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MASTER THESIS

Cash flow management in international corporations

student

Maksym Feshchenko



Supervisor_ Professor, PhD in Economics

(signature) Oksana Nebyltsova

Thesis has been approved for the defence before the Examinations Commission

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Head of the Masters' Program
Associate Professor, PhD in Economics
Y.Solodkovskyy

(signature)

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Заголовок

Cash flows management in international corporations

Автор

Maksym Feshchenko

Науковий керівник

Oksana Nebyltsova

підрозділ

кафедра міжнародного обліку і аудиту

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ACADEMIC SUPERVISOR'S REVIEW OF MASTER THESIS

by the Student at the Faculty of International Economics and Management
MBA program "Global Business"

_____ **Maksym Feshchenko** _____
(Name, Surname)

Title___ **Cash flows management in international corporations**_____

1. Evidence of learning in accordance with the objectives of the assignments (0-5 points) _____5 points_____

2. Depth of critical analysis (0-10 points) _____ 10 points _____

3. Effectiveness of argumentation/analysis (0-10 points) _____ 10 points _____

4. Accurate and coherent use of quantitative tools and language (0-20 points) _15 points

5. Compliance with master thesis written requirements (0-5 points) __5 points _____

6. Compliance with writing master thesis's schedule (0-5 points) __5 points _____

7. Attendance (0-5 points) _____ 5 points _____

8. Published research work/Thesis (0-10 points) ____10 points _____

9. Positive aspects of the thesis: System analysis approach towards discovering general aspects regarding cash flow management within international corporations; focusing attention on all key cash flow management's functions, in particular, planning, budgeting, accounting, control; application both descriptive methodology of economic research and forecasting one.

10. Negative aspects of the paper: Objectives and stages of forecasting discovering is focused on concept approaches without proper illustrating by empirical data.

11. Total Supervisor's Grade of Master Thesis: ____65 points

_____ Academic Supervisor _____ Professor, PhD in Economics _____

(position, academic degree)

_____ (Signature)

Oksana Nebyltsova
(Name, Surname)

"13" December 2022 p.

External Review of Master Thesis
Maksym Feshchenko
Cash flows management in international corporations

The Master's theses, completed by Maksym Feshchenko, is devoted to the topic of cash flows management in international corporations. The thesis paper contains chapters describing tactical and strategic aspects of managing cash flows in international corporations. The project systematized and analyzed theoretical aspects such as models of international cash flow operations and benefits gained by corporations while managing their cash flows.

An important part of the project is the description and systematization of all components of cash flow management, such as planning and budgeting, accounting, control, analysis, decision-making, and forecasting. For many of the components, the thesis looked at theoretical principles studied by field experts and practical approaches supported by business practitioners and coaches.

The project describes in detail the common approaches for identifying a “healthy” cash flow in an international corporation, provides examples of summarized cash flows of well-known companies, and analyses them in accordance with the business stage the company is on. The strong side of the thesis is a well-thought description of theoretical methodology and modern approaches while defining cash flow management aspects and their characteristics.

Director



Chekhovich T

Semprom Limited Liability Company

“08” December 2022p.

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Introduction

In today's market conditions, one of the main tasks of an international corporation is to increase the efficiency of its operations with the help of smart cash management, which will ensure financial stability and profit, continuous flow of operations, accelerate the turnover of capital and reduce the risk of insolvency. Cash flow management is one of the main tasks given that forecasting and financial management belong to the everyday activities of corporate managers. They decide how to save money from inflation, how to support stable current activity, maintain the company's reputation as a reliable financial partner. At the same time, it is necessary to avoid a huge surplus of money, which can be used for short-term investments and lead to receiving additional profit in the future. The economic growth of the company is based on supporting its financial position and, at the same time, ensuring the growth of the business value, which, in its turn, is highly determined by successful cash flow management. Therefore, research related to cash flow management theory and practice is highly prioritized and relevant.

Theoretical and practical aspects of cash flow management in international corporations are well covered in the works of both post-war authors (Baumol, W. J., 1952, Markovitz, H., 1952, Modigliani, F. and Miller, M. H., 1958, Sharpe, W., 1964 etc) as well as modern scientific and scientific-methodological works (Pandey, I.M., 2010, Reuvid, J., 2010, Jury, T.D.H, 2012, Hrechyshkina, O., 2016).

The purpose of the research is to systematize the theoretical aspect of the cash flow management, its roles functions and peculiarities in the international corporate perspective.

In accordance with the purpose of the research, the following *research objectives* have been set:

- to reveal the essence of cash management, its role and functions for corporations;
- to identify the models for international cash flow operations;
- to define cash flow management benefits for international corporations;
- to characterize planning and budgeting aspect of cash flow management;
- to analyze accounting and its functions in cash management;
- to reveal the importance of controlling techniques and their elements;
- to define the peculiarities of analyzing cash flow at different business stages;
- to characterize decision-making process in business and cash flow management;
- to identify objectives and stages of cash flow forecasting.

Object of research: cash flow management in international corporations.

Subject of research: theoretical views on aspects and practices of managing cash flows in international corporations.

The following general scientific *methods* have been used in order to achieve the set objectives:

- theoretical: research on the formation and development of cash flow management practices in international corporations; classification method for cash flows models description, systemic and functional analysis of sample corporations;
- empirical: a comparative analysis of budgeting techniques to define the characteristics of each and assess their influence on the planning and budgeting aspect of cash management.

CHAPTER 1.

Theoretical principles of cash flow management in international organizations.

1.1 Cash management in the international corporate perspective

The practice of gathering and controlling cash flow is known as cash management. Financial stability for both individuals and businesses depends on effective cash management. Cash is any medium of exchange that is immediately negotiable, according to Davidson [8]. It cannot be limited for any kind of commercial use. Cash must meet the basic requirements of being generally accepted and immediately available for purchases and debt repayments. Bank acceptance of deposits is a generally considered test that applies to cash. Its management is the process of planning, controlling and accounting for cash transactions and cash balances.

Furthermore, cash is the funds available to a bank or business: it is not inventory, accounts receivable, or property. The latter can be converted to cash at some point, but cash will be needed on hand or in the bank to pay suppliers, rent, and cover labor. An increase in profit doesn't necessarily mean an increase in cash [8].

Cash is an important current asset of a company. Cash is the primary resource a business needs to continue operating: the end result the business expects to achieve by selling a service or producing a product. The company must have enough cash, no more and no less. A shortage of cash disrupts a company's production operations, while too much cash just sits idle without affecting the profitability of the firm. Therefore, the main responsibility of a financial manager is to maintain a sound financial position [35].

Cash is funds that companies can issue immediately without any restrictions. The term "cash" refers to the company's bank account balances as well as any coins, cash, or checks that are on hand. Cash can occasionally also include quasi-cash items like marketable securities or time deposits with banks. The ease with which near-cash assets can be turned into cash is a fundamental characteristic. When a business has extra cash, it typically invests it in marketable securities. Such an investment yields specific returns for the business [38].

Cash flow management is a topic primarily addressed by practitioners and academics who study the practice of cash flow management or financial modeling, but it can also be addressed from a theoretical perspective. In this sense, two different approaches can be distinguished. First, cash management can be considered a separate topic within short-term asset management and considers the question of how much cash is needed relative to other liquid assets. This is the main focus of short-term financial management textbooks, such as Hill and Sartoris [18], Maness and Zietlow [28]. Second, cash management theory can start from Modigliani and Miller's assumptions about ideal markets [33]. The theory then suggests that firms do not need cash at all, unless market imperfections cause firms to hold cash [19]. Various transaction costs associated with frequent raising of additional debt and/or capital, or, if cash is required to pay suppliers or employees are typically high. So even if the funds don't generate income, it might make sense to keep cash on hand. Additionally, bankruptcy costs became a big reason to hoard cash. If creditors do not pay on time, they may bankrupt the company, and shareholders and managers try to avoid the associated costs [10].

The development of common markets has been influenced by various free trade agreements and alliances (NAFTA, Eurozone etc), has reduced market imperfections and influenced the cash flow management of international companies. These businesses, however, are more sophisticated than those that operate in a single nation and frequently have regional corporate headquarters and

subsidiaries. Managers of local subsidiaries might be thought of as proxies for shareholders and board members of the parent firm of the multinational corporation. Since control over money is a key element in the exercise of power, the agency connection between the local and headquarters managers is crucial in this situation. Local subsidiary managers might wish to have as much cash as they can on hand. Jensen claimed that free cash flow results in agency costs [21].

Additionally, there won't be substantial returns on investments made in cash, bank accounts, or short-term obligations. For these reasons, multinational companies may decline in value if they hold unnecessary cash locally. In such cases, the multinational corporation's domestic financial market is inadequate and the firm may exhibit "group discounting" compared to similar individual firms [10].

Therefore, at the enterprise level, international cash flow management can be defined as a comprehensive process of planning, accounting, control, analysis, decision-making and forecasting of cash inflows and outflows in international organizations. This process helps identify trends, prepare for the future and resolve any cash flow issues [15]. Businesses use cash flow management software to monitor cash flow and forecast future cash flows for the industry. It also helps determine how much money a company needs to pay its suppliers and employees. The ultimate goal of cash flow management is to ensure that the organization does not run out of cash.

The need for multinational corporations to improve their cash flow management processes has never diminished. Especially now, the following financial targets and global trends support a focus on cash flow management:

- improving the efficiency and scalability of cash management methods;
- increase the clarity of forecasts;
- meeting the needs of accounting and financial departments of large and small companies;

- increasing the field of e-commerce and expanding the implementation of automation applications in the banking industry;
- expanding the implementation of innovative and secure cash management solutions for various end users;
- growing demand for supply chain management and working capital management;
- managing cash flow to improve planning and budgeting cycles;
- increase the implementation of predictive analytics for the company.

Additionally, businesses are looking for centralized cash management solutions tied to enterprise-grade networks and banking applications to consolidate cash management practices with the click of a button [15]. Factors restraining the market growth include increase in cyber-attacks, financial regulation and standards, and data theft. Growing demand for automated cloud solutions in the banking industry is expected to create new opportunities for profitable growth.

1.2 Models for international cash flow operations

The enormous impact of communication technologies, especially the Internet, globalization of the banking industry and the reduction of regulatory barriers in major economies have allowed to understand the origins of innovation in the field of cash flow management. From a theoretical point of view, it is worth noting models for the determination of optimal cash balances in a multinational organization and models of optimal multilateral netting and international funds transfer as well as their implications for short-term borrowing, investment and hedging decisions [31].

Keeping various components of cash for an international organization is an indispensable part of international cash flow management, including determination of optimal cross-border flows transfer, short term investments, intercompany company borrowing and short-term loans [43]. Shapiro [40] analyzed the need for cash transactions in international setting by extending Baumol's optimal cash balance model [4] including numerous currencies.

Maintaining foreign currency balances has become more important in order to avoid borrowing in such currencies, as well as the expenses and exchange rate risks involved with cross-border cash transfers. In order to assess how much cash a global corporation should hold while taking into account opportunity cost, transaction cost, and existing volatility of exchange rates with native currency. Essayad and Jordan [11] created an order quantity economic model. Their model demonstrates that an ideal equilibrium optimizes the difference between the total operating and opportunity cost of buying foreign currency prior to an increase in the exchange rate and the total cost for the subsequent quantity ordered without the increase. They found out that assuming current balance is less than optimal balance, then a surplus can be recognized in case an appropriate order quantity is placed before the price of the foreign currency increases. The practical application of the model depends primarily on exchange rate projections: whether the currency will appreciate or depreciate. The projections are, however, quite unstable, should the relations between the countries get worse.

Gautier [13] also modeled how much foreign currency an international corporation should keep, how much to keep in exchange for domestic currency and changes in the amount of domestic and foreign currencies related cost, benefit and risk. The work used an analysis of sensitivity created by Gautier and Granot [14] to check how currency holdings, expected returns, exchange rates and their volatility influence the cost of different tactics to assist managers realize the interdependence of different sources and demands for various currencies. They

demonstrated how maintaining a variety of currencies enables one to adjust to changes in external cash flows from activities. They did point out that even tiny changes in amounts that are to be retained in one currency will have an impact on the other currencies that is multiplied by several. The tiny amount of foreign exchange trading amplifies this amplification effect [14].

Empirical research on how businesses should invest their foreign cash balances in light of home country rates of return and currency risk is done by Levy [26]. He used historical data to find evidence of the existence of multi-currency balances. Optimal stock varies by country. Likewise, Swanson and How [46] showed that this would be optimal within the mean-variance model for US companies to hold cash balances in US dollars, British pounds, and Deutsche Mark between 1981-1982.

Van der Linden and Gramlich [49] studied the short-term investment problem of excess yen in the Japanese money market, which is characterized by Interest rates have been close to zero for more than a decade. Using data from July 1997 to May 2002, they found that the USD/JPY forward rate overestimated the future spot rate in 61% of monthly observations. They explored some cash investment strategy in order to use this arbitrage when the associated investment risk is also controlled. They discovered that using zero-cost or collared options to invest in dollars that were later converted to yen yielded higher returns and lower risk than other strategies involving the use of covered or unsecured Eurodollar options [49]. However, as US nominal interest rates fell after May 2002, such an investment strategy was not more profitable. The collared investment strategy that invests excess yen in British pounds was found profitable only if the forward contract bias was proved to be for yen and pound while the UK nominal rates would remain high.

Madura [27] modeled short-term international borrowing in a specific structure. It took into account interest rate and exchange rate risk. He discovered

an equally weighted portfolio of related currencies, excluding any currencies with higher borrowing rates than a home currency provides a higher return which is supported by the mean-variance framework.

These models are continuously in use by various transnational corporations that hold foreign currency balances to cover operational, investment exchange rate risks. What's left after the transactions needs are considered should go towards inter-company lending or investing in currencies that yield higher returns for a certain degree of exchange speed risk.

Other international cash management models focus on getting the best solution to multilateral netting and international funds movement. In general, there are solutions modeled as a generalized network problem or as a linear or goal programming type of mathematical problem. Shapiro [41] showed that capital flows between subsidiaries may be similar to transportation issues should the transfer costs be linear. However, when the costs are not linear, a programming method should be used. The optimal netting for such issues may result in transfers that can differ from those obtained using the pen-and-paper method because it takes into account transaction costs between different states. What is more, the multilateral system also provides information to help move funds considering interest rate differences, expected exchange rate fluctuations, and tax differences. Shapiro once again highlighted the statement that in a multilateral netting system, the exchange rate at which transactions are made is set by the international corporation within a week, while the sums netted are converted into one currency [41]. In case billing periods among subsidiaries are different, netting could stimulate changes to credit terms, causing delays flow and money among the subsidiaries. Among the possible decisions to tackle this problem is to implement netting more often.

Anvari [2] designed multi-period cross-border cash transfer-scheduling model that uses forecasts to create the most profitable multilateral clearing system.

Using transaction forecasts can help identify currency risk that is a part of such transfers and how this risk can be navigated. Therefore, his model includes currency exchange and other fees hedging as well as transaction fees. As opposed to Shapiro, funds transfers do not appear in a single currency. The management is therefore responsible for currency risk identification and including hedging costs in the optimal transfer model.

A generalized network optimization model that allows to compute cost from available funds and to determine how netting will affect investment and short-term borrowing in the existing subsidiaries was designed by Srinivasan and Kim [44]. They showed what until a pure netting system cannot generate cash flow between subsidiaries, and if short-term borrowing and investment needs are considered, transfers between subsidiaries will occur because the costs of borrowing money may be higher than the savings from the transaction costs. The model developed by Srinivasan and Kim can be further extended in order to calculate the cost of foreign exchange spreads and their impact on borrowing costs and short-term investments.

Adkins [1] proposed the international cash management network of a single company over time, unlike earlier models that focused on cash flows among subsidiaries. In his model, cash flow could be the result of gathering accounts receivable in the same currency as well as other transfers, investment disposal, borrowing and currency exchanges. Outflows include accounts payable and other transfers to repay loans or initiate investments and transfers into foreign currencies [1]. This model is designed to come up with one universal way of currency exchange, lending and investment opportunities without hedging interest arbitration. Adkins's model for international cash management is capable of combining netting, matching and flows from the other parties. The model also takes into account currencies exchange costs due to bidding and asking spreads while future foreign exchange is made through forward contracts. Model's implications

research related to other derivatives may provide an opportunity to evaluate how well these models fit the growth of the currency derivative market.

While the above models provide insight into the challenges of cross-border transactions, most of the models are determined by design and thus are not capable of solving all issues that appear in cash flow management. The models are quite complex in design while the information requirements are not easy to be followed. Anwar, for example (1986) pointed out that although these models can be incorporated into computerized information transfer and processing systems, input data preparation and administrative tasks records of past decisions requires a well-developed information system which companies may not be able to implement. However, since 1985 the emergence of integrated service centers where financial and accounting activities are grouped and backed up by Enterprise Reporting Systems can provide assistance in integrating cash management models and other corporate practices [47].

1.3 Cash flow management benefits for international corporations

The financial literature has long focused on the value of conglomerates. While diversification theory based on Markowitz [29] suggests that firms can benefit by reducing overall risk, the later developed risk theory by Sharpe [42] emphasizes that shareholders can diversify their portfolios for themselves, and they do not need outside help from the companies they invest in. Creating a corporation does not increase the value for a shareholder. For this reason, financial theory seeks other advantages and disadvantages of merging firms, since empirical evidence shows that, in general, acquisitions only increase value for target firm shareholders.

The worth of a significant multinational corporation may fluctuate over time, according to a thorough investigation of the Beatrice Company [3]. The participating companies gained from mergers in the first half of the 20th century because the parent company could add value. Particularly, it is simpler for a conglomerate than it is for a single firm to access the limited and precious financial, legal, management, and financial resources. However, thanks to business schools, business knowledge is now more widely available, less expensive, and hence more accessible to small businesses.

Additionally, the emergence of junk bonds gave experienced outsiders the ability to dismantle conglomerates in the event of subpar corporate performance. For these reasons, individual companies now have the same capabilities as conglomerates [10]. It can be added that the knowledge resources of the company's subsidiaries may also increase, which reduces the relative power of the subsidiary's parent company.

If individual companies or sectors are on par with the company, one might wonder why the multinationals still exists. Several reasons may arise, but the main hypothesis is that co-financing and internal reallocation of funds between subsidiaries may have advantages. For example, Stein [45] argues that corporate headquarters can add value to diversified firms in the sense that corporate headquarters may be better than outside banks at finding profitable investment opportunities. However, research conducted by Scharfstein [39] found evidence that sectors of high-potential industries tend to invest less than sectors of autonomous industries, while the opposite is true for low-potential sectors. Conglomerates typically do not allocate more money to sectors in businesses with superior investment potential. Further research demonstrates that diversified companies typically trade at a discount to similarly sized companies, and that the discount is positively correlated with both the degree of investment mismatch and the diversity of investment options across sectors [36]. Funds may be allocated to

the wrong investment projects, especially where headquarters have little influence. This is backed up by Mudambi [34], who discovered that the operation of internal capital markets is impeded when parent businesses give subsidiaries additional control.

However, Khanna and Tice [24] argue that joint firm discounting occurs mainly in uncorrelated diversification patterns. A conglomerate with unrelated subsidiaries has more problems with internal financing than a conglomerate with all subsidiaries operating in the same field of activity. In the latter case, there is little opportunity for subsidiary managers to mislead corporate headquarters about desirable local investment opportunities. In addition, managers are more likely to move from one subsidiary to another and thus may be less inclined to prop up their subsidiaries through irrational investments. Finally, Burch, Nanda and Narayanan [6] argue that conglomerate discounts result from the fact that most low-quality firms prefer to participate in clusters.

Thus, empirical research and theory on firms generally suggests that lower-quality firms within unrelated multinationals with weak headquarters may be able to obtain financing for weak investments.

In general, cash management systems for international companies have traditionally been simple in structure. In each country where the firm has significant operating facilities, the subsidiary's treasury usually performs its own cash management [48]. This is a rational approach due to the imperfections of the world's capital markets. These market deficiencies, as well as the costs of centralizing financial functions, have been greatly reduced following liberalization, deregulation, and the introduction of a single currency in some markets (such as the European Union).

Centralization offers many advantages [5; 23; 32]. First, the concentration of funds provides economies of scale and bargaining power. Second, financing costs are further reduced as cash balances, cash flows, and risks are reduced.

Third, the lead and lag of cash flow within the company are easier to track and control. Fourth, there is likely to be a general reduction in finance staff across the company. Fifth, it can reduce the bank's cash transfer service and reduce related costs. Furthermore, the benefits of internal financing are more readily available because a concentration of financial knowledge helps improve investment decisions.

In the case of disintermediation, the shape of the cash management system is determined not only by internal characteristics, but also by external relationships, especially with banks, so it is not surprising that many companies consider their relationship with banks to be almost as important as banks' fees and quality of service [48].

Over time, foreign relations developed with centralization. Initially, the banking system was used to collect accounts receivable and pay bills. The relationship with banks is asymmetrical: banks offer a wide range of products that businesses can use. There may then be a trend toward centralized cash management, where multinational corporations will seek to efficiently handle various financial transactions across operating divisions [10]. This can lead to a significant reduction in the number of bank accounts as underutilized accounts are closed. The treasury department of the international corporation will act as a procurement department, and as "purchasing" with other banks increases and financial knowledge at headquarters expands, linkages with banks will weaken.

A multinational corporation's treasury role might then change to a corporate treasury function that balances competing goals including minimizing tax and interest payments, lowering interest rate risk, and securing liquidity. Banks with international connections, technical know-how, and information systems expertise might focus on providing services to these industries rather than products. Some enormous financial institutions have actually benefited from these changes by expanding their service areas and investing in cutting-edge

information systems for European cash management systems [10].

Finally, the corporate finance function of a corporation can relate to it being considered as an internal bank [17]. Such self-operated banks independently provide internal products and services, issue short-term financial instruments such as commercial paper, and compete with other banks for the business of third-party customers, thus becoming equal partners of investment or commercial banks. Obviously, the above centralization trend is not conducive to the intermediary function of banks.

The combined trends of centralization and disintermediation of the cash function will have implications for the power of a corporations' parent companies. Centralization generally takes place at the head office and has a positive impact on the head office's cash management capabilities. Since the main reason for corporate discounts is the parent company's lack of financing and investment power, centralized cash management can reduce these discounts.

With disintermediation present, the power of the headquarters can be further increased. First, because there are fewer banks involved, the banks most relevant to the corporation will have primary ties to the parent company. Second, if the cash management function becomes the corporate treasury function, external funds will be channeled through the head office, and likewise, the treasury power of the head office will increase [10]. For these reasons, liberalization, deregulation, and the introduction of a single currency to improve domestic financial functioning and reduce conglomerate discounting should be expected.

However, not all international corporations have been able to directly centralize the cash function, and the degree of centralization of cash management still varies between firms [16]. Furthermore, not all multinationals are able or have a desire to transform their cash management function into a corporate treasury function. Finally, even though corporate finance functions are managed centrally at corporate headquarters, decisions about fixed assets need or should be

centralized.

Therefore, conglomerate discounts based on lack of parental rights to internal financing and investment will not disappear in all international corporations. However, developments in financial markets may have helped reduce conglomerate discounting in some multinational firms in the single-currency markets.

CHAPTER 2.

Tactical aspects of international cash flow management

2.1 Planning and budgeting: definition, types and functions

From a conceptual point of view, a general approach to cash flow management in any organization, including international organizations, includes the following areas: planning and budgeting, accounting, control, analysis, decision-making and forecasting. Given the period during which the results of these activities are expected to bring additional value to the organization, the functions implemented can be classified as tactical (planning and budgeting, accounting, control) and strategic ones (analysis, decision making and forecasting). In the next two chapters, each category will be explained in more detail.

Planning can be part of the decision-making process and is a function of creating the vision of company goals and determining the means to achieve them. It involves analyzing a company's cash flows, predicting the consequences of various investment, financing, and dividend decisions, and weighing the impact of various alternatives [20]. Additionally, it helps prevent waste by providing policies and procedures that allow for closer coordination between the various functions of a business.

If advantages of a successful plan are to be discussed, it's worth to note that a successful plan allows the company to determine which funds are available to implement its plans in the material sphere and provides information on the expected costs of these operations. Furthermore, it supports the analysis of the impact of alternative activity types on the financial results of the company, thereby making the decision-making process dependent on financial criteria.

Depending on the function of a particular plan and the time period it must cover, 3 types of financial plans can be defined (Figure 2.1).

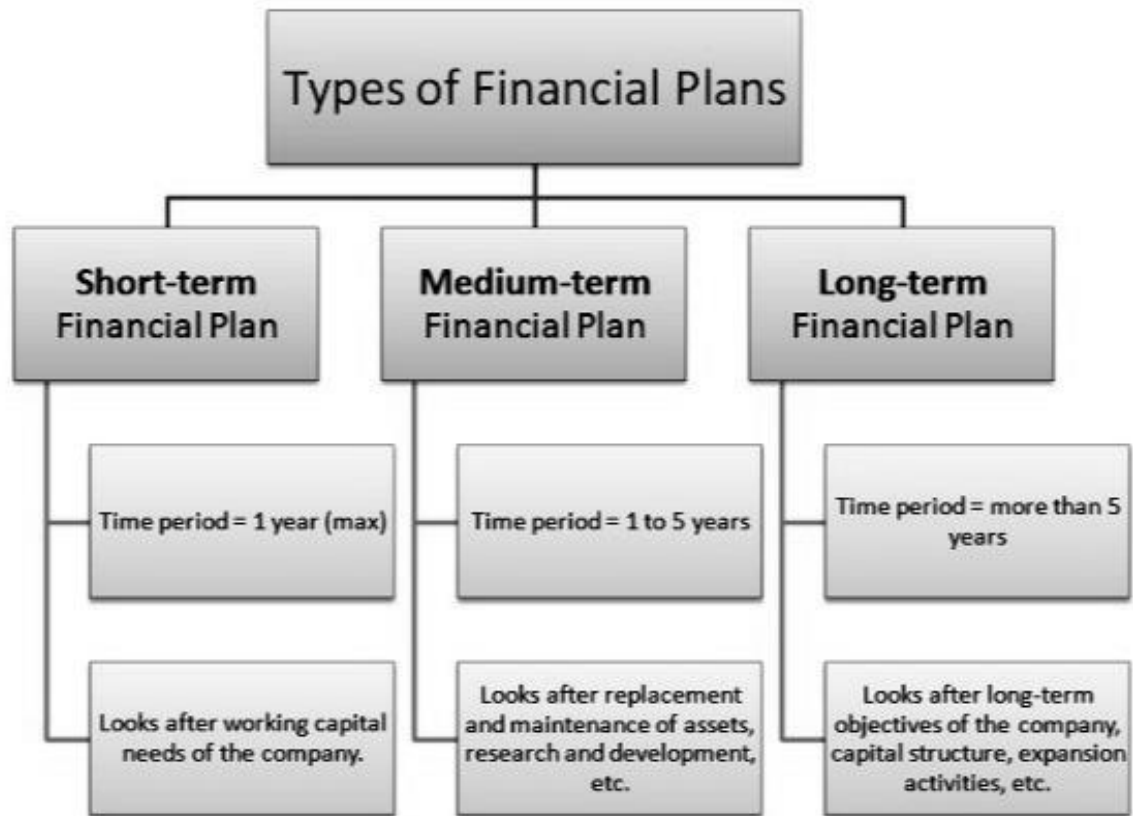


Figure 2.1 - Types of financial plans [20]

Therefore, the importance of financial planning aspect as part of the overall cash flow management process can be summarized as follows:

- providing an appropriate argumentation for funding;
- maintain a reasonable balance of capital outflows and inflows;
- assisting with development and expansion plans;
- reducing the uncertainty of market trend changes, and providing sufficient funds to deal with them;
- reduce uncertainties that can hinder the company's growth. This helps ensure the stability and profitability of the business.

Each plan executed by an organization typically includes the phases outlined on Figure 2.2. Determining where a company currently stands in the

market helps to set clearer expectations and specific objectives based on the available resources. The company then creates plans that are expected to meet previously stated objectives and develops a plan for executing those. Adjustments should be made at this stage, as the company strives to make the plan as accurate and easy to follow as possible during the execution phase. The analysis and control of plans and their execution, as well as market behavior, play a central role in the planning phase and form the basis for further refinement of the reasoning process.

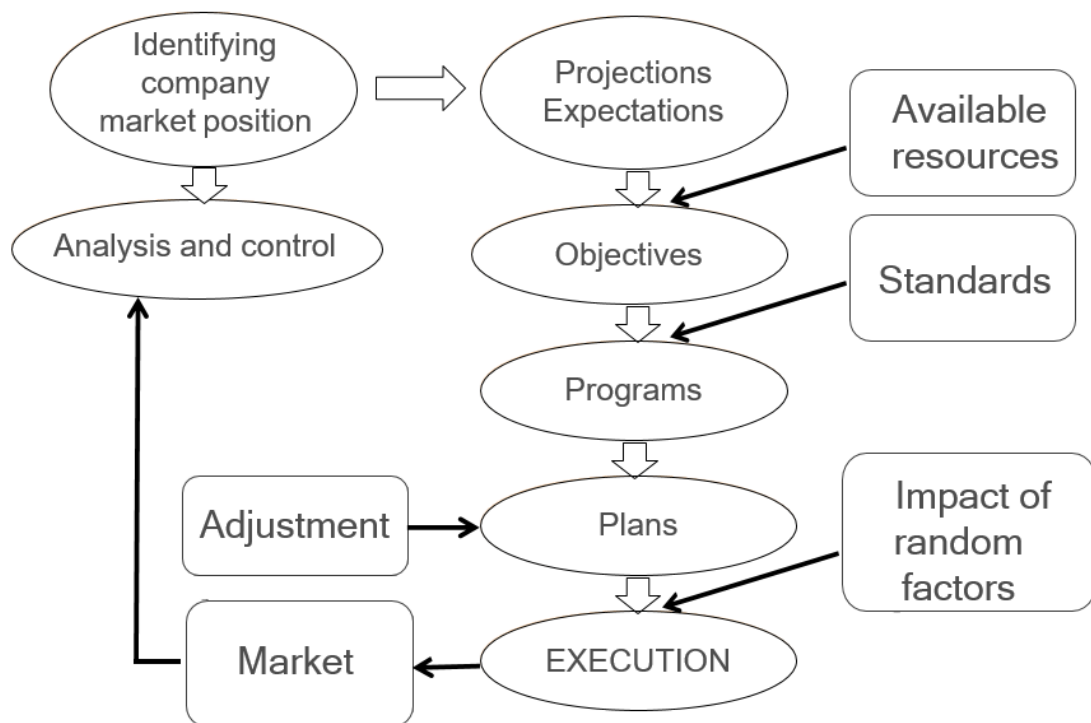


Figure 2.2 – Enterprise planning cycle [20]

Budgeting in international cash flow management can be considered as part of the planning aspect or as a separate activity. Cash flow budgeting forecasts company's cash inflows and outflows over a period of time [7]. A typical cash flow budget predicts monthly, weekly, or daily cash inflows and outflows.

A cash flow budget can help predict company's cash flow shortfall and allows to take steps to ensure that the shortfall is covered, or at least reduced, to

avoid costly and unmanageable overdrafts. These steps typically include reducing investments in accounts receivable or inventory, increasing or prepaying revenue, or seeking external sources of cash, such as short-term loans, to fill cash flow gaps [7].

In case a business is considering to apply for a loan, the company will need to prepare a cash flow budget that looks several years into the future. It can predict future events in advance so that companies can take some corrective actions and it can minimize uncertainties related to budgeting.

The budgetary aspects of international cash flow management typically include:

- preparing sales forecasts;
- forecasting expected cash inflows and outflows;
- preparing the forecast of the last line of cash flows;
- detecting surplus and short-term deposits to earn interest;
- identifying deficits and the need to accelerate cash flow or borrow money in the short term;
- realizing long-term surplus to fund expansion and development;
- identifying long-term funding needs from the bank or shareholders.

When it comes to the budgeting methods most commonly used by international organizations, two types can be considered: traditional and zero-base budgeting. The first approach is to plan the current year's budget based on the previous year's actual (planned) indicators, taking into account known changes in inflation and activity levels.

Zero-based budgeting ignores past experience and starts with goals and activities for the coming year. In this case, the estimating developer must justify all resource requirements. Table 2.3 details the differences between the two budgeting methods.

Table 2.3

Types of budgeting techniques.

Criteria	Traditional (incremental) budgeting	Zero-base budgeting
Emphasis	accounting-oriented; “how much” is a key question	decision-oriented; “why” is a key question
Approach	towards the expenditures monitoring	towards the objective achievements
Focus	changes in the expenditures	cost-benefit analysis
Communication	vertical only	vertical and horizontal
Method	future projections are based on the previous ones	decision is based on the cost-benefit analysis

Source: compiled by the author on the basis of [20]

A typical cash budget for a business usually shows an income statement, bank statement, and cash flow statement all at the same time. It starts by providing the same projected opening cash balance as the previous month's closing cash balance (Figure 2.4). There is space between them for each type of cash receipt, such as customer payments for cash sales and credit sales, and cash payments for fees and loan repayments.

A cash budget ends with a cash deficit or surplus based on the company's target cash balance, which is the minimum amount the company is willing to have at the end of the month.

	January	February	March	April	May	June
Opening Cash Balance	\$ 75,000.00	\$ 62,385.00	\$ 74,720.00	\$ 81,105.00	\$ 86,025.00	\$ 75,460.00
Cash collections						
Accounts receivable payments	\$5,000.00	\$5,000.00	\$5,000.00	\$2,000.00	\$2,000.00	\$5,000.00
Cash sales	\$20,000.00	\$25,000.00	\$30,000.00	\$25,000.00	\$15,000.00	\$16,250.00
Interest	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
Cash Inflow	\$ 25,050.00	\$ 30,050.00	\$ 35,050.00	\$ 27,050.00	\$ 17,050.00	\$ 21,300.00
Cash payments						
Returns	\$2,750.00	\$2,000.00	\$2,500.00	\$3,000.00	\$2,500.00	\$1,500.00
Inventory purchases	\$25,000.00	\$5,000.00	\$5,000.00	\$3,000.00	\$15,000.00	\$5,000.00
Wages	\$5,000.00	\$5,000.00	\$5,000.00	\$10,000.00	\$5,000.00	\$8,000.00
Payroll taxes	\$415.00	\$415.00	\$415.00	\$830.00	\$415.00	\$664.00
Advertising	\$500.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
Repairs and maintenance	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00
Rent	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00
Shipping	\$1,200.00	\$1,500.00	\$1,800.00	\$1,500.00	\$900.00	\$975.00
Utilities	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
Insurance	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00
Office supplies	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
Loan payments	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00
Interest	\$-	\$-	\$150.00	\$-	\$-	\$150.00
Income taxes	\$-	\$-	\$10,000.00	\$-	\$-	\$10,000.00
Cash Outflow	\$ 37,665.00	\$ 17,715.00	\$ 28,665.00	\$ 22,130.00	\$ 27,615.00	\$ 30,089.00
Net Cash Inflow (Outflow)	\$ (12,615.00)	\$ 12,335.00	\$ 6,385.00	\$ 4,920.00	\$ (10,565.00)	\$ (8,789.00)
Closing Cash Balance	\$ 62,385.00	\$ 74,720.00	\$ 81,105.00	\$ 86,025.00	\$ 75,460.00	\$ 66,671.00
Target Cash Balance	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00	\$70,000.00
Cash Surplus (Deficiency)	\$(7,615.00)	\$4,720.00	\$11,105.00	\$16,025.00	\$5,460.00	\$(3,329.00)

Figure 2.4 – Example of a semi-annual budget for a company, in millions of dollars [25]

In this particular example, the company plans to have cash inflows in February, March, and April so that receipts exceed expenditures. In the first 3 months, the cash flow was good and the expenses were relatively small. However, the company expects a net cash outflow in January, May and June, when the company expects expenses to exceed revenue. This shouldn't be a problem in May, as the cash balance is higher than projected at \$70,000. However, the company must consider how to manage thousands of fewer people than it wants to reserve for emergencies in January and June.

2.2 Accounting: objectives, functions and impact of the competitive environment

There are many definitions of accounting, but one definition that reflects the international corporate context is developed by the American Accounting Association. Accounting is described as the process of identifying, measuring, and communicating economic information to enable users of the information to make informed judgments and decisions. In other words, accounting focuses on supplying both financial and non-financial data to assist decision-makers in making the best choices. Consequently, to comprehend accounting, one must be aware of users of accounting information as well as the decision-making process.

In the context of cash flow management, the accounting function is reduced to recording cash receipts and payments determined by budget items. Proper bookkeeping ensures that the company receives payments when they are due. It tracks the profits of the businesses to ensure that the revenue stream flows into its bank account. Recording cash outflows assists in keeping track of a company's liabilities. This ensures that the company pays what is owed and proves that it is a trustworthy partner. It also helps to schedule payments so businesses can better manage their money based on when it arrives.

To individuals who are interested in an organization, such as managers, potential shareholders and investors, employees, creditors, and the government, accounting entails giving both financial and nonfinancial information. Managers need information to make decisions and take action. They require details about, for instance, the expected selling prices, costs, demand, competitive position, and profitability of the many products the company produces [9]. The value of their investment and the income they will receive from their equity are two things that shareholders need to know. Employees are interested in learning whether a corporation can satisfy pay expectations without laying off workers. Debt capital

providers and lenders want details regarding a company's capacity to fulfill its financial commitments. Governmental organizations gather accounting data and demand information on sales activities, profits, investments, shares, dividend payments, the proportion of profits that are taxed, etc. Tax officials also demand details on taxable income. All of this information is important for determining the country's economic management policies.

Therefore, the goal of accounting is to provide enough information at the lowest possible cost to satisfy the needs of various users. Clearly, the benefits of using an information system for decision making must outweigh the costs of operating the system [9].

The different users of accounting information can be divided into two categories:

1. Parties within the organization;
2. External parties outside the organization, such as shareholders, creditors, and regulators.

Internal and external users of accounting data are the two different forms of accounting. While managerial accounting focuses on giving information to people inside an organization to help them make better decisions and increase the effectiveness and efficiency of present operations, financial accounting involves sending information to persons outside the company [9]. It is possible to think of management accounting as internal and financial accounting as external.

Legal requirements, methods scope, accounting principles, timing, and frequency of reporting are thought to be the key differences between these two fields of accounting.

Legal requirements for companies require them to prepare annual financial statements, whether or not management deems the information useful. Managerial accounting, on the other hand, is entirely optional and should only be created when the benefits to management of using the information are deemed to outweigh the

costs of collecting it.

While managerial accounting focuses on more specific aspects of an organization, like the cost and profitability of products, services, customers, and activities, financial accounting reports cover the entire business [9]. Management accounting data also evaluates the financial performance of distinct business units and divisions.

Regulatory organizations like the Financial Accounting Standards Board (FASB) in the US and the Accounting Standards Board (ASB) in the UK set the laws and generally accepted accounting principles. To guarantee the requisite consistency and uniformity of external financial information, these requirements are essential. In order to enable inter-company and historical comparisons, external users must verify that external reporting is prepared in line with generally accepted accounting standards.

However, when providing management information for internal use, management accountants are not required to adhere to widely accepted accounting principles [9]. Instead, the emphasis is on meeting management's demands and giving them access to data that will help them in their positions as decision-makers, planners, and controllers.

Financial accounting reports on what happened to an organization in the past, while managerial accounting deals with information about the future and the past. Decisions are about future events, so management needs detailed information about expected future costs and revenues.

A detailed set of financial statements is issued annually, while less detailed reports are issued semi-annually. Management needs information quickly to act. Thus, management accounting reports on various activities can be generated on a daily, weekly or monthly basis [9].

Cost accounting and management accounting systems must generate information that meets specific requirements. Therefore, the main functions of

management accounting are:

1. Cost allocation between costs of goods sold and inventory for internal and external revenue reporting;
2. Providing relevant information to help managers make better decisions and plan, control and measure performance.

Financial accounting rules require companies to compare expenses to income to calculate profit. Therefore, any unsold finished goods stock or partially completed stock (work in progress) will not be included in the cost of goods sold compared to sales revenue over time [9]. In an organization that produces a variety of different products, for inventory (stock) valuation it is necessary to assign costs to each individual product. The total value of finished goods and work-in-progress inventory plus any unused raw materials is the basis for determining the value of the inventory, which is deducted from current cost to calculate profit. The cost of inventory is calculated on the balance sheet using this total as a starting point. As a result, keeping track of the expenses associated with each task or product satisfies the requirements of financial accounting for allocating costs incurred between the cost of products sold and the cost of inventory. This information is necessary to meet external financial accounting requirements, but most organizations also generate an internal profit and loss statement each month [9]. Therefore, regular internal reporting of benefits also entails product costs. However, because many service businesses don't keep inventory, they can estimate their inventory without using product costs.

The second requirement of a cost and management accounting system is to provide managers with relevant financial information to help them make better decisions. This applies to both periodic and regular reports. Regular information on the profitability of different business units (such as products, services, customers and distribution channels) is required to ensure that only profitable activities are carried out [9]. Making judgments about resource allocation, product

mix, and closures also need information. In some circumstances, cost data from costing systems also plays a significant role in deciding selling prices, particularly in markets where specific goods and services are provided without the knowledge of market prices. Making strategic decisions involves knowledge that is outside the norm. These decisions, which are made seldom, include those involving the creation and introduction of new goods and services, the purchase of new machinery and equipment, and the negotiation of long-term business agreements with clients and suppliers.

For decision-making to distinguish between profitable and nonprofit activities, accurate cost information is required. The stated cost of the product (or service) will be distorted if the costing system does not effectively reflect the product's resource consumption, and there is a risk that managers will stop producing profitable items or continue to develop unprofitable ones. Underestimating a product could lead to accepting unprofitable business, while overestimating could lead to rejecting bids and losing profitable business if cost information is utilized to establish selling pricing.

A management accounting system must also include data for performance planning, monitoring, and evaluation. Planning is converting objectives into the precise steps and resources required to attain them. Companies create both long- and short-term plans, and a crucial part of this process is played by the management accounting function. One of the tools managers employ as a foundation for performance monitoring and evaluation is short-term planning, which takes the shape of the budget process [9]. Short-term planning is more precise than long-term planning. Controlling is the process of making sure that results are as expected. Setting objectives or benchmarks—typically derived from the budgeting process—against which actual results are assessed is a part of the controlling process.

After that, the company's performance is measured and compared towards the targets and previous periods. It is the responsibility of management accountants to give managers feedback in the form of frequent reports that have been properly analyzed, allowing managers to assess whether operations are going according to plan and spot any actions that need to be corrected [9]. Managers must receive economic input from the accounting department, in particular, to help them control expenses and boost operational effectiveness and efficiency.

Many businesses in the manufacturing and service sectors have experienced significant changes in the business environment over the past ten years. Most businesses now compete in a fiercely competitive global market as a result of deregulation and intense international competition in the domestic market. At the same time, product lifecycles are drastically compressed as a result of technical advancements and the requirement to satisfy customers' ever-higher expectations.

The aforementioned changes have not been recorded by management accounting systems for a long time despite the fact that they are important competitive variables. Historically, financial performance reporting has been the main focus of management accounting systems. However, in response to the shifting business landscape, management accounting systems have started to place more emphasis on gathering and disclosing non-financial data, both quantitative and qualitative, on critical factors that are essential for successful competition and support an organization's investment strategy [9]. Financial indicators are now seen as a component of a larger collection of indicators rather than being the core of a management accounting system.

All changes in the business environment can have a significant impact on the management accounting system. Most organizations face changes in cost structures that do not directly follow changes in production volumes and are difficult to track accurately between products or services. Organizations are

reviewing their current management accounting systems and considering implementing new systems that arose in the late 1980s and early 1990s as a result of this change in cost structure.

2.3 Control over cash: common techniques and their elements

Any organization, even major multinational corporations, are facing new difficulties as a result of today's economic pressures as they try to manage cash flow in an unstable market. Cash is the lifeblood of every business, and it can be hard to predict which clients will or will be able to pay when the economy slows down and they take longer to pay. Longer payment terms are possible, and there is a higher chance that clients will fall bankrupt and never make a payment. Even the most responsible and well-funded worldwide companies might become bankrupt due to this cash flow instability [37]. Hence, in any international company, the controlling aspect of cash flow management plays a vital role in ensuring that the company can manage its cash flow well to survive and prosper in the future.

According to Reuvid [37], there are 5 main practices common to international companies to support strong cash flow management. These are:

- new clients' appraisal;
- invoice sales financing;
- invoices collection and credit control;
- poor/insolvent debts avoidance;
- successful information management.

Businesses are continually testing the strength of their present clients as well as searching for new markets and customers. The dynamics are continually

shifting, bringing with them new dangers and chances in both domestic and international markets. As a result, businesses need to establish a reliable procedure for assessing their clients, setting reasonable credit limits, and periodically evaluating them.

When it comes to sales invoice financing, there is a wide range of financing available, and businesses may be attracted to the simplicity of an overdraft, but it has limitations and has nothing to do with day-to-day receipts or payment delays and can also be an uncertain source of funds in a tough economy. One of the most comprehensive types of support is invoice financing, and as invoice financing service providers are closely involved in all aspects of the working capital cycle, it is estimated that up to 85% of sales revenue will be improved as soon as those are invoiced [37]. This typically covers all cost of sales as soon as the invoice is issued, allowing the company to have funds to pay the invoice and move on to the next sale. 15%, usually gross profit less commission, is earned upon payment of the invoice. These funds can be used to increase revenues from internal or export sales and reduce the risk of currency exchange.

Another common issue affecting international business is cash flow constraints, when suppliers want quick payments and customers demand longer payment terms or delay payments. Therefore, there is a need for a strict credit control unit or dedicated person in charge who knows who is paying and who is late on their bills. This business unit/person should also have multilingual skills and legal assistance where necessary to enable faster payments.

Large international companies usually protect themselves from bad debts, either by creating multiple sales so that bad debts don't do too much damage, or by using some form of protection. This can be accomplished through independent business insurance or professional services that can provide pre-approval of clients, maintain contacts to monitor any late payments and provide bad debt protection in the event of bankruptcy [37]. The advantage of this single-vendor

approach is that end-to-end services are provided 24/7 in a simple web-based system supported by local relationship managers.

Ultimately, companies must have robust systems and the ability to say “yes” to the discipline of approving, financing, collecting and securing their invoiced sales [37]. However, this is rather the case for small businesses that rely solely on overdraft financing, so they are better off accepting a package of support from an external consultancy that covers all working capital management, commonly known as bad debt protection factoring.

However, it is worth noting that a recent survey of Business Development Bank of Canada (BDC) (2014), which included and summarized responses from actual business entities highlighted the following key elements of control in international cash flow management:

- ensuring the profitability of the business;
- prepare cash flow forecasts;
- cash flow monitoring;
- timely collection of accounts receivable;
- cash flow control;
- taking control over inventory management.

While some of these appear to be directly related to the general theoretical strategies discussed previously, they can be considered more practical and serve as recommendations for companies.

It can be inferred, that proper profit is crucial to any business. Cash flow management and its control functions mean nothing in the long run if the company is consistently unprofitable. Even when a business is making a profit, it is important to know whether profits can be higher, which products/services a business offers that generate the most profit, and whether the prices offered to customers take costs into account. Therefore, a thorough analysis of the causes of

potential revenue problems is crucial to finding the right solutions. Large international companies or product lines often encounter multiple problems for which solutions can be difficult to find.

The survey cites insufficient revenue, improper pricing, inefficiencies, and low profit margins as the most common reasons for profitability problems [30]. The first two reasons are directly related to price and cost and can be eliminated by reducing costs or using a different pricing strategy (or both). Two other issues require a deeper look, usually involving comparative costs and product line analysis, respectively.

Financial projections are often tied to the starting point of cash flow management and in fact need to be tightly controlled. They help companies predict the peaks and troughs of cash flow in the coming year. Forecasting allows companies to plan the best way to deal with declining cash flows [30]. This may include seeking additional financing, altering discretionary spending plans, cutting costs, securing adequate cash reserves, or requiring security deposits from suppliers and bankers.

Tracking cash flow throughout the year can be considered one of the most important things a business can do to keep track of its financial pulse. To streamline the process, international companies use specialized accounting software that includes dashboards as part of their cash flow management tools [30]. Actual results are done monthly or quarterly and compared to planned results. However, some more volatile companies prefer to do it on a weekly basis.

Timely collection of accounts receivable plays a vital role in the cash flow of international companies as an element of control and improvement. One way to speed up the debt collection process is to receive invoices sooner. Here, a company's level of technological adaptation can be a determining factor. Accounting software allows international companies to submit electronic invoices, which contain a link that takes customers to a digital portal where they

can pay the invoice online [30]. Many companies are using mobile technology to further speed up checkout. In addition to being faster than creating invoices by hand, the use of technology reduces paper and mailing costs.

Another way to speed up the debt collection process is to offer discounts to those who pay the fastest. Therefore, there may be a small discount of 1-2% for fast payments. These discounts are expensive and should only be used if the company needs cash urgently. On the other hand, to encourage customers to pay on time, companies may charge late fees [30]. Additionally, when a customer whose payment was previously delayed returns, the company requests partial or full payment. In this case, there is also an automatic billing system that sends regular reminders to defaulters.

Maintaining control over fixed and variable costs is an important part of maximizing cash flow and business profits. One way a company can do this is by looking at its past variable costs and calculating them as a percentage of sales. These percentages can be used as a future baseline to align these costs with sales. Also, to maximize cash flow, an international company might consider paying its suppliers a bit more (say 1%) [30]. This becomes a win-win situation as the company's suppliers earn more and the company itself can use the extra funds to increase sales.

Additionally, many companies today use cloud computing systems rather than on-premises systems, which are relatively expensive to purchase and maintain. Therefore, investing in technology can be another way for international companies to control costs. Finally, large international companies often motivate employees who find ways to cut costs. This helps create a zero-waste culture in the organization and motivates cost-cutting employees to stay focused and creative.

Although inventory management controls are last on the list, their importance cannot be underestimated as excess inventory can significantly reduce

an international company's cash flow. However, having too little stock can lead to product out-of-stock or delayed delivery. According to Business Development Bank of Canada (2014), there are a number of common steps companies take to successfully take inventory management under control.

One of these steps is the coordination of different types of inventories between departments. This can improve overall inventory optimization. Another step is planning for changes in demand and volatility. This is especially useful for international companies with seasonal demand peaks and troughs so they can optimize inventory levels according to demand cycles. What is more, it is worth optimizing inventory levels for different customers, taking into account their different expectations for service levels and delivery times [30]. Additionally, international companies have developed strong relationships with suppliers that they can rely on to deliver on time and meet tight schedules. This is also a common way for businesses to purchase and use inventory management software that helps predict demand and streamlines the overall inventory management process. Finally, the company analyzes each product line and eliminates loss-making products.

CHAPTER 3.

Strategic components of a cash flow management in an international corporation

3.1 Peculiarities of a cash flow analysis at different business stages

General cash flow patterns vary widely between different businesses. The most important reason for this diversity is the stage the business is in in its life cycle. Therefore, in order to correctly analyze the cash flow of a multinational company, it is necessary to understand the current stage of the enterprise, as well as the cash flow patterns and characteristics at different stages of the business cycle: a start-up phase, growth, maturity and the decline stage.

The term "startup" can apply to businesses until they turn a profit. From an analytical point of view, this is a problem because the theme of entrepreneurship changes fundamentally in the process [22]. In the early stages of a start-up project, the business has no cash flow because transactions with customers have not yet started. Owners and investors are essentially giving money to the corporate entity at this moment, which then gives money to other stakeholders (workers, suppliers) without immediate cash flow. Later, the business demonstrates that it can successfully manufacture a good or service, sell it to clients, and have them use it.

The only true cash flow metric that can be studied at this stage is the cash burn rate. It is calculated by dividing the available liquidity (funds already raised plus any other committed funds) by the expected average cash burn (the monthly cash flow value associated with the continued execution of the entrepreneurial idea) [22]. Therefore, we get the time period in months until the liquidity is completely exhausted. At this stage, if investors can see what they consider to be reasonable progress, they will generally continue to invest in the project. In many

business areas, this can take years. Cash flow is significantly negative during this period, with negative operating cash margins, net current investments, and net capital expenditures (Table 3.1). All cash flow comes from the financing provider. Table 3.1 shows an example of a company's cash flow at the start-up stage.

Table 3.1

Startup Cash Flow Summary [22]

SUMMARY CASH FLOW	20X8 £'000	20X7 £'000	20X6 £'000	20X5 £'000	20X4 £'000	20X3 £'000
OPERATING CASH MARGIN	-2775	-4228	-3853	-5754	-7998	-9070
(INV)/GEN FROM NET WORKING ASSETS	-212	757	151	529	-430	465
NET CAPITAL EXPENDITURE	-13	-58	2	-58	-40	-139
TAXATION	346	382	378	389	538	1780
CASH FLOW AVAILABLE TO SATISFY FINANCE PROVIDERS	-2654	-3147	-3322	-4894	-7930	-6964
NET INTEREST	21	74	211	297	401	322
NET DIVIDENDS	0	0	0	0	0	0
OTHER NON-OPERATING INC/(EXP)	0	0	0	118	0	0
NET CASH IN/(OUT) BEFORE FINANCING	-2633	-3073	-3111	-4479	-7529	-6642
Financed by:						
CHANGE IN EQUITY INCREASE/(DECREASE)	3033	6	138	2544	9388	0
CHANGE IN DEBT INCREASE/(DECREASE)	0	0	0	-66	764	412
CHANGE IN CASH (INCREASE)/DECREASE	-400	3067	2973	2001	-2623	6230
TOTAL CHANGE IN FINANCING	2633	3073	3111	4479	7529	6642

As can be inferred from the table, the business has never generated a positive operating cash margin. While being close to breakeven, it was still around £2.5m at the end of 20X8. To break even, the income has to be two to three times what it is at this point. The business is still a start-up as it has yet to prove a viable business model while its current level of activity is well below what the business is necessary to achieve

To sum up, when start up projects are looked at and analyzed, two of the main things to consider while looking at their cash flows are the cash burn rate versus their progress made towards possibility for further financing and achieving cash break-even.

The future viability of the company is currently fraught with uncertainties. The product's price must make enough money for the finance source to stay confident. If a business owner uses this price as a penetration strategy and sells

goods or services below it, the success of the venture won't be evident until it establishes an affordable price for its items, which could take some time. Target volumes may also need to be reached before economies of scale start to emerge [22]. Businesses do not demonstrate viability until they regularly achieve cash break-even.

Businesses operating in emerging markets are often referred to as growth companies. An emerging market is one where a new product or service is being introduced for the first time [22]. In such a market, all enterprises participating in the market can develop according to the market price. If the market is expanding at a rate of 30% per year, it means that all related companies can also grow at an average rate of 30% per year. This makes these markets very attractive places to invest. When an emerging market is recognized, it can be expected that many new entrants will be in the early stages of growth. Typically, these will be existing companies that have the knowledge and experience to deliver new products or develop services.

Nokia is a great sample of a growing company that has grown over the first decade of the 21st century. Table 3.2 shows the cash flows for the past six years. In each of these six years, Nokia generated surpluses in cash items available to satisfy the needs of finance providers and five years in net cash in/(out) items. For many years, the cash available to meet the needs of financial providers has been sufficient to cover interest and dividends. The only reason for negative net cash before financing in 2008 was two major acquisitions by Nokia. They acquired Navtec, an American company specializing in GPS and mapping, and increased their stake in Symbian from 47.5% to 100%.

Table 3.2

Summary of Nokia's 2003-2008 Cash Flow [22]

Nokia						
Summary group cash flow statement						
Year ended 31st December	20X8	20X7	20X6	20X5	20X4	20X3
	€m	€m	€m	€m	€m	€m
OPERATING CASH MARGIN	7457	8474	6163	5390	5193	6545
(INV)/GEN FROM NET WORKING ASSETS	-2546	605	-793	-366	299	-194
NET CAPITAL EXPENDITURE	-966	-800	-748	-593	-643	-631
TAXATION	-1780	-1457	-1163	-1254	-1368	-1440
CASH FLOW AVAILABLE TO SATISFY FINANCE PROVIDERS	2165	6822	3459	3177	3481	4280
NET INTEREST	66	260	271	374	219	341
NET DIVIDENDS	-2042	-1748	-1553	-1530	-1391	-1354
OTHER NON-OPERATING INC/(EXP)	-1945	78	1754	2436	292	-2608
NET CASH GEN/(ABS) BEFORE FINANCING	-1756	5412	3931	4457	2601	659
Financed by:						
INCREASE/(DECREASE) IN EQUITY	-3068	-2832	-3325	-4256	-2648	-1332
INCREASE/(DECREASE) IN DEBT	3571	760	-88	217	-257	-70
(INCREASE)/DECREASE IN CASH	1253	-3340	-518	-418	304	743
TOTAL CHANGE IN FINANCING	1756	-5412	-3931	-4457	-2601	-659

Therefore, it can be concluded that once an emerging market has been identified and decided to enter it, the strategies of international firms are usually aimed at gaining market share [22]. Once the above business stage has been defined, it is worth pointing out some common characteristics of growth stage companies.

Attractive new growth markets can lead to irrational behavior of investors and general confusion about the actual potential cash flows of new growth markets [22]. This can lead to extreme and absurd results. The latest example is the dot-

com bubble. Consumer websites ideas have been able to raise millions of dollars from venture capitalists or Nasdaq IPOs for website development. Many of these companies considered their projects successful if they generate were generating thousands of visits per day, i.e. thousands of users per day to their website. Such companies' market values were millions of dollars and they kept rising dramatically in value.

Despite having no real cash flow, many of these sites proudly told investors that it was too early to force users to subscribe or pay for content, arguing that building a user base or increasing market share was more important. There was no real profitability to the service, so consumers could simply find cheaper or free alternatives, or drop the service entirely because they didn't really need it. While a small number of these companies were successful in the late 90s, most failed.

Another characteristic of growth companies is that they tend to have negative cash flows for many years [22]. This is due to the continued investment demand for growth. At this stage, the company has proven the viability of its product by generating actual sales from customers. Now they need to build the infrastructure needed to manufacture their products and sell them to their target customer base. Even though a successful growth company can generate solid profits from its existing customers, the need to invest in operating assets and new factories, distribution facilities, and possibly retail stores often results in negative net cash flow [22]. Cash can also be used for later growth, business acquisitions and/or assets from former competitors.

Over the past 2 decades, there have been a series of bankruptcies of large public companies. Enron, WorldCom and Global Crossing were among the US companies while Tiphook and Brent Walker – the UK ones. All of these businesses took advantage of emerging markets. The reason they went under was they ran out of money and there was no other company in the group that could

generate cash to make up. There were 65 banks lending to various components of the firm when Brent Walker collapsed [22]. By doing this, 65 separate business units have determined that the credit risk that comes along with their exposure to the group was acceptable. This means that determining whether a growth company is a genuinely viable business entity is a complex and challenging issue. Therefore, even when seeking equity or debt investments, growth companies should expect to have negative cash.

In general, it is assumed that all firms want to grow, but that mature firms no longer produce large volumes and therefore have a lower need for growth-related investments. However, for various reasons, this definition may not be strong enough to properly understand the cash flows of mature companies.

Inflation remains a major global problem and is expected to become an even greater problem over the next decade. Unless a mature firm intends to expand geographically or invest heavily to increase production, the first thing a mature firm must do is ensure that its sales are in line with nominal inflation [22]. So, if a company is facing 7% inflation in its market, it has to raise prices by 7% every year while keeping production constant in order to be in the same position at the end of the year as it was at the beginning of the year. This means that if a firm is not operating in a zero-inflation economy, its turnover should increase in nominal terms every year, but this does not necessarily mean that it will increase production.

The second thing to consider when analyzing the cash flow of a mature company is the growth in turnover relative to the market growth rate. Established companies must keep up with inflation and the market growth rates of the segments they serve in order to maintain real stability relative to their competitors [22]. For example, if the market is growing at 3% and inflation is 4%, that means revenue and profits growing at 7% per year is equivalent to a shutdown. Below this, the business falls short of the requirements of its competitors.

A third point to consider when analyzing an established company's cash flow is the market in which it operates. Adoption occurred decades or centuries ago in most developed markets. This indicates that the businesses engaged in competition in these markets have a long history. These sectors have invested decades in streamlining processes and lowering costs.

Small adjustments in customer tastes, however, occasionally offer chances to grow market share. If a business expands more quickly than the market in a mature market within a year, it indicates that its direct rivals have lost market share and consequently revenues. As a general rule, a competitor will react aggressively to any innovation that causes it to lose sales; the usual response is to copy the innovation and reflect it in the product and business itself, thereby negating the advantage over time and reverting to some balance [22].

Therefore, depending on the state of the industry, mature enterprises may register zero, negative, or positive growth over any period being considered. Due to the nature of mature markets, it is challenging to establish profitable mature firms in a sustainable manner [22].

Finally, having defined a mature firm as one operating in a mature market, the location of the firm must be considered when analyzing cash flows. A company may compete within a single city, county, state, or province, may be regional or national, may be a multinational corporation operating in multiple countries, or may be a multinational corporation operating across an entire continent. In fact, a market can mature in one place and grow in another. The profit margins for manufacturers are, therefore, small. Many mature markets in developed countries are in a growth phase in developing countries [22].

Thus, for the purpose of analyzing cash flows, the market conditions in which a business chooses to operate determine whether the business should be considered mature.

Coca-Cola can serve as an example of one the most successful mature companies of the past few decades. As shown in Table 3.3, free cash flow available to satisfy capital providers averaged \$5.397 billion over the three years.

Table 3.3

Summary of Coca-Cola's Cash Flow from 2000 to 2015 [22]

COCA COLA Summary Cash Flows	20XX \$millions	20XW \$millions	20XV \$millions
Cash from operations	8909	8182	7667
Change in NWA	6	−615	430
Net Capex	−1409	−1295	−811
Cash taxes	−1596	−1601	−1676
CASH FLOW AVAILABLE TO SATISFY CAPITAL PROVIDERS	5910	4671	5610
Net interest	−169	−9	2
Net dividends	−3149	−2911	−2678
Other	−5310	−405	−685
NET CASH INFLOW/(OUTFLOW)	−2718	1346	2249
Inc/(Dec) in equity	−219	−2268	−1825
Inc/(Dec) in debt	4341	−1404	−2282
(Inc)/Dec in cash	−1404	2326	1858
FINANCING CASH FLOW	2718	−1346	−2249

A typical company enters a decline phase when demand in the market in which it operates declines. This may be due to technological, environmental, demographic changes or related to consumer taste or fashion. Over the past 20 years, the world in which commodities are produced has changed dramatically. These changes have occurred due to a number of factors reducing the economic cost of working remotely for consumers. It was the combination of containerization, cheap air travel, global courier services, computerization, faxing and later the Internet, and a relatively light regulatory environment that made it profitable for large manufacturers to supply global markets through multiple factories located in countries with low labor costs [22].

Dawson International, formerly a leading supplier of cashmere to the textile industry, can serve as a good example of a company being at its decline phase. Table 3.4 summarizes Dawson International's cash flows for eight years. Operating cash margins are typically negative. This item includes positive and negative operating cash margins for the year, as well as non-recurring costs related to the year-over-year reduction in the size of the business. In some years, investing in current assets helps generate cash flow as the value of investments in inventory and accounts receivable (net of accounts payable) decreases. Capital expenditures are low and, in some years, capital gains also contribute to cash flow.

Table 3.4

Consolidated Cash Flow of Dawson International, 2000-2007 [22]

Amounts in £ millions	20X7	20X6	20X5	20X4	20X3	20X2	20X1	20X0
Operating cash margin	-4.3	-2.5	1.3	0.2	-9.6	-7.4	-2.1	0.8
Change in net working assets	0.2	-5.7	5.3	0.2	5.1	-4.8	11.8	-13.4
Net Capex	2.6	-1.4	-2.3	0.3	-0.9	0.2	-2	0.2
Cash taxes	-0.3	-0.4	-0.5	0.3	0.1	0	-0.2	-0.2
CASH FLOW AVAILABLE TO SATISFY CAPITAL PROVIDERS	-1.8	-10.0	3.8	1	-5.3	-12	7.5	-12.6
Net interest	-0.9	-0.7	-0.7	-1.2	-1.1	-0.2	0.1	0.1
Net dividends	0.0	0.0	0	0	0	0	0	-25
Other	0.0	-1.1	-6.9	16.5	1.3	-1.1	1.1	8.8
NET CASH INFLOW/(OUTFLOW)	-2.7	-11.8	-3.8	16.3	-5.1	-13.3	8.7	-28.7
Increase/(Decrease) in equity	0.0	0.0	1.4	0	0	0	0	0
Increase/(Decrease) in debt	6.0	1.9	-0.7	1.8	3.5	-0.7	0.3	-0.6
(Increase)/Decrease in cash	-3.3	9.9	3.1	-18.1	1.6	14	-9	29.3
FINANCING CASH FLOW	2.7	11.8	3.8	-16.3	5.1	13.3	-8.7	28.7

Since the goal of maximizing corporate welfare is to always seek to optimize cash flow, even in recessionary times, managers often seek to diversify their business from declining markets into new ones [22]. They use cash flow from existing mature and declining business areas to enter new markets, which may be emerging, growing or mature ones.

One consequence of the decline is that price competition among other competitors in the market can be intense. This is because each individual firm is struggling to maintain or increase production even as total market consumption is declining. Due to excess capacity among manufacturers, the market is flooded

with products, leaving customers seeking lower prices, potentially switching to other suppliers. It is therefore should be expected that operating cash margins will decline steadily over time, which can be seen as a sign that companies face permanent rather than temporary problems in selecting the markets in which they compete.

3.2 Decision-making aspect: stages and core activities

Decision making in cash flow management of an international company can be seen as the end result of the successful completion of the stages and aspects discussed earlier in this paper. In addition to the typical cycles that characterize the decision-making process, conclusions and recommendations related to cash are supported by significant financial data, such as a company's cash flow statement. Therefore, it is important to know information about a company's income and expenses, which can be found in its accounting documents. Also, the way they are arranged is important so that balances for a given period can be determined and future cash flows estimated. The decision-making aspect of cash flow management is generally considered to be a combination of the following activities:

- forecasting future deficits (lack of cash);
- building a solid foundation for obtaining a loan (included in the business plan/project);
- Creating additional revenue streams (for example, by investing positive balances in capital markets) or reinvest "extra funds" in technology or equipment to improve the company's management.

As can be seen from Figure 3.2, decision making has its own cycle and is closely related to the planning and control process. The initial five steps are the

decision- or planning-making process. Planning is typically a decision-making process that involves weighing several options.

The latter two steps constitute the control process, which include evaluating and modifying actual performance to guarantee that the chosen alternative and its implementation strategy are carried out as intended. Each element of decision making is discussed in more detail on the next couple of pages.

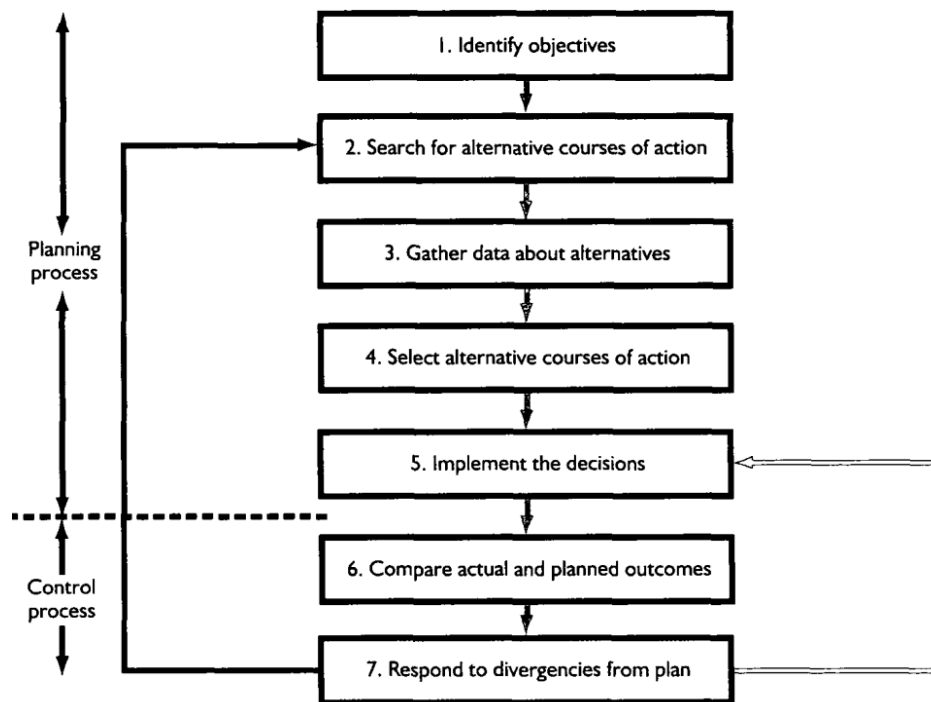


Figure 3.2 – Decision-making process [9]

Like many other management processes, decision making begins with the definition of objectives. Before the right decision can be made, there must be some guiding goal or direction that enables the decision maker to assess the appropriateness of prioritizing one type of action over another [9]. Therefore, the first stage of the decision-making process should be to define the goals of the organization.

What the company's objectives are or ought to be is a topic of substantial debate. Economic theory typically presupposes that businesses want to maximize

profits for their owners, or more specifically, to maximize shareholder wealth (common shareholders in a limited corporation) [9]. The pursuit of profit maximization has been justified using a number of arguments. Legal experts contend that since common stockholders own the company, a trust manager should be in charge of managing it for their advantage. The maximizing of overall economic wellbeing results from profit maximization, which is another argument in favor of the profit motive. That is, by doing the best for itself, the company unknowingly does the best for society. Furthermore, it seems plausible that higher profits are more in the firm's interest than lower profits, so maximization is at least a useful approximation.

Some authors argue that entrepreneurs are content to find plans that provide satisfactory profits rather than profit maximization [9]. Since people have limited comprehension and can only process limited information at a time, they tend to just search for solutions until they find the first acceptable one. There is, unfortunately, no other attempt to look for a better option or to keep looking until the best option is found.

Others see corporations as a coalition of different groups (shareholders, employees, customers, suppliers, and government), each of which must pay a minimum fee to join the coalition [9]. Any excess profits beyond these minimums are subject to negotiation between the groups. In addition, companies are subject to social constraints. Keeping a healthy environment, providing work opportunities for workers with disabilities as well as social and recreational opportunities are among the examples of social goals a business may strive for.

To suggest that a business's main goal is to maximize profits is an evident simplification. Building a stronghold and an empire are two goals that some managers have. Another goal is security, which might take precedence over strictly financial considerations. It is commonly accepted that businesses aim to maximize the value of future net cash inflows, or more specifically, the present

value of future net cash inflows (i.e., future cash inflows minus cash payments) [9]. This is the same thing as increasing shareholder value. This goal was chosen for the following reasons:

1. It is unlikely that any other objective would be so broadly applicable to measure an organization's ability to survive in the future.
2. Although maximizing the present value of future cash flows is unattainable in practice, one can learn how to do so by developing the essential concepts.
3. Let shareholders as a whole in the negotiating coalition know how much they are spending to achieve other goals by showing the amount of cash that is distributed among the coalition members.

The second stage of the decision model is to find some possible courses of action (or strategies) that can ensure that the goal is achieved. If a company's management is fully focused on its current product and market mix, market share and cash flow may decline, and there is a danger that the company will not be able to generate enough cash flow to survive in the future. To maximize future cash flows, management must identify potential opportunities and threats in the current environment and take immediate action to ensure that the organization is not shocked by any future events that may occur [9]. In particular, companies should consider one or more of the following courses of actions:

1. Creating new products to be sold in the existing market;
2. Developing new products for sale in new markets;
3. Discovering or creating new markets to sell existing products

The most challenging and crucial step of the decision-making process is identifying alternative courses of action, which requires gathering knowledge about potential possibilities and situational factors. While it's ideal for businesses to take into account every possible course of action, in practice they typically only explore a small number of options, and their initial search is localized [9]. If this

ongoing search effort does not produce adequate results, search will increase in frequency.

After identifying viable areas of activity, management must assess the potential growth rate of these sectors, the company's capacity to capture a sizable portion of the market, and the cash flow of each alternative activity for various business states. Due to the fact that decision-making occurs in a context of uncertainty, certain potential events that are beyond the decision-control maker's must be taken into account for each alternative course of action. These uncontrollable factors are called the state of nature [9]. Some examples of possible states of nature are economic prosperity, high inflation, recession, competitiveness, etc.

The course of action a company chooses using the above information will involve its long-term resources and how this will affect the company's overall position in its environment, i.e. the products it produces, the markets in which it operates and its ability to respond to future changes. These decisions determine the company's long-term capabilities and therefore the types of decisions it can make in the future. These decisions are often called long-term or strategic decisions [9]. It is crucial to gather enough information about a firm's capabilities and the environment in which it works since strategic decisions have a significant impact on a firm's position going forward. Top management should concentrate on making strategic decisions due to their significance.

Management must make choices that do not commit firm resources to the long term in addition to strategic or long-term ones. Operational decisions, often known as short-term decisions, are typically made by lower-level managers. The corporation bases its short-term decisions on the existing environment, its material, human, and financial resources [9]. They are mostly reliant on how well the business makes long-term decisions. Some examples of short-term decisions are shown below.

1. How much should the sales price of the company's products be set?
2. How many units of each product must be produced?
3. What media will we use to promote the company's products?
4. What level of service will we provide to our customers in terms of delivery days and after-sales service?

Data also needs to be collected for short-term decision-making; for example, data on competing product selling prices, estimated demand for alternative selling prices, and projected costs at various levels of activity must be collected to make pricing and production decisions. After data is collected, management must decide what action to take.

In practice, decision-making involves choosing among competing alternative courses of action and choosing the alternative that best meets organizational goals. Assuming that the firm's goal is to maximize future net cash inflows, the choice of alternatives should be based on a comparison of the differences between cash flows [9]. Therefore, a step-by-step analysis of net monetary benefits must be applied to each alternative. Alternatives are ranked according to net monetary benefit, and those showing the greatest benefit are selected, taking into account any qualitative factors.

Once an alternative course of action has been chosen, it must be implemented as part of the budgeting process. A budget is a financial plan developed to carry out decisions made by management. Budgets for all the different solutions are presented in terms of cash in and out as well as sales receipts and expenses. These budgets are consolidated into a unified report on the organization's expectations for the period to come. This report is called the total budget. The main budget includes profit and loss budget statement, cash flow statement and balance sheet. The budgeting process communicates to everyone in the organization the role they must play in carrying out management decisions [9].

The final stage of the process of comparing actual and planned results and reacting to deviations from plan, as shown in Figure 3.2, represents the company's control process. The control management function includes measuring, reporting and subsequently correcting performance to ensure that the company's goals and plans are being met. In other words, the purpose of controlling the process is to ensure that work is carried out in the manner intended.

Accountants create reports on activity results and send them to the appropriate management, who are in charge of carrying out various decisions, in order to track efficiency. Periodically released performance reports should provide a comparison of actual outcomes (actual costs and revenues) to anticipated results (budgeted costs and revenues) [9]. Performance evaluations offer feedback by contrasting expected and actual outcomes. The actions that did not proceed as planned should be highlighted in these reports so that management may devote their valuable attention to these areas. Corrective action is necessary for effective control in order to align intended outcomes with actual outcomes. Plans can also need to be changed if comparisons show that they are no longer practical.

The arrowed lines in Figure 3.2 connecting steps 7 and 5 and 7 and 2 depict the process of taking corrective action to bring actual results into alignment with planned results, or revising plans if the comparison reveals that actual results do not match planned results. "Feedback loops" are shown by these arrowed lines [9]. They stress the interconnection between the many stages of the process and imply that it is dynamic. Phase 7's feedback loop with Phase 2's feedback loop suggests that the strategy should be frequently reviewed and, if it is no longer viable, alternative courses of action should be taken into consideration to meet organizational goals. The second cycle emphasizes corrective actions taken to bring actual results into line with planned results.

3.3 Forecasting: objectives, stages and their characteristics

The purpose of financial forecasting is to make reasonable projections of the company's future activities and likely financial situation. Some of the questions the company is eager to answer while making financial projections include the following ones:

- Can the company pay off its current debt at the expense of future cash flows?
- How much additional capital will the company need to fund its future growth?
- What is the future borrowing capacity of the company? What is the maximum amount of debt that can be repaid with cash flow, taking into account the other needs of the business, such as working capital, factory costs, etc.?
- How much can the projected cash flow be reduced? How much can sales, margins and cash flow drop before profitability is threatened?
- Is the company overleveraged as growth leads to increased debt?
- In summary, how should the loan be arranged? What payment schedule should be in place for new debt?
- What forms of protection and controls must be provided in credit agreements to maximize the safety of bank funds?

The financial forecast will enable the company to evaluate various aspects, including the facility's actual purpose, whether it is appropriate for the purpose being considered (project financing, expansion, acquisition, debt refinancing), or if it is used for a non-specific purpose (signal warning), as well as the risks of emergency lending and the likelihood of repayment [12].

Another use for financial forecasting is in debt restructuring, which is a common requirement for businesses for a variety of factors. A financial projection will evaluate the issue at hand and choose the best payment plan in light of the company's potential future cash flow.

The forecasting aspect of corporate cash flow management generally involves three phases: three-year financial statement analysis, profit and loss construction, and balance sheet financial statements.

Historical analysis is the starting point for forecasting a company's future performance and financial condition [12]. Analysis of past performance and company performance provides the basis for forecasting company performance under future circumstances. At this stage, the most important factor is to identify the key variables that affect the company. If the company is unable to determine from historical analysis the possible causes of the results shown and if the company has certain information about future conditions from statistical agencies, industry forecasts or company plans, the company will make assumptions about possible future events and how these events affect the company's future activities.

Financial statements for at least three years provide the opportunity to examine the various causes and effects of a company's historical performance. Analyzing a company's historical operations, performance and financial position will help the company make informed guesses about what might happen in the future.

According to Fight [12], before starting the forecast, it is worth summarizing the analysis of the company's activities in the following areas:

- operational health of the company;
- financial health (whether the leverage is too high);
- markets characteristics;
- company's location among its competitors;

- financial position and cash flow summary;
- management strengths and weaknesses, industry status, products' nature and associated risks;
- management effectiveness;
- operational risk;
- past history of financial performance.

Consequently, it is helpful to research a firm's historical charts and carefully consider the history and performance of the organization while setting the foundation for a forecast. This will assist the business in creating useful forecasting assumptions.

Analyzing the anticipated growth in net sales is the first step in forecasting. Simple assumptions as well as more complex choices, such as segmenting the company's divisions into geographies or product lines and estimating the performance of each division (including acquisitions/capex) to get an overall outcome, can be used to create pro forma sales predictions [12].

It is crucial to carefully track the uncovered factors that have an impact on net sales statistics over time, allowing for the distinct identification and manipulation of crucial or vulnerable components. Because of this, it is frequently possible to generate net sales projections in a separate matrix created just for this use [12]. All other elements will be generated (directly or indirectly) from the net sales estimate, thus a thorough analytical procedure is necessary to arrive at a credible estimate of net sales.

Since sales forecasting comprises the most variables and unknowns, it poses the biggest analytical difficulty. The sales prediction provided by a company (which is occasionally included in its annual report) might serve as a starting point for estimating sales, but it should always be compared to the

analyst's own assumptions and knowledge of the challenges the firm may encounter in accomplishing its objectives.

Once the pro forma net sales growth forecast has been created and the number of years considered forecasted, constructing the projected income statement is a relatively simple operation. The cost of sales, gross profit, SGA, and operating profit from past income statements are frequently used as a starting point to compute the average percentage of net sales for this time period [12]. The estimated value on the pro forma income statement is then determined by adding these percentages to the pro forma net sales prediction. This method should be used for operating items that result from sales-driven activities and appear on a company's income statement.

However, some factors may not necessarily correlate with a company's historical sales performance and require special treatment. The cost of goods sold may need to be adjusted for expected changes, such as the availability of key raw materials used in operations [12]. Another example is where the proposed entity seeks to acquire a business or company that is operating at above average costs or would incur additional costs upon joining the business; must also be considered.

A different method is used when forecasting the balance sheet than when projecting the income statement. For various balance sheet accounts, multiple different strategies are employed. The first step is to create a balance sheet item called "working capital" that is closely tied to sales and profitable operations [12]. The income statement's forward-looking indicators are used to determine key performance ratios.

The average proportion of total assets method may be combined with "new cash requirements" for items like cash and marketable securities (calculated using a projected asset and debt amortization schedule once all other balance sheet items are completed).

For balance sheet liabilities, known values are determined first. This would include items related to sales (accounts payable). For items such as debt, a debt repayment schedule must be prepared, which includes the company's existing debt repayment schedule (given in the company's accounts), as well as the loan debt repayment schedule of the suggested duration [12]. Other items can be calculated based on historical averages (for example, tax bills).

For net worth projections, companies combine projected retained earnings with projected capital inflows. Finally, assets and liabilities need to be balanced: this will require calculating the company's "new cash requirements" - a "plug-in" figure that can be used along with the cash/marketable securities heading (calculated after all other balance sheets are completed) [12].

It is important to note that a large number of forecast accounts are sales oriented and will use sales figures for calculations. So, in addition to using forecast assumptions and projected profit and loss statements, a ratio table based on the historical data will be used significantly.

Conclusions

The research has examined the role of cash flow management in international corporations, provided examples of successful practices of managing cash flows at different business stages. The results obtained in the research process have allowed to achieve the set research objectives and provided a possibility of the following conclusions to be made.

1. Literature review and analysis performed have defined the cash flow management as a process of collecting and managing cash flows within the organization. It is vital for any type of business and, especially, for large international corporations where it can be characterized as a combined process of planning, accounting, control, analysis, decision making and forecasting of cash inflows and outflows within the international organization.

2. Internet, banking and regulatory developments have been defined as key factors influencing the diversification of models used in international cash flow management. From the theoretical stand point, 2 categories of models can be identified: determination of optimal cash balances and solutions to multilateral netting (international funds transfer). The first category includes such approaches as economic order quantity, short-term currency surpluses investment, international short-term borrowing with interest rates and exchange rate risks. The other category is represented by multi-period cross-border cash transfer-scheduling, generalized network optimization and currency flows models.

3. Cash flow management for international corporations is often associated with benefits such as reduction of total risks bared by shareholders, effective reallocation of funds for investment purposes, discount trade, centralization and differentiation. At the same time, it is worth to be noted that such benefits could be turned into significant advantages for a corporation as a whole only in case of

a strong corporate headquarter and clear distribution of power between the main company and its subsidiaries.

4. Planning can be considered as a starting point in cash flow management. It allows the company picture its financial outcomes and define the methods to achieve them. 3 types of plans are defined according to the term they are expected to be implemented: short-term (up to 1 year), medium-term (1-5 years) and long-term (5 years and more). Budgeting adds financial back-up for planning (or considered as a stand-alone activity) and can be implemented using 2 types of techniques: traditional and zero-base budgeting.

5. While accounting as a whole is concerned with providing various types of information to help make the right business decisions, the cash flow management functions of accounting are mainly related to recording cash receipt and outflows which are determined by the budget items.

6. Control over cash flows requires significant attention from the managerial stand point while the topic is considered to contain both theoretical elements and advice derived from business practitioners. The theoretical aspect includes such components as appraising new customers, funding invoiced sales, collecting invoices and crediting control, avoiding “bad” debts, and successful information management. The other side supports the control to be achieved via: business profitability, cash flow supervision and projections; quick accounts receivable collection; cash outflows and inventory management control.

7. The phase in a business cycle of a particular corporation is regarded as a key factor while analyzing the company’s cash flow. The patterns, common cash flow features vary dramatically from the start-up phase through its decline stage. Despite different indicators chosen to analyze each business stage, operating cash flow and cash flow to stockholders are considered to be important parameters throughout the company’s business cycle.

8. Decision making in cash flow management, despite having a common

cycle, is strongly supported by financial data which has a decisive factor while making the decisions. The need data is typically retrieved from company's cash flow statement and is thoroughly analyzed by company's management. Moreover, the decision-making process includes such stages as objectives identification, searching for alternative courses of action, gathering data about alternatives, selecting alternative courses of action, implementing the decisions, comparing actual and planned outcomes and responding to divergencies from plan.

9. The need to evaluate company's future performance and financial conditions needed to achieve the desired outcomes are among the main reasons forecasting is considered to be a part of the cash flow management. On practice, the process typically includes 3 stages: analysis of financial statements, constructing profit and loss, and balance sheet financial statements.

Abstract

The paper has defined cash flow management as vital for any large international corporation. The research has also highlighted key factors influencing the diversification of models and identified their categories. Furthermore, the paper has researched benefits for international corporations in cash flow management and the conditions for their presence. The work has identified planning, budgeting, its types, and peculiarities. Next, the paper has defined accounting in the context of cash flow management and highlighted its functions. The research has further looked at the controlling aspect of international cash flow management as well as its components and common tactics applied by modern enterprises. The paper has also given examples by analyzing companies' cash flows at different business stages and defining their key characteristics. It has further researched the decision-making aspect, its cycle, and the data needed in cash flow management. Finally, the process of forecasting, its cash flow management aspects and components were reviewed in detail.

Keywords: cash flow, planning, budgeting, accounting, control, analysis, sales, funding, invoicing, international corporation.

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