127
Remeasurement of investments			-2,136
Result from investments measured at equity		81	44
Financial income, cash effective		1,293	1,507
Financial expenses, cash effective		-1,457	-1,630
Interest and dividends received		548	475
Interest paid		-246	-242
Income taxes paid		-1,191	-1,044
<b>Cash flow</b>		<b>6,565</b>	<b>6,835</b>
Increase in inventories		-148	-148
Change in receivables and other assets		-1,316	385
Change in liabilities		757	-489
Change in current provisions		279	-624
<b>Cash flows from operating activities (A)</b>		<b>6,137</b>	<b>5,959</b>
Acquisition of subsidiaries and other business units		-8	-3,507
Disposal of subsidiaries and other operating units		26	19
Additions to non-current assets		-5,213	-4,848
Proceeds from disposal of non-current assets		316	456
Purchase of securities		-7,248	-9,844
Disposal of securities		6,901	10,520
<b>Cash flows from investing activities (B)</b>		<b>-5,226</b>	<b>-7,204</b>
Borrowing		1,665	486
Repayment of financial liabilities		-1,167	-748
Dividends paid		-425	-393
<b>Cash flows from financing activities (C)</b>		<b>73</b>	<b>-655</b>
<b>Change in liquidity (A+B+C)</b>		<b>984</b>	<b>-1,900</b>
<b>Liquidity at the beginning of the period (January 1)</b>		<b>3,707</b>	<b>5,513</b>
Exchange-rate related increase in liquidity		11	90
Increase in liquidity due to changes in the consolidated group		51	4
<b>Liquidity at the end of the period (December 31)</b>		<b>4,753</b>	<b>3,707</b>

05

## **2. Framework for the preparation and presentation of financial statements**

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### **2.1 Objective of financial statements**

According to IAS 1, the objective of financial statements is *"to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions. Financial statements also show the results of the management's stewardship of the resources entrusted to it"*.

The users of financial statements are diverse. They include investors (present and potential), lenders, employees, suppliers, customers, governments, and the public.

All these users of financial statements have different information needs:

- Investors are mainly concerned with the risk and return of their investment. They need information to help them determine whether they should buy, sell or hold securities issued by the firm.
- Lenders are interested in information that enables them to predict whether their loans will be repaid and the interest on them will be paid.
- Employees are concerned with the stability and profitability of their employer. They are also interested in information useful in determining the ability of the enterprise to pay remuneration and pensions.
- Suppliers are interested in information about the ability of the enterprise to pay amounts owing to them.
- Etc.

Despite the variety of information needs of the different categories of users, the IASB postulates that financial statements that meet the needs of investors will also meet most of the needs of other users.

This market-orientated approach to financial reporting is typical of the Anglo-American view of accounting, as discussed in section 1. It is opposed to the less market-orientated approaches that have traditionally prevailed in Continental Europe.

Consistent with this emphasis on the information needs of investors, the IASB considers that financial statements should provide information helpful in assessing the ability of enterprises to generate cash flows - with their problems of timing and uncertainty.

### **2.2 Accounting conventions**

Accounting rules are based on a common set of principles (accounting conventions) that are universally admitted and from which all detailed accounting standards are derived. Any user of financial statements should have a good knowledge of these principles in order to properly understand information contained in financial statements. These conventions are described in the IASB framework and IAS 1.

### ***2.2.1 Accrual basis of accounting***

Financial statements are prepared on the accrual basis of accounting. This means that the effects of transactions and other events are recognised **when they occur** (and not when cash is received or paid).

According to this convention, a sale of goods taking place on December 20, N is included in the revenues of year N even if the payment will only be received in January N+1.

Because many transactions originate and end in different periods, adjustments are necessary at the reporting date to respect the accrual basis convention. These adjustments give rise to the recognition of transitory assets (prepayments and accrued income) and transitory liabilities (accruals and deferred income).

### ***2.2.2 Going concern***

According to this convention, financial statements are prepared on the assumption that the enterprise will continue its activities in the foreseeable future. It is assumed that the firm has neither the intention nor the need to liquidate.

The practical consequence of this convention is that assets may be valued at an amount higher than their liquidation value.

The going concern principle must, of course, not be applied when the management of a firm either intends to liquidate it, or has no realistic alternative but to do so. When financial statements are not prepared on a going concern basis that fact should be disclosed, together with the basis on which the financial statements are prepared and the reason why the enterprise is not regarded as a going concern.

### ***2.2.3 Prudence***

The value of assets and the amount of provisions depend on future events and circumstances, which are subject to uncertainties such as the collectability of doubtful receivables or the probable useful life of fixed assets.

This inevitably raises the question of how to deal with such uncertainties. It is universally accepted that firms should exercise prudence in the preparation of financial statements, so that assets or income are not overstated and liabilities or expenses are not understated.

Nevertheless, the IASB states that the exercise of prudence does not allow the creation of "hidden reserves", as it was the case in Germanic countries before the implementation of the IFRS. The deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses is thus prohibited for companies that comply with international accounting standards.

The practical consequence of the prudence (or conservatism) principle is that:

- an expense is recognised as soon as it is probable,
- a revenue is recognised only when it is certain.

Because of this asymmetry in the treatment of good news and bad news, the accounting valuation of the enterprise (as measured by stockholders' equity) is biased downwards. This must be kept in mind when analysing financial statements.

### ***2.2.4 Comparability***

It is fundamental for the analyst to compare the financial statements of an enterprise through time in order to identify trends in the company's financial position and performance. Unfortunately, accounting figures are highly dependent on the methods used in the preparation of accounts. For example, if a firm abandons an accelerated depreciation method for the straight-line method this generally results in an increase in profit because the depreciation expense will be lower.

Accounting changes make comparisons through time more difficult. However, it is not possible to completely prohibit such changes because they are necessary to achieve a fair presentation of the enterprise's financial position when circumstances have changed. Accordingly, IAS 8 standards do not prohibit accounting changes but regulate them very strictly by imposing conditions on such changes and by requiring disclosures about the effects that these changes have on the financial statements (*cf.* "Data analysis").

Comparisons through time would also be more complicated if the enterprise were to modify the presentation of its financial statements from one period to the next. This is why IAS 1 prohibits such changes unless the new presentation is more appropriate or imposed by a new standard.

It should also be possible to compare the financial statements of several enterprises that use different accounting policies. In order to facilitate such comparisons, the IFRS require that firms disclose the accounting policies they have used in the preparation of their financial statements. This should enable the analyst to identify differences between accounting methods for like transactions and their probable impact on the financial statements of the entities being compared.

### ***2.2.5 Substance over form***

Traditionally, there are two competing views of accounting:

- the legal view,
- and the economic view.

According to the legal view, accounting should reflect the legal nature of transactions, whereas under the economic view, it should reflect their economic substance.

To show the opposition between these two approaches, let us consider the case of financial leases, such as leases that give the lessee the right to acquire the leased asset by the end of the lease term:

- According to the legal view of accounting, the leased asset should be recognised in the balance sheet of the lessor because, as long as title has not been transferred, the lessor has the ownership of the asset.
- According to the economic view of accounting, the relevant issue is not "who has the ownership title?" but "who bears the risks and rewards incidental to the ownership of the asset?". In a financial lease contract, these risks and rewards have been transferred to the lessee at the inception date. The leased asset should thus be recognised in the balance sheet of the lessee.

The substance-over-form convention requires that transactions be accounted for and presented in accordance with their substance and economic reality and not merely with their legal form. In other words, the economic view of accounting prevails over the legal view.

This convention, consubstantial to the Anglo-American view of accounting, is not admitted in all countries. Nevertheless, it is one of the basic principles of the IFRS.

## **2.3 Fundamental definitions**

The IASB framework provides fundamental definitions of the basic elements of financial statements. They are very important because all the detailed rules contained in the standards are more or less derived from these definitions.

### ***2.3.1 Assets***

An **asset** is defined as "*a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity*".

The use of the word "*controlled*" rather than "*owned*" emphasises that holding an ownership title is not a necessary condition for recognising an asset. The balance sheet may thus include goods for which the enterprise has no legal ownership such as, for example, leased assets.

Future economic benefits embodied in an asset have the potential to contribute to the flow of cash to the entity. The main feature of an asset is that it should generate **future cash flows**. These cash flows will be obtained in a number of ways. For example, an asset may be:

- used in the production of goods or services to be sold by the enterprise,
- exchanged for another asset (cash in particular),
- or used to settle a liability.

### 2.3.2 Liabilities

A **liability** is "*a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits*".

The obligation is legally enforceable when it derives from a contract or legislation. But an obligation may also arise from business practice, the desire to maintain good business relations or act in an equitable manner. These "constructive obligations" must also be taken into account, especially when determining provisions (cf. "Balance sheet").

To give rise to a liability the obligation must be **present**. For example a decision to acquire an asset in the future does not, of itself, give rise to an obligation. No liability is recognised until the asset is delivered or the enterprise enters into an irrevocable agreement to acquire it.

The settlement of the obligation involves giving up resources embodying economic benefits. This differentiates liabilities from grants, for which no reimbursement is normally needed. The settlement of the obligation may occur in a number of ways:

- payment of cash,
- transfer of other assets,
- provision of services,
- etc.

### 2.3.3 Equity

**Equity** is defined as "*the residual interest in the assets of the entity after deducting all its liabilities*". In other words: **Equity = Assets – Liabilities**

This definition clearly shows that the amount of equity is dependent on the measurement of assets and liabilities, i.e. on accounting conventions and policies used by the enterprise.

Equity has two main sources:

- contributions from the owners of the enterprise (capital and additional paid-in capital),
- past earnings of the enterprise which have not yet been distributed to the owners (retained earnings).



### 2.3.4 Income

**Income** is *"increases in economic benefits during the accounting period ... that result in increases in equity, other than those relating to contributions from equity participants"*.

Note that an increase in equity may result either from an increase in assets, or from a decrease in liabilities.

The IASB framework makes a distinction between two categories of income:

- **revenues**, which are generated by the ordinary activities of the enterprise (sales, interest and dividends received, royalties...),
- **gains**, which may or may not arise in the course of the ordinary activities of the enterprise. Gains include income arising from the disposal of fixed assets, as well as unrealised income resulting from the revaluation of assets.

### 2.3.5 Expenses

**Expenses** are *"decreases in economic benefits during the accounting period ... that result in decreases in equity, other than those relating to distributions to equity participants"*.

Definitions of income and expenses are thus symmetrical.

As for income, the IASB framework makes a distinction between:

- **expenses strictly speaking**, that result from the ordinary activities of the enterprise (cost of sales, wages, depreciation...),
- **losses**, that may or may not arise in the course of the ordinary activities of the enterprise (losses on the disposal or the revaluation of assets).

## 2.4 Criteria for accounting recognition

The main question an accountant is faced with is "when should an asset, a liability, an income or an expense be recognised in the financial statements?". The IASB framework provides precise answers to this question.

According to the IASB, an item that meets the definition of an element of financial statements (asset, liability, equity, income, expense) must be recognised when two conditions are met:

- 1) it is probable that future economic benefits (i.e. cash or cash equivalents) associated with the item will flow to or from the entity;
- 2) the item has a cost or value that can be measured with reliability.

It is not necessary to elaborate on these general principles for the time being because they are complemented by specific rules for each category of elements (assets, liabilities, income and expenses), which will be discussed in the coming chapters.

## Financial accounting and financial statement analysis

The following appendix provides examples of consolidated financial statements. Pay no attention to the date of these statements. These examples are just aimed at showing different presentation formats which, because of the consistency-of-presentation principle, generally do not vary over time.

In these examples, you will find an item called "minority interests". You need not worry about these at this juncture. They represent the interests of the minority shareholders in the subsidiaries of the company. You will see this in detail in "Consolidated Financial Statements".

## 2.5 APPENDIX: Consolidated financial statements

### 2.5.1 Louis Vuitton Moët Hennessy (France)

#### CONSOLIDATED INCOME STATEMENT

<i>(EUR millions, except for earnings per share)</i>	Notes	2016	2015	2014
Revenue	23-24	37,600	35,664	30,638
Cost of sales		(13,039)	(12,553)	(10,801)
Gross margin		24,561	23,111	19,837
Marketing and selling expenses		(14,607)	(13,830)	(11,744)
General and administrative expenses		(2,931)	(2,643)	(2,373)
Income (loss) from joint ventures and associates	7	3	(13)	(5)
Profit from recurring operations	23-24	7,026	6,605	5,715
Other operating income and expenses	25	(122)	(221)	(284)
Operating profit		6,904	6,384	5,431
Cost of net financial debt		(83)	(78)	(115)
Other financial income and expenses		(349)	(336)	3,062
Net financial income (expense)	26	(432)	(414)	2,947
Income taxes	27	(2,109)	(1,969)	(2,273)
Net profit before minority interests		4,363	4,001	6,105
Minority interests	17	(382)	(428)	(457)
Net profit, Group share		3,981	3,573	5,648
Basic Group share of net earnings per share (EUR)	28	7.92	7.11	11.27
Number of shares on which the calculation is based		502,911,125	502,395,491	501,309,369
Diluted Group share of net earnings per share (EUR)	28	7.89	7.08	11.21
Number of shares on which the calculation is based		504,640,459	504,894,946	503,861,733

## CONSOLIDATED STATEMENT OF COMPREHENSIVE GAINS AND LOSSES

(EUR millions)	Notes	2016	2015	2014
<b>Net profit before minority interests</b>		<b>4,363</b>	<b>4,001</b>	<b>6,105</b>
Translation adjustments	15.4	109	631	534
Amounts transferred to income statement		(32)	-	-
Tax impact		(9)	135	104
		<b>68</b>	<b>766</b>	<b>638</b>
Change in value of available for sale financial assets	8, 13	18	(32)	494
Amounts transferred to income statement		4	(91)	(3,326)
Tax impact		1	20	184
		<b>23</b>	<b>(103)</b>	<b>(2,648)</b>
Change in value of hedges of future foreign currency cash flows		48	(63)	(30)
Amounts transferred to income statement		(26)	33	(163)
Tax impact		(2)	3	57
		<b>20</b>	<b>(27)</b>	<b>(136)</b>
<b>Gains and losses recognized in equity, transferable to income statement</b>		<b>111</b>	<b>636</b>	<b>(2,146)</b>
Change in value of vineyard land	6	30	64	(17)
Amounts transferred to consolidated reserves		-	-	(10)
Tax impact		108	(21)	9
		<b>138</b>	<b>43</b>	<b>(18)</b>
Employee benefit commitments: change in value resulting from actuarial gains and losses	29	(86)	42	(161)
Tax impact		17	(16)	52
		<b>(69)</b>	<b>26</b>	<b>(109)</b>
<b>Gains and losses recognized in equity, not transferable to income statement</b>		<b>69</b>	<b>69</b>	<b>(127)</b>
<b>Comprehensive income</b>		<b>4,543</b>	<b>4,706</b>	<b>3,832</b>
Minority interests		(434)	(558)	(565)
<b>Comprehensive income, Group share</b>		<b>4,109</b>	<b>4,148</b>	<b>3,267</b>

## CONSOLIDATED BALANCE SHEET

<b>ASSETS</b> (EUR millions)	Notes	2016	2015	2014
Brands and other intangible assets	3	13,335	13,572	13,031
Goodwill	4	10,401	10,122	8,810
Property, plant and equipment	6	12,139	11,157	10,387
Investments in joint ventures and associates	7	770	729	519
Non-current available for sale financial assets	8	744	574	580
Other non-current assets	9	777	552	489
Deferred tax	27	2,058	1,945	1,436
<b>Non-current assets</b>		<b>40,224</b>	<b>38,651</b>	<b>35,252</b>
Inventories and work in progress	10	10,546	10,096	9,475
Trade accounts receivable	11	2,685	2,521	2,274
Income taxes		280	384	354
Other current assets	12	2,343	2,355	1,916
Cash and cash equivalents	14	3,544	3,594	4,091
<b>Current assets</b>		<b>19,398</b>	<b>18,950</b>	<b>18,110</b>
<b>Total assets</b>		<b>59,622</b>	<b>57,601</b>	<b>53,362</b>
<b>LIABILITIES AND EQUITY</b> (EUR millions)	Notes	2016	2015	2014
Share capital	15.1	152	152	152
Share premium account	15.1	2,601	2,579	2,655
Treasury shares and LVMH share-settled derivatives	15.2	(520)	(240)	(374)
Cumulative translation adjustment	15.4	1,165	1,137	492
Revaluation reserves		1,049	949	1,019
Other reserves		17,965	16,189	12,171
Net profit, Group share		3,981	3,573	5,648
<b>Equity, Group share</b>		<b>26,393</b>	<b>24,339</b>	<b>21,763</b>
Minority interests	17	1,510	1,460	1,240
<b>Equity</b>		<b>27,903</b>	<b>25,799</b>	<b>23,003</b>
Long-term borrowings	18	3,932	4,511	5,054
Non-current provisions	19	2,342	1,950	2,291
Deferred tax	27	4,137	4,685	4,392
Other non-current liabilities	20	8,498	7,957	6,447
<b>Non-current liabilities</b>		<b>18,909</b>	<b>19,103</b>	<b>18,184</b>
Short-term borrowings	18	3,447	3,769	4,189
Trade accounts payable	21.1	4,184	3,960	3,606
Income taxes		428	640	549
Current provisions	19	352	421	332
Other current liabilities	21.2	4,399	3,909	3,499
<b>Current liabilities</b>		<b>12,810</b>	<b>12,699</b>	<b>12,175</b>
<b>Total liabilities and equity</b>		<b>59,622</b>	<b>57,601</b>	<b>53,362</b>

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

EUR millions)		Number of shares	Share capital	Share premium account	Treasury shares and LVMH share-settled derivatives	Cumulative translation adjustment	Available for sale financial assets	Hedges of future foreign currency cash flows	Revaluation reserves	Vineyard land	Employee benefit commitments	Net profit and other reserves	Group share	Minority interests	Total equity
Notes			15.1		15.2	15.4									17
As of December 31, 2013		507,793,661	152	3,849	(451)	(8)	2,855	136	946	(37)	19,437	26,879	1,028	27,907	
Gains and losses recognized in equity						500	(2,648)	(122)	(15)	(96)	-	(2,381)	108	(2,273)	
Net profit											5,648	5,648	457	6,105	
Comprehensive income			-	-	-	500	(2,648)	(122)	(15)	(96)	5,648	3,267	565	3,832	
Stock option plan and similar expenses											37	37	2	39	
(Acquisition)/disposal of treasury shares and LVMH share-settled derivatives					27						(17)	10	-	10	
Exercise of LVMH share subscription options		980,323		59									59	-	59
Retirement of LVMH shares		(1,062,271)		(50)	50								-	-	-
Capital increase in subsidiaries													-	3	3
Interim and final dividends paid											(1,579)	(1,579)	(328)	(1,907)	
Distribution in kind of Hermès shares <sup>(a)</sup>				(1,203)							(5,452)	(6,855)	-	(6,855)	
Changes in control of consolidated entities											(5)	(5)	11	6	
Acquisition and disposal of minority interests' shares											(2)	(2)	32	30	
Purchase commitments for minority interests' shares											(48)	(48)	(73)	(121)	
As of December 31, 2014		507,711,713	152	2,655	(374)	492	207	14	931	(133)	17,819	21,763	1,240	23,003	
Gains and losses recognized in equity						645	(103)	(25)	33	25	-	575	130	705	
Net profit											3,573	3,573	428	4,001	
Comprehensive income			-	-	-	645	(103)	(25)	33	25	3,573	4,148	558	4,706	
Stock option plan and similar expenses											35	35	2	37	
(Acquisition)/disposal of treasury shares and LVMH share-settled derivatives					23						(13)	10	-	10	
Exercise of LVMH share subscription options		552,137		35									35	-	35
Retirement of LVMH shares		(1,124,740)		(111)	111								-	-	-
Capital increase in subsidiaries													-	89	89
Interim and final dividends paid											(1,659)	(1,659)	(229)	(1,888)	
Changes in control of consolidated entities											(9)	(9)	1	(8)	
Acquisition and disposal of minority interests' shares											5	5	(3)	2	
Purchase commitments for minority interests' shares											11	11	(198)	(187)	
As of December 31, 2015		507,139,110	152	2,579	(240)	1,137	104	(11)	964	(108)	19,762	24,339	1,460	25,799	
Gains and losses recognized in equity						28	23	19	113	(55)	-	128	52	180	
Net profit											3,981	3,981	382	4,363	
Comprehensive income			-	-	-	28	23	19	113	(55)	3,981	4,109	434	4,543	
Stock option plan and similar expenses											39	39	2	41	
(Acquisition)/disposal of treasury shares and LVMH share-settled derivatives					(322)						(21)	(343)	-	(343)	
Exercise of LVMH share subscription options		907,929		64									64	-	64
Retirement of LVMH shares		(920,951)		(42)	42								-	-	-
Capital increase in subsidiaries													-	41	41
Interim and final dividends paid											(1,811)	(1,811)	(272)	(2,083)	
Changes in control of consolidated entities											(5)	(5)	22	17	
Acquisition and disposal of minority interests' shares											(56)	(56)	(35)	(91)	
Purchase commitments for minority interests' shares											57	57	(142)	(85)	
As of December 31, 2016		507,126,088	152	2,601	(520)	1,165	127	8	1,077	(163)	21,946	26,393	1,510	27,903	

(a) See Note 8.

## CONSOLIDATED CASH FLOW STATEMENT

(EUR millions)	Notes	2016	2015	2014
<b>I. OPERATING ACTIVITIES AND OPERATING INVESTMENTS</b>				
Operating profit		6,904	6,384	5,431
Income/(loss) and dividends from joint ventures and associates	7	18	27	26
Net increase in depreciation, amortization and provisions		2,143	2,081	1,895
Other computed expenses		(177)	(456)	(188)
Other adjustments		(155)	(91)	(84)
<b>Cash from operations before changes in working capital</b>		<b>8,733</b>	<b>7,945</b>	<b>7,080</b>
Cost of net financial debt: interest paid		(59)	(75)	(116)
Tax paid		(1,923)	(1,807)	(1,639)
<b>Net cash from operating activities before changes in working capital</b>		<b>6,751</b>	<b>6,063</b>	<b>5,325</b>
Change in working capital	14.2	(512)	(429)	(718)
<b>Net cash from operating activities</b>		<b>6,239</b>	<b>5,634</b>	<b>4,607</b>
Operating investments	14.3	(2,265)	(1,955)	(1,775)
<b>Net cash from operating activities and operating investments (free cash flow)</b>		<b>3,974</b>	<b>3,679</b>	<b>2,832</b>
<b>II. FINANCIAL INVESTMENTS</b>				
Purchase of non-current available for sale financial assets <sup>(a)</sup>	8, 13	(28)	(78)	(57)
Proceeds from sale of non-current available for sale financial assets	8	91	68	160
Dividends received	8	6	4	69
Tax paid related to non-current available for sale financial assets and consolidated investments		(461)	(265)	(237)
Impact of purchase and sale of consolidated investments	2.4	310	(240)	(167)
<b>Net cash from (used in) financial investments</b>		<b>(82)</b>	<b>(511)</b>	<b>(232)</b>
<b>III. TRANSACTIONS RELATING TO EQUITY</b>				
Capital increases of LVMH SE	15.1	64	35	59
Capital increases of subsidiaries subscribed by minority interests	17	41	81	3
Acquisition and disposals of treasury shares and LVMH share-settled derivatives	15.2	(352)	1	1
Interim and final dividends paid by LVMH SE <sup>(b)</sup>	15.3	(1,810)	(1,671)	(1,619)
Tax paid related to interim and final dividends paid		(145)	(304)	(79)
Interim and final dividends paid to minority interests in consolidated subsidiaries	17	(267)	(228)	(336)
Purchase and proceeds from sale of minority interests	2.4	(95)	(4)	10
<b>Net cash from (used in) transactions relating to equity</b>		<b>(2,564)</b>	<b>(2,090)</b>	<b>(1,961)</b>
<b>Change in cash before financing activities</b>		<b>1,328</b>	<b>1,078</b>	<b>639</b>
<b>IV. FINANCING ACTIVITIES</b>				
Proceeds from borrowings	18.1	913	1,008	2,407
Repayment of borrowings	18.1	(2,134)	(2,443)	(2,100)
Purchase and proceeds from sale of current available for sale financial assets <sup>(a)</sup>	8, 13	(113)	(3)	(106)
<b>Net cash from (used in) financing activities</b>		<b>(1,334)</b>	<b>(1,438)</b>	<b>201</b>
<b>V. EFFECT OF EXCHANGE RATE CHANGES</b>				
		(47)	(33)	27
<b>NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS (I+II+III+IV+V)</b>		<b>(53)</b>	<b>(393)</b>	<b>867</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD</b>	14.1	<b>3,390</b>	<b>3,783</b>	<b>2,916</b>
<b>CASH AND CASH EQUIVALENTS AT END OF PERIOD</b>	14.1	<b>3,337</b>	<b>3,390</b>	<b>3,783</b>
<b>TOTAL TAX PAID</b>		<b>(2,529)</b>	<b>(2,376)</b>	<b>(1,955)</b>

(a) The cash impact of non-current available for sale financial assets used to hedge net financial debt [see Note 18] is presented under "M. Financing activities" as "Purchase and proceeds from sale of current available for sale financial assets".

(b) The distribution in kind of Hermès shares in 2014 had no impact on cash, apart from related tax effects. See Note 8.

## 2.5.2 Fiat (Italy)

### Consolidated Income Statement

(in € million, except per share amounts)

	Note	Years ended December 31		
		2016	2015	2014
Net revenues	4	€ 111,018	€ 110,595	€ 93,640
Cost of revenues		95,295	97,620	81,592
Selling, general and other costs		7,568	7,576	6,973
Research and development costs	5	3,274	2,864	2,334
Result from investments:		316	143	131
Share of the profit of equity method investees	12	313	130	117
Other income from investments		3	13	14
Gains on disposal of investments		13	—	12
Restructuring costs		88	53	50
Net financial expenses	6	2,016	2,366	2,051
<b>Profit before taxes</b>		<b>3,106</b>	<b>259</b>	<b>783</b>
Tax expense	7	1,292	166	424
<b>Net profit from continuing operations</b>		<b>1,814</b>	<b>93</b>	<b>359</b>
Profit from discontinued operations, net of tax	3	—	284	273
<b>Net profit</b>		<b>€ 1,814</b>	<b>€ 377</b>	<b>€ 632</b>
<b>Net profit attributable to:</b>				
Owners of the parent		€ 1,803	€ 334	€ 568
Non-controlling interests		11	43	64
		€ 1,814	€ 377	€ 632
<b>Net profit from continuing operations attributable to:</b>				
Owners of the parent		€ 1,803	€ 83	€ 327
Non-controlling interests		11	10	32
		€ 1,814	€ 93	€ 359
<b>Earnings per share:</b>				
28				
Basic earnings per share		€ 1.192	€ 0.221	€ 0.465
Diluted earnings per share		€ 1.181	€ 0.221	€ 0.460
<b>Earnings per share for Net profit from continuing operations:</b>				
28				
Basic earnings per share		€ 1.192	€ 0.055	€ 0.268
Diluted earnings per share		€ 1.181	€ 0.055	€ 0.265

The accompanying notes are an integral part of the Consolidated Financial Statements.

# Consolidated Statement of Comprehensive Income/(Loss)

(in € million)

	Note	Years ended December 31		
		2016	2015	2014
<b>Net profit (A)</b>		<b>€ 1,814</b>	<b>€ 377</b>	<b>€ 632</b>
Items that will not be reclassified to the Consolidated Income Statement in subsequent periods:	27			
Gains/(Losses) on re-measurement of defined benefit plans		584	679	(327)
Share of (losses) on re-measurement of defined benefit plans for equity method Investees		(5)	(2)	(4)
Related tax Impact		(261)	(201)	28
Items relating to discontinued operations, net of tax		—	3	(5)
<b>Total items that will not be reclassified to the Consolidated Income Statement in subsequent periods (B1)</b>		<b>318</b>	<b>479</b>	<b>(308)</b>
Items that may be reclassified to the Consolidated Income Statements in subsequent periods:	27			
Gains/(Losses) on cash flow hedging instruments		(249)	186	(144)
Gains/(Losses) on available-for-sale financial assets		15	11	(24)
Exchange gains on translating foreign operations		458	1,002	1,323
Share of Other comprehensive (loss)/income for equity method Investees		(122)	(17)	51
Related tax Impact		69	(48)	26
Items relating to discontinued operations, net of tax		—	18	(74)
<b>Total items that may be reclassified to the Consolidated Income Statement in subsequent periods (B2)</b>		<b>171</b>	<b>1,152</b>	<b>1,158</b>
<b>Total Other comprehensive income, net of tax (B1)+(B2)=(B)</b>		<b>489</b>	<b>1,631</b>	<b>850</b>
<b>Total Comprehensive income (A)+(B)</b>		<b>€ 2,303</b>	<b>€ 2,008</b>	<b>€ 1,482</b>
<b>Total Comprehensive income attributable to:</b>				
Owners of the parent		€ 2,288	€ 1,953	€ 1,350
Non-controlling Interests		15	55	132
		<b>€ 2,303</b>	<b>€ 2,008</b>	<b>€ 1,482</b>
<b>Total Comprehensive income attributable to owners of the parent:</b>				
Continuing operations		€ 2,288	€ 1,685	€ 1,182
Discontinued operations		—	268	168
		<b>€ 2,288</b>	<b>€ 1,953</b>	<b>€ 1,350</b>

The accompanying notes are an integral part of the Consolidated Financial Statements.



# Consolidated Statement of Financial Position

(In € million)

		At December 31		At January 1	
	Note	2016	2015 <sup>(1)</sup>	2015 <sup>(1)</sup>	
<b>Assets</b>					
Goodwill and intangible assets with indefinite useful lives	9	€ 15,222	€ 14,790	€ 14,012	
Other intangible assets	10	11,422	9,946	8,835	
Property, plant and equipment	11	30,431	27,454	26,408	
Investments accounted for using the equity method	12	1,793	1,658	1,471	
Other financial assets	13	649	724	700	
Deferred tax assets	7	3,699	4,056	4,186	
Other receivables	15	581	485	1,000	
Tax receivables	15	93	98	44	
Accrued income and prepaid expenses		372	325	206	
Other non-current assets		359	176	114	
<b>Total Non-current assets</b>		<b>64,621</b>	<b>59,712</b>	<b>56,976</b>	
Inventories	14	12,121	11,351	10,449	
Assets sold with a buy-back commitment		1,533	1,881	2,018	
Trade and other receivables	15	7,273	6,575	7,653	
Tax receivables	15	206	307	284	
Accrued income and prepaid expenses		389	367	309	
Other financial assets	13	762	1,243	610	
Cash and cash equivalents	17	17,318	20,682	22,840	
Assets held for sale	3	120	5	10	
Assets held for distribution	3	—	3,650	—	
<b>Total Current assets</b>		<b>39,722</b>	<b>46,041</b>	<b>44,173</b>	
<b>Total Assets</b>		<b>€ 104,343</b>	<b>€ 105,753</b>	<b>€ 101,149</b>	
<b>Equity and liabilities</b>					
<b>Equity</b>					
Equity attributable to owners of the parent	27	€ 19,168	€ 16,805	€ 14,064	
Non-controlling interests		185	163	313	
<b>Total Equity</b>		<b>19,353</b>	<b>16,968</b>	<b>14,377</b>	
<b>Liabilities</b>					
Long-term debt	21	16,111	20,418	26,014	
Employee benefits liabilities	19	9,052	9,406	8,904	
Provisions	20	6,520	5,680	4,711	
Other financial liabilities	16	16	307	169	
Deferred tax liabilities	7	194	156	233	
Tax payables	22	25	31	50	
Other liabilities	22	3,603	3,183	3,306	
<b>Total Non-current liabilities</b>		<b>35,521</b>	<b>39,181</b>	<b>43,387</b>	
Trade payables		22,655	21,465	19,854	
Short-term debt and current portion of long-term debt	21	7,937	7,368	7,710	
Other financial liabilities	16	681	429	579	
Employee benefit liabilities	19	811	658	688	
Provisions	20	9,317	8,112	6,069	
Tax payables	22	162	241	296	
Other liabilities	22	7,809	7,747	8,189	
Liabilities held for sale	3	97	—	—	
Liabilities held for distribution	3	—	3,584	—	
<b>Total Current liabilities</b>		<b>49,469</b>	<b>49,604</b>	<b>43,385</b>	
<b>Total Equity and liabilities</b>		<b>€ 104,343</b>	<b>€ 105,753</b>	<b>€ 101,149</b>	

<sup>(1)</sup> Refer to Note 2, Basis of Preparation, for additional information on reclassifications and an adjustment to prior year balances.  
The accompanying notes are an integral part of the Consolidated Financial Statements.

## Consolidated Statement of Cash Flows

(in € million)

		Years ended December 31		
	Note	2016	2015	2014
<b>Cash flows from operating activities:</b>				
Net profit from continuing operations		€ 1,814	€ 93	€ 359
Amortization and depreciation		5,956	5,414	4,607
Net losses on disposal of tangible and intangible assets		13	18	8
Net gains on disposal of investments		(13)	—	(9)
Other non-cash items	30	111	812	348
Dividends received		123	112	87
Change in provisions		1,519	3,206	1,169
Change in deferred taxes		389	(279)	(179)
Change due to assets sold with buy-back commitments and GDP vehicles		(95)	6	177
Change in inventories		(471)	(958)	(821)
Change in trade receivables		177	(191)	106
Change in trade payables		776	1,571	1,470
Change in other payables and receivables		295	(580)	24
Cash flows from operating activities - discontinued operations		—	527	823
<b>Total</b>		<b>10,594</b>	<b>9,751</b>	<b>8,169</b>
<b>Cash flows used in investing activities:</b>				
Investments in property, plant and equipment and intangible assets		(8,815)	(8,819)	(7,804)
Investments in joint ventures, associates and unconsolidated subsidiaries		(116)	(266)	(17)
Proceeds from the sale of tangible and intangible assets		36	29	38
Proceeds from disposal of other investments		55	—	38
Net change in receivables from financing activities		(483)	410	78
Change in securities		299	(239)	40
Other changes		(15)	11	19
Cash flows used in investing activities - discontinued operations		—	(426)	(532)
<b>Total</b>		<b>(9,039)</b>	<b>(9,300)</b>	<b>(8,140)</b>
<b>Cash flows (used in) /from financing activities:</b>				
	30			
Issuance of notes		1,250	2,840	4,629
Repayment of notes		(2,373)	(7,241)	(2,150)
Proceeds of other long-term debt		1,342	3,061	4,873
Repayment of other long-term debt		(4,618)	(4,412)	(5,834)
Net change in short-term debt and other financial assets/liabilities		(591)	(36)	496
Net proceeds from initial public offering of 10 percent of Ferrari N.V.	3	—	866	—
Issuance of Mandatory Convertible Securities and other share issuances	27	—	—	3,094
Cash Exit Rights following the merger of Fiat Into FCA	1	—	—	(417)
Exercise of stock options		—	—	146
Distributions paid		(18)	(283)	—
Acquisition of non-controlling interests	3	—	—	(2,691)
Other changes		(119)	10	(45)
Cash flows from financing activities - discontinued operations		—	2,067	36
<b>Total</b>		<b>(5,127)</b>	<b>(3,128)</b>	<b>2,137</b>
Translation exchange differences		228	681	1,219
<b>Total change in Cash and cash equivalents</b>		<b>(3,344)</b>	<b>(1,996)</b>	<b>3,385</b>
Cash and cash equivalents at beginning of the period		20,662	22,840	19,455
Cash and cash equivalents at end of the period - Included within Assets held for distribution		—	182	—
<b>Cash and cash equivalents at end of the period</b>	17	<b>€ 17,318</b>	<b>€ 20,662</b>	<b>€ 22,840</b>

The accompanying notes are an integral part of the Consolidated Financial Statements.

## Consolidated Statement of Changes in Equity

(in € million)

	Attributable to owners of the parent										
	Share capital	Treasury shares	Other reserves	Cash flow hedge reserve	Currency translation differences	Available-for-sale financial assets	Re-measurement of defined benefit plans	Cumulative share of OCI of equity method investees	Non-controlling interests	Total	
December 31, 2013 <sup>a</sup>	€ 4,477	€ (259)	€ 5,202	€ 101	€ 38	€ (13)	€ (757)	€ (134)	€ 4,258	€ 12,913	
Capital increase	2	—	989	—	—	—	—	—	3	994	
Merger of Fiat Into FCA	(4,269)	224	4,045	—	—	—	—	—	—	—	
Mandatory Convertible Securities (Note 27)	—	—	1,910	—	—	—	—	—	—	1,910	
Cash Exit Rights (Note 1)	(193)	—	(224)	—	—	—	—	—	—	(417)	
Dividends distributed	—	—	—	—	—	—	—	—	(50)	(50)	
Share-based compensation	—	35	(31)	—	—	—	—	—	—	4	
Net profit	—	—	568	—	—	—	—	—	64	632	
Other comprehensive Income/(loss)	—	—	—	(205)	1,266	(24)	(303)	48	68	850	
Distribution for tax withholding obligations	—	—	—	—	—	—	—	—	(45)	(45)	
Purchase of shares in subsidiaries from non-controlling interests <sup>a</sup>	—	—	1,875	35	175	—	(518) <sup>a1</sup>	—	(3,990)	(2,423)	
Other changes	—	—	4	—	—	—	—	—	5	9	
At December 31, 2014	17	—	14,338	(69)	1,479	(37)	(1,578)	(86)	313	14,377	
Distributions	—	—	(17)	—	—	—	—	—	(283)	(300)	
Share-based compensation	—	—	80	—	—	—	—	—	—	80	
Net profit	—	—	334	—	—	—	—	—	43	377	
Initial public offering of 10 percent Ferrari N.V. (Note 3)	—	—	869	7	(4)	—	1	—	(7)	866	
Other comprehensive Income/(loss)	—	—	—	132	1,016	11	479	(19)	12	1,631	
Other changes	—	—	(149)	—	1	—	—	—	85	(63)	
At December 31, 2015	17	—	15,455	70	2,492	(26)	(1,098)	(105)	163	16,968	
Capital increase	—	—	—	—	—	—	—	—	18	18	
Mandatory Convertible Securities (Note 27)	2	—	(2)	—	—	—	—	—	—	—	
Share-based compensation	—	—	98	—	—	—	—	—	—	98	
Net profit	—	—	1,803	—	—	—	—	—	11	1,814	
Other comprehensive Income/(loss)	—	—	—	(182)	456	15	324	(128)	4	489	
Other changes <sup>a1</sup>	—	—	(42)	49	(36)	—	6	—	(11)	(34)	
At December 31, 2016	€ 19	€ —	€ 17,312	€ (63)	€ 2,912	€ (11)	€ (768)	€ (233)	€ 185	€ 19,353	

<sup>a1</sup> Relates to the 41.5 percent interest in FCA US's re-measurement of defined benefit plans reserve of €1,248 million upon FCA's acquisition of the 41.5 percent remaining interest in FCA US previously not owned (Note 3, Scope of Consolidation).

<sup>a2</sup> Amounts primarily relate to the reclassification of reserves for Ferrari as a result of Ferrari's classification as a discontinued operation for the year ended December 31, 2015 and the completion of the spin-off of Ferrari N.V. on January 3, 2016 as well as the distribution of the Group's 16.7 percent ownership interest in RCS MediaGroup S.p.A. in May 2016.

<sup>a3</sup> Refer to Note 2, Basis of Preparation, for additional information on an adjustment to prior year balances.

The accompanying notes are an integral part of the Consolidated Financial Statements.

### 2.5.3 Nikon (Japan)

#### Consolidated Balance Sheet

Nikon Corporation and Consolidated Subsidiaries  
Year ended March 31, 2016

		Millions of Yen	Thousands of U.S. Dollars (Note 1)
	2015	2016	2016
<b>ASSETS</b>			
<b>Current assets:</b>			
Cash and cash equivalents (Note 15)	¥ 259,625	¥ 251,210	\$ 2,229,414
Notes and accounts receivable—trade (Note 15):			
Customers	131,521	98,929	877,966
Unconsolidated subsidiaries and associated companies	34	61	543
Inventories (Note 5)	239,983	247,448	2,196,020
Deferred tax assets (Note 12)	37,862	37,451	332,362
Other current assets (Note 16)	20,651	28,982	257,202
Allowance for doubtful receivables	(4,160)	(2,434)	(21,597)
Total current assets	685,516	661,647	5,871,910
<b>Property, plant and equipment (Note 6):</b>			
Land	16,143	15,681	139,168
Buildings and structures	133,377	130,932	1,161,982
Machinery and equipment	209,496	202,722	1,799,095
Furniture and fixtures	86,149	84,266	747,834
Lease assets	9,317	8,403	74,571
Construction in progress	4,393	3,566	31,648
Total	458,875	445,570	3,954,298
Accumulated depreciation	(310,790)	(317,910)	(2,821,357)
Net property, plant and equipment	148,085	127,660	1,132,941
<b>Investments and other assets:</b>			
Investment securities (Notes 4 and 15)	70,117	62,274	552,663
Investments in and advances to unconsolidated subsidiaries and associated companies	10,972	11,926	105,836
Long-term loans to employees and other	355	78	691
Asset for retirement benefits (Note 8)	9,659	1,700	15,083
Software	20,482	17,900	158,854
Goodwill	3,076	20,766	184,292
Security deposits	3,958	3,582	31,789
Deferred tax assets (Note 12)	10,153	7,591	67,369
Other	10,858	30,747	272,883
Allowance for doubtful receivables	(286)	(44)	(389)
Total investments and other assets	139,344	156,520	1,389,071
<b>Total</b>	¥ 972,945	¥ 945,827	\$ 8,393,922

See notes to consolidated financial statements.

## Financial accounting and financial statement analysis

	2015	Millions of Yen 2016	Thousands of U.S. Dollars (Note 1) 2016
<b>LIABILITIES AND EQUITY</b>			
<b>Current liabilities:</b>			
Short-term borrowings (Notes 7 and 15)	¥ 13,600	¥ 13,600	\$ 120,696
Current portion of long-term debt (Notes 7 and 15)	16,012	13,671	121,330
Notes and accounts payable—trade (Note 15):			
Suppliers	113,206	116,757	1,036,178
Unconsolidated subsidiaries and associated companies	519	643	5,706
Income taxes payable (Note 15)	5,038	4,012	35,602
Accrued expenses (Note 15)	58,455	53,616	475,823
Advances received	46,489	67,960	603,123
Provision for product warranties	9,166	7,066	62,711
Other current liabilities (Note 16)	24,780	17,100	151,761
<b>Total current liabilities</b>	<b>287,265</b>	<b>294,425</b>	<b>2,612,930</b>
<b>Long-term liabilities:</b>			
Long-term debt (Notes 7 and 15)	85,886	85,501	758,795
Liability for retirement benefits (Note 8)	8,477	8,902	79,003
Asset retirement obligations	3,624	3,658	32,460
Deferred tax liabilities (Note 12)	11,472	8,952	79,445
Other long-term liabilities (Note 16)	4,020	3,381	30,012
<b>Total long-term liabilities</b>	<b>113,479</b>	<b>110,394</b>	<b>979,715</b>
<b>Commitments and contingent liabilities</b> (Notes 14, 16, and 17)			
<b>Equity:</b>			
Common stock (Note 9):			
Authorized—1,000,000,000 shares;			
issued—400,878,921 shares in 2015 and 2016	65,476	65,476	581,078
Capital surplus (Note 9)	80,712	80,625	715,515
Stock acquisition rights (Note 10)	1,133	1,339	11,885
Retained earnings (Note 9)	378,516	388,730	3,449,858
Treasury stock—at cost (Notes 2 (k) and 9):			
4,152,366 shares in 2015 and 4,687,767 shares in 2016	(12,413)	(13,255)	(117,634)
Accumulated other comprehensive income (loss):			
Unrealized gain (loss) on available-for-sale securities	20,774	11,735	104,153
Deferred gain (loss) on derivatives under hedge accounting	(1,201)	(35)	(312)
Foreign currency translation adjustments	40,518	12,551	111,383
Defined retirement benefit plans	(1,821)	(6,688)	(59,353)
<b>Total</b>	<b>571,694</b>	<b>540,478</b>	<b>4,796,573</b>
Non-controlling interests	507	530	4,704
<b>Total equity</b>	<b>572,201</b>	<b>541,008</b>	<b>4,801,277</b>
<b>Total</b>	<b>¥972,945</b>	<b>¥945,827</b>	<b>\$8,393,922</b>

## Financial accounting and financial statement analysis

### Consolidated Statement of Income

Nikon Corporation and Consolidated Subsidiaries  
Year ended March 31, 2016

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2015	2016	2016
<b>Net sales</b>	¥857,782	¥822,916	\$7,303,124
<b>Cost of sales</b>	532,383	505,298	4,484,360
Gross profit	325,399	317,618	2,818,764
<b>Selling, general and administrative expenses (Note 11)</b>	281,987	280,917	2,493,051
Operating income	43,412	36,701	325,713
<b>Other income (expenses):</b>			
Interest and dividend income	2,713	3,246	28,805
Interest expense	(1,406)	(1,385)	(12,289)
Foreign exchange losses	(1,789)	(172)	(1,526)
Loss on sales of property, plant and equipment	(56)	(26)	(234)
Loss on impairment of long-lived assets (Note 6)	(16,230)	(8,449)	(74,984)
Loss on valuation of investment securities	(3)		
Gain on sales of property, plant and equipment	92	3,173	28,158
Gain on sales of investment securities	4,982	573	5,083
Restructuring expenses (Note 20)		(2,726)	(24,194)
Environmental expenses (Note 21)		(1,833)	(16,271)
Equity in earnings of associated companies	1,421	1,449	12,860
Other—net	2,017	3,030	26,902
Other income (expenses)—net	(8,259)	(3,120)	(27,690)
<b>Income before income taxes</b>	35,153	33,581	298,023
<b>Income taxes (Note 12):</b>			
Current	11,006	11,008	97,689
Deferred	5,729	282	2,505
Total income taxes	16,735	11,290	100,194
<b>Net income</b>	18,418	22,291	197,829
<b>Net income attributable to non-controlling interests</b>	54	99	881
<b>Net income attributable to owners of the parent</b>	¥ 18,364	¥ 22,192	\$ 196,948
	Yen		U.S. Dollars (Note 1)
<b>Per share of common stock (Notes 2 (r) and 19):</b>			
Basic net income	¥46.29	¥55.98	\$0.50
Diluted net income	46.21	55.85	0.50
Cash dividends applicable to the year	32.00	18.00	0.16

See notes to consolidated financial statements.

### Consolidated Statement of Comprehensive Income

Nikon Corporation and Consolidated Subsidiaries  
Year ended March 31, 2016

	Millions of Yen		Thousands of U.S. Dollars (Note 1)
	2015	2016	2016
<b>Net income</b>	¥18,418	¥ 22,291	\$ 197,829
<b>Other comprehensive income (loss) (Note 18):</b>			
Unrealized gain (loss) on available-for-sale securities	7,915	(9,039)	(80,220)
Deferred gain (loss) on derivatives under hedge accounting	(1,041)	1,166	10,345
Foreign currency translation adjustments	23,201	(28,020)	(248,666)
Defined retirement benefit plans	928	(4,884)	(43,345)
Share of other comprehensive income (loss) in associates	11	18	155
Total other comprehensive income (loss)	31,014	(40,759)	(361,731)
<b>Comprehensive income (loss)</b>	¥49,432	¥(18,468)	\$(163,902)
Total comprehensive income (loss) attributable to:			
Owners of the parent	¥49,271	¥(18,515)	\$(164,319)
Non-controlling interests	161	47	417

See notes to consolidated financial statements.

# Financial accounting and financial statement analysis

## Consolidated Statement of Changes in Equity

Nikon Corporation and Consolidated Subsidiaries  
Year ended March 31, 2016

Thousands		Millions of Yen											
	Number of Shares of Common Stock Outstanding	Accumulated Other Comprehensive Income (Loss)											
		Common Stock	Capital Surplus	Stock Acquisition Rights	Retained Earnings	Treasury Stock	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Non-Controlling Interests	Total Equity
BALANCE, April 1, 2014 (as previously reported)	396,660	¥65,476	¥80,712	¥ 953	¥384,843	¥(12,619)	¥12,859	¥ (160)	¥ 17,424	¥(2,762)	¥546,726	¥ 87	¥546,813
Cumulative effect of accounting change					(11,971)						(11,971)		(11,971)
BALANCE, April 1, 2014 (as restated)	396,660	¥65,476	¥80,712	¥ 953	¥372,872	¥(12,619)	¥12,859	¥ (160)	¥ 17,424	¥(2,762)	¥534,755	¥ 87	¥534,842
Adjustment of retained earnings for newly consolidated subsidiaries and liquidation of consolidated subsidiaries					88						88		88
Net income attributable to owners of the parent (Note 2 (c))					18,364						18,364		18,364
Cash dividends, ¥32.0 per share					(12,693)						(12,693)		(12,693)
Purchase of treasury stock	(4)					(5)					(5)		(5)
Disposal of treasury stock	71				(115)	212					97		97
Net change in the year				180			7,915	(1,041)	23,094	941	31,089	420	31,509
BALANCE, March 31, 2015	396,727	¥65,476	¥80,712	¥1,133	¥378,516	¥(12,413)	¥20,774	¥(1,201)	¥ 40,518	¥(1,821)	¥571,694	¥507	¥572,201
Net income attributable to owners of the parent (Note 2 (c))					22,192						22,192		22,192
Cash dividends, ¥30.0 per share					(11,902)						(11,902)		(11,902)
Purchase of treasury stock	(580)					(976)					(976)		(976)
Disposal of treasury stock	45				(76)	134					58		58
Change in the parent's ownership interest due to transactions with non-controlling interests (Note 2 (c))				(87)							(87)		(87)
Net change in the year				206			(9,039)	1,166	(27,967)	(4,867)	(40,501)	23	(40,478)
BALANCE, March 31, 2016	396,192	¥65,476	¥80,625	¥1,339	¥388,730	¥(13,255)	¥11,735	¥ (35)	¥ 12,551	¥(6,688)	¥540,478	¥530	¥541,008

Thousands of U.S. Dollars (Note 1)												
	Accumulated Other Comprehensive Income (Loss)											
	Common Stock	Capital Surplus	Stock Acquisition Rights	Retained Earnings	Treasury Stock	Unrealized Gain (Loss) on Available-for-Sale Securities	Deferred Gain (Loss) on Derivatives under Hedge Accounting	Foreign Currency Translation Adjustments	Defined Retirement Benefit Plans	Total	Non-Controlling Interests	Total Equity
BALANCE, March 31, 2015	\$581,078	\$716,289	\$10,051	\$3,359,208	\$(110,160)	\$184,373	\$(10,657)	\$ 359,585	\$(16,164)	\$5,073,603	\$4,501	\$5,078,104
Net income attributable to owners of the parent (Note 2 (c))				196,948						196,948		196,948
Cash dividends, \$0.266 per share				(105,628)						(105,628)		(105,628)
Purchase of treasury stock					(8,662)					(8,662)		(8,662)
Disposal of treasury stock				(670)	1,188					518		518
Change in the parent's ownership interest due to transactions with non-controlling interests (Note 2 (c))			(774)							(774)		(774)
Net change in the year				1,834		(80,220)	10,345	(248,202)	(43,189)	(359,432)	203	(359,229)
BALANCE, March 31, 2016	\$581,078	\$715,515	\$11,885	\$3,449,858	\$(117,634)	\$104,153	\$ (312)	\$ 111,383	\$(59,353)	\$4,796,573	\$4,704	\$4,801,277

See notes to consolidated financial statements.



# Financial accounting and financial statement analysis

## Consolidated Statement of Cash Flows

Nikon Corporation and Consolidated Subsidiaries  
Year ended March 31, 2016

	2015	Millions of Yen 2016	Thousands of U.S. Dollars (Note 1) 2016
<b>Operating activities:</b>			
Income before income taxes	¥ 35,153	¥ 33,581	\$ 298,023
Adjustments for:			
Income taxes—paid	(11,108)	(12,783)	(113,443)
Depreciation and amortization	38,458	37,739	334,918
Loss on impairment of long-lived assets	16,230	8,449	74,984
Provision (reversal) for doubtful receivables	3	(1,425)	(12,649)
Provision (reversal) for product warranties	(863)	(1,984)	(17,605)
Interest and dividends income	(2,713)	(3,246)	(28,805)
Interest expenses	1,406	1,385	12,289
Loss (gain) on sales of property, plant and equipment	(35)	(3,146)	(27,924)
Loss (gain) on sales of investment securities	(4,982)	(573)	(5,083)
Loss (gain) on valuation of investment securities	3		
Equity in earnings of associated companies	(1,421)	(1,449)	(12,860)
Other—net	32	19,028	168,869
Change in assets and liabilities:			
Decrease (increase) in notes and accounts receivable—trade	(3,777)	30,813	273,458
Decrease (increase) in inventories	15,103	(17,099)	(151,748)
Increase (decrease) in notes and accounts payable—trade	(4,892)	3,555	31,549
Increase (decrease) in accrued expenses	1,669	(4,330)	(38,424)
Increase (decrease) in advances received	(4,044)	21,215	188,273
Increase (decrease) in net defined benefit liability	(875)	(223)	(1,981)
Other—net	(2,038)	(4,292)	(38,091)
Total adjustments	36,156	71,634	635,727
Net cash provided by operating activities	71,309	105,215	933,750
<b>Investing activities:</b>			
Purchases of property, plant and equipment	(22,337)	(21,957)	(194,863)
Proceeds from sales of property, plant and equipment	377	3,678	32,645
Purchases of investment securities	(1,028)	(6,791)	(60,270)
Proceeds from sales of investment securities	6,947	1,009	8,955
Purchases of investments in subsidiaries resulting in change in scope of consolidation (Note 22)		(43,563)	(386,604)
Net decrease (increase) in loans receivable	(20)	(162)	(1,442)
Other—net	(8,884)	(13,095)	(116,212)
Net cash used in investing activities	(24,945)	(80,881)	(717,791)
<b>Financing activities:</b>			
Net increase (decrease) in short-term borrowings	(896)	(0)	(2)
Proceeds from long-term debt		12,500	110,934
Repayments of long-term debt	(10,000)	(15,000)	(133,120)
Dividends paid	(12,686)	(11,910)	(105,700)
Dividends paid to non-controlling interests	(35)	(24)	(213)
Other—net	(1,338)	(3,740)	(33,183)
Net cash used in financing activities	(24,955)	(18,174)	(161,284)
Foreign currency translation adjustments on cash and cash equivalents	14,196	(14,575)	(129,353)
Net increase (decrease) in cash and cash equivalents	35,605	(8,415)	(74,678)
Cash and cash equivalents of newly consolidated subsidiaries, beginning of year	2,652		
Cash and cash equivalents, beginning of year	221,368	259,625	2,304,092
Cash and cash equivalents, end of year	¥259,625	¥251,210	\$2,229,414

See notes to consolidated financial statements.



### **3. Statement of cash flows**

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#### **3.1 Rationale for the statement of cash flows**

The balance sheet and the income statement alone are not sufficient for determining the firm's health. In the short run, liquidity is essential for the survival of the enterprise. The statement fulfilling this need of the analyst is the statement of cash flows. It provides insight into the organization's ability to generate enough cash in the present and future, trends in cash components and helps in crucial decisions like financing, payout and investment.

According to IAS 7, cash includes cash on hand and demand deposits with banks or other financial institutions only. Cash equivalents include short-term highly liquid instruments, if they can be readily converted into known amounts of cash and have a maturity of less than 3 months. In most cases bank borrowings will form part of financing activities. However, in some countries, there is a concept of bank overdraft, wherein the firm has to repay the same on demand and the firm is allowed to fluctuate between a positive and negative balance, then it may be included within cash equivalents.

The most important component in cash flow analysis is the free cash flow or FCF. This is the basic analytical tool used by most analysts in valuation models. This is derived from the statement of cash flows. Hence, this statement has become a mandatory part of financial statements in most countries.

Typical means of financing for projects differ between the USA and Europe. While in the US it is predominantly through the equity route, European firms take frequent recourse to debt financing. It is for such type of financing that the statement of cash flow acquires an added importance. Specifically, this statement helps investors and creditors to analyse the ability of the firm to generate future cash flows, and thus, its ability to meet the payment obligations. Ideally, the cash flow statement should a) give an idea of the financial structure of the firm and its cash obligations, b) provide additional information about changes in assets, liabilities and working capital, which are not captured in the income statement or the balance sheet, c) improve cross sectional analysis across enterprises by eliminating the effect of different accounting policies and d) serve as an indicator of certainty, timing of future cash flows.

In a typical statement of cash flows, there are four sections. They are cash flows from:

- 1) operating activities;
- 2) financing activities;
- 3) investing activities;
- 4) cash and cash equivalents at the beginning and end of the year.

**1) Cash flow from operating activities** refers to the cash generated by all the transactions, which are neither investing nor financing activities of the firm. It includes all those activities which are central to the firm's business and other extraordinary transactions.

**2) Cash flow from financing activities** typically deals with all those transactions, which deal with resources, long-term as well as short-term. It also includes payments to the shareholders as well as receipts from them.

**3) Cash flow from investing activities** deals with the asset side of the balance sheet. It also deals with the disposal of assets. Apart from that, acquisition and disposal of businesses or subsidiaries are also included.

**4) Net change in cash or cash equivalents** is the balancing figure or the net effect of the above three activities. By looking at these activities we can make meaningful managerial and investment decisions.

It should be noted that the statement of cash flows excludes non-cash transactions. But this will prove to be a major drawback for the analyst. Their non-inclusion may be justified by saying that the statement of cash flows deals only with cash flows. However, to be in line with the basic premise of 'a true and fair view', the standards mandate that non-cash transactions should be disclosed elsewhere in the financial statements. If we look at what constitutes non-cash transactions, we will realize how important they could be. Typical non cash transactions are conversion of debt into equity, conversion of one type of debt or equity into another type or class of equity, acquisition of assets through financial leases, acquisition of assets by issue of stocks or debt notes, interchange of non cash assets and liabilities for each other or one another of the same type, disposal of assets for stocks or debt, etc.

Let us take a look at the following cash flow statement. You may note that there is no mention of non-cash transactions. These have been mentioned only as a part of notes to accounts, which is a part of financial statements in totality.

**Consolidated statement of cash flows**

(in millions CU)

	<b>N</b>	<b>N-1</b>
Net income	6'659	6'010
Reversal of non-cash items		
Minority interests	27	26
Taxes	1'833	1'882
Depreciation and amortization on		
Tangible fixed assets	1'261	1'161
Intangible assets	248	227
Income from associated companies	-383	-239
Divestments gains	-288	-89
Net financial income	-793	-759
Interest and other financial receipts	1'816	2'114
Interest and other financial payments	-815	-1'366
Taxes paid	-1'690	-1'843
<b>Cash flow before working capital changes</b>	<b>7'875</b>	<b>7'124</b>
Restructuring payments	-488	-698
Change in net current assets and other operating cash flows	-494	-573
<b>Cash flow from operating activities</b>	<b>6'893</b>	<b>5'853</b>
Investment in tangible fixed assets	-1'371	-1'577
Proceeds from disposals of tangible fixed assets	286	303
Purchase of intangible and financial assets	-733	-384
Proceeds from disposals of intangible and financial assets	385	91
Acquisition/divestment of subsidiaries	239	235
Acquisition of minorities	-68	-1
Investment in marketable securities	-1'755	-2'503
<b>Cash flow used for investing activities</b>	<b>-3'017</b>	<b>-3'836</b>
Premium from option rights	-	2
Change in treasury shares	-1'919	722
Change in long-term financial debts	-336	-691
Change in short-term financial debts	-130	-1'583
Dividends paid	-1'935	-1'663
<b>Cash flow used for financing activities</b>	<b>-4'320</b>	<b>-3'213</b>
Net effect of currency translation on cash and Cash equivalents	74	-31
Net change in cash and cash equivalents	-370	-1'227
<b>Cash and cash equivalents at the beginning of year</b>	<b>6'651</b>	<b>7'878</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>6'281</b>	<b>6'651</b>

This statement of cash flows (SCF) follows IAS 7. It includes cash equivalents as a part of cash while excludes the non-cash transactions.

It has to be realized that while it is easy to prepare the SCF by the accountants of the enterprise, it is rather difficult to derive the same for outsiders because it needs information which are not disclosed in the balance sheet and the income statement. However, it is possible to prepare a reasonably proper SCF by looking at the balance sheets at the beginning and end of the accounting period, corresponding statement of comprehensive income (or income statement) and notes to accounts. We will look at the preparation and use of SCF in the following section.

### 3.2 Relation between income flows and cash flows

In this section we will see the link between the balance sheet, the statement of comprehensive income (or the income statement) and the SCF. Apart from this, we will see the methods used for preparation of SCF, their limitation and the uses of SCF.

## Financial accounting and financial statement analysis

As noted earlier, the CFS emerged as a need, which filled the gaps that arose by the use of the accrual concept for preparation of the balance sheet, the income statement and the statement of comprehensive income. It was clear that the balance sheet and the statement of comprehensive income (or the income statement) are affected by accounting policies. But the biggest gap was seen in their inability to provide adequate information about the solvency and liquidity of the enterprise. The term solvency refers to the ability of the firm to meet its obligations in the long term. Liquidity refers to the ability of the firm to ensure that it has enough cash and cash equivalents to run its day-to-day operations.

The biggest advantage which the cash flow analysis provides, is to adjust for differences in depreciation policies and provisions. This can be seen from the following example:

### Example 1:

An equipment was acquired for CU 600'000 at the beginning of year N. Its useful life is 5 years and its residual value after 5 years will be zero. Let us assume that each of the following 5 years will generate cash inflows of CU 800'000, cash outflows (other than taxes) of 300'000 and that the tax rate of the enterprise is 30%.

Net income and net cash flow can be calculated as follows:

Useful life = 5 years	N	N+1	N+2	N+3	N+4	Total
Cash inflows	800'000	800'000	800'000	800'000	800'000	4'000'000
Cash outflows	- 300'000	- 300'000	- 300'000	- 300'000	- 300'000	- 1'500'000
Cash flow before taxes	500'000	500'000	500'000	500'000	500'000	2'500'000
Depreciation	- 120'000	- 120'000	- 120'000	- 120'000	- 120'000	- 600'000
Earnings before taxes	380'000	380'000	380'000	380'000	380'000	1'900'000
Taxes	- 114'000	- 114'000	- 114'000	- 114'000	- 114'000	- 570'000
Net income	266'000	266'000	266'000	266'000	266'000	1'330'000
Net cash flow	386'000	386'000	386'000	386'000	386'000	1'930'000

If the useful life of the asset was 3 years instead of 5, the table would be:

Useful life = 3 years	N	N+1	N+2	N+3	N+4	Total
Cash inflows	800'000	800'000	800'000	800'000	800'000	4'000'000
Cash outflows	- 300'000	- 300'000	- 300'000	- 300'000	- 300'000	- 1'500'000
Cash flow before taxes	500'000	500'000	500'000	500'000	500'000	2'500'000
Depreciation	- 200'000	- 200'000	- 200'000	0	0	- 600'000
Earnings before taxes	300'000	300'000	300'000	500'000	500'000	1'900'000
Taxes	- 90'000	- 90'000	- 90'000	- 150'000	- 150'000	- 570'000
Net income	210'000	210'000	210'000	350'000	350'000	1'330'000
Net cash flow	410'000	410'000	410'000	350'000	350'000	1'930'000

The above tables show clearly that:

- cash flow before taxes is not affected by the choice of the depreciation policy,
- the change in after-tax cash flow is due solely to the difference in the tax expense.

	N	N+1	N+2	N+3	N+4	Total
Tax expense:						
– with u.l. = 5 years	114'000	114'000	114'000	114'000	114'000	570'000
– with u.l. = 3 years	90'000	90'000	90'000	150'000	150'000	570'000
Tax saving (increase)	24'000	24'000	24'000	(36'000)	(36'000)	0
Net cash flow:						
– with u.l. = 5 years	386'000	386'000	386'000	386'000	386'000	1'930'000
– with u.l. = 3 years	410'000	410'000	410'000	350'000	350'000	1'930'000
Difference	24'000	24'000	24'000	- 36'000	- 36'000	0

The SCF is a statement derived from two successive balance sheets and the statement of comprehensive income (or the income statement) between these dates. We will see in the following paragraphs how to prepare a cash flow statement.

Using the transactional analysis<sup>4</sup> as the basis for our understanding, we can reconcile the line item changes in the balance sheet with their related income statement components to derive the cash flow consequences of the reported transactions and events. These changes are grouped according to whether they are operating, investing or financing in nature. The classification and cash flow description is given below:

#### ***Changes included in Cash Flow from Operating Activities (CFO)***

##### *Balance Sheet Account*

##### *Cash Flow Description*

<i>Accounts receivable</i>	<i>Cash received from customers</i>
<i>Inventories</i>	<i>Cash paid for inputs</i>
<i>Prepaid expenses</i>	<i>Cash expenses</i>
<i>Accounts payable</i>	<i>Cash paid for inputs</i>
<i>Advances from customers</i>	<i>Cash received from customers</i>
<i>Rent payable</i>	<i>Cash expenses</i>
<i>Interest payable</i>	<i>Interest paid</i>
<i>Income tax payable</i>	<i>Income taxes paid</i>
<i>Deferred income taxes</i>	<i>Income taxes paid</i>

#### ***Changes included in Cash Flow from Investing Activities (CFI)***

##### *Balance Sheet account*

##### *Cash Flow Description*

<i>Property, plant and equipment</i>	<i>Capital expenditure</i>
	<i>Proceeds from property sales</i>
<i>Investment in affiliates</i>	<i>Cash paid for acquisitions and investments</i>

<sup>4</sup> Adapted from White, Sondhi and Fried. "The Analysis and Use of Financial Statements", John Wiley, 1998, pp. 91-92.

***Changes included in Cash Flow from Financing Activities (CFF)****Balance Sheet Account**Cash Flow Description*

<i>Notes payable</i>	<i>Increase or decrease in debt</i>
<i>Short-term debt</i>	<i>Increase or decrease in debt</i>
<i>Long-term debt</i>	<i>Increase or decrease in debt</i>
<i>Bonds payable</i>	<i>Increase or decrease in debt</i>
<i>Common stock</i>	<i>Equity financing or repurchase</i>
<i>Retained earnings</i>	<i>Dividends paid</i>

In short, increases (decreases) in assets represent net cash outflows (inflows). Increase (decrease) in liabilities represents net cash inflows (outflows).

There are two methods of presenting cash flow from operating activities, namely the direct and indirect methods. The direct method consists in disclosing directly major classes of gross cash receipts and gross cash payments. With the indirect method, these flows are obtained by adjusting net income (or total comprehensive income) for the effects of non-cash transactions. It must be remembered that due to variations in dealing with some items like interests, dividends, etc. the analyst must be careful. An important advantage of the direct method is that it allows the user to understand better the relation between the company's net income and cash flow. A summary of the conversion is given below.<sup>5</sup>

<b>Accrual Basis</b>	<b>Additions</b>	<b>Deductions</b>	<b>Cash Basis</b>
Net Sales	Beginning accounts receivable	Ending accounts receivable	= Cash received from customers
Cost of goods sold	Ending inventory and beginning accounts payable	Beginning inventory and ending accounts payable	= Cash paid to the suppliers

It is obvious that the amounts to be included in the operating section of the SCF are the derived amounts and not the direct balances.

In the indirect method, we need to compute cash from operations by adding and subtracting various items from net income or total comprehensive income. This is the most preferred method as it is easy to prepare and understand. This method emphasizes the changes in the components of current assets and current liabilities.

The IASB encourages enterprises to report cash flows from operating activities using the direct method, but in practice most companies use the indirect method.

<sup>5</sup> Adopted from Epstein and Mirza. "Interpretation and Application of International Accounting Standards 2000", Wiley, 2000, p. 99.

## Presentation of the statement of cash flows

### *The direct method*

Cash flows from operating activities	
Cash received from customers	(+)
Cash paid to suppliers and employees	(-)
Other operating inflows	(+)
Other operating outflows	(-)
Interests and dividends paid*	(-)
Income taxes paid	<u>(-)</u>
Net cash from operating activities	I
Cash flows from investing activities	
Purchase of fixed assets	(-)
Proceeds from sales of fixed assets	(+)
Acquisition of subsidiaries and affiliates	(-)
Disposal of subsidiaries and affiliates	(+)
Interests and dividends received	<u>(+)</u>
Net cash from investing activities	II
Cash flows from financing activities	
Issuance of share capital	(+)
Capital repayments	(-)
Issuance of bonds	(+)
Bonds repayments	(-)
Payment of finance lease liabilities	(-)
Interests and dividends paid*	<u>(-)</u>
Net cash from financing activities	III
<b>Net cash flow</b>	$IV = I + II + III$
<b>Cash balance at beginning of period</b>	V
<b>Cash balance at end of period</b>	$VI = V + IV$

\*This item may be classified either in cash flow from operating activities or in cash flow from financing activities.

***The indirect method***

Cash flows from operating activities

Net profit before taxes	(+)	
Depreciation and provision increases	(+)	Adjustments for non-cash
Reversal of provisions	(-)	revenues and expenses
Gains or losses on sales of assets	(-) or (+)	
Interests paid*	(+)	Adjustments for non-operating
Interests and dividends received	(-)	cash flows
Changes in inventories	(+) or (-)	
Changes in accounts receivable	(+) or (-)	Adjustments for changes
Change in accounts payable	(+) or (-)	in working capital
Income taxes paid	<u>(-)</u>	
Cash from operating activities	I	

Cash flows from investing activities

Purchase of fixed assets	(-)
Proceeds from sales of fixed assets	(+)
Acquisition of subsidiaries and affiliates	(-)
Disposal of subsidiaries and affiliates	(+)
Interests and dividends received	<u>(+)</u>
Net cash from investing activities	II

Cash flows from financing activities

Issuance of share capital	(+)
Capital repayments	(-)
Issuance of bonds	(+)
Bonds repayments	(-)
Payment of finance lease liabilities	(-)
Interests and dividends paid*	<u>(-)</u>
Net cash from financing activities	III

**Net cash flow**  $IV = I + II + III$

**Cash balance at beginning of period** V

**Cash balance at end of period**  $VI = V + IV$

\*This item may be classified either in cash flow from operating activities or in cash flow from financing activities.

Let us see how to prepare the statement of cash flows from the given balance sheets and income statement using both the direct and indirect methods.



## Financial accounting and financial statement analysis

### Example 2:

Given below are the financial statements of ABC Co. for years 1 and 2. Prepare a statement of cash flows using both the direct and indirect method.

#### Balance sheets as at the end of years 1 and 2 (all figures in millions of CU)

	Year 1	Year 2
<b>Assets</b>		
Cash	150	200
Accounts receivable	0	200
Inventory	50	35
<b>Current assets</b>	<b>200</b>	<b>435</b>
Investment in affiliates	15	35
Buildings	300	350
Accumulated depreciation	-100	-125
<b>Fixed assets</b>	<b>215</b>	<b>260</b>
<b>Total assets</b>	<b>415</b>	<b>695</b>
<b>Liabilities</b>		
Short-term borrowings	65	120
Accounts payable	75	150
Accrued liabilities	75	50
Interest payable	0	25
Taxes payable	0	25
Dividend payable	0	50
<b>Current liabilities</b>	<b>215</b>	<b>420</b>
Bonds payable	100	125
<b>Total liabilities</b>	<b>315</b>	<b>545</b>
Common stock	50	75
Additional paid-in capital	50	50
Retained earnings	0	25
<b>Stockholders' equity</b>	<b>100</b>	<b>150</b>
<b>Total liabilities and equity</b>	<b>415</b>	<b>695</b>

#### Statement of comprehensive income for year 2 (all figures in million of CU)

Net sales	1'000	
Cost of goods sold	-600	
<b>Gross margin</b>		<b>400</b>
Operating expenses	-75	
Depreciation expense	-25	
Rent expense	-50	
Interest expense	-125	
<b>Profit before taxes</b>		<b>125</b>
Tax expense	-25	
<b>Profit for the year</b>		<b>100</b>
<b>Other comprehensive income</b>		<b>-</b>
<b>Total comprehensive income</b>		<b>100</b>

#### Change in retained earnings

Beginning balance	0	
Profit for the year	100	
Dividend declared	-75	
<b>Ending balance</b>		<b>25</b>

## Financial accounting and financial statement analysis

### Cash flow statement for year 2 (all figures in millions CU)

#### Direct method:

##### **Cash flows from operating activities**

Cash received from customers	800	
Cash paid to suppliers	-510	
Other operating outflows	-150	
Interests paid	-100	
Income taxes paid	0	
Net cash from operating activities		40

##### **Cash flows from investing activities**

Purchase of buildings	-50	
Investment in affiliates	-20	
Net cash used in investing activities		-70

##### **Cash flows from financing activities**

Issuance of common stock	25	
Issuance of bonds	25	
Short-term borrowings	55	
Dividends paid	-25	
Net cash from financing activities		80

**Net cash flow** **50**

**Cash balance at beginning of year 2** **150**

**Cash balance at end of year 2** **200**

#### Indirect method:

##### **Cash flow from operating activities**

Profit before taxes	125	
Depreciation expense	25	
Change in inventories	15	
Change in accounts receivable	-200	
Change in accounts payable	75	
Change in accrued liabilities	-25	
Change in interests payable	25	
Change in taxes payable	25	
Tax expense	-25	
Net cash from operating activities		40

##### **Cash flows from investing activities**

Purchase of buildings	-50	
Investment in affiliates	-20	
Net cash used in investing activities		-70

##### **Cash flows from financing activities**

Issuance of common stock	25	
Issuance of bonds	25	
Short-term borrowings	55	
Dividends paid	-25	
Net cash from financing activities		80

**Net cash flow** **50**

**Cash balance at beginning of year 2** **150**

**Cash balance at end of year 2** **200**

## Financial accounting and financial statement analysis

### Working notes:

Cash received from customers = net sales – increase in accounts receivable = 1'000 – 200 = 800

Cash paid to suppliers = cost of goods sold – decrease in inventories – increase in accounts payable = 600 – 15 – 75 = 510

Other operating outflows = rent expense + operating expenses + decrease in accrued liabilities = 50 + 75 + 25 = 150

Interests paid = interest expense – increase in interest payable = 125 – 25 = 100

Income taxes paid = tax expense – increase in taxes payable = 25 – 25 = 0

Dividends paid = dividends declared – increase in dividends payable = 75 – 50 = 25

In the case of acquisitions and divestments, the SCF should report the impact of acquisitions separately. Hence, the balance sheet, the statement of comprehensive income and the SCF need to be reconciled by the analyst. This will help the analyst to explain the distortion in trends of cash flows.

We have seen that the statement of cash flows bridges an important gap in the analysis of the performance of companies. In most countries, the statement of cash flows is an integral part of the financial statements available to stockholders. Analysts appreciate the use of this tool because of its ability to take care of most problems arising from accounting policy changes. They also realize that cash flow is as important as profitability, if not more, for an organization.