CHAPTER 1

Introduction to Management Accounting and Cost Accounting

FEATURE STORY

JETS Unlimited SE is a European-based airline positioned in the low-cost flight sector. Since its foundation in 2008, the company has been successfully competing with the incumbents in the market. Joana Hansen, Head of Operations and member of the executive board, meets with Carol Marino, Chief Management Accountant, to discuss the most recent management report and other upcoming decisions.

Joana: Carol, thanks for sending me last month's management report this morning. I've already had a couple of minutes to look at it.

Carol: No problem. I'm sorry, though, that it came through a day later than usual. My team and I had to adjust data for the extraordinary effects resulting from the strike at Paris Airports two weeks ago.

Joana: I saw that. More than 50 of our flights were cancelled. We've lost 10 per cent of the monthly revenues, and operating profit is down by almost 35 per cent!

Carol: Yes, but without this one-time effect, our sales and profits would have been in line with the plans. Fortunately, they've now reached an agreement in Paris, so that further strikes are called off. I'm confident that next month's plan will be met.

Joana: Another thing that caught my attention was the capacity utilization. Our seat-load-factor has slightly decreased from 87 per cent to 84 per cent. This means that our planes are less utilized. Is this anything to worry about?

Carol: I noticed that too. But the decline is a cyclical effect. I checked with the reports from the previous two years. We've had this situation every year around this time. I'm not expecting this to become a negative trend. That's why I didn't highlight it in the report.

Joana: The other thing I wanted to talk to you about is the pending decision about outsourcing our on-board catering. You know, we have the offer of an external airline caterer on the table. Have you made any progress in the analysis?

Carol: My team needs one more day to finalize the presentation for the management board. We were able to extract all relevant information from the cost accounting system. It looks as if outsourcing is a feasible option. But I want to wait until all the number crunching has been finalized.

Joana: I'm glad I've got you and your team. The other board members have become increasingly impatient in this matter. They want a decision soon. However, I'm not going to decide anything without having seen a thorough cost–benefit analysis.

Carol: Absolutely. We've measured the performance of our internal catering services over the last two years. This is a good basis for comparison with the outsourcing offer. A large amount is characterized by fixed costs. If we're able to eliminate most of the fixed costs within a year, the outsourcing deal makes sense.

Joana: Another component of this decision will be more difficult to assess. If we're really going to accept the outsourcing deal, we'll have to downsize and restructure the existing catering operations. This also means laying-off employees. We'll have to answer some ethical questions, too.

Carol: You're right, that part should not be neglected. However, our accounting system will hardly help in this aspect. This will rather require a lot of tact and sensitivity.

LEARNING OBJECTIVES

After completing this chapter, you should be able to:

1. Define the purpose of accounting
2. Understand the importance of accounting information for doing business
3. Describe the "Accounting Family" and differentiate financial accounting from management accounting
4. Explain conceptual differences in management accounting between countries and world regions
5. Understand the German approach to "Controlling" compared to Anglo-American management accounting
6. Describe the role of a controller in an organization
7. Discuss ethical aspects of accounting

The Purpose of Accounting

Information Needs in Business

Imagine you take the job of general manager in a medium-sized manufacturing company that is active as supplier for most of the major car manufacturers around the globe. You make decisions, you coordinate activities of other people working inside and outside of your own company, you motivate your direct employees, you explain tasks and goals, etc. What do you need most in order to accomplish your tasks? A brand-new computer? A personal assistant? A big office? These things might all help, but your most important resource most likely is – information!

Information has probably become the most valuable resource in modern business. In today's business environment, rational decisions and actions – that is, those that help achieve company goals – would be virtually impossible without access to information. Companies spend a great deal of effort, time, and money on making sure that the right information is available to the right people in order to make the right decisions and initiate the right actions. Information is required for many different tasks:

1. **Planning:** Simply speaking, "planning" is about anticipating potential future events and developments or future consequences of today's decisions and actions, respectively. Plans are by nature uncertain, because nobody can anticipate the future with absolute certainty. But plans can be made more "robust" when they are based on past experience and when they take into account what is already known about future developments. Businesses therefore strive to base plans on a solid foundation of information about past achievements and potential future developments.

2. **Documenting:** A documentation of what has happened and what has been done in the past can be a valuable source of information in business – for a number of reasons: First, it can be a reference for future decisions and actions. Knowing how things have been done previously can help us avoid making the same mistakes again. Documenting the past therefore is a necessary (albeit not sufficient) condition for learning. Second, businesses also rely on documentation when it comes to assigning responsibility and accountability for past actions and decisions. Documentation can help clarify whether the right people have been involved and who has actually made a particular decision. Third, documentation can also serve as a justification: given the information available at the time of the decision, management had to act the way it did. Given hindsight, a different decision might have been more advisable, but documentation proves that the decision was justified at the time it was taken.
3. **Decision making:** Decisions involve choices between alternatives. Even the decision not to do anything is a choice – one could have done something instead. A rational decision maker will try to make sure that they take the right decision – that is, picking the one alternative that promises the greatest reward. Generally speaking, decision makers will try to identify the alternative that offers the highest probability of achieving the defined goals. Identifying this optimal alternative is possible only by having information on likely future consequences of each decision alternative, necessary conditions for each alternative to be realized, or potential conflicts with other decisions that have to be made at the same time.
4. **Monitoring and Feedback:** Businesses want to make sure that things evolve in the intended manner: goals have been set with the intention of achieving them, projects have been started in order to be completed as planned, and rules have been set based on the expectation that they are observed. Planning and decision making therefore inevitably involve an element of control. Again, this control would be impossible without information – both about the original goals and plans as well as about actual achievements and developments.

Acting in a business environment is therefore virtually impossible without using information of various kinds. The users of business information hold different positions and follow different interests. It is common to distinguish information users belonging to the company from those that are outsiders to the company. The most important type of information user within the company is certainly company management. But management tasks are not concentrated only at the top of a company. Key account managers, project managers, product managers, or team leaders in the company's research and development (R&D) department all perform management tasks. Their scope of responsibility as well as the primary object of management differs. Depending on their area of responsibility they need information on different subjects and to differing degrees of detail, but they all must make decisions, must plan ahead, and must control goal achievement.

Company employees with management functions are not the only users of information, though. Even if not working for a particular company (be it in a management position or in a purely operational role), one might still have a high interest in collecting information on that company's business activities:

- **Investors** must decide whether they want to become owners of the company (for instance by purchasing shares in the company). Thus, they are interested in the company's past performance as well as in its future outlook.

- **Creditors** must decide whether they can safely lend money to the company or whether they run the risk of losing their money (for instance, should the company go bankrupt in the near future). They will therefore look for information on the company's creditworthiness, its past track record of servicing debt and on its expected future business success.
- **Suppliers and customers** must decide whether they should enter into a business relationship with the company. This decision will depend on the company being able to fulfill contractual obligations.
- **Society** might be interested in learning about how the company uses natural resources, treats its employees and deals with the potential negative effects of its business activities on society. Thus, even without a direct business relationship many people might want to get information on what a particular company is doing or how it is dealing with a certain problem.
- Last but not least, **public authorities** need information on the company's business activities. A very important reason is the need to determine the company's tax burden. Levying taxes is possible only if tax authorities can determine the tax base. Taxes on company earnings therefore can be set only if tax authorities have information on how the company has determined its earnings and whether all business activities have been properly taken into account when determining earnings.

With potential information users and information needs being so diverse, it is clear that there is no single information source within a company that could fulfill all possible information needs. The information required is of a very different nature: some users look for "hard facts" and pieces of information that can be expressed in monetary values. Others will rather need "soft," textual information.

Different Sources of Information for Businesses

We have described various uses of information in a business organization and also have outlined the many different types of users of information. We have not yet, though, talked about sources of information: where can decision makers and other users find all the information they need for their job?

A considerable amount of the required information relates to the company itself and its activities. The company therefore needs systems and tools to track its diverse business activities: ordering raw materials from suppliers, hiring new staff, paying open bills, planning the manufacturing program for the next period, checking the quality of goods produced, delivering orders to customers. A modern business is a continuous stream of individual activities, which in their entirety define "what's going on" in the organization. The amount of information that can be collected is enormous and companies implement a variety of tools and systems to keep track of it.

But not all types of events and activities are equally well suited to be recorded and tracked in a systematic manner. Some events, states, or developments will best be expressed in terms of qualitative information – that is, information that is predominantly in verbal or textual form: rumors about competitors' future activities, complaints from customers, news about promising results in the research department. Information of this kind might be extremely valuable for users both inside and outside the organization and will be best expressed in qualitative form (text). Other events and states, though, can readily be expressed in quantitative form – that is, information that can be expressed in numbers. Inventory levels, monthly sales revenues, purchasing expenses, number of staff in the manufacturing department can all be documented and further processed in numerical format. Quantitative information of this kind accounts for a large part of the business information that is continuously recorded and processed within a company. Organizations typically have set up dedicated systems for this purpose, the centerpiece being the accounting system.

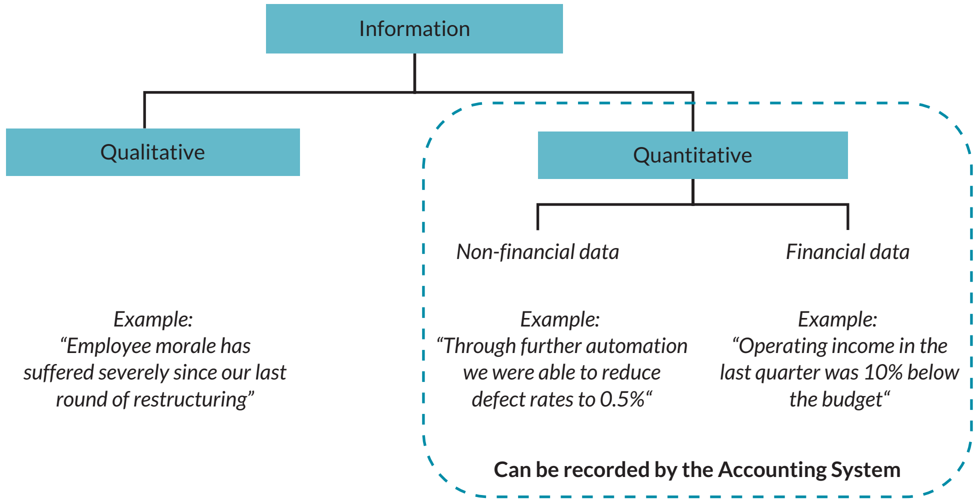

Exhibit 1.1 Types of business information

A Definition of Accounting

Accounting denotes the system that records, analyzes, and reports all business transactions of a company in a systematic and comprehensive manner in order to provide useful information to users inside and outside the company. Accounting is a "system" because it comprises various elements that are logically connected with each other: individuals (accountants) use various tools (for instance computers and accounting software) and follow certain procedures in order to produce its main output: information. Accounting systems typically record only quantitative information.

Accounting is not the only system to keep track of quantitative information within a company. Quantitative information might also be recorded and processed in customer databases, quality management tools, production planning systems, or HR files – to name just a few. But accounting is typically the central piece in a company's information landscape.

The Job of an Accounting System

As we have previously outlined, not all events and developments can be tracked in the company's accounting system. Clear rules are needed to determine what accounting does and what it does not do. Without going into too much detail we can say that the accounting system:

1. records and stores
2. the stocks and flows
3. of scarce goods and resources

4. that have a value to the company in order to
5. ensure efficient and effective use of these goods and resources.

This general accounting definition contains a number of important concepts and notions:

- First, the basic accounting system is primarily concerned with keeping track of what is happening or has happened. Accounting as such does not judge or interpret events and states; it merely documents them. Accounting is expected to be neutral and objective.
- Second, accounting records and documents both stocks and flows. Stocks always refer to a certain point in time. The question how much money you have in your pocket can be answered only by referring to a certain date and time: today it might be this sum, but tomorrow it might be a totally different sum. Stocks therefore must be linked to points in time. Flows, in turn, happen over time: money is spent or earned, resources are consumed or built up. Flows refer to a period between two defined points in time. The basic accounting system deals with both: points in time (for stocks) and periods (for flows).
- Third, stocks and flows are recorded only for scarce resources and goods. An economic good or resource is scarce if and when the amount available is not sufficient to satisfy the total demand for it. Scarcity leads to the central problem of all economic actors: since the available amount is limited, one has to make optimal use of what is available. If a resource were available in abundance, no business actor would have to care about the amount consumed – there would always be more available if needed. It therefore only makes sense to keep track of the stocks and flows of scarce goods and services. Abundant goods can simply be ignored.
- Scarcity provides a value to goods and resources: since the amount available is not sufficient to satisfy the needs of all business actors, these business actors must compete for what is available. Those who have a higher need will be willing to give up more in return for receiving the scarce resource. The value of a good or service is therefore determined by its supply in relation to the demand for it. Goods and services that do not have value need no specific attention, since their consumption or production will not alter the business actor's economic performance. This performance, in turn, depends on the values consumed in relation to the values generated. It is this comparison that is used as the central yardstick of business performance in accounting.
- Last but not least, the preceding statements should have made clear that keeping track of the stocks and flows of scarce resources serves the primary purpose of allowing the best possible use of these goods in the company. In order to avoid waste (that is an unnecessary consumption of scarce, valuable goods and services) one has to keep track of their generation and consumption. From this thought we can derive the basic economic principles of efficiency (the relation between input and output) and effectiveness (the relation between goals set and degree of achievement of these goals).

The "Accounting Family"

It is the basic accounting system that keeps track of all business activities that match the above criteria. Quite often, the accounting system is further divided into specialized subsystems. The most important link between all accounting subsystems is their common information base. We will explore these individual accounting subsystems in this section.

The basic accounting system serves as the foundation for its other accounting siblings, namely financial accounting on the one side and management and cost accounting on the other. These, in turn, process the basic accounting data further in order to generate the reports, analyses, or forecasts required by decision makers. The accounting subsystems take different perspectives on how values are determined and serve different economic purposes. This is the root cause for the differences between them.

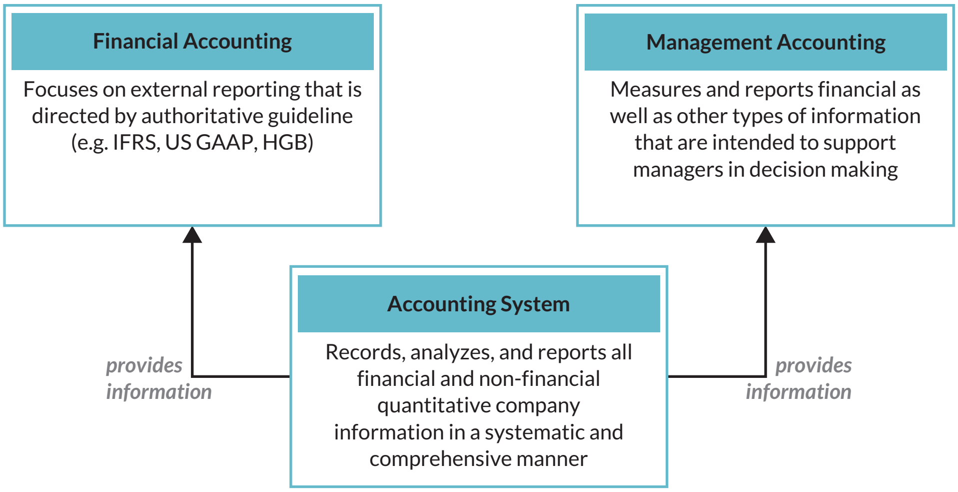

Exhibit 1.2 Accounting systems

Accounting information serves different purposes and is used by users with different needs. As we have outlined in the previous sections, this information variety can be generated only if the company's accounting system is further differentiated. The "accounting family" comprises several "relatives." And just as in a family of humans, family members share certain common traits, but differ from each other in some other characteristics.

Financial Accounting

Many different stakeholders want to learn more about a company's business. Creditors might want to know whether the company stands a good chance of paying back loans. Investors might want to assess whether the company has a successful business model that promises high returns in the future. Tax authorities have to determine a base for the company's tax payments. Suppliers and customers need to know whether the company will be a reliable business partner to deal with. All these parties have one thing in common. They are outsiders to the business.

But being outsiders to the company, they all lack hands-on information on the company's daily operations and business transactions. They will find it very hard to get information themselves that is both reliable and meaningful and can be compared with information provided by other companies.

The information needs of external decision makers therefore must be satisfied by the company itself. The system collecting and preparing this information is called "financial accounting." Financial accounting is responsible for processing the basic accounting data further in order to prepare reports that are useful to external decision makers.

However, if companies were left on their own to decide what information they publish to outsiders and what not to publish, the reports would be very different in the best case if not complete chaos. At least we could say they would not be comparable to other companies' reports. However, comparing is what outside decision makers like investors and creditors normally do. They compare businesses to decide what the best investment is, or what interest rate to charge for a loan.

This problem is resolved by setting clear rules on what kind of information companies must make available to the public and how this information is to be structured in order to be of use for external parties. Financial accounting therefore is subject to *extensive regulation* – both at a national and international level. Statutory provisions and international guidelines like IFRS (International Financial Reporting Standards) determine which financial information must be made available, when and how often this has to happen, and how the information is to be generated and presented in order to serve external decision makers' needs.

However, business organizations will be reluctant to provide too many details about their operations and individual business transactions. After all, public information is accessible to everybody – including competitors! This is why the information provided in financial accounting reports is not as detailed and is rather based on the company as a whole. Financial accounting information need not go into each and every detail. External decision makers need not know about individual business transactions (even though sometimes they might want to get more insight). Instead, they can confine themselves to *aggregate* information that provides a sufficiently good picture of the company's financial performance. Financial accounting therefore provides only very limited information on the company's individual products, customers, or projects. For instance, a financial accounting report of Apple Inc. would disclose the profit for the year for the whole company, but it would not provide the profit margin made on its latest iPhone model.

On the other hand, external decision makers have a strong interest in receiving *complete* information: no *relevant* transactions or business developments are to be left out because this might bias their decisions. Financial accounting therefore must record and report events and transactions also if they are exceptional ("extra-ordinary"), but material (that is, influencing the company's overall business situation). Whether the company faces financial problems because it cannot sell its products in the market or because it suffers from the effects of a natural disaster might have the same effect on the company's creditors. Therefore, all material events and transactions must be taken into account when preparing financial accounting reports.

Financial accounting information is predominantly dealing with the past – for at least two reasons: First, companies would be very reluctant to provide information on their future plans and goals to the general public. It would simply be unrealistic, unfair, and probably unfeasible to ask them to publish this information. Second, external decision makers rely on the information providing a faithful picture of the company's performance. Information about the future is uncertain and subjective by nature. Nobody knows for sure what will happen – not even the company itself. Information about the future is difficult to standardize and even more difficult to analyze without access to detailed data. The reports prepared by financial accounting therefore follow a different path: Their main objective is to provide a complete, objective, and well-structured overview of the company's past and present financial performance. It is then up to external decision makers themselves to draw conclusions about the future from the information provided.

Cost and Management Accounting

Now let us turn to decision makers within the company itself. The most important group of internal decision makers is managers. Managers must make decisions, set goals, and motivate others to work for these goals, they must plan ahead and monitor whether plans have been achieved. Management is not confined to the company's top management only. In fact, management tasks can be found at different hierarchical levels. Project managers, key account managers, and product managers all have a need for accounting information in order to accomplish their tasks. Their main information source is management accounting. Management accounting processes the accounting data in order to prepare information that is of use to internal decision makers. Since many decisions deal with avoiding unnecessary resource consumption and an efficient use of available resources, cost information is probably the most important type of management accounting information. In fact, cost accounting – that is the system that gathers, analyzes, and reports cost information in the company – is often considered the central element of management accounting. But management accounting comprises more than just cost information, since managers also need more than only cost information for their decision making.

Since managers are primarily concerned with the performance of their own company, comparability and standardization of accounting information is of lower relevance. Instead, the information must fit to the specific management question that has to be tackled in a given situation: The decision to accept an order at the price demanded by the customer will require different information than the plan to extend company operations to a new country. The annual review of customer satisfaction will be based on a different set of information than the weekly quality report. Apple Inc. needs to know exactly how much profit they earn on one single iPhone produced and sold to a customer in a particular country. Many more examples could be given for the extremely high information variety demanded by managers. The key success factors for management accounting consequently are "focus" (information must be targeted towards the specific management task) and "relevance" (information must fit managers' needs).

Fortunately, management accounting is free to process and to structure the information as needed. Management accounting is hardly regulated at all (with the exception of some industries that are subject to a higher degree of regulation). In fact, management accounting is not mandatory at all – companies implement a management accounting system only because they have a need for the information. Management accounting can then process basic accounting data as needed, can compile individual reports and analyses, and can choose the level of detail and frequency that is most appropriate for the management task in question. We summarize the most important differences between management accounting and financial accounting in the table in exhibit 1.3.

From the above, it is immediately clear that accounting data – if it were to be exchanged between companies – would be very difficult to compare across different organizations. Scope and content, structure, and interpretation of management accounting information is difficult to assess for an outsider, there are no national or supra-national standards or legal regulations that could serve as a common yardstick across companies. Usually this is not a problem, because the only users of management accounting information are company managers. They need to understand the information they receive – but nobody else does.

	Financial Accounting	Management Accounting
Information users	External – investors, creditors, suppliers, government and tax authorities	Internal – all management functions within the company
Purpose of information	Help investors, creditors, and others make investment, credit, and other decisions	Help managers plan and control business operations
Focus and time dimension	Reliability, objectivity, and focus on the past	Relevance and focus on the future
Obligation for preparation	Mandatory	Not mandatory
Type of report, regulation	Financial statements restricted by accounting standards (IFRS, US GAAP, HGB, etc.)	Internal reports not restricted by accounting standards – tailored to specific decisions
Presentation of accounting information	Content and format highly standardized across companies	Not standardized, individual contents and formats
Verification	Annual independent audit by certified public accountants	No independent audit
Level of detail	Summary reports primarily on the company as a whole	Detailed reports on parts of the company (products, customers, market segments, etc.)
Frequency	At least on an annual basis, sometimes quarterly	Varying, often on a weekly or monthly basis

Exhibit 1.3 Differences between financial accounting and management accounting

Financial accounting and management accounting are not totally separate. They not only share the company's basic accounting data as their common information base. They possess some more common traits. The most important one is the focus on company performance: They both measure company success by netting value generated and value consumed, but differ in the value concept used and the scope of activities considered when measuring value. This will further be outlined in Chapter 2.

Is Accounting a Universal Language?

We have described accounting as the major information source of decision makers in business. Their information needs differ depending on whether they are members of the business or not. This gives rise to the distinction between financial accounting on the one hand and management accounting on the other. Justified as this differentiation is, one might still assume that each one of these two disciplines is homogenous across nations. After all, aren't many problems and challenges that a typical decision maker faces similar or even identical all over the world? Typical management tasks such as keeping track of inventory levels, documenting resource consumption for a specific product, or planning future personnel cost are universal in nature. Shouldn't then managers' information needs be universal as well? The same reasoning of course applies to financial accounting. Investors or creditors have the same economic interest across countries, no matter which language they speak. Shouldn't accounting be a "universal language of business" all over the world?

This view of accounting as a globally oriented business discipline can be maintained only at a very abstract level, though: if we disregard cultural, regulatory, or institutional differences between countries then the fundamental economic problems can indeed be dealt with in a common "accounting language." The problem is that at such a high level of abstraction, accounting loses its link to daily operational business. A global accounting language might be feasible – but at the cost of losing its benefit to decision makers!

As we will see during the entire course of this book, accounting has found quite different solutions in different countries to the same fundamental business problems. You are asking why? Decision makers all over the world might be confronted with the same kind of business decisions, but their information needs are not universal: they have different cultural mind-sets, act under different legal regimes, and are part of different institutional environments.

The same also applies to accounting researchers. Very few of them are truly "global minds." Most of them have been trained in specific national environments (universities, businesses, professional bodies, etc.) and work in the same environment. Their case studies and corporate contacts typically reside in the same country. It is only natural, then, that accounting academics will focus their attention on business problems as they appear in this specific national environment. They write about the results of their work in their working language and they read journals and books that are published in their working language. How should an academic or accounting practitioner learn about new concepts and approaches if these are made available only in sources they have no access to and are explained in a language they do not understand?

Another reason for the diversity of accounting across the world is probably a mixture of overconfidence and reluctance to change. Unfortunately, sometimes we tend to believe that the way we do things and the way we have done things in the past is always right. Accountants are no different in this respect.

Doing accounting research across countries of course is possible. Indeed, a subdiscipline of accounting – so-called "comparative accounting" – is explicitly focused on differences in the accounting systems across countries. This book is not about comparative accounting, but we consider it both necessary and interesting for a business student to understand at least the basic differences in accounting systems and practices between countries. Since we deal with cost and management accounting in this book, we put the emphasis on this subdiscipline and only very briefly touch on the world of financial accounting.

Differences in Financial Accounting

Financial reporting evolved in each country within its own borders, which resulted in substantial differences. But why would national legislators and regulators set different rules and frameworks for the same basic financial accounting problems? The national differences are deep-seated and they can be explained mainly by three factors: (1) the sources of finance, (2) the existing legal system, and (3) the link between accounting and taxation.

1. **The sources of finance:** When companies grow they are in need of capital. What sources of capital do they have? They can borrow from a family member, from a bank, or even rely on state-financing. Alternatively, a company could issue shares on a stock market. While the first group would be creditors and provide debt financing to the company, issuing shares would be a type of equity financing.

   In the past, companies in different countries relied on different sources of capital. While in some countries equity financing was predominant, creditor financing was preferred in other countries with less developed equity capital markets. Examples of countries with preferred debt financing are France, Italy, and Germany. Typical countries with preferred equity financing are the UK and the US. As a result, financial accounting information has been tailored to the particular information needs of the providers of capital. Today, creditor preferred countries have shaped financial accounting regulations to protect creditors' interests. Financial accounting rules and legislation therefore lead companies to minimize profit in order to limit the distribution of earnings to company owners and maintain a high level of equity instead. Companies must follow a prudent valuation of assets and treat unearned profits differently than potential future losses. For instance, they would rely on historical cost data and be very suspicious about current (and volatile) market prices in financial accounting reports.

In contrast, countries with a strong tradition in equity financing shaped accounting requirements to the needs of equity investors. These countries expect financial accounting to provide a "true and fair view" of a company's current business performance. This guiding principle will lead to different rules, though, when it comes to (re-)valuating assets and liabilities, for instance. The same asset (let's say real estate owned by the company and used for company operations) might therefore have different book values depending on whether financial accounting follows German or US standards.

2. **The existing legal system:** Over time, in countries across the world, two types of legal systems have developed: Case law and code law systems. The case law system originated in England and is characterized by a legal system that is based on case by case decisions rather than general rules that apply to many situations. As a result, in a case law system, we have large amounts of detailed rules for individual cases. Accountants in these countries appreciate the clear guidance for each and every particular situation. A downside is the ever growing size and complexity of such a rules-based accounting system.

   In case law countries, accounting regulation is typically in the hands of private institutions ("standard setters"), usually with some formal (governmental) backing. Developing new rules follows an inductive approach. That is, only if a particular accounting problem comes up, the standard setter starts to develop new accounting guidelines. Usually, this is done by researching how a particular accounting problem has been solved in the past in practice. Preparers and users of accounting information can to some extent participate and influence the development of a new standard.

   In contrast, code law systems are characterized by few, more abstract and general rules to give guidance in a wide range of situations. It has its origin in continental Europe. Accounting regulation is typically in the hand of governments. The development of new accounting rules follows a deductive approach and is principle-based. A general, rather abstract, rule is developed and applied to all kinds of situations without getting too specific.

   Today, typical code law countries are Japan, France, Spain and Germany. Case law countries are the US and basically all countries that have been influenced by the UK (commonwealth countries). Also, the International Financial Reporting Standards (IFRS) are influenced by promoters of a case law system, even though the institution that creates the IFRS (the International Accounting Standards board – IASB) claims IFRS to be rather principle-based.

3. **The link between accounting and taxation:** Governments usually levy taxes from companies. In some countries, the tax authorities utilize information provided in financial accounting to determine taxable profit. Tax accounts must be identical to financial accounts (the so-called principle of congruency). In this way, companies can kill two birds with one stone – they prepare financial statements and file them at the same time with their tax office.

In other countries, tax accounting and financial accounting are separate. Special accounts have to be filed for tax purposes. This sounds inefficient? Why the double work? The problem is that the objective of financial accounting is usually very different from tax accounting. While the firm might want to attract investors with a strong financial performance, they are on the other hand not necessarily interested in paying high taxes. Showing high profits in financial accounting and low profits in your tax files would not be possible if you prefer (or are required!) to use only one set of financial statements for both purposes. Countries with a traditional link between financial accounting and taxation are Germany, France and Italy. It is obvious that a strong link to tax accounting is often found in countries that do not have an explicit equity investor focus. Financial accounting is influenced through the back door by fiscal considerations of a particular government. You can imagine that this might harm the information aspect of the financial reports.A country with a clear separation between financial accounting and tax filings is the US. Thus the US claims that its accounting rules (the US GAAP) are more relevant for investors.

Whatever system you may favor, you begin in any case to understand that financial accounting can differ from country to country. Is this the end to a global regulatory framework for financial accounting? Not necessarily! In fact, supra-national frameworks are already in place today and national frameworks gradually converge. This process is called harmonization. But as long as the above factors hold true, and governments stick to their local traditions in accounting, financial accountants will still have to adapt to national differences in their systems.

Differences in Cost and Management Accounting

Unlike financial accounting, management accounting is typically not subject to detailed regulation and statutory provisions. It is up to the individual company to decide how – and whether at all – it wants to implement a cost and management accounting system. One might assume, therefore, that superior practices are developed and once they have been implemented by one company can easily be adopted by its peers – both at a national as well as at a cross-national level. However, to date, such a worldwide common body of best practices in cost and management accounting has not evolved. Instead, we can observe quite large differences in cost and management accounting approaches between countries. This is due to a number of reasons:

1. First of all, **regulation of financial accounting** has a strong, albeit indirect, effect on management accounting practices. National legislation and international accounting rules determine the scope of accounting duties (Who has to document what, and to what level of detail?), and the structure of annual accounts (How is the information presented to third parties?). Regulatory environments that place the main emphasis on protection of creditors' interests (as for instance the case in Germany) force companies to be very prudent and conservative when setting up financial accounting information. This information is consequently not well suited for supporting internal decision makers who need the "true and fair view" of the company's current business performance. This view is much more common in the Anglo-American accounting sphere. German management accounting, therefore, had to develop its own approaches and new ways of handling business situations that differ from what is recorded and reported in financial accounting following German rules. Management accountants in the US, in contrast, can base their work much more closely on financial accounting information than their German counterparts.

2. Although a comprehensive set of rules and regulations for management accounting is missing both at the national and the international level, management accounting practices are nevertheless influenced by the **legal and economic framework**. Industries might be subject to specific regulation as regards setting of market prices (such as price controls in monopoly situations), might have to follow specific rules as regards product costing schemes for public contracts (such as civil engineering), or might operate under schemes protecting them from foreign competition. Deutsche Telekom, for instance, the biggest telecommunications service provider in Germany, has long been in a quasi-monopoly position for most telecommunication services. Its prices, then, were subject to regulation and Deutsche Telekom had to provide detailed documentation on its cost structure and on costs incurred for providing particular services to customers. These information requirements had immediate effects on the set-up and the focus of its internal cost accounting system, because it had to serve the needs of external regulatory bodies. Likewise, specific economic conditions such as high inflation or tax regimes will have a direct effect on what management accounting has to cope with and which tools and concepts it uses in order to do so.
3. A third important factor explaining national differences in management accounting can be traced back to **academic and professional accounting education**. In some countries, strong professional bodies (such as the Chartered Institute of Management Accountants – CIMA in the UK or the Institute of Management Accountants – IMA in the United States) oversee the training of future management accountants as well as act as the central professional body for trained management accountants. Bodies such as CIMA therefore have a strong influence on tools and practices employed in their country – all the more so since many practicing management accountants have not studied what could be considered a "relevant subject" for their profession (such as business or economics) and thus the common body of technical knowledge is often acquired through the professional association. In other countries, there are only voluntary professional bodies for management accountants, which have a much weaker role both in training and in representing the profession in the outside world. Countries such as Germany or Belgium, for instance, have put management accounting training mainly into the hands of universities. In Germany, most management accounting practitioners have learned their profession during their studies. "Career changers" entering management accounting from other disciplines are the exception rather than the rule. Their use of management accounting tools and their skills in certain techniques and concepts mostly depend on academic curricula and less on what other professional peers have been practicing in the past.
4. Although management accounting might seem to be a "number-focused" discipline it is subject to **cultural and historical influences**. Different cultures have different ways of dealing with uncertainty or power differentials between individuals. Management accounting practices will reflect such differences when it comes to long-term planning, setting of incentive schemes, or implementing performance measurement systems, for instance. Likewise, national management accounting practices are influenced by other countries through a shared common language (an important factor for the worldwide dissemination of Anglo-American management accounting concepts) or historical periods of close ties between countries (such as colonialism). Both factors make it more likely that countries also share management accounting concepts and approaches.

National Differences in Management Accounting – Problem or Strength?

We have outlined several factors that explain why management accounting practices differ between countries and world regions. We have not yet asked a question that is closely connected to it: Would it be desirable to have a single, uniform way of practicing management accounting across the world? Or to put the question differently: What's wrong with having differing ways of doing management accounting across countries?

The answer to this question is not easy and indeed many scholars and practitioners have spent a great deal of time and effort investigating not only the causes of national differences but also potential benefits that could be gained from harmonization. The most common arguments against a nationally fragmented system of management accounting are the following:

- National and regional differences in management accounting lead to **inefficiencies**. With businesses more and more acting on an international or even global scale, they need systems that are uniform across all countries they operate in. The time and effort invested in harmonizing plans or processes across national subsidiaries could be better used for more productive ventures.
- National and regional differences in management accounting cause **confusion** and lead to **misunderstandings**. If the same notion has different meanings across countries, and is interpreted (and acted upon) differently by management accountants, a business will not achieve its full potential: decisions made at local level might be in conflict with each other, plans and strategies are interpreted differently, accounting data is processed in different ways and leads to different decisions depending on which national management accounting paradigm is prevailing.

The case against national differences in management accounting is not so clear-cut, however. Indeed, there are equally valid arguments in favor of such differences. Advocates of a globally diverse landscape in management accounting put forward the following arguments:

- National and regional differences in management accounting are a **source of competitive advantage**. Better management accounting concepts and practices will lead to better management decisions. Diversity of management accounting practices is thus fostering management innovation. Why should such diversity be sacrificed in favor of a potentially less effective uniform system?
- National and regional differences in management accounting are a source of **increased corporate performance.** Companies compete not only in product quality or service levels offered to customers. They also compete in management practices and business processes. If some management accounting practices prove to be more effective than others, companies will adopt them. Other and less useful concepts will be abolished, since companies continuously strive to increase their performance and therefore are on the lookout for concepts and practices that help them in this quest.

National and regional differences in management accounting are a matter of fact. The question of whether these differences should be considered positive or negative is somewhat academic, since we have to deal with them in any case. Experience tells us that diversity of management accounting practices has not significantly diminished in the past few decades, although information exchange and communication among management accounting scholars and practitioners has become easy and almost costless across nations. No matter whether you consider differences between German and Anglo-American management accounting inefficient and harmful or natural and potentially productive, they are a matter of fact which one has to deal with.

German "Controllers" versus "Management Accountants"

This book deals with concepts and tools as they are used in cost and management accounting systems of German-speaking countries. Lots of similarities may exist in other countries, especially in Central Europe.

Unlike in most other countries, those who use these tools and concepts are not called "management accountants" in Germany, but "controllers." This term needs some further explanation.

The term "controller" (or "controlling" to denote the discipline as such) has its origins in the American controller or comptroller – itself a combination of the French word "compte" (for "account") and the English notion of "counterroller" (somebody who checks scroll copies). The "comptroller" in its original sense is therefore a function specializing in supervising and checking budgets or public accounts. Private enterprises in the US frequently have assigned the title of "controller" to the top financial accountant who is in charge of supervising accounting staff and preparing accounting information for both internal and external decision makers. This might be called the "institutional perspective" on controlling.

The role of a "controller" is not synonymous with the general control function in management accounting. In fact, we have already outlined that controlling is an integral part of the accounting function. Decision makers have to ensure that set targets are achieved and budgets are observed. Planning without control would be useless. Thus, controlling in its functional perspective is an integral part of management accounting.

The German notion of "controller" and "controlling" is again somewhat particular, as it denotes not only one subtask of management accounting, but the entire discipline: Controllers in the German sense of the word occupy themselves with a wide range of tasks that are all focused on providing support to company management: planning and control, information management, coordination, and performance management – to name just the most important ones. A German "controller" is considered the critical counterpart to management: While management is responsible for setting goals, making decisions, and enforcing these decisions, the controller is responsible for supporting managers by analyzing options, planning ahead, monitoring past performance and coordinating activities in order to ensure goal achievement. In German literature, controllers are therefore often compared with air traffic controllers or harbor pilots. Their main task is to keep an object (a ship, air traffic, a process) under control, i.e. within defined boundaries or limits that have been set by other entities (management).

A German controller – unlike its US namesake – is typically not involved in financial accounting (see Exhibit 1.4). The typical German accounting system is marked by a clear separation of financial accounting on the one side and management accounting (or rather: "controlling") on the other. This separation has its roots in German regulation of financial accounting. Under German rules, the main purpose of financial accounting is the protection of creditors: great care must be taken by companies not to overestimate their profits or overvalue their assets. German financial accounting regulation forces companies to be very conservative in their assumptions. Financial accounting information therefore is not directly suited to internal decision making, since it is not necessarily showing the "true and fair view" of a company's current (and expected future) economic performance. Under these circumstances company management would be ill-advised to base its decisions on financial accounting information only.

Instead of dealing directly with financial accounting issues, German controlling has gone to great lengths to adapt financial accounting information for management purposes. This has given rise to a comprehensive and interrelated system of financial accounting and management accounting information – with the latter being based on the former. This double-circuit system differs considerably from the single-circuit system known in many other countries that use the same set of accounting information both for internal and external reporting and decision making.

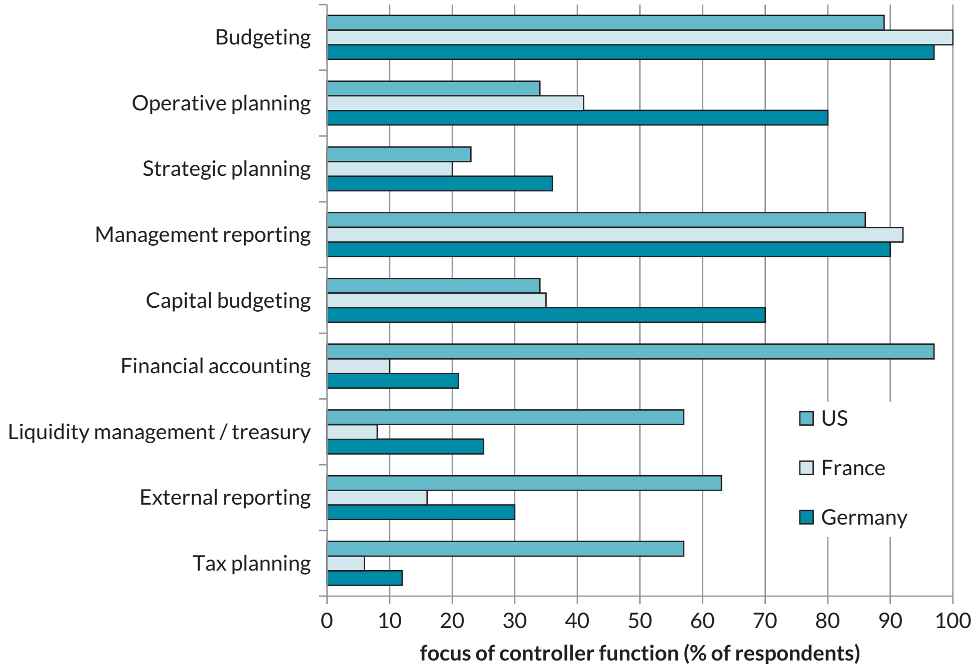

Exhibit 1.4 Differences in occupational tasks between management accountants.
Source: Adapted from Stoffel (1995).

The Role of a Controller in a Business Organization

Today's controllers have a much more comprehensive set of tasks to accomplish than their early ancestors. A controller no longer is confined to supervising his master's treasury or keeping public accounts. The modern controller is more of a business partner to management. In fact, "controlling" (as a task or function) is not exclusively done by "controllers" (as members of a certain profession or institution). Instead, controlling happens right at the interface between managers and controllers (see Exhibit 1.5).

Managers set goals and make decisions about measures and resource uses best suited to achieving these goals. Decisions made must be enforced; staff must be motivated and guided in order for all organization members to contribute to goal achievement. In order to accomplish this demanding set of tasks, managers rely on the support of controllers. One of the controller's main tasks is to provide transparency to management: transparency about the economic framework the business is operating in, transparency about alternative routes available to realize set goals, and transparency about possible effects of these alternative routes. Controllers must be able to turn "data" into "information." In order to do so, they must be familiar with the key methods and tools needed to collect, analyze, transform, and communicate business information.

While managers predominantly are decision makers and motivators, controllers have the traits rather of coordinators, analysts and methods experts. These two profiles complement each other and it is the intersection of these two profiles where "true" controlling happens. Modern controlling does not renounce its accounting origins, though. Accounting information still is a key input for a controller's work, but it is not the only input. Controllers need a more than thorough knowledge of both financial accounting and cost accounting, but in order to fully live up to management's expectations, a controller must be familiar with many more techniques in strategic and operational planning, information processing, and process management.

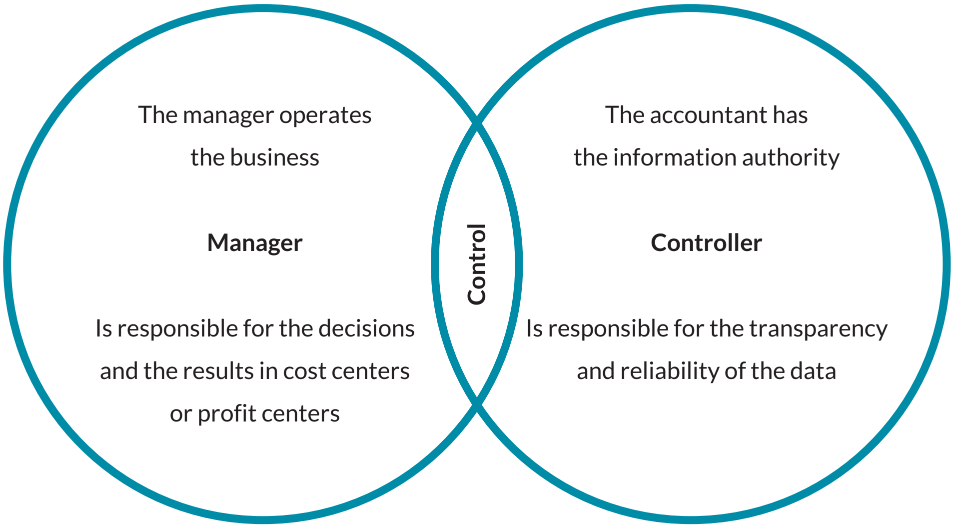

Exhibit 1.5 Controlling as team work between controller and manager.
Source: Adapted from International Controller Association (ICV) and the International Group of Controlling (IGC) (2012): Die Kernelemente des Controllings - das Verständnis von ICV und IGC, Wörthersee/St. Gallen.

It is with this profile of a modern controller in mind that we have written this book. It is intended to familiarize readers with the basic set of tools and methods needed to work as a critical counterpart to management and to act as key support to a business's decision makers. Welcome to the world of cost accounting and controlling!

Ethical Aspects of Accounting

At the end of this first chapter, we should not forget to briefly discuss ethical challenges in accounting. After numerous accounting scandals in the recent past, ethical behavior is more important than ever. We would even go beyond that and state that, in accounting, ethical conduct is probably even more important than in any other business function.

When doing business you must make decisions. Making decisions is about choosing from several options. The solution to a problem will not always be clear and obvious. Instead, finding a solution will require your judgment.

Management decisions are often related to the distribution of resources among stakeholders in the company. By choosing one alternative, managers will benefit one party while others have to go away empty-handed. A cost-cutting initiative might be applauded by investors because it increases company profits, but it might at the same time lead to employees losing their jobs. A newly built warehouse might lead to considerable increases in logistics processes, but at the same time it destroys the natural habitat of a scarce butterfly. There is no universal recipe for these dilemmas.

Business ethics deals with basic concepts and fundamental principles of decent human conduct in business activities. In other words, it deals with the question what is morally good or bad, right or wrong. Many firms have a code of ethics that might help in situations that require judgment. A code of ethical business conduct is a written set of guidelines to help managers and employees conduct their actions in accordance with the primary values and ethical standards of the company. Siemens, a German multinational conglomerate company, active in industry, energy, healthcare, and infrastructure, had gone through several severe scandals concerning the unethical behavior of Siemens staff between 2002 and 2008. In 2009, Siemens issued comprehensive "Siemens Business Conduct Guidelines" that apply to all Siemens employees worldwide. These guidelines contain the fundamental principles and rules governing the way Siemens employees at all hierarchical levels should act and make decisions.

Ethics is important in business, especially in accounting. Why? For two reasons. First, look at what happened to firms that committed accounting fraud. Enron is probably the most shocking example. The company was one of the big players in energy and commodities trading in the US. In 2001, the company employed 22,000 people. Business magazine *Fortune* awarded the company six times as "America's Most Innovative Company". Enron Corporation claimed annual revenues of over $100 billion in peak times. In late 2001, a systematic accounting fraud was revealed. Enron admitted that profits had been overstated by $1.2 billion and liabilities understated by $30 billion.

On 2 December 2001, Enron filed for bankruptcy. The employees lost their jobs and their retirement savings. Enron's shareholders lost everything. CEO Jeffrey Skilling was jailed for accounting fraud for 24 years. Arthur Andersen, Enron's audit firm and one of the by then "Big Five" went out of business only a little later. To sum it up: accounting fraud often has extremely severe consequences, unfortunately not only for the perpetrators.

A second reason for the importance of ethical behavior in accounting is that the quality of accounting reports is difficult to evaluate for readers. In this aspect, accounting differs substantially from some other business functions.

Imagine you enter a car dealership to buy a car. The car dealer has two cars to offer. One is an old, rusty convertible, while the other is a brand new limousine. The car dealer walks over to the convertible and tells you that this is the best car he ever had for sale. It is of the finest quality, would go 250 km/h fast and despite being 15 years old you won't have to bother about repairs in the future. Will you believe this? Probably not. Why? Because you can observe the quality of the product. You can touch it, you can listen to the sound of the engine and you can take a test drive. Eventually you will take the limousine (if you can afford it) or buy somewhere else.

In accounting you don't have this choice. The product of accounting is a financial report. The financial statements might come on shiny paper, bound into a colorful, expensive-looking book called an annual report. Over more than 200 pages, the firm might tell you how great the company was doing and how prosperous the future will be. It is signed and stamped by an audit firm. Will you believe it this time? Probably yes, because you have no visible indication to doubt the correctness of the numbers.

For these two reasons, ethical conduct in accounting is even more important than in any other business discipline. The accounting scandals have shown that no regulation can completely ensure that financial information is free from error and fraud. The only thing that can guarantee the faithful representation of a company's financial situation is high ethical standards of accountants.

CHAPTER SUMMARY

- Accounting records, analyzes, and reports all business transactions of a company in a systematic and comprehensive manner in order to provide useful information to users inside and outside the company. In doing so, it focuses on quantitative data.
- Accounting is crucial for many business actors inside and outside the company, since it provides information that is needed for planning ahead, for making decisions, and for assessing business performance.
- In order to best serve the information needs of different decision makers, accounting has further split up into subdisciplines. Financial accounting serves the information needs of external decision makers (investors, creditors, etc.) whereas management accounting focuses on the information needs of decision makers within the company (management).
- Management accounting is not uniform across countries and world regions. Differences in regulation and legal regimes, different economic conditions, historical influences, and different cultural backgrounds all influence management accounting practices and lead to variations in how management accounting is done across countries.
- German "controllers" are the counterparts to Anglo-American management accountants. Unlike their peers, however, German controllers are typically not dealing with financial accounting tasks, but mostly confine themselves to cost accounting and management accounting.
- The modern controller is more of a business partner to management, who contributes to company success by turning data into useful management information.
- Ethical behavior is of crucial importance in accounting. Accounting information must not be biased and accountants must continuously strive to achieve the highest ethical standards in their work.

GLOSSARY

Accounting The information system that identifies, records, and communicates quantitative information about economic events of an organization that occurred within a given time period.

Controlling The German management accounting discipline.

Cost accounting The system that gathers, analyzes, and reports cost information in the company.

Double-circuit system An accounting system that uses separate subsystems to generate accounting information for internal and external information users.

Effectiveness The relation between goals set and degree of achievement of these goals.

Efficiency The relation between input and output.

Financial accounting The subsystem of accounting that deals with providing information to external decision makers, such as investors, creditors, or the general public.

Flow An economic value that refers to a time period. Sales revenues or cash flows are typical examples of flow concepts.

Management accounting The subsystem of accounting that deals with providing information to internal decision makers, i.e. mostly managers of the company.

Single-circuit system An accounting system that uses the same set of accounting information both for internal and external reporting and decision making.

Stock An economic value that refers to a certain point in time. Cash at hand, inventory levels, or accounts payable are typical examples of stock concepts.

REVIEW QUESTIONS

R1. Describe the various uses of information in a business organization.

R2. Who are the primary users of information on a company's business activities? How do the information needs of internal and external users differ?

R3. What is the difference between quantitative and qualitative business information? Give examples for each type of information and explain when it is most useful.

R4. What is accounting?

R5. Describe the purpose of an accounting system in a business organization.

R6. Distinguish between management accounting and financial accounting.

R7. Explain why financial accounting is subject to regulation while management accounting is not.

R8. What are the main reasons explaining the diversity of accounting practices across the world?

R9. Why do financial accounting and management accounting systems differ between countries?

R10. List the advantages and disadvantages of harmonizing management accounting practices.

R11. Explain the nature of "controlling" according to the German understanding.

R12. How does the job of a German controller differ in comparison to its US-American counterpart?

R13. Describe how the "controller" supports management in achieving set goals.

R14. Explain why ethical behavior is essential in accounting!

EXERCISES

E1. National Differences in Management Accounting – the case of performance measurement and performance reporting

"Fast & Furious Inc." is a manufacturer of sports equipment with corporate headquarters in Germany. It recently has established new sales and service subsidiaries in several countries, among them China, Canada, and India. Now an individual performance measurement and incentive system for the new country managers must be set up. In addition, a standard performance reporting system for sales subsidiaries is to be developed.

The responsible management accountant at the German headquarters wants to prepare a proposal that takes national differences into account. What national aspects must be considered when setting up the new system of measuring and incentivizing performance? Collect ideas about the reasons for such differences and their effect on the way the system is structured and implemented!

E2. Management Accounting across the World

Fred Zinger and Klaus Beier are management accountants working for "Mega Corp." – a multinational company headquartered in Seattle, US. Fred is working for the business division "business services" in the US, Klaus is management accountant of the same business division at the German subsidiary. Although Fred and Klaus have been working together closely for many years, they are each still struggling now and then with the way their colleague is doing his job. Fred does not understand why Klaus is not concerned about preparing annual accounts of the German subsidiary. Klaus, in turn, spends a good deal of his working time on preparing detailed cost plans and investment budgets – a task that Fred is hardly concerned with.

Why are Fred and Klaus dealing with different tasks although they are management accountants for the same company? How can these differences be explained?