

T.C.
MARMARA UNIVERSITY
SOCIAL SCIENCES INSTITUTE
ACCOUNTING AND FINANCE (ENG.) MASTER PROGRAM

**CASH FLOW STATEMENT ANALYSIS AND AN
APPLICATION CONSIDERING IFRS**

Master Thesis

ESRA EKE

İstanbul, 2008

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Supervisor: ASSOC. DR. FİGEN ÖKER

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Sosyal Bilimler Enstitüsü Müdürlüğü

Tez Onay Belgesi

İŞLETME Anabilim Dalı MUHASEBE FİNANSMAN(İNG) Bilim Dalı Yüksek Lisans öğrencisi ESRA EKE KARAAHMETOĞLU'nun CASH FLOW STATEMENT ANALYSIS AND AN APPLICATION CONSIDERING IFRS adlı tez çalışması ,Enstitümüz Yönetim Kurulunun 22.05.2008 tarih ve 2008-8/42 sayılı kararıyla oluşturulan jüri tarafından oybirliği/oyçokluğu ile Yüksek Lisans Tezi olarak kabul edilmiştir.

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ÖZET

NAKİT AKIŞ TABLOSU ANALİZİ VE ULUSLARARASI MUHASEBE STANDARTLARINA GÖRE DÜZLENMİŞ BİR ÖRNEK

Günümüz iş dünyasında şirketlerin varlıklarını devam ettirebilmeleri ve kar ederek şirket sermayesini artırabilmeleri için kaynaklarını ve bunların kullanımını çok iyi takip etmeleri gerekmektedir. Bu doğrultuda finansal tabloların önemi ve kullanım alanlarında giderek artmaktadır. Şirketlerin en temel finansal tablolarını bilanço, gelir tablosu ve nakit akış tablosu olarak özetleyebiliriz. Nakit akış tablosu şirket nakit durumunu, nakit kaynak ve kullanımını en açık şekilde gösterdiği için şirketlerin varlıklarını devam ettirebilmeleri açısından çok önemli bir rol üstlenmiştir. Şirketlerin tedarikçilerine, çalışanlarına, devlete karşı ödemelerini ne ölçüde yapabildikleri, kredi borçlarını ödeme yetenekleri, hissedarlarına temettü dağıtabilme durumları şirket ile ilgili olan tüm üçüncü kişiler için takip edilmesi gereken önemli bilgilerdir. Bu bilgiler ışığında şirketin devamlılığı kontrol edilebilir. Uluslararası Muhasebe Standartları sayesinde nakit akış tabloları standart ve güvenilir bir yapı kazanmıştır. Bu çalışma ile Türkiye’de gıda sektöründe önemli bir pazarı olan bir firmada Nakit Akış Tablosunun Uluslararası Muahsebe Standartlarına göre nasıl hazırlandığı detaylı bir şekilde anlatılmıştır. Rasyo analizleri ile şirketin finansal ve nakit durumunun nasıl analiz edileceği açıklanarak örnek üzerinde detaylı şekilde gösterilmiştir. Amerikan, İngiliz ve Türk nakit akış tablosu ile ilgili standartların Uluslararası Muhasebe Standartları ile karşılaştırmasında çalışma içerisinde önemli bir yer taşımaktadır. Çalışma neticesinde Nakit Akış Tablolarının Uluslararası Muhasebe Standartlarına göre yapılışı çok net bir şekilde ifade edilmiş ve şirket için ne kadar önemli bir finansal tablo olduğu vurgulanmıştır.

GENERAL KNOWLEDGE

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ABSTRACT

CASH FLOW STATEMENT ANALYSIS AND AN APPLICATION CONSIDERING IFRS

Companies should track their resources and the use of the sources very detailed and carefully, in order to continue their life, generate gain and improve equity of the firm. Therefore, the importance and usage of the financial statements are increasing everyday. The main financial statements are Balance Sheet, Income Statement and Cash Flow Statement. Cash Flow Statements have an important roll for the future of the compnay, since they show the cash structure of the company. The paying ability of the company againts vendors, employee, and government, credit backpayment and dividend payment capacity are so considerable for external information users. The solvency of the firm can be controlled with the help of these informations. International Accounting Standards set the rules for preperation and presentation of the Cash Flow Statements. In this thesis the preperation of the Cash Flow Statement according to Internatioanl Accounting Standards in a leading food company is expleianed detailed. The analysis of the financial situation of the company is made by the help of ratio analysis. In addition to these, American, English and Turkish accounting standards for Cash Flow Statements are copared in these thesis. As a reult of this thesis, preperation of the Cash Flow Statements accordindg to International Accounting Standards and the importance of the statement is explained.

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ABBREVIATION

IFRS	International Accounting Standards
IASC	International accounting Standard Committee
IAS	International Accounting Standards
TMS	Turkish Accounting Standards
CMB	Capital Markets Board
FCF	Financing Cash Flow
OCF	Operating Cash Flow
ICF	Investing Cash Flow
EBIT	Earnings Before Interest and Tax
GAAP	Generally Accepted Accounting Principles
ASB	Accounting Standards Board
FASB	Financial Accounting Standards Board

PART 1

1. INTRODUCTION

A cash flow statement, balance sheet and income statement are the three most common financial statements used to reflect a company's performance. The same accounting data is used in preparing all three statements, but each gives information about different aspects of the company.

The cash flow statement discloses how a company raised money and how it spent those funds during a given period and shows the effect on cash of the operating, investing and financing activities of a company for an accounting period.

Every business organization has two key financial objectives. The one is the achieving high operating profitability and the second is staying solvent. Operating profitably means increasing the amount of the owners' equity through the activities of the business and providing the owners with the satisfactory return on their investment. Staying solvent means being able to pay the debts and obligations of the business as they come due. Income statement gives information about the profitability of the company. A balance sheet shows whether the business is solvent or not. It shows the nature and amounts of current liabilities. However, cash flow statement is giving direct information about the cash structure of the company. If there is enough money to pay debts or not and the sources and uses of the money is presented by the help of cash flow statement.

The information in a statement of cash flow should help investors, creditors and others to assess the entity's ability to generate future cash flows, to pay dividends to stockholders, interest and principal to creditors.

PART 2

MAIN CONCEPTS OF ACCOUNTING AND FINANCIAL STATEMENTS

2.1. ACCOUNTING INFORMATION SYSTEM

The purpose of the Accounting Information System is to identify, collect and measure information about economic entities for the information users who have an interest in the financial activities of the enterprise.¹

With the help of the accounting, a business is being controlled by keeping accurate bookkeeping records. From those records certain statistics called “accounting ratios” are being prepared and by using those ratios, financial difficulties are detected before they become serious, so that counter-measures may be taken.”²

The users of financial information are classified as external or internal decision makers. The accounting information is divided into two broad categories, according to the type of the decision makers. Management accounting is the reporting of financial information for internal users. Managers who are responsible for the planning the future of the business, implementing those plans and controlling daily operations use management accounting information. Financial accounting is the reporting of financial information for external decision makers. External decision makers are shareholders and potential investors, creditors, suppliers, customers, competitors, financial analyst and advisors, brokers, underwriters, labor unions, governmental agencies and public. External decision makers have no direct access to the information generated by the internal operations of the company. They use financial statements to decide to invest in the entity, extend it credit, or even do business with it. Therefore, the relevance and reliability of the financial statements are so important for the external decision makers.

¹ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, **Intermediate Accounting**, Vol.1, Boston, Massachusetts: Irwin/McGraw-Hill, 1998, s.4.

² Assoc. Prof. Dr. Uğur Günege, **Financial Accounting, Principles and Turkish Accounting Practices**, İstanbul: Marmara University Faculty of Economic and Administrative Sciences Press, 1990, s.1.

2.2. GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP)

Generally accepted accounting principles (GAAP) are the financial accounting and reporting rules and procedures, which a business entity must use in preparing external financial statements subject to audit by an independent certified public accountant.³

GAAP are the broad guidelines at financial reporting that have been developed and accepted by the accounting professions.⁴

If there would be no standards to guide accounting and reporting practice, all accountants would have to develop their own financial accounting theory, practices and procedures. That would enable the comparability and reliability of the reported data.

The external information users may not receive all the specific financial information they need from the entity, therefore they must use general-purpose financial statements. GAAP has been developed to provide relevant and reliable financial statements to external decision makers and to give all generally needed information to them by the accounting professions.⁵

GAAP has three main purposes. They increase the confidence of external information users that the financial statements are faithful. They guide the companies and accountants who prepare financial statements on how to account for and report economic activities. They provide independent auditors of financial statements a basis for evaluating the fairness of those statements.⁶

³ Lanny Chasteen, Richard Flaherty and Melvin O Conner, **Intermediate Accounting**, 1998, s.4.

⁴ Assoc. Prof. Dr. Uğur Günege, s.3.

⁵ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, s.4.

⁶ Lanny Chasteen, Richard Flaherty and Melvin O Conner, s.4.

2.3. INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE AND INTERNATIONAL ACCOUNTING STANDARDS

The Objectives of the International Accounting Standards Board (IASB) are:

- a) To develop a single set of high quality and understandable global accounting standards. These standards require high quality, transparent and comparable information in financial statements and other financial reporting for the users of the information to make economic decisions;
- b) To support the use and application of those standards; and
- c) To work with national standard-setters to bind national standards and International Financial Reporting Standards (IFRS).

The IASB achieves its objectives by developing and publishing IFRS and promoting the use of those standards in general purpose financial statements and other financial reporting. In developing IFRS, the IASB works with national standard-setters to maximise the convergence of IFRS and national standards.

IFRS set out recognition, measurement, presentation and disclosure requirements for the transactions and events that are important in general purpose financial statements.

Such financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, creditors, employees and the public at large. The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions.

A complete set of financial statements includes a balance sheet, an income statement, a statement showing all changes in equity, a cash flow statement and accounting policies and explanatory notes. In the interest of timeliness and to avoid repeating information previously reported, an entity may provide less information in its interim financial statements than in its annual financial statements.

In some cases, International Accounting Standards Committee permitted different treatments for given transactions and events. Usually, one treatment is identified as the benchmark treatment and the other as the allowed alternative treatment. The financial statements can be prepared by using benchmark treatment or the allowed alternative treatment in accordance with IFRS.⁷

2.4. TIME-PERIOD CONCEPT IN ACCOUNTING

In order to get the operating results of any business with certainty, the company should complete its lifespan. At that time all receivables are collected, payables are paid; assets are sold at their market value. On the other hand, external decision makers need timely accounting information. Therefore, changes in a business financial position are reported over a series of shorter periods according to the time-period concept.⁸

According to going concern principle, it is assumed that enterprises will continue its operations for the near future. According to accounting period concept, the financial statements are prepared and income is determined, as if the business activity stops at periodical intervals. Although the reporting period varies, one year is the standard.⁹

As a result of the demand for periodic reports during the life span of a business, accruals and deferrals are necessary , due to reflect the precise data at a specific time or for a particular period of time.

According to Turkish tax law, accounting period is one year. In addition, Turkish accounting standards, requires business entities to make accruals and deferrals to reflect the real income or loss of the period.¹⁰

⁷ International Accounting Standarts Board, **International Financial Reporting Standarts**, London: International Accounting Standarts Committee Foundation, 2004, s. 14-15.

⁸ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, s.38.

⁹ Prof. Dr. Ümit Ataman, **Genel Muhasebe, Muhasebede Dönem Sonu İşlemleri**, Voll 2, İstanbul: Türkmen Press, 1996, s.5.

¹⁰ Prof. Dr. Yüksel Koç Yalkın, **Genel Muhasebe İlkeleri ve Uygulaması**, Ankara: Turhan Press, 1989, s.25.

In our present society with division of work, an organization can only produce products and services when it uses products and services received from other units. Therefore, it is natural to report its performance in the following ways:

-on the activity side by comparing the money value of the outgoing products and services with the money value of the incoming products and services

-on the payment side by comparing the incoming payments and the increase in accounts receivable with the outgoing payments and the increase in payment obligations.

All the incoming products and services and the corresponding outgoing payments and all the outgoing products and services and their corresponding received money value do not happen in the same accounting period. Therefore, the performance result within accrual accounting compares revenues and expenses for the period independent of when the corresponding cash inflows and outflows occur. ¹¹

2.5. REALIZATION CONCEPT IN ACCOUNTING

Revenues and gains are realized when products (goods or services), merchandise, or other assets are exchanged for cash or claims to cash. Revenues, expenses, gains & losses are recognized when realized. Recognition means to accept and to record. If an asset were exchanged with an asset whose value is higher, there would be realized gain. However, if it were exchanged with an asset whose value is lower, there would be realized loss.

¹¹ Monsen, Norvald, **Cameral Accounting and Cash Flow Reporting: Some Implications for Use of the Direct or Indirect Method**, [Electronic Version], European Accounting Review, Dec 2001, Vol.10, issue 4, p705-724, (26.10.2006).

The market value of the assets can change. Since there is no exchange here, there would be unrealized gain or loss. If we are buyer, the market value is the replacement cost. However, if we are seller the market value is net realizable value.

There are two types for realization:

a) Narrow (Cash Basis) Realization: Gains can be accepted as realized, only when they are collected. Loss can be accepted as realized, only when they are paid.

b) Broad (Accrual Basis) Realization: Gains and losses can be accepted as realized, if there is an exchange. Revenue is accepted as realized, when it is earned. Transfer of ownership, performance of service or receipt of the good or service are the evidences of the earning. Cost is accepted as realized, when it incurs.¹²

There are two approaches for recognition of unrealized gains or losses:

a) Conservatism Principle: According to conservatism principle, unrealized gains are not recognized, but unrealized losses are recognized.¹³

Conservatism assumes that when uncertainty exists, the users of financial statements (borrowers and investors) are better served by understatement than by overstatement of net income and assets, since they want to know the debt paying ability or dividend paying ability of the company.

The use of an overly conservative practice may also result in a negatively biased reflection of the company's financial condition. For example, highly assumed doubtful receivables account will result with a lower net income reflection of the company.¹⁴

b) Mark to Market Principle: According to mark to market principle, unrealized gains and losses are recognized.

¹² Doç. Dr. Necdet Şensoy, "Muhasebede Gerçekleşme Kavramı ve Yansımaları "Kapsamlı Kar" (Comprehensive Income), **Muhasebe Bilim Dünyası Dergisi**, Vol. 4, No. 2, (June2002), s. 9-24.

¹³ Prof. Dr. Ümit Ataman, s.5.

¹⁴ Prof. Dr. Yüksel Koç Yalkın, s.27.

An interest group who has no direct access to the information has emerged, because of the historical development of security markets. Therefore, the concern for disclosing “fair” information has become important. Shareholders are interested not only in expected losses but also in probable (unrealized) gains. Therefore, this approach has caused a significant increase in the use of “fair value”, where applicable.¹⁵

2.6. FINANCIAL STATEMENTS

The objective of financial statements and their accompanying disclosure notes is to report the economic effects of completed business transactions and other events on an organization.¹⁶

2.6.1. Main Financial Statements

Financial statements display either the financial position of the entity at a point in time or various kinds of changes in financial position of the entity over a period. Since all financial statements are derived from the same economic data, they interrelate with each other and serve different single purpose.

Main Financial Statements are:

a) The balance sheet or statement of financial position: The balance sheet is a financial statement showing financial condition of the business entity through presentation of assets, liabilities and capital of the business.

b) The income statement or statement of earnings: Income statement reports the company’s revenues, gains, expenses, losses and net income. It is a dynamic statement, which summarizes the results of business operations for a period.

¹⁵ Prof. Dr. Necdet Şensoy, **“Değerleme Esaslarında Eğilim ve Etkileşimler”**, Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü Türkiye XXII. Muhasebe Eğitimi Sempozyumu, Ankara, 2003, s.1.

¹⁶ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, s.4.

c) Changes of owners' equity statement: Statement of retained earnings reports changes in the company's earnings. Retained earnings show the stockholders' equity in the company's assets. Retained earnings increase as profits of the business accumulate and decrease as dividends occur. ¹⁷

d) The statement of cash flows: Cash Flow Statements reports the company's cash flow from operating, investing and financing activities.

e) Disclosures

2.6.2. Objectives of Financial Statements

The objectives of the financial statements are:

- To provide the information that helps to make economic decisions.
- To provide the necessary information to foresee, to match and to evaluate the profitability of the firm.
- To provide information to evaluate the managers ability for achieving the company's goals and using the company's sources efficiently.
- To provide information to shareholders about the dividend payment ability of the company
- To determine the tax to be paid to government
- To provide enough information for auditors to let them control the operation results of the company.
- To give information to potential investors
- To give information to creditors

¹⁷ Assoc. Prof. Dr. Uğur Günege, s. 9.

- To help the managers of the companies to take correct decisions for future economic operations.¹⁸

According to the International Accounting Standard (IAS) 1 and Turkish Accounting Standard 1 the purpose of the financial statements are “to give information about financial conditions, operational results and cash flows of the company to external and internal financial statement users”.¹⁹

The purpose of these external financial statements is explained by the FASB in its Statement of Financial Accounting Concepts No. 1 as follows:

Financial reporting should provide information to help present and potential investors and creditors and other users in assessing the amounts, timing and uncertainty of prospective cash receipts from dividends or interest and the proceeds from the sale, redemption or maturity of securities or loans. The prospects for those cash receipts are affected by an enterprise’s ability to generate enough cash to meet its obligations when due and its other cash operating needs, to reinvest in operations, and to pay cash dividends, and may also be affected by perceptions of investors and creditors generally about that ability, which affect market prices of the enterprise securities. Thus, financial reporting should provide information to help investors, creditors, and others assess the amounts, timing, and uncertainty of prospective net cash inflows to the related enterprise.²⁰

2.6.3. Relation between Main Financial Statements

Even financial statements are the reports that summarize same financial events, they state different perspectives. These statements are not alternatives but

¹⁸ Doç. Dr. Nalan Akdoğan, Doç. Dr. Nejat Tenker, **Finansal Tablolar ve Analizi**, Ankara: Savaş Yayınları 1988, s. 11.

¹⁹ Prof. Dr. Nalan Akdoğan, Prof. Dr. Orhan Sevilengül, **Türkiye Muhasebe Standartlarıyla Uyumlu Tekdüzen Muhasebe Sistemi Uygulaması**, Vol. 10, Ankara: Gazi Kitabevi, 2000, s. 10.

²⁰ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, s.5.

When we understand the situations of two different terms of a company (financial period beginning and end) regarding assets, resources, profit oriented activities (income statement), cash situation (Cash Flow Statement), it means that we have broad information about this company. Thus, there will be useful information for internal and external individuals or companies. These three tables look alike and explain each other since they depend on the same financial information.²¹

2.7. CONCEPTS OF FUNDS

In accounting and financial usage, the term fund has a variety of meanings. Funds can be interpreted broadly to mean working capital or more narrow to mean cash or cash equivalents and marketable securities.²²

2.7.1. Funds Defined as All Financial Resources

All important financing and investing activities regardless of whether cash or other elements of working capital are directly affected, are accepted as a fund. For example, acquisition of property by issuance of securities or in exchange for other property, and conversions of long term debt or preferred stock to common stock , refunding of bonds payable, exchanges of property, capitalization of leases by lessees and donation of plant assets to the corporation should be accepted as fund resulting event. These exchanges of funds are disclosed by statement of changes in financial position.

We can identify the basic objectives of a statement of changes in financial position as follows:

²¹ Doç. Dr. Necdet Şensoy, **Nakit akış Tabloları Hazırlanması, Standartları, Analizi, İstanbul: Yayın Yayıncılık**, 2002, s. 24-26.

²² Philip E. Fess, C. Rollin Niswonger, **Accounting Principles**, 13th Edition, USA: South-Western Publishing Co., 1981, s. 712.

- a) To provide information about all investing and financing activities of the company
- b) To disclose the financial resources (funds) provided from operations and other resources during the period
- c) To show the uses of financial resources during the period.
- d) To show the amounts and causes of all other changes in financial position during the period.²³

All changes in assets and liabilities of the balance sheet are reported in statement of changes in financial position. Net income after tax from the income statement is accepted as resource of sources without any adjustment.

2.7.2. Funds Defined as Working Capital

The excess of an enterprise's total current assets over its total current liabilities at the same point in time may be termed as its net current assets or working capital.²⁴

The amount of working capital is a measure of the safety factor that exists for the protection of short-term creditors. Working capital generating ability of a business entity is an important factor in forecasting cash flows and estimating to pay liabilities at maturity. The purchase of the inventory (usually on short-term credit) is the first step of the operating cycle of a business. The inventory is then converted into accounts receivable, then these receivables are collected and the inflow of cash is used to pay current payables. Then the operating cycle begins again. Therefore, working capital statements are basic tools of financial planning and analyses.

²³ Walter B. Meigs Ph. D., A.N. Mosich Ph. D., Charles E. Johnson Ph. D., **Intermediate Accounting**, 4. Edition, USA: McGraw-Hill Book Comp, 1978, s. 991,992.

²⁴ Philip E. Fess, C. Rollin Niswonger, s. 713.

The major sources of working capital are revenue from operations, disposal of non-current assets, long-term borrowing, and issuance of equity securities. The major uses of working capital are operating expenses, acquisition of non-current assets, extinguishment of long-term debt or reclassification of it as current debt, distributions to stockholders, including cash dividends, purchase of treasury stock, and redemption of preferred stock.

	Additions	Deductions	
	+ Depreciation expense	-Decrease in deferred	
	+ Increase in deferred	income tax liability	
	income tax liability	- Amortization of investment tax	
	+ Amortization of intangibles	credit and deferred revenue	
Net	and deferred charges	- Amortization of premium	
income	+ Amortization of bond	on bonds payable	= Working
(or loss)	discount and issue costs	- Accumulation of discount	capital provided
	+ Amortization of premium	on investment in bonds.	from
	on investment in bonds.	- Income accrued investment	operations
	+ Loss accrued on investment	in stock using the equity method.	
	in stock using the equity method.	- Extraordinary gains	
	+ Value assigned to stock		
	options and debited to expense.		
	+ Extraordinary losses.		

Chart 2. Computation of Working Capital Provided from Operations

Source: Walter B. Meigs Ph. D., A.N. Mosich Ph. D., Charles E. Johnson Ph. D., Intermediate Accounting, 4. Edition, USA: McGraw-Hill Book Comp, 1978, s. 996.

The amount of working capital provided from operations during an accounting period are computed by adding the deductions from revenue, which do not reduce working capital to net income or loss, and by subtracting revenue items and offsets to expenses, which do not provide working capital from net income or loss.

2.7.3. Funds Defined as Cash

Cash is cash on hand and demand deposits with banks or other financial institutions. Cash equivalents are short term liquid investments that are readily convertible to known amounts of cash, and so near their maturity (original maturity of three months or less) that they present negligible risk of changes in value because of

changes in interest rates. Treasury bills, commercial paper and money market funds are all examples of cash equivalents.²⁵

Cash equivalents are held for meeting short-term cash commitments rather than for investment or other purposes.²⁶

Companies make these short-term highly liquid investments, which are classified as cash equivalents to earn a return on idle cash balances. However, investment companies that specialize in the purchase and sale of securities may buy such items as part of its investing activities.²⁷

Cash flows are inflows and outflows of cash and cash equivalents. A statement of changes in financial position on a cash basis provides useful predictive information for decision makers. Management and outside users of financial statements are concerned with the ability of the business to meet maturity obligations and remain solvent. A statement of cash flows, which includes other significant financing and investing activities, is viewed by many users of financial statements as a barometer of financial strength.

	Additions	Deductions	
Working capital provided from operations	+Decreases in net accounts and loans receivable from customers	+Increases in net accounts and loans receivable from customers	= Cash provided from operations
	+ Decrease in inventory and short term prepayments	+ Increase in inventory and short term prepayments	
	+ Increases in accounts and loans payable to suppliers.	+ Decreases in accounts and loans payable to suppliers.	
	+ Increase in accrued liabilities (including income taxes payable)	+ Decrease in accrued liabilities (including income taxes payable)	

Chart3: Computation of cash provided from operations

Source: Walter B. Meigs Ph. D., A.N. Mosich Ph. D., Charles E. Johnson Ph. D., Intermediate Accounting, 4. Edition, USA: McGraw-Hill Book Comp, 1978, s. 997.

²⁵ Barry J. Epstein, Abbas Ali Mirza, **IFRS 2005 Interpretation and Application of International Accounting and Financial Reporting Standards**, USA: John Wiley & Sons Inc, 2005, s. 63.

²⁶ International Accounting Standards Board, **International Financial Reporting Standards**, London: International Accounting Standards Committee Foundation, 2004, s. 635.

²⁷ Kermit D. Larson, **Fundamental Accounting Principles**, 13. Edition, Homewood: Irwin, 1993, s. 755.

2.8. HISTORY OF CASH FLOW STATEMENTS DEVELOPMENT

Since operating, financing and investing activities of a company changes the financial position of a business, financial statement users are interested in these results of these activities. An analysis of comparative balance sheets helps to disclose the changes of assets, liabilities and owners equity accounts. However, these analyze do not give information about the reasons of these changes. The income statement and retain earnings statement help to explain these changes by giving the results of operating activities, the amount of distributed dividend and retained earnings. However, balance sheet and income statement do not give enough information about the sources (financing activities), and about the uses (investing activities) of financial resources. A Statement of Changes in Financial Position (SCFP) reports the sources and uses of financial resources for a specified period. Funds can be defined as cash (cash and cash equivalents) or as working capital. Because of an increasing emphasis on the usefulness of cash flow information to investors and creditors, SCFP is replaced with CFS.²⁸

2.8.1. Development of Cash Flow Statements in World

The history of accounting goes back to ancient Roman and Greek times and even as far back as the Sumerians and Assyrians. The ancient Egyptians had at least simple form of warehouse control. By Roman times, records of account had acquired a legal aspect. Accounting practices have advanced in parallel with the development of civilization for more than five thousand years.²⁹

Double entry book keeping was used first in Italian famous commercial cities like Florence, Enova, and Milan in 14. and 15. century. Italian merchants classified their financial records based on double entry book keeping principle between 1250 and 1400.

²⁸ John G. Helmkamp, Leroy F. Imdieke, Ralph E. Smith, **Principles of Accounting**, 3. Edition, USA: John Wiley & Sons, 1989, s. 840-841.

²⁹ Assoc. Prof. Dr. Uğur Günege, s. 5-6.

We saw that they concentrated about cost accounting, accruals, advanced paid expenses and control of their accounting records.³⁰

Luca Paciolo wrote first scholarly work concerning double entry bookkeeping in 1494 in Italy. The name of the book was Summary of Arithmetic Geometric Proportion. Paciolo describes three principles to be successful in business: ready cash, good accountants and reliable system. Complete list of business assets and liabilities is first thing to do. Then the books that a merchant needs to keep and how these books to be kept should are explained by Paciolo.³¹

In 1600's the overseas trade was developed so much. Because of these huge trade, a need for big amounts of capital occurred. Then there were many owners for one company for the first time. However, the responsibilities of the management against the owners of the companies were not taken into account and no financial information about the activities of the companies is given to owners. That caused many dishonest activities of the managers that could not be controlled. To prevent these dishonest activities the Bubble Law was made in 1719 in England that allows only six partners for one company. However, that law was not enough to prevent dishonesty. Then a new law that allows twenty partners for one company was made in 1825, because of increasing capital needs. When the railroad constructions began in 1830-1870, the need for capital increased and that law was not applicable again and companies with many owners became necessary and the new way to prevent dishonesty should have been found.³²

During the construction of railroad between Liverpool and Manchester in 1830, laws that rule the accounting records, for every construction firm were made. However, the disclosure of the financials to the owners and the control of these financials were not compulsory. Disclosure of the financials to the owners in every board of meeting was made compulsory in 1835 by Great Western Railroad Law. Then the control of the financials at least by three owners and disclosure of balance sheet were made compulsory in 1845. However, the conditions were not suitable at these times to get

³⁰ Prof. Dr. Yüksel Koç Yalkın, s.9.

³¹ Assoc. Prof. Dr. Uğur Günege, s. 6.

³² Doç. Dr. Nalan Akdoğan, Doç. Dr. Nejat Tenker, s. 3.

benefit from financials. There were four main reasons for that: Income statements were not disclosed, owners can only examine the financials at firm, they were not allowed to take the pressed financials, there were no generally accepted accounting rules and there were not enough accounting specialist. In 1856, a new law that makes control of financials by auditors and disclosure of balance sheet and income statement at least seven days before the board of meeting, compulsory was made. In 1907 a new law that makes it compulsory to prepare audited balance sheet. The aim of the law was to provide safety to creditors by disclosing real financial position of the firm. Then in 1929, disclosing income statements was made compulsory too.³³

William Morse Cole prepared “Where-got and Where-gone Statement” which shows only the difference of the beginning and ending balance sheet accounts without explaining the reasons of the differences in 1908. Then William Morse Cole changed the name of the table as “Summary of Balance Sheet Changes”. The table consisted of two parts: source of funds (increase in liabilities and equity, decrease in assets), uses of funds (decrease in liabilities and equity, increase in assets). Then in 1918, Paton and Stevenson showed the two parts of that table as two column and they used source of fund and uses of fund terms for the first time.³⁴

H.A. Finney called Cole’s table as “Uses of Funds Table” in 1921 and defined fund as all financial resource of the company. The term “fund” was first used by H.A. Finney. In 1928, Robert H. Gregory made Gregory Table that shows increase and decrease of balance sheet accounts without making net off and some balance sheet accounts were kept excluding from fund concept.³⁵

A new book “Auditing financial statements” which gives examples about how to audit balance sheet and income statements were published in 1928 at U.S.A. That was the first time in American accounting history for determining accounting rules.³⁶

³³ Doç. Dr. Nalan Akdoğan, Doç. Dr. Nejat Tenker, s. 4-5.

³⁴ Donald E. Kieso, Jerry Weygandt, Terry Warfield, **Intermediate Accounting**, New York: John Wiley and Sons, 2001, s.1139.

³⁵ Hüseyin Devrim Özer, **“Uluslararası Standartlara Göre Nakit Akım Tablosunun Düzenlenmesi ve Türkiye Uygulaması**, (Yayınlanmamış doktora tezi, Marmara Üniversitesi SBE, 2004), s.12-13.

³⁶ Doç. Dr. Nalan Akdoğan, Doç. Dr. Nejat Tenker, s. 9.

Managerial finance emerged as a separate field of study in the early 1900s. In 1900s, the emphasis was on the legal aspect of mergers, the formation of new firms and various types of securities that firms could issue to raise funds. Because of industrialization, so many takeovers and mergers were used to create large corporations. During the Great Depression of the 1930s, many business failures caused the emphasis in finance to shift to bankruptcy and reorganization, to corporate liquidity and to regulation of security markets. In these years, finance continued to be taught as a descriptive subject. Finance was viewed more from the sight of outsider rather than from the sight of management.³⁷

Rey B. Kester prepared a fund table based on net working capital items in 1933. Gutman made the first cumulative fund table which disclosed five years period. William A. Paton made direct method for disclose of the fund table that based on the net working capital. Kester used net working capital term and showed beginning and ending fund balance at the first time.³⁸

In 1938 a Committee on Accounting Procedures published first official accounting rules in U.S.A. Then Financial Accounting Standard Board established in U.S.A.

During the 1960's and 1970's, authoritative bodies issued documents either recommending or requiring the inclusion of a funds flow statement in companies' financial reports. This statement became known as the "statement of the changes in financial position". Various concepts of "funds" were used in the statement of changes in financial position. Historically, the term funds usually meant cash or working capital (current assets minus current liabilities).³⁹

Milray and Wolden prepared the first fund flow table based on net working capital in 1960. They showed the items that affect net working capital, clearly. Prof.

³⁷ J. Fred Weston, Scott Besley, Eugene F. Birgham, **Essentials of Managerial Finance**, 11.Edition, USA: The Dryden Press, 1996, s. 6.

³⁸ Hüseyin Devrim Özer, s.13

³⁹ Lanny Chasteen, Richard Flaherty, Melvin O'Connor, **Intermediate Accounting**, Boston: Irwin McGraw-Hill, 1998, s.276-277

Almand Colenon from Virginia University prepared cash flow table based on last two years balance sheet and last year income statement in 1962.⁴⁰

AICPA suggested to include cash flow and fund table to the financial statement that were disclosed to shareholders and external auditors in 1961. Then the name of the table changed as “Sources and Uses of Funds Table” and the format of the table was standardized in 1963. However, the disclosure of that table was voluntary in 1971. APB made “Statement of Changes Financial Position Table” non-deportable part of financial statements and it was compulsory for external auditors.⁴¹

Many people believed that the concept of the working capital was not as useful as the cash (or cash and cash equivalents) concept in assessing, predicting and evaluating cash flows and therefore conflicted with financial reporting objectives. In Statement of Concepts No: Five, the FASH took the position that a full set of financial statements for a period should show cash flows for that period. In addition, in 1987, acknowledging the importance of cash flow information, the FASH issued Statement of Accounting Standards No. 95, “Statement of Cash Flows”. This statement, as amended by Statements No.102 and 104, requires that a company present a statement of cash flows with any set of financial statements that purports to report both the company’s financial position and the results of the operations.

In 1992, the International Accounting Standards Committee issued International Accounting Standard 7 (revised), titled “CFS”. However, a funds or CFS is not required in all countries. For example, Germany and the Netherlands are notable European Community countries without a requirement. However, even when not required, the presentation of some type of statement by multinational corporations, often on a voluntary basis, is now the rule rather than the exception.⁴²

2.8.2. Development of Cash Flow Statements in Turkey

⁴⁰ Hüseyin Devrim Özer, s.15

⁴¹ Doç. Dr. Needet Şensoy, s.28-29

⁴² Lanny Chasteen, Richard Flaherty, Melvin O’Connor, s.277

In Turkey, accounting meant just book keeping until 1926. After the foundation of the Republic, accounting has started to develop in order to control the financial situations of the State Economic Foundations (SEF). Turkish accounting system has been affected by German ecol. Prof Sachsenberg from Germany has set up an accounting system for Sumerbank and Private sector companies have been affected by this system. In addition, most of the SEFs have started to implement this system.

At the year 1960s, accounting was perceived to be an excessive work rather than a useful control and management tool. Researches and progresses in the European countries affected Turkey and CFS terminology was used for the first time in 1960.⁴³

In 1974, a commission was formed to regulate the SEFs. Between the years 1964 and 1968, accounting and reporting system that has been prepared by the commission, suggested to prepare balance sheet, income statement, change of net working capital statement and cash flow statement. The commission has stated that financial statements would be very useful for owners, managers, creditors, government and auditors. However, these rules were compulsory for SEFs but voluntary for private sector. The first law that bounded private sector was the Tax Law and the Income Tax Law in 1950. However, these laws were related with the regulation of the taxes. The Turkish Commerce law in 1957 defended the partners' information receiving rights and identified what kind of financial statements would presented to partners. However it was insufficient for other external information users, and there was no information related with the CFS in this law.⁴⁴

The Capital Market Board (CMB) law in 1981 has identified the standard financial statements. It was compulsory to prepare detailed and summary balance sheets and income statements. In 1987, CMB has declared that CMB bounded all companies

⁴³ Yüksel Koç Yalkın s.11

⁴⁴ Hüseyin Devrim Özer, s.19

should have external audits. In 1987, CMB identified the format of balance sheets, income statements, CFSs, Cost of good sold tables, distribution of income.⁴⁵

In 1985, all banks were obliged to use single type balance sheets and income statements but CFS was not mentioned.

Before CMB made it compulsory to prepare CFSs, some private sector companies in Turkey were already preparing it for managerial purposes or to get credit from foreign credit institutions, which wanted to see the CFS of the companies in order to see the Dept Paying ability of the Company. Besides making profit, companies needed to learn about their Cash Flow situations.

2.9. CASH FLOW STATEMENT

2.9.1. Concept Of Cash Flow Statement

The statement of cash flows shows the effect on cash of the operating, investing and financing activities of a company for an accounting period. It explains the net increase (or decrease) in cash during the accounting period. For purposes of preparing this statement, cash is defined to include both cash and cash equivalents according to International Accounting standards (IFRS).

Cash equivalents are defined by the FASB as short-term, highly liquid investments, including money market accounts, commercial paper and treasury bills. A company maintains cash equivalents in order to earn interest on cash that otherwise would temporarily lie idle. The company may place the cash in an account that earns corporation by purchasing that corporation's short-term note (commercial paper) or it might purchase a short-term obligation of the government (a treasury bill).

Short-term is defined as original maturities of ninety days or less. Since cash and cash equivalents are considered the same, transfers between the cash account and

⁴⁵ Yüksel Koç Yalkın s.13-14

cash equivalents are not treated as cash receipts or cash payments. In effect, cash equivalents are combined with the cash account on the statement of cash flows.

Cash equivalents should not be confused with short-term investments or marketable securities, which are not combined with the cash account on the statement of cash flows. Purchases of marketable securities are treated as cash outflows and sales of marketable securities as cash inflows on the statement of cash flows. Cash is assumed to include cash and cash equivalents.⁴⁶

Cash flow data supplement the information provided by the income statement as both link consecutive balance sheets. The Statement of cash flows is intended to report all the cash inflows and outflows (classified among operating, investing and financing activities according to IFRS) of the firm for a specified period. It also provides disclosures about that period's non-cash investing and financing activities. The classification of cash flows among operating, financing and investing activities is essential to the analysis of cash flow data.

Cash flow from operating activities (cash from operations or CFO) measures the amount of cash generated or used by the firm as a result of its production and sales of the goods and services. Although deficits or negative cash flows from operations are expected in some circumstances (e.g. rapid growth), for most firms positive operating cash flows are essential for long-term survival. Internally generated funds can be used to pay dividends or repurchase equity, repay loans, replace existing capacity or invest in acquisitions and growth.

The amount of the cash flow from operations for a period may be useful to internal financial management in considering the possibility of retiring long-term debt, in planning replacement of plant facilities or in formulating dividend policies.

Investing cash flow reports the amount of cash used to acquire assets such as plant and equipment as well as investments and entire businesses. These outlays are

⁴⁶ Belverd E. Needles, Henry R. Anderson, James C. Caldwell, **Principles of Accounting**, Boston: Houghton Mifflin Compnay, 1993, s. 659-660.

necessary to maintain a firm's current operating capacity and to provide capacity for future growth. CFI also includes cash received from the sale or disposal of assets or segments of the business.

Financing cash flow includes cash flows related to the firm's capital structure (debt and equity), including proceeds from the issuance of equity, returns to shareholders in the form of dividends and repurchase of equity and incurrence and repayments of debt.⁴⁷

Like most financial statements, the cash flow statement is only a snapshot in time. The frequency of the need for the cash flow statement can depend on the overall health of the company. Some very healthy companies only review the cash flow statement quarterly. However, if a company's current ratio is low, a company may prepare a cash flow statement as often as every week projecting out six to eight weeks at a time until the company returns to health.⁴⁸

2.9.2. Importance of The Cash Flow Statement

The balance sheet shows the resources that a company has - its assets. It also shows where those resources come from; borrowing, shown as liabilities; investments by owners, shown as paid-in capital; and accumulation of earnings, shown as retained earnings. These resources and sources of resources are presented at one instant in time, the end of the accounting period. The purpose of the income statement is to match the expenses incurred with the revenues earned. Gains and losses experienced during the period are also included. The statement of retained earnings simply shows the beginning balance of retained earnings, the net income or loss for the period, the dividends declared and the ending balance of retained earnings.

⁴⁷ Gerald I. White, Ashwinpaul C. Sondhi, Dov Fried, **The Analysis and use of Financial Statements**, New York: John Wiley and Sons, 1998, p. 88.

⁴⁸ Benschhoff, Mike, **Financial Management – Part 6**, [Electronic Version], Professional Builder, Jul2005, Vol. 70, issue 7, p45-52, 5p, (27.10.2006).

It is impossible to learn certain things from studying the three major statements. For example, to discover how a company's growth and expansion was financed or what amount of cash was generated by operations, we would need to make a detailed analysis of the statements. We would also have to make a number of assumptions before we would even attempt to find out this information.⁴⁹

Lumps of cash must be expended from time to time for capital equipment, facilities or inventory that will not generate an offsetting inflow of cash immediately. In addition, customers are not generally inclined to pay your invoices on receipt. The products or services you have sold them required an outlay of cash on your part, but you are not going to see cash from your customers for 30,60 or even 90 days.

Consequently, you have to carefully and frequently monitor the ins and outs of greenbacks to ensure that your cash obligations can be adequately satisfied. Cash flow data indicate the additional funds that you might have to borrow or otherwise source to sustain the business. Cash flow analysis can help condition your decisions with respect to growth or diversification.⁵⁰

Cash flow statement may not reflect a profit every month, quarter or a year. Conversely, you could have great profits on paper, but experience a cash flow shortfall during some periods. If you concentrate too heavily on profits, such a shortfall may crop up and cripple your business.⁵¹

The importance of cash flow information to decision makers has directly influenced the thinking of accounting authorities. For example, the FASB has stated objectives of financial reporting clearly reflect the importance of cash flow information. The FASB stated that financial statements should include information:

⁴⁹ Jack L. Smith, Robert M. Keith, William L. Stephens, **Accounting Principles**, New York: McGraw-Hill Book Company, 1989 s. 728.

⁵⁰ Willax, Paul, **Cash is King, in new ventures and old**. [Electronic Version], NH Business Review, May 12-25, 2006, Vol.28, Issue 10, p25, 5p (26.10.2006).

⁵¹ Shepherd, Connie National City Bank, **Use Your Statements to Enhance Financial Performance**, [Electronic Version], Indiana Business Magazine, May 2003, Vol. 47, Issue 5, P6 2p (27.10.2006).

- About how a business obtains and spends cash,
- About its borrowing and repayment activities,
- About the sale and repurchase of its ownership securities,
- About the dividend payments and other distributions to its owners,
- About other factors that affect a company's liquidity or solvency.⁵²

To accomplish these objectives, a financial statement is needed to summarize, classify and report the periodic cash inflows and outflows of a business. This information is contained in a statement of cash flows. The statement of cash flows is designed to fill this information gap left by other statements.

There are two key financial objectives of every business organization: operating profitably and staying solvent. Operating profitably means increasing the amount of the owners' equity through the activities of the business, that means providing the owners with the satisfactory return on their investment. Staying solvent means being able to pay the debts and obligations of the business as they come due.

An income statement measures the success or failure of the business in achieving its objective of profitable operations. To some extent, a balance sheet shows whether or not the business is solvent. It shows the nature and amounts of current liabilities. From this information, users of the financial statements may complete such measures of solvency as the current ratio and the amount of working capital.

However, assessing the ability of a business to remain solvent involves more than just evaluating the liquid resources on hand at the balance sheet date. How much cash does the company receive during a year? What are the sources of these cash receipts? What expenditures are made each year for operations and for investing and financing activities? To answer these questions, companies prepare a third major

⁵² Kermit D. Larson, p. 751.

financial statement showing the sources and uses of liquid resources during the accounting period.

Until recently, the financial statement showing the sources and uses of liquid resources was called a statement of changes in financial position. Informally, this statement was often termed a funds statement. In preparing a funds statement, companies were permitted to define “liquid resources” in several different ways. Some companies prepared funds statements showing the sources and uses of cash. Other companies, however, prepared funds statements showing the sources and uses of these alternative definitions of “funds” the statements of changes in financial position prepared by different companies varied greatly in content. This created difficulties for investors in comparing the funds statements of different companies.

To solve this problem, the FASB stated that beginning in 1987 all companies should discontinue the statement of changes in financial position and instead, prepare a statement of cash flows. The FASB provides considerably more guidance as to the form and content of the new statement of cash flows than it did for the old funds statement. To avoid confusion between the old “funds statement” and the new statement of cash flows, the FASB has asked companies to avoid the use of the word “funds” in the new statement.⁵³

In the long run, profits determine the success of a company. In the shorter run, however, cash flow information is significant. It indicates whether a borrower will produce sufficient cash to pay its liabilities. Business creditors are interested in the historical record of cash inflows and outflows.

Investors often avoid companies without free cash flow, generally defined as operating cash receipts less necessary operating and capital expenditures and debt services payments. Free cash flow can be used to repurchase stock, pay dividends, expand, acquire other businesses, and pay debts or to invest in securities. If free cash

⁵³ Walter B. Meigs, Robert F. Meigs, *Account: The Basis For Business Decisions*, New York: McGraw-Hill Book Company, 1987, s.757.

flow is negative, the deficiency must be made up with additional debt or equity financing.

The trend of cash flows over several periods allows an assessment of financial flexibility, the ability to use cash flows to meet unexpected needs and opportunities. A firm able to raise additional capital in the debt and equity markets, to sell non-operating assets and to increase cash inflows by increasing efficiency and lowering costs is financially flexible. Healthy operating cash flows imply financial flexibility.

Cash flow information help users to understand the relationship between income and cash flow and to forecast future operating cash flows. Cash flow information also provides feedback about past decisions, such as the cash flow effects of previous investment decisions, how capital expenditures were financed and the amount of debt issued or retired.

Cash flow information also helps explain changes in balance sheet accounts, such as increases in long-term debt and whether cash was affected. Cash flow reporting answers these questions as well as provides information about investing and financing activities.⁵⁴

2.9.3.Purposes of The Statement of Cash Flows

The information in a statement of cash flows should help investors, creditors and others assess the following:

1- The entity's ability to generate future cash flows: A primary objective of financial reporting is to provide information that makes it possible to predict the amounts, timing and uncertainty of future cash flows. By examining relationship between items such as sales and net cash flow from operating activities or net cash flow from operating activities and increases or decreases in cash, it is possible

⁵⁴ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, p. 1189.

to make better predictions of the amounts, timing and uncertainty of future cash flows than is possible using accrual basis data.⁵⁵

2- To determine the ability to pay dividends to stockholders and interest and principal to creditors: Stockholders are interested in receiving dividends on their investments in the company's stock. Creditors want to receive their interest and principal amounts on time. The statement of cash flows helps investors and creditors predict whether the business can make these payments. If a company does not have adequate cash, employees cannot be paid, debts cannot be settled, dividends cannot be paid, and equipment cannot be acquired. A statement of cash flows indicates how cash is used and where it comes from. Employees, creditors, stockholders, and customers should be particularly interested in this statement, because it alone shows the flows of cash in business.

3- To show the relationship of net income to changes in the business's cash. Usually cash and net income move together. High levels of income tend to lead to increase in cash and vice versa. However, a company's cash balance can decrease when net income is high, and cash can increase when income is low. The net income number is important, because it provides information on the success or failure of a business enterprise from one period to another. However, some people are critical of accrual basis net income because estimates must be arrived at it. As a result, the reliability of the number is often challenged. Such is not the case with cash. Thus, readers of the statement benefit from knowing the reasons for the difference between net income and net cash flow from operating activities. Then they can assess for themselves the reliability of the income number.⁵⁶

4- The cash, non-cash investing, and financial transactions during the period. By examining, a company's investing activities (purchase or sales of assets other than its products) and its financial transactions (borrowing and repayments of borrowings, investments by owners and distribution to owners), a financial statement

⁵⁵ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1311.

⁵⁶ Charles T. Horngren, Walter T. Harrison, **Accounting**, New Jersey: Prentice Hall, 1989, s. 696.

reader can better understand why assets and liabilities increased or decreased during the period.

5- To evaluate management decisions. If managers make wise investment decisions, their businesses prosper. If they make unwise decisions, the businesses suffer. The statement of cash flow reports the company's investment in plant and equipment and thus gives investors and creditors cash-flow information for evaluating manager's decisions. Since the statement of cash flows presents the effects on cash of all significant operating, financing and investing activities, management can see the effects of its past major policy decisions in quantitative form by reviewing the statement. The statement may show a flow of cash from operating activities large enough to finance all projected capital needs internally rather than having to issue long-term debt or additional stock. Alternatively, if the company has been experiencing cash shortages, management can use the statement to determine why such shortages are occurring. After reviewing the statement, management may decide to reduce dividends to conserve cash and reduce cash shortages.⁵⁷

⁵⁷ James Don Edwards, Roger H. Hermanson, R.F. Salmonson, **A Survey of Financial and Managerial Accounting**, 5. Edition, Boston: Irwin, 1989, s. 352.

PART 3

CASH MANAGEMENT AND CASH BUDGETING

3.1. CASH MANAGEMENT

Even though cash is a “non earning, or idle, asset” it is needed to pay for labor and raw materials, buy fixed assets, pay taxes, service debt, pay dividends, and so on. When possible, cash should be “put to work” by investing it in assets that have positive expected returns. Thus, the goal of the cash manager is to minimize, the amount of cash the firm must hold for use in conducting its normal business activities, yet at the same time, to have sufficient cash to (1) pay suppliers, (2) maintain its credit rating, and (3) meet unexpected cash needs. We begin our analysis with a discussion of the reasons for holding cash. For the purposes of our discussion, the term “cash” refers to the funds a firm holds that can be used for immediate cash disbursement needs. – this includes the amount a firm holds in its checking account as well as the amount of actual currency and coin it holds.

Firms face the consequences of financial distress if they do not have the cash available to cover required fixed payments. Traditionally, fixed payments have been divided into two categories: operating and financial. Traditional breakeven analysis can be viewed as profit breakeven analysis based on accrual and deferral accounting. It identifies the minimum level of sales required to cover operating fixed costs. A variant computes the additional sales required to cover financial fixed costs. Their sum provide the overall sales level required to cover both fixed operating costs and fixed financial costs. Because, it is possible for a firm reporting profit to experience financial distress, cash breakeven analysis provides a new way to assess liquidity and predict solvency. Because depreciation is a non-cash charge, one version of the analysis involves subtraction of depreciation from fixed operating costs before computation of breakeven

point. Cash breakeven analysis is based on the formula that represents the pro forma cash flow statements of the firm.⁵⁸

3.2. ACCOUNTING SHENANIGANS ON THE CASH FLOW STATEMENT

Investors use the balance sheet and the income statement to make investment decisions. Companies sometimes engage in unusual or aggressive accounting practices in order to flatter their reported figures, especially earnings. After the recent high-profile scandals, the majority of the investors are keenly aware of the concept of quality of earnings. Investment community knows that corporate management can in various ways manipulate earnings as reflected on the income statement.

Companies are regularly evaluated based on free cash flow yield. The users of financial statements demands companies and auditors to devote more attention to cash flow statements. That increased attention is so beneficial, because analyzing the cash flow statement is integral to understanding a company's financial performance and position and it often provides a check to the quality of the earnings shown in the income statement. Certain accounting shenanigans may cause to present unsustainable cash flows and cause reported cash flow from operations to appear higher than it would have otherwise. For example: excessive capitalization of cash expenditures, nonrecurring sources of cash, such as the receipt of an income tax refund.

Dozens of tricks exist to manipulate the cash flow statement. The 2000 financial statements of Nortel Networks Corporation can be an example. When a company records revenue, it record an accounts receivable until it receives the cash. The

⁵⁸ Matsumoto, Keishiho, Hoban, James P., **Cash Breakeven Analyses amd Leverage Indices**, [Electronic Version], Rewiev of Pasific Basin Financial Market and Policies, Vol.6, N0.4, (2003) p.501-547, (26.10.2006).

cash flow statement effect is that the revenue increases the net income and cash from operations. That increase is usually offset by an increase in current accounts receivable, which are then subtracted from cash from operations. The net effect from operations should be nil because no cash has been received.

However, what happens when accompany decides to record the revenue, but the cash wont be received within one year. The impact is that the long-term receivable could be buried in a category like other investments. The revenue still is recorded, and cash from operations increase, but no current account receivable is recorded to offset the revenue. Thus, cash from operations and free cash flow remain boosted.

The misdirection occurs because the cash ends up where investors are not looking. Since no actual cash was received from operations and the cash flow statement has no balance out, the long-term receivable is recorded as cash used for making other investments. Free cash flow does not catch the trick because most free cash flow valuations only consider investments in capital assets and not other assets.⁵⁹

Stretching out payables

The simplest thing that companies can do to improve reported operating cash flow is to do improve reported operating cash flow is to slow down the rate of payments to their vendors. Extending out vendors used to be interpreted as a sign that a company was beginning to struggle with its cash generation. Companies now use this method as a prudent cash management strategy. Reported operating cash flows can be improved due to a change in policy to slow the payment rate to vendors. If analysts or investors expect the current period improvement to continue, they may be mistaken; vendors will put increasing pressure on the company to pay more timely. Therefore, any benefit may be unsustainable.

⁵⁹ Rosen, Al, **Follow the Money**, [Electronic Version], Canadian Business, 2,17,2003, Vol.76 issue 3, p 25, 1p, 2c, (25.10.2006).

The extension of payables can be identified by monitoring days sales in payables (DSP). This metric is calculated as the end of period accounts payable balance divided by the cost of goods sold and multiplied by the number of days in the period. As DSP grow, operating cash flows are boosted. General Electric Corporation began stretching out its payables in 2001 and therefore received boosts to operating cash flow. However, that benefit began to slow in subsequent periods.

Financing of Payables

A more complicated version of stretching out payables in the financing of payables. This occurs when a company uses a third party financial institution to pay the vendor in the current period, with the company then paying back the bank in a subsequent period with a fee for the service. Delphi Corporation made an agreement with GE Capital Corporation to finance its accounts payables. GE Capital would pay Delphi's accounts payables each quarter. This agreement provided Delphi to change the timing of its operating cash flows. After GE Capital paid the amounts due from Delphi to its vendors, Delphi reclassified these items from accounts payable to short-term loans due to GE Capital. Delphi did this in a quarter in which cash flows were seasonally strong and it had access to the accounts receivable securitization facilities. The reclassification resulted in a decrease to operating cash flow in that quarter and increase in financing cash flow. In the subsequent quarter, when Delphi paid GE Capital, the cash outflow was accounted for as a financing activity because it was a repayment of a loan. Normally, cash expenditures for accounts payable are included in operating activities. Therefore, because of the arrangement, Delphi was able to manage the timing of reported operating cash flows each period because the timing and extend of the vendor financing was at the discretion of company management.

Securitization of Receivables

Securitizedizations of receivables occur when companies package their receivables, most often those that have a longer term and higher credit quality, and transfer them to a financial institution. The GAAP indicates that the receivable have been sold and the proceeds received should be reflected in the operating section of the

cash flow statement. In many cases companies can report gains when long-term accounts receivable are securitized. This occurs because the book value of the receivables at the time they are securitized does not include all the future interest income that is to be earned, yet the entity purchasing the receivables will have to pay for that interest. A gain is generated; the amount received is grosser than the book value. While one company may report the gain on sale of receivables with in revenues, another might record it as an offset to selling, general or administrative expense. Another company might report the gain below the line in the other non-operating income.⁶⁰

3.3. RATIONALE FOR HOLDING CASH

Firms hold cash for two primary reasons:

1) Transactions: Cash balances are necessary in business operations. Payments must be made in cash and receipts are deposited in the cash account. Cash balances associated with routine payments and collections are known as transaction balances.

2) Compensation to banks for providing loans and services: Bank makes money by lending out funds, that have been deposited with it, so the larger its deposits, the better the banks profit position. In addition, if a bank is providing services to a customer, it might require the customer to leave a minimum balance on deposit to help offset the costs of providing the services.⁶¹

Two other reasons for holding cash have been noted in the finance and economics literature: for precaution and for speculation. Cash inflows and outflows are somewhat unpredictable, with the degree of predictability varying among firms and industry. Therefore, firms need to hold some cash in reserve for random, unforeseen

⁶⁰ Siegel, Marc A., **Accounting Shenanigans on the Cash Flow Statement**, [Electronic Version], CPA Journal, Mar2006, Vol. 76 issue 3, p38-43, 6 p, (26.10.2006).

⁶¹ J. Fred Weston, Scott Besley, Eugene F. Birgham, s. 360.

fluctuations in cash flows. These safety stocks are precautionary balances – the less predictable the firm's cash flows, the larger such balances should be – However if the firm has easy access to borrowed funds – that is, if it can borrow on short notice – its need for precautionary balances is reduced. In addition, firms that would otherwise need large precautionary balances tend to hold highly liquid marketable securities- or near cash, rather than cash.

Sometimes cash balances are held to enable the firm to take advantage of bargain purchases that might arise. These funds are called speculative balances. However, as with precautionary balances firms today are more likely to rely on reserve borrowing capacity and marketable securities portfolios than on cash for speculative purposes.

Although the cash accounts of most firms can be thought of as consisting of transactions, compensating, precautionary and speculative balances, we cannot calculate the amount needed for each purpose, sum them, and produce a total desired cash balance, because the same money often serves more than one purpose. For instance, precautionary and speculative balances also can be used to satisfy compensating balance requirements. Firms do, however consider all of these factors when establishing their target cash positions.

3.4. ADVANTAGES OF HOLDING ADEQUATE CASH AND NEAR-CASH ASSETS

In addition to four motives just mentioned, sound working capital management requires that an ample supply of cash be maintained for several specific reasons:

- 1) It is essential that the firm have sufficient cash and near cash assets to take advantage of cash discounts. Suppliers frequently offer customer discounts for early payments of bills. The cost of not taking discounts is very high. Therefore, firms

should have enough cash and near cash assets to permit payment of bills in time to take discounts if such payment behavior is considered appropriate.

2) Adequate holdings of cash and near-cash assets can help the firm maintain its credit rating by keeping its current and acid test ratios in line with those of other firms in its industry. A strong credit rating enables the firm both the purchase goods from suppliers on favorable terms and to maintain an ample line of credit with its bank.

3) Cash and near-cash assets are useful for taking advantage of favorable business opportunities, such as, special offers from suppliers or the change to acquire another firm.

4) The firm should have sufficient cash and near-cash assets to meet such emergencies as strikes, fires or competitors' marketing campaigns and to weather seasonal and cyclical downturns.⁶²

3.5. CASH BUDGETING

The planning and control of the cash inflows, the cash outflows and the related financing is important in all enterprises. Cash budgeting is an effective way to plan and control the cash flows, assess cash needs and effectively use excess cash. A primary objective is to plan the liquidity position of the company as a basis for determining future borrowings and future investments. For example, excess cash, if not invested, incurs an opportunity cost, that is, loss of the interest that could be earned, on the excess cash. The timing of cash flows can be controlled in many ways by the management, such as increasing the effectiveness of credit and collection activities, making payments by time drafts rather than by check, making payments on the last day of discount periods, batching payments and giving discounts on cash sales. Cash

⁶² J. Fred Weston, Scott Besley, Eugene F. Birgham, s. 361-362.

management is important in enterprises, whether large or small. Many lending agencies require cash flow projections before granting large loans.

A cash budget shows the planned cash flows, outflows and ending position by interim periods for a specific time span. Most companies should develop both long-term and short-term plans about their cash flows. The short-term cash budget is included in the annual profit plan. A cash budget basically included two parts: (1) the planned cash receipts (inflows) and (2) the planned cash disbursements (outflows).

Planning cash inflows and outflows gives the planned beginning and ending cash position for the budget period. Planning the cash inflows and outflows will indicate (1) the need for financing probable cash deficits or (2) the need for investment planning to put excess cash to profitable use. The cash budget is directly related to other plans, such as the sales plan, accounts receivable and the expense budgets, and the capital expenditures budget. Nevertheless, planning and control of these activities do not automatically take care of the cash position. This statement suggests an essential distinction between the cash budget and the other budgets. The cash budget focuses exclusively on the amounts and timing of cash flows and outflows. In contrast, the other budgets focus on the timing of all transactions – both cash and noncash (this is called the accrual basis).

The primary purposes of the cash budget are to

1. Give the probable cash position at the end of each period as a result of planned operations
2. Identity cash excesses or shortages by time periods
3. Establish the need for financing and / or the availability of idle cash for investment
4. Coordinate cash with (a) total working capital, (b) sales revenue, (c) expenses, (d) investments and (e) liabilities
5. Establish a sound basis for continuous monitoring of the cash position

Preparation of the cash budget should be the responsibility of the company treasurer. The cash budget is based almost exclusively on the other budgets; therefore, the treasurer must work closely with the other managers whose decisions may directly affect cash flows.⁶³

⁶³ Welch, Glenn A., Hilton, Ronald W. and Gordon, Paul W., **Budgeting Profit Planning and Control**, 5. Edition, Prentice Hall International Editions, 1988 s. 433-434.

PART 4

**PREPARATION OF CASH FLOW STATEMENT
ACCORDING TO INTERNATIONAL FINANCIAL REPORTING
STANDARDS (IFRS)**

4.1. INTERNATIONAL ACCOUNTING STANDARDS 7 (CASH FLOW STATEMENTS)

International accounting standard 7 (Statement of Changes in Financial Position) was approved in July 1977. The International Accounting Standards Committee last revised IAS7 Cash Flow Statements in 1992. The revised standards became effective in 1994.

In the United States SFAS95, which was the standard related to the cash flow statements was issued in 1988. IAS7 and SFAS95 have generally similar requirements. In addition, the original FRS1, which was issued in 1991 in UK, had the similar requirements. Then UK rules were revised in 1996 and now it differs from the IAS7 and SFAS95.

Entities need cash to conduct their operations, to pay their obligations and to provide returns to their investors. Thus, IAS7 requires all entities to present a cash flow statement. Investors are interested in the entities ability to generate cash flows, so that the company can make dividend payment to the investors. The cash flow statement should help investors and creditors to assess the ability to generate future positive cash flows, to meet obligations and pay dividends, reasons for differences between income and cash receipt and payments, cash and non-cash aspects of financing and investing activities of the company.

Most of the improvements in financial statements occurred between 1950's and 1960's in USA. Source and application of funds were most common approach for reporting by the mid 1970's. This reporting type was not compulsory until 1971 and

funds can be defined as cash or working capital. Since the accounting professionals were against the cash basis measurement, cash flow concept did not improve quickly.

By focusing instead on funds, which most typically was defined as net working capital, items such as receivables and payables were included, thereby preserving the essential accrual basis characteristic of the flow measurement. On the other hand, this failed to give statement users meaningful insight into the entities sources and uses of cash, which is germane to an evolution of the reporting entity's liquidity and solvency.

The FASH's conceptual framework project of the late 1970's to mid 1980 has identified usefulness in predicting future cash flows as a central purpose of the financial reporting process. This presaged the nearly universal move away from funds flows to cash flows as third standard measurement to be incorporated in financial report.

Cash flow statements thus became required in the late of 1980's in the USA, with the United Kingdom. The international accounting standard, which was adopted a year after that of the United Kingdom embraces the somewhat simpler US approach but offers greater flexibility, thus effectively incorporating the UK view without adding to the structural complexity of the cash flow statement itself.

Today, the clear consensus of national and international accounting standard setters is that the statement of cash flows is a necessary component of complete financial reporting. The perceived benefits of presenting the statement of cash flows have been highlighted by IAS 7 to be as follows:

1. It provides an insight into the financial structure of the enterprise (including its liquidity and solvency) and its ability to affect the amounts and timing of cash flows in order to adapt changing circumstances and opportunities.
2. It provides additional information to the users of financial statements for evaluating changes in assets, liabilities and equity of an enterprise.
3. It enhances the comparability of reporting operating performance by different enterprises because it eliminates the effects of using different accounting treatments for the same transactions and events. For example, cash flows provided by or

used in operating activities are derived, under the indirect method, by adjusting net income (or loss) for items such as depreciation and amortization, which might have been computed by different entities using different accounting methods. Thus, accounting standardization will be achieved by converting the accrual-basis net income to cash-basis income and the resultant figures will become comparable across enterprises.

4. It serves as an indicator of the amount, timing and certainty of future cash flows. Furthermore, if an enterprise has a system in place to project its future cash flows, the statement of cash flows could be used as a touchstone to evaluate the accuracy of past projections of those future cash flows. This benefit is elucidated by the standard as follows:

a. The statement of cash flows is useful in comparing past assessments of future cash flows against current year's cash flow information

b. It is of value in appraising the relationship between profitability and net cash flows and in assessing the impact of changing prices.⁶⁴

4.2. COMPONENTS OF CASH AND CASH EQUIVALENTS

Cash and cash equivalents include unrestricted cash (meaning cash actually on hand, or bank balances whose immediate use is determined by the management), other demand deposits, and short-term investments whose maturities at the date of acquisition by the enterprise were three months or less. That means cash includes only those items immediately available to pay obligations. Cash equivalents are short-term, highly liquid investments with two additional characteristics:

1. They are readily convertible to known and fixed amount of cash.

⁶⁴ Barry J. Epstein, Abbas Ali Mirza, s. 64-65.

2. They are so near maturity that there is insignificant risk of market value fluctuation from interest rate changes.

Generally, only investments with an original maturity (to the purchasing firm) of 3 months or less qualify.

A two-year treasury note purchased three months before maturity is cash equivalence because it is readily convertible into a known amount of cash and is very near maturity. The same note purchased four months before maturity is not, and it does not become a cash equivalent one month later because its original maturity to the purchaser is four months.

Securities that qualify as cash equivalents include money market funds, commercial paper and treasury bonds, notes and bills. An investment in equity securities cannot be a cash equivalent because it has no maturity date and is not convertible into a known (unchanging) amount of cash.

Cash equivalents are merged with cash for SCF purposes because a security that fulfills the criteria for cash equivalents is economically to cash. Their known value is not likely to change significantly, and they are readily convertible to cash. Cash has these characteristics. The three-month rule minimizes the risk of security price fluctuation from changes in interest rates and usually ensures that the face (or recorded value if different) of the investment is essentially equal to its market value during the holding period.

The assessment of a firm's cash flows would be incomplete without consideration of cash equivalents. Typically, firms invest idle cash in cash-equivalent securities to earn a return higher than is available from saving accounts. Purchases and sales of cash equivalents are a normal part of cash management practices.⁶⁵

The three major and most comprehensive sets of accounting standards (US, UK, and IFRS) have taken three different roads (optionally including cash equivalents,

⁶⁵ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, p. 1191.

mandatory excluding cash equivalents, and including cash equivalents, respectively) to the presentation of the statement of cash flows.

IFRS and US standard required that the change in both cash and cash equivalents be explained by the cash flow statement. UK standard defines cash flows to include movements only in cash.

As mentioned before, equity investments do not qualify as cash equivalents unless they fit the definition above of short-term maturities of three months or less. Preference shares carrying mandatory redemption features, if acquired within three months of their predetermined redemption date, would meet the criteria above since they are cash equivalents.

Bank borrowings are normally considered as financing activities. In some countries overdrafts are to be included as a component of cash equivalents if the following conditions are met:

- The bank overdraft is repayable on demand
- The bank balance often fluctuates from positive to negative (overdraft)

Postdated checks are accepted as back up for the credit that the vendors extended. If the discounting party's credit is strong, banks will offer to discount these postdated checks. Then vendors may end up collecting their receivables before the due date. In that case, post dated checks can be accepted as cash equivalent. If it is not certain at the balance sheet date whether the postdated checks are to be discounted, it can be considered as cash equivalent, when its maturity date is three months after balance sheet date. The customer who issued post-dated checks has no control over them, and cannot accept them as a part of its cash management. Post dated checks are accounts payable in the debtors' financial statements and not cash transactions until the dates of the post-dated checks occur.

Statutory (or reserve) deposits by banks, which are held with the central bank for regulatory compliance purpose, are often included in the cash caption of the balance sheet. In some countries, statutory reserves are accepted as cash equivalent or an

operating asset. If the changes in amount are presented in the operating activities section of the cash flow statement, it could not be combined with the cash in the balance sheet; it must be accepted as operating asset. IAS 7 does not include statutory deposits with the central bank as cash equivalent. If those deposits are more or less permanent, which means they can increase instead to diminish, they cannot be accepted as cash equivalent.⁶⁶

4.3. CLASSIFICATION OF CASH FLOWS

Fundamentally, businesses undertake three distinctly different types of activities. First, they must finance their operation. Therefore, they must acquire the money necessary to launch and sustain the business. It was receipt of cash from the owner to start the business. Those investors who finance the business expect a return on their money, so financing activities also include paying dividends to the stockholders.

The businesses' second transaction is an investment. Companies invest in land, buildings, office furniture, equipment and other long-lived assets for use in the business. They pay close attention to their investing activities because the long-term assets they buy determine the future course of the business.

The main purpose is to generate revenues in order to earn a profit. The way a company earns revenues is called its operations. For a grocery store, operations include buying and selling food and other grocery products. For a law firm, operations consist of providing legal services for clients. The operations of a company define the type of business it is.

A good way to evaluate a business is based on these three types of business activities. After the business is up and running, operations are the most important activity, followed by investing activities and financing activities. The statement of cash

⁶⁶Barry J. Epstein, Abbas Ali Mirza, p. 66-67.

flows therefore divides cash receipts and disbursements into operating activities, investing activities and financing activities.⁶⁷

Classification of cash flows is important for evaluating past cash flows and predicting future flows. For example, the ability of a firm to generate positive cash flow from operations is critical to its survival. A firm cannot indefinitely sell its assets or incur additional debt if it is not operating successfully. Classification enables the user to distinguish between repetitive ongoing activities and long term strategic chances.⁶⁸

4.3.1. Operating Activities

Operating activities create revenues and expenses in the entity's major line of business. Therefore, operating activities affect the income statement, which reports the accrual-basis effects of operating activities. The statement of cash flows reports their impact on cash.

Thus, cash inflows from operating activities include cash receipts from sales of goods or services, including receipts from collection or sale of accounts and both short- and long-term notes receivable from customers arising from those sales. Also, (because they are reported on the income statement) interest received from making loans and from other debt instruments of other entities and dividends received from investments in equity securities are included in cash inflows from operating activities. Other cash flows include all other cash receipts that do not arise from transactions defined as investing or financing activities (such as amounts received to settle lawsuits, proceeds of certain insurance settlements and refunds from suppliers).

⁶⁷ Charles T. Horngren, Walter T. Harrison, p:697

⁶⁸ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, p. 1194.

Inflows
*Receipts from customers
*Interest received
*Dividends received
*Income tax refunds
*Refunds from suppliers
*Other receipts related to income-producing activities, such as revenue received in advance.
*Receipts from lawsuits.
*Insurance proceeds from health, life, and business interruption insurance.
*Proceeds from sales and maturities of trading securities.
Outflows
*Payments to suppliers
*Payments to employees
*Interest payments (net of amounts capitalized)
*Income and other tax payments
*Others payments related to income-producing activities, including prepayments and expenses.
*Payments on operating leases
*Settlements of lawsuits
*Principal payments on long- and short-term loans from suppliers.
*Purchases of trading securities
*Payments for fines and penalties
*Charitable contributions

Chart4: Operating Cash Flows

Source: Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, **Intermediate Accounting**, Vol.2, Boston, Massachusetts: Irwin/McGraw-Hill, 1998, p. 1192.

Cash outflows for operating activities generally include cash payments for expenses that appear on the income statement. Thus, cash outflows for operating activities include cash payments to acquire materials for manufacture or goods for resale (including principal payments on accounts and both short- and long-term notes payable to suppliers for those materials or goods), to other suppliers and employees for other goods or services, to governments for taxes, duties, fines and other fees or

penalties, to lenders and other creditors for interest. All other cash payments that do not arise from transactions defined as investing or financing activities (such as payments to settle lawsuits, cash contributions to charities and cash refunds to customers).⁶⁹

4.3.2. Investing Activities

Investing activities increase and decrease the assets that the business has to work with. A purchase or sale of a plant asset like land, a building or equipment is an investing activity, as is the purchase or sale of an investment in stock or bonds of another company. On the statement of cash flows, investing activities include more than the buying and selling of assets that are classified as investments on the balance sheet. Making a loan (an investing activity because the loan creates a receivable for the lender) and collecting on the loan are reported as investing activities on the statement of cash flows.⁷⁰

This category is important for identifying firm's growth plans. Capital expenditures and acquisition of subsidiaries are important strategic decisions for a firm.

Cash flows from investing activities include cash received from collections or sales of loans made by the enterprise; cash received from the sale of equity instruments of other enterprises and from returns of investment in those instruments and cash received from the sale of property, plant and equipment and other productive assets. Cash outflows for investing activities include cash paid for loans made by the enterprise and payments to acquire debt instruments of other entities; cash paid to acquire equity instruments of other enterprises and cash paid at the time of purchase or soon before or after purchase to acquire property, plant or equipment and other productive assets.

⁶⁹ James Don Edwards, Roger H. Hermanson, R.F. Salmonson, **Accounting**, Boston, Irwin, 1989, p. 353.

⁷⁰ Charles T. Horngren, Walter T. Harrison, p:697

Inflows
*Proceeds from plant assets sales
*Proceeds from sales and maturities of debt and equity securities nt classified as cash equivalents or as trading securities
*Collections of principle amounts of loans made to other parties and not held principally for resale
*Sale of real estate
*Casualty insurance proceeds(related to involuntary disposal of plant assets)
Outflows
*Payments to purchase plant assets
*Purchase of debt and equity securites not classified as cash equivalents or as trading securities
*Loans made to other parties and not held principally for resale
*Payments to purchase real estate
*Paymetns for capitalized interest (increases plant assets)
*Down payments, advance payments, and other paymetns before or soon after purchase of plant assets (subsequent principal payments on debt financing are financing cash outflows)

Chart5: Investing Cash Flows

Source: Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, **Intermediate Accounting**, Vol.2 , Boston, Massachusetts: Irwin/McGraw-Hill, 1998, p. 1193.

A fundamental distinction between operating and investing cash outflows is the anticipated benefit period. Inventory purchases are operating cash flows because the benefits from inventory sales are expected in the short term. Plant assets provide benefits over longer periods.

Gains and loses from discontinued operations and transactions producing extraordinary items are often associated with investing cash flows. For example, the sale of assets from discontinued operations produces an investing inflow. The gains and

loses from extraordinary items and discontinued operations appear as adjustments to net income in the reconciliation of net income and operating cash flows.⁷¹

4.3.3. Financing Activities

Financing activities generally include transactions with creditors and owners. Thus, financing activities include obtaining resources from owners and providing them with a return on their investment and of their investment; borrowing money and repaying amounts borrowed or otherwise settling the obligation and obtaining and paying for other resources obtained from creditors on long-term credit. Cash inflows from financing activities include cash received from issuing equity instruments and bonds, mortgages, notes and from other short- or long-term borrowing. Cash outflows for financing activities include payments of cash dividends or other distributions to owners (including cash paid to purchase treasury stock) and repayments of amounts borrowed. Payment of interest is not included because interest expense appears on the income statement and is therefore included in operating activities.⁷²

Inflows
*Proceeds from stock issuance
*Proceeds from bond issuance
*Proceeds from debt for specific investing activities
*Proceeds from loans from financial institutions.
Outflows
*Payments to purchase treasury stock
*Payments to retire bonds

⁷¹ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, p. 1193.

⁷² James Don Edwards, Roger H. Hermanson, R.F. Salmonson, p: 354

*Dividends paid to shareholders
*Principle payments on loans from financial institutions
*Principle payments on capital leases
*Principle payments on debt used to purchase productive assets financed by dealers or third parties.

Chart6: Financing Cash Flows

Source: Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, **Intermediate Accounting**, Vol.2 , Boston, Massachusetts: Irwin/McGraw-Hill, 1998, p. 1194.

Some cash flows relating to investing or financing activities are classified as operating activities. The association with income is the reason for classifying these flows for operating. For example, receipts of investment income (interest and dividends) and payments of interest to lenders are classified as operating activities, since they are associated with expenses or revenues.

Conversely, some cash flows relating to operating activities are classified as investing and financing activities. For example, the cash received from the sale of property, plant and equipment at a gain, although reported in the income statement, is classified as in investing activity and the effects of the related gain would not be included in net cash flow from operating activities. Likewise, a gain or loss on the payment (extinguishment) of debt would generally be part of the cash outflow related to the repayment of the amount borrowed and therefore is a financing activity.⁷³

The classification of some items depends on the nature of the firm's operations. For example, there is a presumption that the acquisition and sale or other disposals of long-lived assets are investing activities. However, if long-lived assets are acquired or produced to be rented to others for a short period and then sold, their acquisition or

⁷³ Donald E. Kieso, Jerry J. Weygandht, Terry D. Warfield, **Intermediate Accounting**, New York, John Wiley & Sons, Inc., 2001, p:1312-1313

production should be considered an operating activity.⁷⁴ That means, cash flows from other transactions that may at first appear to be investing or financing flows are classified as operating if related to the main business activity. For example, if a real estate developer acquires land for subdivision, improvement, and resale as individual lots, the cash payment used to purchase the land is appropriately classified as operating. In this case, land is similar to the inventory of other types of businesses. Operating cash flows also include cash flows from originating, purchasing, and collecting principle amounts on loans carried at market value and held for a short time for resale.

4.3.4. Non-cash Activities

Some investing and financing activities of an entity during a period affect assets or liabilities on the balance sheets but do not result in cash receipts or cash payments in the period. These items are referred to as non-cash investing and financing activities.⁷⁵

A company will occasionally engage in significant non-cash transactions involving only long-term assets, long-term liabilities, or stockholders' equity, such as the exchange of a long-term liability or the settlement of a debt by issuing capital stock. For instance, a company might take out a long-term mortgage for the purchase of a land and a building, or it might convert long-term bonds into common stock. These transactions represent significant investing and financing activities, but they would not be reflected on the statement of cash flows because they do not either involve cash inflows or cash outflows. However, since one purpose of the statement of cash flows is to show investing and financing activities, and since transactions like these will affect future cash flows, the FASB has determined that they should be disclosed in a separate

⁷⁴ John G. Helmkamp, Leroy F. Imdieke, Ralph E. Smith, p:843.

⁷⁵ A. Douglas Hillman, Richard F. Kockanek, Isaac N. Reynolds, **Principles of Accounting**, 5. Edition, Chicago: The Dryden Press, 1989, p. 883.

schedule as part of the statement of cash flows. In this way, the reader of the statement will see clearly the company's investing and financing activities.⁷⁶

The statement of cash flows, as its name implies, includes only actual inflows and outflows of cash and cash equivalents. Accordingly, it excludes all transactions that do not directly affect cash receipts and payments. However, IAS 7 does require that the effects of transactions not resulting in receipts or payments of cash be disclosed elsewhere in the financial statements. The reason for not including non-cash transactions in the statement of cash flows and placing them elsewhere in the financial statements (e.g. the footnotes) is that it preserves the statement's primary focus on the cash flows from operating, investing and financing activities. It is thus important that the user of financial statements fully appreciate what this financial statements – and does not – attempt to portray.⁷⁷

Example: Settling a \$50,000 debt by issuing stock with a \$50,000 fair market value has the same effect as issuing the stock for cash and using the proceeds to settle the debt. This transaction is recorded in the non-cash schedule as follows:

-Stock with a \$50,000 fair market value was issued in payment of \$50,000 of long-term debt.

Example: If a plant asset costing \$400,000 is acquired by paying \$100,000 cash and issuing a \$300,000 long-term note, the cash flow statement discloses the \$100,000 cash payment as an investing cash outflow and references the following footnote or supporting schedule:

A plant asset was acquired as follows:

Cost of asset acquired	\$400,000
Cash paid	<u>(\$100,000)</u>

⁷⁶ Belverd E. Needles, Henry R. Anderson, James C. Caldwell, p. 662-663.

⁷⁷ Barry J. Epstein, Abbas Ali Mirza, p. 65.

Long-term note issued

\$300.000⁷⁸

4.4. FORMAT OF THE STATEMENT OF CASH FLOWS

The general format of the statement of cash flow is divided into three categories corresponding to the three activities just mentioned above. The cash flows from operating activities are followed by cash flows from investing activities and cash flows from financing activities. The individual inflows and outflows from investing and financing activities are shown separately in their respective categories. For instance, cash inflows from the sale of property, plant, and equipment are shown separately from the cash outflows for the purchase of property, plant and equipment. Similarly, cash inflows from borrowing are shown separately from cash outflows to retire loans. A reconciliation of the beginning and ending balances of cash is shown at the end of statement. A list of non-cash transactions appears in the schedule at the bottom of the statement.

⁷⁸ Thomas R. Dyckman, Roland E. Dukes and Charles J. Davis, p. 1194.

Statement of Cash Flows		
Cash Flows from Operating Activities (List of individual inflows and outflows)	<u>XXX</u>	
Net Cash Flows from Operating Activities		XXX
Cash Flows from Investing Activities (List of individual inflows and outflows)	<u>XXX</u>	
Net Cash Flows from Investing Activities		XXX
Cash Flows from Financing Activities (List of individual inflows and outflows)	<u>XXX</u>	
Net Cash Flows from Financing Activities		<u>XXX</u>
Net Increase (Decrease) in Cash		XX
Cash at Beginning of Year		<u>XX</u>
Cash at End of Year		XX
Shedulae of Noncash Investing and Financing Transactions (List of Individual Transactions)		XXX

Chart7: Format of Statement of Cash Flows

Source: Belverd E. Needles, Henry R. Anderson, James C. Caldwell, Principles of Accounting, Boston: Houghton Mifflin Compnay, 1993, p. 662.

The statement of cash flows is based on an activity format, which means that cash inflows and outflows are classified in terms of operating investing and financing activities. Operating activities relate to a company's primary revenue generating activities. Cash flows from operating activities are generally the cash effects of transactions and economic events included in the determination of income. Investing activities include lending money and collecting on those loans, buying and selling productive assets that are expected to generate revenues over long periods, and buying and selling securities not classified as cash equivalents. Financing activities include borrowing money from creditors and repaying the amounts borrowed and obtaining resources from owners and providing them both a return on their investments through dividends and return of their investments. Investing and financing transactions that do not affect cash, such as the issuance of common stock to acquire land, must be reported

either in a supplementary schedule or in a narrative footnotes to the statement of cash flows.⁷⁹

4.5. COMPONENTS OF CASH FLOW STATEMENT

Cash Flow Statements have three sections according to International Accounting Standards. The components of the standards will be explained in this part detailed.

4.5.1. COMPONENTS OF OPERATING ACTIVITIES

Operating cash flows are listed first in cash flow statement because they are the largest and most important source of cash for most business. The cash flow from operations should generally reflect the cash effects of transactions entering into the determination of net income. Therefore the net cash flow from operations is equal to cash received from customers, plus investment income received (interest and dividends), less cash payments for purchases of merchandise and for expenses. To determine from cash flow from operations, we must convert the company's accrual basis measurements of revenue and expenses to the cash basis.

4.5.1.1 Cash Received From Customers

Sales result in a positive cash flow for a company. Cash sales are direct cash inflows of the company. Credit sales are not, because they are recorded originally as accounts receivable. When they are collected, they become inflows of cash. Credit sales

⁷⁹ Lanny Chasteen, Richard Flaherty, Melvin O'Connor, s.278-279

cannot be assumed as automatically inflows of cash because the collections of account receivable in any one accounting period are not likely to equal credit sales. Receivables may be uncollectible, sales from a prior period may be collected in the current period or sales from the current period may be collected next period. For example if account receivable increases from one account in period to the next, cash receipt from sales will not be as great as sales. On the other hand if account receivable decreases from one accounting period to the next, cash receipts from sales will exceed sales.⁸⁰

The relationship among sales, changes in account receivable and cash receipts from sales are reflected in the following formula.

$$\text{Cash receipts from sales} = \left\{ \begin{array}{l} \text{Sales} \\ \text{+ Decrease in Accounts Receivable} \\ \text{or} \\ \text{- Decrease in Accounts Receivable} \end{array} \right.$$

If accounts receivable have increased during the year, credit sales have exceeded collections of accounts receivable. There fore we must deduct the increase in accounts receivable over the year from net sales in order to determine the amounts of cash received. If accounts received have decreased over the year, collections of these accounts must have exceeded credit sales. Therefore, we must add the decrease in accounts receivable to net sales to determine of cash received.

4.5.1.2. Cash Receipts From Interest and Dividend Received.

⁸⁰ Belverd E. Needles, Henry R. Anderson, James C. Caldwell, p. 666

Although interest and dividends received are most closely associated with investment activity and often called investment income, cash received from these items are classified as operating activities.

Dividends are earned on investment in stock. Unlike interest, dividends do not accrue with the passage of time. Therefore dividend revenue is recorded when cash is received. Dividends received are part of operating activities, but dividends paid are financing activities. Interest revenue, on the other hand is recognized on accrual basis. Accrual basis interest should be converted to cash basis interest. The formula for converting net sales to the cash basis may be modified to convert interest revenue to the cash basis as follows:

$$\begin{array}{l} \text{Interest} \\ \text{received} \end{array} = \text{Interest revenue} \left\{ \begin{array}{l} + \text{ Decrease in Interest Receivable} \\ \text{or} \\ - \text{ Decrease in Interest Receivable} \end{array} \right.$$

4.5.1.3 Cash Payments to Suppliers for Purchases

An accrual basis income statement reflects the cost of goods sold during the year, regardless of whether the merchandise was acquired or paid for in that period. The statement of cash flows, on the other hand, reports the cash paid for merchandise during the year, even if the merchandise was acquired in a previous period or remains unsold at year-end. The relationship between cash payments for merchandise and the

cost of goods sold depends upon the changes during the period in two related balance sheet accounts: inventory and accounts payable to suppliers of merchandise.⁸¹

Under accrual accounting, purchases of merchandise on account are recognized when made by a debit to inventory (in a perpetual system) and credit to Accounts Payable. Under the cash basis, purchases are not recognized until cash is paid. Thus, to convert from accrual basis cost of goods sold to cash basis of goods sold, adjustments must be made for the changes during the year in inventory and in accounts payable as follows:

Accrual basis	}	- beginning inventory		Accrual
cost of		+ ending inventory	=	basis
goods sold				

Accrual	}	- beginning accounts payable		Cash paid
basis		+ ending accounts payable	=	for
purchases				

The amount of purchases made during the year is computed first by deducting the beginning inventory balance from accrual basis cost of goods sold and adding the ending inventory balance to accrual basis cost of goods sold. After the amount of purchases for the year is determined, the amount of cash paid to suppliers for purchases can be computed. This is done by adding beginning accounts payable (goods

⁸¹ Meigs & Meigs, Bettner, Whittington, **Accounting the Basis for Business Decisions**, 1996, p:771.

purchased last year are paid for during the current year) and deducting ending accounts payable (goods purchased this year have not been paid for).⁸²

If a company is increasing its inventory, it is buying more merchandise than it sells during the period. However, if the company is increasing its account payable to merchandise creditors, it is not paying cash for all of these purchases.

4.5.1.4 Payments to Employees

This category includes disbursements for salaries, wages, commissions and other forms of employee compensation. Salaries expense must be adjusted for any increase or decrease in prepaid salaries (an unlike account) as well as for any increase or decrease in salaries payable. An increase in prepaid salaries would result from paying salaries in advance of when the expense was incurred. This amount must be added to salaries expense to determine cash outflows for salaries. A decrease in prepaid salaries would result from incurring salaries expense for which cash payments were made in previous periods. This amount must be subtracted from salaries expense in order to calculate the current period's cash payments to employees for salaries.

An increase in salaries payable means that salaries expense has been incurred but not paid in the current period. This amount must be subtracted from salaries expense to calculate cash outflows for salaries. A decrease in salaries payable results from having paid salaries that were accrued as expenses in a previous period. This amount must be added to salaries expense to determine cash payments for salaries in this period.

4.5.1.5 Cash Payments for Rent

⁸² Leroy F. Imdieke, Ralph E. Smith, **Financial Accounting**, John Wiley&Sons, New York, 1987, p:651

Rent expense, like salaries expense, must be adjusted for changes in prepaid rent expense and rent payable to calculate cash payments for rent.⁸³

4.5.1.6 Cash Payments for Expense

Expenses, as shown in the income statement, represent the cost of goods and services used up during the period. However, the amounts shown as expenses may differ significantly from the cash payments made during the period. Consider, for example, depreciation expense. Recording depreciation expense requires no cash payment, but it does increase total expenses measured on the accrual basis. Thus, in converting accrual-basis expenses to the cash basis, we must deduct depreciation expense and any other “non-cash” expenses from our accrual-basis operating expenses. The other “non-cash” expenses -expenses not requiring cash outlays- include amortization of intangible assets, any unfunded portion of postretirement benefits expense and amortization of bond discount.

A second area of difference arises from short-term timing differences between the recognition of expenses and the actual cash payments. Expenses are recorded in accounting records when the related goods and services are used. However, the cash payments for these expenses might occur (1) in an earlier period, (2) in the same period. Briefly,

1. If payment is made in advance, the payment creates an asset, termed a prepaid expense or in our formula, a “prepayment”. Thus, to the extent that prepaid expenses increase over the year, cash payments exceed the amount recognized as expense.

2. If payment is made in the same period, no problem arises because the cash payment is equal to the amount of expense.

⁸³ Lanny Chasteen, Richard Flaherty and Melvin O Conner, p: 293-294.

3. If payment is made in a later period, the payment reduces a liability for an accrued expense payable. Thus, to the extent that accrued expenses payable decrease over the year, cash payments exceed the amount recognized as expense.

The relationship between cash payments and accrual-basis expenses are summarized below:⁸⁴

$$\begin{array}{l}
 \text{Cash payments} \\
 \text{For expenses}
 \end{array}
 =
 \begin{array}{l}
 \text{Expenses} \\
 \text{non-cash} \\
 \text{Expense}
 \end{array}
 \left\{ \begin{array}{l}
 - \text{ Depreciation} \\
 \text{and other} \\
 \text{non-cash} \\
 \text{Expense}
 \end{array} \right\}
 \text{ and }
 \left\{ \begin{array}{l}
 + \text{ Increase in} \\
 \text{related pre-} \\
 \text{payments} \\
 - \text{ Decrease in} \\
 \text{related} \\
 \text{prepayments}
 \end{array} \right\}
 \text{ and }
 \left\{ \begin{array}{l}
 + \text{ Decrease in} \\
 \text{related accrued} \\
 \text{liabilities or} \\
 - \text{ Increase in} \\
 \text{related accrued} \\
 \text{liabilities}
 \end{array} \right\}$$

4.5.1.7 Cash Payments of Interest

Cash payments for interest are classified as operating activities in spite of the fact that some authorities argue that they should be considered financing activities because of their association with loans incurred to finance the business. Interest expense is a cost of operating the business.

Interest payments show the cash cost of borrowing money. Because excessive borrowing can lead to financial trouble, a large amount of interest payments may signal managers to examine this aspect of operations.

The fact that the liability for unpaid interest increased over the year means that not all of the interest expense shown in the income statement was paid in cash. To determine the amount of interest actually paid, we must subtract from total

⁸⁴ Meigs & Meigs, Bettner, Whittington, p. 772.

interest expense the portion that has been financed through an increase in the liability for interest payable.

4.5.1.8 Cash Payments for Income Taxes

The amount of income taxes expense that appears on the income statement rarely equals the amount of income taxes actually paid during the year. One reason for this difference is that the final payments for the income taxes of one year are not due until some time in the following year. A second reason is that there may be differences between what is deducted from, included in, income for accounting purposes and what is deducted from, or included in, income for tax purpose.

To determine cash payments for income taxes, income taxes expense (from the income statement) is adjusted by the change in income taxes payable. If income taxes payable increased during the accounting period, cash payments for taxes will be less than the expense shown on the income statement. If income taxes payable decreased, cash payments for taxes will exceed income taxes on the income statement. In other words, the following equation is applicable.⁸⁵

$$\begin{array}{l} \text{Cash Payments for} \\ \text{Income Taxes} \end{array} = \begin{array}{l} \text{Income} \\ \text{Taxes} \end{array} \left\{ \begin{array}{l} + \text{Decrease in Income Taxes Payable} \\ \text{or Increase In Income Taxes Payable} \end{array} \right.$$

4.5.1.9 Depreciation Expense and Other Non-cash Income Statement Items

⁸⁵ Belverd E. Needles, Henry R. Anderson, James C. Caldwell, p:669

These expenses are not listed on the statement of cash flows. Because they do not affect cash. For example, depreciation is recorded by debiting the expense and crediting accumulated depreciation. No debit or credit to cash account occurs. Therefore, this expense is a non-cash expense.

Loss on the sale of equipment and gain on the sale of investments are not reported as cash flows from operating activities for two reasons. First, the amount a gain or loss is not a measure of the related cash flow. Second, such gains and losses do not relate to operating activities; rather, they arise from a company's peripheral activities from its investment activities. Accordingly, cash flows arising from the sale of equipment and investments will be reported in the section of the statement of cash flows that is concerned with cash flows from investing activities.⁸⁶

4.5.2. COMPONENTS OF INVESTING ACTIVITIES

Investing activities generally include lending money and collecting on the loans and acquiring and selling or otherwise disposing of securities that are not cash equivalents and productive assets that are expected to generate revenue over a long period.

Cash outflows for investing activities are made primarily for the acquisition of productive assets (such as plant and equipment and natural resources) and for the purchase of securities of other entities that are not cash equivalents (recall that readily marketable securities representing temporary investments of excess cash are considered a component of cash rather than cash investments). Cash outflows for investing activities also include loans made or purchased by the firm.

Cash inflows from investing activities result essentially from events that are opposite to those producing cash out flows for investing activities. Thus, cash inflows include receipts from the sales of productive assets (such as plant and

⁸⁶ Lanny Chasteen, Richard Flaherty, Melvin O'Connor, p. 295.

equipment and natural resources), and from the sale of securities of other entities that are not cash equivalents. Cash inflows from investing activities also include receipts from loans by principal repayments either by borrowers or by the sale of loans made by the entity. Note that interest receipts are not treated as investing activities but rather are included as interest revenue in operating activities.

Cash inflows and cash outflows should be shown individually by activity at their gross amounts. For example, the total receipts from the sales of productive assets during the period should be reported as a cash inflow and the total payments for new productive assets reported as a cash outflow.⁸⁷

Many analysts regard investing as a critical activity because a company's investments determine its future course. Large purchases of plant assets signal expansion, which is usually a good sign about the company. Low levels of investing activities over a lengthy period mean the business is not replenishing its capital assets. Knowing these cash flows helps investors and creditors evaluate the direction that managers are charting for business.

4.5.2.1. Cash Payments to Acquire Plant Assets and Cash Proceeds from Sales of Plant Assets

The purchases of plant assets such as land, buildings and equipment are investing activities because the company is investing in assets for use in the business rather than for resale. These transactions have no effect on revenues or expenses and thus are not reported in the income statement. Operations consist of buying and selling merchandise or rendering services to earn revenue. Investing activities are the acquisition and disposition of assets used in operations. Therefore, the sale of plant assets is seen as cash inflows from investing activities.

⁸⁷ Leroy F. Imdieke, Ralph E. Smith, p:655-656

Investors and creditors are often critical of a company that sells large amounts of its plant assets. Such sales may signal an emergency. In other situations, selling of fixed assets may be good news about the company if it is getting rid of an unprofitable division. Whether sales of plant assets are good news or bad news should be evaluated in light of a company's operating and financing characteristics.

4.5.2.2 Purchases and Sales of Securities

Debit entries to marketable securities account represent purchases of marketable securities or cash outlays. Credit entries represent the cost of marketable securities sold during the period. To determine the cash proceeds from these sales transactions, we must adjust the amount of the credit entries for any gains or losses recognized on the sales.

Example: If there is a debit entry in marketable security account for \$65,000 and debit entry for \$44,000. The \$65,000 in debit entries represents purchases of marketable securities. The \$44,000 in credit entries represent the cost of marketable securities sold during the period. If the income statement shows that these securities were sold at a \$4,000 loss, the cash proceeds from these sales would be amounted to only \$40,000. (\$44,000 cost, minus \$4,000 losses on sale). In the statement of cash flows, these investing activities are summarized as follows:

Purchases of marketable securities	\$65,000
Proceeds from sales of marketable securities	\$40,000 ⁸⁸

4.5.2.3. Loans Made and Collected

Debit entries to the Notes Receivable account represent new loans made during the year; credit entries indicate collections of the principal amount on outstanding notes.

⁸⁸ Meigs & Meigs, Bettner, Whittington, p. 775.

As mentioned before, interest received is credited to the Interest Revenue account and is included among the cash receipts from operating activities.

4.5.3. COMPONENTS OF FINANCING ACTIVITIES

Cash flows from financing activities are determined by analyzing the debit and credit changes recorded during the period in the related liability and stockholders' equity accounts. In a sense, cash flows from financing activities are more easily determined than those relating to investing activities, because financing activities seldom involve gains or losses. Thus, the debit or credit changes in the balance sheet accounts usually are equal to the amounts of the related cash flows.

Credit changes in such accounts as Notes Payable and the accounts for long-term debt and paid-in capital usually indicate cash receipts, debit changes indicate cash payments.

4.5.3.1. Proceeds From Issuance of Stock and Debt

Readers of the financial statements want to know how the entity obtains its financing. Issuing stock (preferred and common) and debt (short-term and long-term) are two common ways to finance operations.

It is possible to determine the proceeds of short-term borrowing transactions throughout the year without carefully reviewing each cash receipt. The proceeds from short-term borrowing are equal to the sum of the credit entries in the short-term notes payable account.

4.5.3.2. Payment of Debt and Purchase of the Company's Own Stock

The payment of debt (short-term and long-term) decreases cash, which is the opposite of borrowing money. Payments to settle short-term debts are equal to the sum of the debit entries in notes payable account. Other transactions in this category are purchases of treasury stock and payments to retire the company's stock.

4.5.3.3. Payment of Cash Dividends

The payment of cash dividends decreases cash and is therefore reported as a cash payment. A dividend in another form – a stock dividend, for example- has no effect on cash and is not reported on the cash flow statement.

In practice, most corporations pay cash dividends in the same year in which these dividend are declared. In these situations, the cash payments are equal to the related debit entries in the retained earnings account. If the balance sheet includes a liability for dividends payable, the amounts debited to retained earnings represent dividends declared during the period, which may differ from the amount of dividends paid, we must adjust the amounts of dividends declared by adding any decrease (or subtracting any increase) in the dividends payable account over the period.⁸⁹

4.6. CONCEPT OF OPERATING FREE CASH FLOW

Smart investors love companies that produce plenty of free cash flow (FCF). It signals a company's ability to pay debt, pay dividends, buy back stock and facilitate the growth of business - all important undertakings from an investor's perspective. However, while free cash flow is a great gauge of corporate health, it does have its limits and is not immune to accounting trickery.

⁸⁹ Meigs & Meigs, Bettner, Whittington, p. 776.

By establishing how much cash a company has after paying its bills for ongoing activities and growth, FCF is a measure that aims to cut through the arbitrariness and "guesstimations" involved in reported earnings. Regardless of whether a cash outlay is counted as an expense in the calculation of income or turned into an asset on the balance sheet, free cash flow tracks the money.

To calculate FCF, make a beeline for the company's cash flow statement and balance sheet. There you will find the item cash flow from operations (also referred to as "operating cash"). From this number subtract estimated capital expenditure required for current operations:

$$\begin{array}{r}
 \text{Cash Flow From Operations (Operating Cash)} \\
 \\
 - \text{Capital Expenditure} \\
 \\
 \text{-----} \\
 = \text{Free Cash Flow}
 \end{array}$$

To do it another way, grab the income statement and balance sheet. Start with net income and add back charges for depreciation and amortization. Make an additional adjustment for changes in working capital, which is done by subtracting current liabilities from current assets. Then subtract capital expenditure, or spending on plants and equipment:

$$\begin{array}{r}
 \text{Net income} \\
 + \text{Depreciation/Amortization} \\
 - \text{Change in Working Capital} \\
 - \text{Capital Expenditure} \\
 \\
 \text{-----} \\
 = \text{Free Cash Flow}
 \end{array}$$

It might seem odd to add back depreciation/amortization since it accounts for capital spending. The reasoning behind the adjustment, however, is that free cash flow is meant to measure money being spent right now, not transactions that happened in the past. This makes FCF a useful instrument for identifying growing companies with high up-front costs, which may eat into earnings now but have the potential to pay off later.

Growing free cash flows are frequently a prelude to increased earnings. Companies that experience surging FCF - due to revenue growth, efficiency improvements, cost reductions, share buy backs, dividend distributions or debt elimination - can reward investors tomorrow. That is why many in the investment community cherish FCF as a measure of value. When a firm's share price is low and free cash flow is on the rise, the odds are good that earnings and share value will soon be on the up.

By contrast, shrinking FCF signals trouble ahead. In the absence of decent free cash flow, companies are unable to sustain earnings growth. An insufficient FCF for earnings growth can force a company to boost its debt levels. Even worse, a company without enough FCF may not have the liquidity to stay in business.

Although it provides a wealth of valuable information that investors really appreciate, FCF is not infallible. Crafty companies still have leeway when it comes to accounting sleight of hand.

Without a regulatory standard for determining FCF, investors often disagree on exactly which items should and should not be treated as capital expenditures. Investors must therefore keep an eye on companies with high levels of FCF to see if these companies are under-reporting capital expenditure and R&D. Companies can also temporarily boost FCF by stretching out their payments, tightening payment collection policies and depleting inventories. These activities diminish current liabilities and changes to working capital. But the impacts are likely to be temporary.

When a company reports revenue, it records an account receivable, which represents cash that is yet to be received. The revenues then increase net income and cash from operations, but that increase is typically offset by an increase in current

accounts receivable, which are then subtracted from cash from operations. When companies record their revenues as such, the net impact on cash from operations and free cash flow should be zero since no cash has been received.

What happens when a company decides to record the revenue, even though the cash will not be received within a year? This question is inspired by telecom equipment maker Nortel Networks' year 2000 financial statements. The receivable for a delayed cash settlement is therefore "non-current" and can get buried in another category like "other investments". Revenue then is still recorded and cash from operations increases, but no current account receivable is recorded to offset revenues. Thus, cash from operations and free cash flow enjoy a big but unjustified boost. Tricks like this one can be hard to catch.

Finding an all-purpose tool for testing company fundamentals still proves elusive. Like all performance metrics, FCF has its limits. On the other hand, provided that investors keep their guard up, free cash flow is a very good place to start hunting.⁹⁰

4.7. REPORTING METHODS OF CASH FLOW STATEMENT

There are two basic ways to present the statement of cash flows. Both methods arrive at the same subtotals for operating activities, investing activities, financing activities and the net change in cash for the period. They differ only in the manner of showing the cash flows from operating activities.

⁹⁰ Ben McClureFree, **Cash Flow: Free, But Not Always Easy**,
<http://www.investopedia.com/articles/fundamental/03/091703.asp>

These methods of preparing the cash flow statement affect only the operating activities section of the statement. No difference exists in the reporting of investing activities and financing activities.

4.7.1. Direct Method

The direct method shows the items that affected cash flow and the magnitude of those cash flows. Cash received from, and cash paid to, specific sources (such as customers and suppliers) are presented, as opposite to the indirect methods converting accrual basis net income (loss) to cash flow information by means of a series of add-backs and deductions.

As mentioned above, under the direct method, major classes of operating revenues are shown as cash inflows from operations. For example, cash inflows may be reported for cash collected from customers and cash received from interest and dividends. Conversely, cash payments and expenses are reported by major class such as cash paid to suppliers for goods and services, cash paid to employees, cash paid to creditors for interest and cash paid to government for taxes. The difference between the cash inflows from operations and cash outflows for expenses represents the net cash flow from operating activities.⁹¹

Entities using the direct method are required by IAS7 to report the following major classes of gross cash receipts and gross cash payments:

- 1-Cash collected from customers
- 2-Interest and dividends received
- 3-Cash paid to employees and other suppliers
- 4-Interest paid

⁹¹ Leroy F. Imdieke, Ralph E. Smith, p:649.

5-Income taxes paid

6-Other operating cash receipts and payments

An important advantage of the direct method is that it permits the user to better comprehend the relationship between the company's net income (loss) and its cash flows. For example, payments of expenses are shown as cash disbursements and are deducted from cash receipts. In this way, the user is able to recognize the cash receipts and cash payments for the period. Knowledge of where operating cash came from and how cash was used in operations in past periods maybe useful in estimating future cash flows.

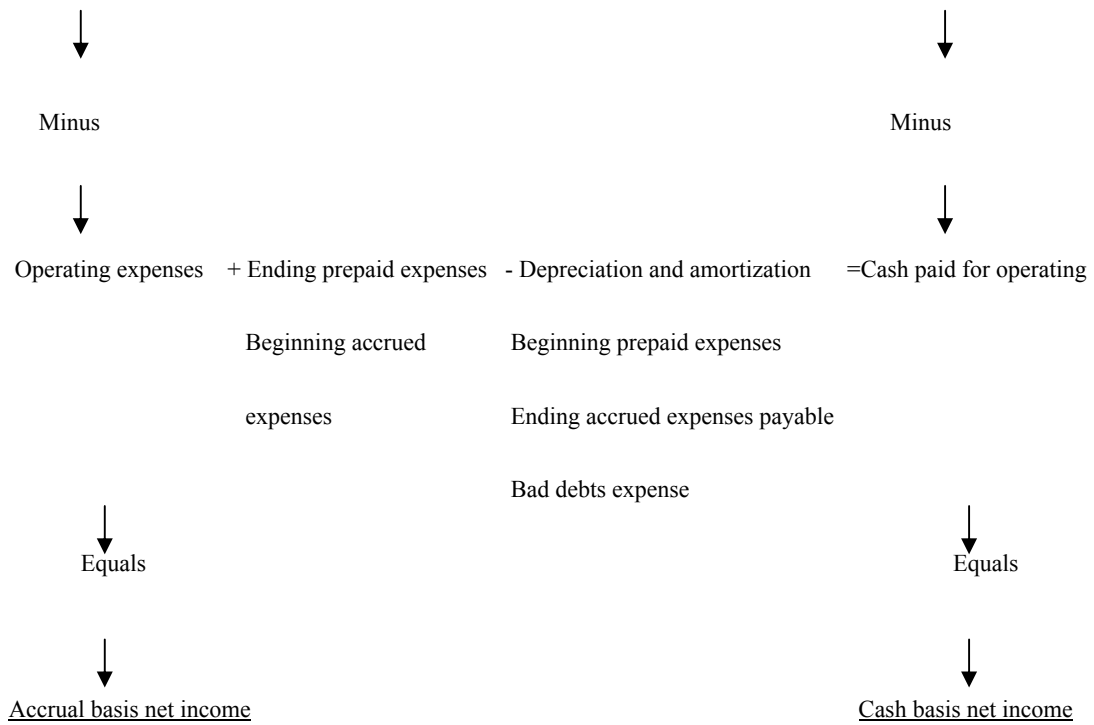
The amounts to be included in the operating section of the statement of cash flows, when the direct approach is utilized, are derived amounts that must be computed; they are not, generally amounts that exist as account balances simply to be looked up and then placed in the statement. The extra efforts needed to prepare the direct method operating cash flow data may be a contributing cause of why this method has been distinctly unpopular with preparers.

In computing cash provided by operating activities, the normal approach is to convert the accrual basis net income to a cash basis income. To make this conversion, the relationship between the effect of operating transactions on accrual income and cash movements within the company must be considered. Thus, the different classes of accrual basis revenues are adjusted to show cash inflows from operations. For example, cash inflows may be reported for cash received from customers and for cash received from interest and dividends. Conversely, accrual basis expenses are adjusted to report cash outflows for various classes of expenses such as cash paid to suppliers for inventory purchases, cash paid to suppliers for other goods and services such as office supplies, advertising and utilities, cash paid to employees, cash paid to creditors for interest and cash paid to the government for taxes. The difference between cash inflows

from operations and cash outflows for expenses represents the net cash flows from operating activities.⁹²

<u>Accrual basis</u>			<u>Cash basis</u>
<u>Income statement</u>	<u>Additions</u>	<u>Deductions</u>	<u>Income statement</u>
Net Sale	+Beginning AR	- Ending AR	= Cash received from
		AR written off	customers
↓			↓
Minus			Minus
↓			↓
Cost of goods sold	+Ending inventory	- Depreciation and amortization*	= Cash paid to suppliers
	Beginning AP	Beginning inventory	
		Ending AP	

⁹² Leroy F. Imdieke, Ralph E. Smith, p:650.



*Applies to a manufacturing entity only

Chart8: Summary Computation of Cash Flows from Operating Activities

Source: Leroy F. Imdieke, Ralph E. Smith, Financial Accounting, John Wiley&Sons, New York, 1987, p:

653.

The direct method is presented below:

Direct method

Cash flows from operating activities:

Cash received from sale of goods	\$xxx	
Cash dividends received*	xxx	
Cash provided by operating activities		\$xxx
Cash paid to suppliers	(xxx)	
Cash paid for operating expenses	(xxx)	
Cash paid for income taxes**	(xxx)	

Cash disbursed for operating activities	\$(<u>xxx</u>)
Net cash flows from operating activities	\$ <u>xxx</u>

* Alternatively, could be classified as investing cash flow.

** Taxes paid are usually classified as operating activities. However, when it is practical to identify the tax cash flow with an individual transaction that gives rise to cash flows that are classified as investing or financing activities, then the tax cash flow is classified as investing or financing activity as appropriate.

4.7.2. Indirect Method

The indirect method (sometimes refer to as the reconciliation method) is the most widely used means of presentation of cash from operating activities, primarily because it is easier to prepare. It focuses on the differences between net operating results and cash flows. The indirect format begins with net income (or loss), which can be obtained directly from the income statements. Revenue and expense items not affecting cash are added or deducted to arrive as net cash provided by operating activities. For example, depreciation and amortization would be added back because these expenses reduce net income without effecting cash.

The statement of cash flows prepared using the indirect method emphasizes change in the components of most current assets and current liability accounts. Changes in inventory, accounts receivable, and other current accounts are used to determine the cash flow from operating activities. Although most of these adjustments are obvious (most preparers simply relate each current assets or current liability on the balance sheet to a single caption in the income statement), some changes require analysis that is more careful. For example, it is important to compute cash collected from sales revenue to both the change in accounts receivable and the change in the related bad debt allowance accounts.

As another example of possible complexity in computing the cash from operating activities, the change in short-term borrowings resulting from the purchase of equipment would not be included, since it is not related to operating activities. Instead, these short-term borrowings would be classified as a financing activity. Other adjustments under the indirect method include changes in the account balances of deferred income taxes, minority interest, unrealized foreign currency gains or losses and the income (loss) from investments under the equity method.⁹³

As stated above, net cash flow from operating activities differs from net income for three major reasons:

1) Non-cash expenses. Some expenses such as depreciation expense reduce net income but do not require any cash outlay during the current period.

2) Timing differences. Revenue and expenses are measured using the concepts of accrual accounting. Net cash flow, on the other hand, reflects the effects of cash transactions. Thus, revenue and expenses may be recognized in a different accounting period from the related cash flows.

3) Non-operating gains and losses. By definition, net cash flow from operating activities shows only the effects of those cash transactions classified as operating activities. Net income may include gains and losses relating to investing and financing activities.⁹⁴

IAS 7 offers yet another alternative way of presenting the cash flows from operating activities. This could be referred to as the modified indirect method. Under this variant of the indirect method, the starting point is not net income but rather revenues and expenses as reported in the income statement. In essence, this approach is virtually the same as the regular indirect method, with two more details: revenues and expenses for the period. There is no equivalent rule under US GAAP.

⁹³ Barry J. Epstein, Abbas Ali Mirza, s. 71.

⁹⁴ Meigs & Meigs, Bettner, Whittington, p:781.

The major drawback to the indirect method involves the user's difficulty in comprehending the information presented. This method does not show from where the cash was received or to where cash was paid. Only adjustments to accrual-basis net income are shown. In some cases, the adjustments can be confusing. For instance, the sale of equipment resulting in an accrual-basis loss would require that the loss be added to net income to arrive at net cash from operating activities (the loss was deducted in the computation of net income, but because the sale will be shown as investing activity, the loss must be added back to net income).

Although the indirect method is more commonly used in practice, the IASC and the FASB both encouraged enterprises to use the direct method. As pointed out by IAS 7, a distinct advantage of the direct method is that it provides information that may be useful in estimating or projecting future cash flows, a benefit that is clearly not achieved when the indirect method is utilized instead.

The indirect method is presented below:

Indirect Method

Cash flows from operating activities:

Net income before income taxes	\$ xx
Adjustments for:	
Depreciation	xx
Unrealized loss on foreign exchange	xx
Interest expense	<u>xx</u>
Operating profit before working capital changes***	xx

Increase in accounts receivable	(xx)
Decrease in inventories	xx
Increase in accounts payable	<u>xx</u>
Cash generated from operations	xx
Interest paid	(xx)
Income taxes paid (see note** above)	(<u>xx</u>)
Net cash flows from operating activities	<u>\$xxx</u>

***The appendix to IAS 7 uses the term “working capital changes,” but the authors believe that “changes in operating assets and liabilities” is preferable since the emphasis has clearly shifted from working capital changes and the related concept of fund flows, to cash flows by the supplanting of the erst-while IAS 7, which dealt with the now obsolete “statement of changes in financial position”.⁹⁵

All expenses with no cash effects are added back to net income on the cash flow statement. For example, depreciation is recorded as follows:

Depreciation Expense.....	xxx
Accumulated Depreciation.....	xxx

This entry contains no debit or credit to cash, so depreciation expense has no cash effect. However, depreciation is deducted from revenues in the computation of income. Therefore, in going from net income to cash flow from operations, we add

⁹⁵ Barry J. Epstein, Abbas Ali Mirza, p. 72.

depreciation back to net income. The add back simply cancels the earlier deduction. The following example should help: Suppose a company had two transactions during the period, a \$1,000 cash sale and depreciation expense of \$300. Net income is \$700 (\$1,000-\$300). Cash flow from operations is \$1,000. To go from net income (\$700) to cash flow (\$1,000), we must add the depreciation amount of \$300.⁹⁶

There are other expenses and losses that are added back to net income because they do not actually use cash of the company; these add backs are called non-cash charges or expenses. Besides depreciation, the items added back include amounts of depletion that were expensed, amortization of discount on bonds payable, unfunded pension expense and amortization of intangible assets.

Certain revenues and gains included in arriving at net income do not provide cash; these items called non-cash credits or revenues. These revenues and gains must be deducted from net income to compute cash flows from operating activities. Such items include gains from income from investments carried under the equity method and amortization of premium on bonds payable.

Timing differences between net income and net cash flow arise whenever revenue or expense is recognized by debiting or crediting an account other than cash. Changes over the period in the balances of these assets and liability accounts represent differences between the amount of revenue or expense recognized in the income statement and the net cash flow from operating activities. The balance sheet accounts that give rise to these timing differences include accounts receivable, inventories, and prepaid expenses, accounts payable and accrued expense payable.⁹⁷

Changes in Accounts Receivable: When a firm makes a sale to a customer, the customer generally charges the purchase to his or her account with the firm. Later the firm bills the customer for the purchase, and the customer pays off the balance of the account. The accounting records recognize revenue when the sale is made, however the

⁹⁶ Charles T. Horngern, Walter T. Harrison, **Accounting**, New Jersey, 1989, Prentice Hall, p:714

⁹⁷ Meigs & Meigs, Bettner, Whittington, **Accounting the Basis for Business Decisions**, 1996, p:781.

firm does not receive any cash until the customer makes a payment on the account. For this reason, sales revenue and cash inflow are not the same. Nevertheless, the two are related, for the current sales trigger the future cash inflow.

At any moment in time, the difference between the sales revenue flow and the cash flow is reflected in the balance of the firm's accounts receivable. With this relationship in mind, one can easily determine the firm's cash inflow from accounts receivable. The amounts of sales must equal the amount of cash inflow plus the increase in the balance of accounts receivable. This means that the amount of cash inflow must equal the amount of sales minus the increase or plus the decrease in accounts receivable.

Changes in Accounts Payable: When a firm makes a purchase from a supplier, it generally charges the purchase to its account with the supplier. Later the supplier bills the firm, and the firm pays off the balance of its account. Although the accounting records recognize the purchase when the purchase is made, the firm does not use any cash until it pays the supplier's bill. For this reason, purchases and cash outflow are not the same.

At any moment in time, the differences between the purchases expense flow and the cash flow is reflected in the balance of the firm's accounts payable. As with accounts receivable, it is easy to determine the firm's cash outflow to accounts payable, given this relationship. The amount of cash outflow must equal the amount of purchases minus the increase or plus the decrease in accounts payable. To derive the firm's cash outflow to accounts payable one must therefore take the firm's purchases and subtract the change in accounts payable.⁹⁸

Changes in Inventory: The balance in the inventory account increases as merchandise is purchased and decreases as goods are sold. A net increase in the inventory account during the period indicates that purchases during the period exceed the cost of goods sold. Thus, to reconcile net income with net cash flow, we deduct

⁹⁸ Mark F. Asman, Scott S. Cowen and Steven L. Mandell, **Accounting Today - Principles and Applications**, New York, Los Angeles, San Francisco and St. Paul: Wets Publishing Company, 1986, s. 546- 547.

from net income the amount of these additional purchases (the net increase in the balance of the inventory account).

A net decrease in the balance of the inventory account over the period indicates that the cost of goods sold (reported in the income statement) exceeds purchases made during the period. To the extent that the cost of goods sold consists of a decrease in inventory, no cash payment is required in the current period. Therefore, we add to net income the amount of a net decrease in inventory.

Changes in Accrued Expenses Payable: The liability for accrued expenses payable increases with the recognition of expenses that will be paid in the future and decreases as cash payments are made. A net increase in accrued expenses payable indicates that expenses in the period exceed the related cash payments. Thus, net income is less than net cash flow and the increase in the accrues expenses payable accounts should be added to net income.

A net decrease in accrued expenses payable indicates that cash payments exceed the related amounts of expense. This decrease, therefore, is subtracted from net income.

The liability for deferred income taxes may be viewed as a long-term accrued expense payable. However, in the reconciliation of net income with net cash flow from operating activities, the change in the liability for deferred income taxes is shown separately from the net change in other accrued expenses payable. A net increase in this liability is added to net income: a net decrease is subtracted.⁹⁹

Changes in Prepaid Expenses: When prepaid expenses (assets) increase during a period, expenses on an accrued basis income statement are lower than they are on a cash basis income statement. Expenditures (cash payments) have been made in the current period, but expenses (as charges to the income statement) have been deferred to future periods. To convert net income to net cash flow from operating activities, the

⁹⁹ Meigs & Meigs, Bettner, Whittington, s. 782.

increase in prepaid expenses must be deducted from net income. An increase in prepaid expenses results in a decrease in cash during the period.¹⁰⁰

The following summary, actually simply an expanded balance sheet equation, may facilitate understanding of the adjustments to net income necessary for converting accrual-basis net income to cash-basis net income when using the indirect method.

Current	-	Fixed	=	Current	+	Long-term	+	Income	+	Accrual income adjustment
<u>assets*</u>		<u>assets</u>		<u>liabilities</u>		<u>liabilities</u>		<u>Income</u>		<u>to convert to cash flow</u>
1-		Increase	=					Increase		Decrease
2-		Decrease	=					Decrease		Increase
3-			=	Increase				Decrease		Increase
4-			=	Decrease				Increase		Decrease

* Other than cash and cash equivalent

Most current assets and current liabilities result from operating activities. Accounts receivable result from sales, inventory generates revenues and prepaid expenses are used up in operations. On the liability side, accounts payable are incurred to buy inventory and accrued liabilities relate to salaries, utilities and other expenses. Changes in these current accounts are reported as adjustment to net income on the cash flow statement. The following rules apply:

1-An increase in a current asset other than cash is subtracted from net income to compute cash flow from operations. Suppose a company makes a sale. Income is increased by the sale amount. However, collection of less than the full amount leaves Accounts Receivable with an increase. To compute the impact of revenue on the cash flow amount, it is necessary to subtract the increase in Accounts Receivable from net income. The same logic applies to the other current assets. If they increase during the period, subtract the increase from net income.

¹⁰⁰ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1319

2-A decrease in a current asset other than cash is added to net income. For example, suppose accounts receivables balance decreased during the period. Cash receipts cause the accounts receivable balance to decrease, so decreases in accounts receivable and the other current assets are added to net income.

3-An increase in a current liability is added to net income. Suppose accrued liabilities increased during the year. This can occur only if cash is not spent to pay this liability, which means that cash payments are less than the related expense. Thus, increase in current liabilities is added to net income.

4-A decrease in a current liability is subtracted from net income. The payment of a current liability causes it to decrease, so decrease in current liabilities is subtracted from net income.¹⁰¹

As explained before, cash flows are classified as operating activities, investing activities or financing activities. Non-operating gains or losses do not affect operating activities. However, these gains and losses do enter into the determination of net income. Therefore, in converting net income to net cash flow from operating activities, we add back any non-operating losses and deduct any non-operating gains included in net income. Non-operating gains and losses include gains and losses from sales of investments plant assets, and discontinued operations, which relate to investing activities, and gains and losses on early retirement of debt, which relate to financing activities.

The illustrate the add back of the losses from disposals of non-current assets; assume that a company sold a piece of equipment for \$6.000. The equipment had cost \$10.000 and had accumulated depreciation of \$3.000. The journal entry to record the sale is:

Cash.....	6.000
Accumulated Depreciation.....	3.000
<hr/>	

¹⁰¹ Charles T. Horngern, Walter T. Harrison, p:715.

Loss on Sale of Equipment.....	1.000
Equipment	10.000

To record disposal of equipment at a loss.

The \$6.000 inflow from the sale of equipment will be shown as a positive cash flow from investing activities on the statement of cash flows. The loss amount (\$1.000) was deducted in calculating net income but did not reduce cash. Thus, the loss must be added back to net income in converting net income to cash flows from operating activities.

To illustrate why the gain on the disposal of a non-current asset must be deducted from net income, assume that a company sold the equipment mentioned above for \$9.000. The journal entry to record the sale is:

Cash:.....	9.000
Accumulated Depreciation.....	3.000
Equipment.....	10.000
Gain on Sale of Equipment.....	2.000

To record disposal of equipment at a gain.

The \$9.000 inflow from the sale of equipment in the statement of cash as a positive cash flow from investing activities on the statement of cash flows. The gain

does not affect cash, yet it was added in calculating net income. Thus, the gain must be deducted in converting net income to cash flows from operating activities.¹⁰²

Below chart shows the detailed calculation way to convert net income to net cash flows from operating activities:

Net Income

- + Loss related to discontinued operation
- + Loss related to extraordinary item
- + Loss related to cumulative effect of accounting change
- + Depreciation, depletion or amortization expense
- + Amortization of bond discount
- + Loss on sale of investment
- + Loss on sale property, plant and equipment
- + decrease in operating receivables
- + decrease in inventories
- + decrease in current prepaid items
- + Increase in accounts payable
- + Increase in accrued liabilities
- + Increase in deferred taxes payable

¹⁰² James Don Edwards, Roger H. Hermanson, R.F. Salmonson, A Survey of Financial and Managerial Accounting, Boston, 1989, Irwin, p: 356

- Gain related to discontinued operation
 - Gain related to extraordinary item
 - Gain related to cumulative effect of accounting change
 - Amortization of bond premium
 - Gain on sale of investment
 - Gain on sale property, plant and equipment
 - Increase in operating receivables
 - Increase in inventories
 - Increase in current prepaid items
 - Decrease in accounts payable
 - Decrease in accrued liabilities
 - Decrease in deferred taxes payable
-

Net cash flows from operating activities¹⁰³

4.7.3. Comparison of the Direct and Indirect Methods

The two methods of computing net cash flow from operating activities are more similar than they appear at first glance. Both methods are based upon the same accounting data and both result in the same cash flow. In addition, the computations underlying both methods are quite similar. Both methods convert accrual based income

¹⁰³ Lanny Chasteen, Richard Flaherty and Melvin O Conner, s.286.

statement amounts into cash flows by adjusting for changes in related balance sheet accounts.

The differences between the two methods lie only in format. However, the two formats provide readers of the cash flow statement with different types of information. The direct method informs these readers of nature and amounts of the specific cash inflows and outflows comprising the operating activities of the business. The indirect method, in contrast, explains why the net cash flow from operating activities differs from another measurement of performance net income.¹⁰⁴

The major conceptual argument in support of the indirect approach is that because the calculation begins with net income, users are better able to link operating cash flows to net income. As a result, users can better assess a company's earnings "quality", that is, how closely income flows are correlated with cash flows. Arguments against the indirect approach are that

1) The major sources of gross cash inflows and outflows from operating activities are not reported

2) Users of financial statements may become confused by the adjustments to net income that are depreciation often has been viewed (quite incorrectly) as a source of "funds" or cash, because it is added back to net income under the indirect approach.

Proponents of the direct approach argue that is much more straightforward than the indirect approach and therefore much less confusing. It shows clearly that cash inflows are from customers and other sources, and that cash outflows are merchandise, salaries, interest, taxes and other operating items. Furthermore, the direct approach provides more information than the indirect approach because of the requirement that the direct analysis be accompanied by the indirect reconciliation.

The direct approach is more understandable, more relevant and more representationally faithful than the indirect approach even through it may be more

¹⁰⁴ Meigs & Meigs, Bettner, Whittington, p:780-781.

costly to apply. Furthermore, a statement of cash flows that is prepared using the direct approach to report operating cash inflows and outflows should be the more logical and simpler statement from the viewpoint of financial statement users, because those cash flows are not affected by recognition, measurement or estimation issues.¹⁰⁵

Supporters of direct method contend that it is more revealing of a company's ability to generate sufficient cash from operations to pay debts, reinvest in operations and make distributions to owners.

The direct method effectively presents income statement information on a cash rather than an accrual basis and may suggest that net cash from operations is as good as or better than net income as a measure of performance.

The indirect method focuses on the difference between net income and net cash flow from operations. Supporters of indirect method note that it provides useful link among the statement of cash flows, the income statement and the balance sheet.

The main difference between the direct and indirect method is that cash paid can be determined using the direct method.¹⁰⁶

4.8. SPECIAL PROBLEMS IN STATEMENT PREPARATION ACCORDING TO IFRS

4.8.1. Adjustments Similar To Depreciation

Depreciation expense is the most common adjustment to net income that is made to arrive at net cash flow from operating activities. However, there are numerous

¹⁰⁵ Lanny Chasteen, Richard Flaherty and Melvin O Conner, **Intermediate Accounting**, s.300-301.

¹⁰⁶ Brahmasrene, Tantatape, Srtupeck, C. David and Whitten, Donna, **Examining Preferences in Cash Flow Statement Format**, [Electronic Version], CPA Journal, October 2004, Vol. 74 issue 10, p 58, 3 p, (26.10.2006).

other non-cash expenses or revenue items. Examples of expense items that must be added back to net income are the amortization of intangible assets such as goodwill and patents, and the amortization of deferred costs such as bond issue costs. These charges to expense involve expenditures made in prior periods that are being amortized currently and reduce net income without affecting cash in the current period.

In addition, amortization of bond discount or premium on long-term bonds payable affects the amount of interest expense, but neither charges cash. As a result, amortization of these items should be added back to (discount) or subtracted from (premium) net income to arrive at net cash flow from operating activities. In a similar manner, changes in deferred income taxes affect net income but have no effect on cash. For example, General Electric Company at one time had a decrease in its liability for deferred taxes of \$171 million. Tax expense decreased and net income increased by this amount, but cash flow was unaffected. Therefore, GE subtracted this amount from net income to arrive at net cash flow from operating activities.

Another common adjustment to net income is a change related to an investment in common stock when income or loss is accrued under the equity method. Recall that under the equity method, the investor (1) debits the investment account and credits revenue for its share of the investee's net income and (2) credits dividends received to the investment account. Therefore, the net increase in the investment account does not affect cash flow from operating activities.

If the fair value method is used, income of the investee is not recognized and any cash dividend received is recorded as revenue. In this case, no adjustment to net income in the statement of cash flows is necessary for any cash dividend received.

4.8.2. Accounts Receivable (Net)

If an allowance for doubtful accounts is needed, how does it affect the determination of net cash flow from operating activities? For example, assume that

Redmark Co. reports net income \$40,000 and has the following balances related to accounts receivable:

	<u>2002</u>	<u>2001</u>	<u>Change</u>
Accounts receivable	\$105,000	\$90,000	\$15,000 Increase
Allowance for doubtful accounts	\$10,000	\$4,000	\$6,000 Increase
Accounts receivable (net)	\$95,000	\$86,000	\$9,000 Increase

Direct and indirect methods are illustrated below:

Indirect Method: An increase in the Allowance for Doubtful Accounts should be added back to net income to arrive at net cash flow from operating activities, since an increase in the Allowance for Doubtful Accounts is caused by a charge to bad debts expense and bad debt expense is a non-cash charge. The presenting way in a statement of cash flows is shown below:

Cash flows from operating activities

Net income	\$40,000
------------	----------

Adjustments to reconcile net income to net

Cash provided by operating activities:

Increase in accounts receivable	\$(15,000)
Increase in allowance for doubtful accounts	<u>\$6,000</u> <u>\$9,000</u>
	\$31,000

A short cut approach is to net the allowance balance against the receivable balance is presented below:

Cash flows from operating activities

Net income	\$40.000
Adjustments to reconcile net income to net	
Cash provided by operating activities:	
Increase in accounts receivable (net)	<u>\$(15.000)</u>
	\$31.000

If the change in the allowance account was caused by a write-off of accounts receivable, this shortcut procedure works again. Since both Accounts Receivable and Allowance for Doubtful Accounts are reduced, no effect on cash flows occurs.

Direct Method: If the direct method is used, the Allowance for Doubtful Accounts should not be netted against the Accounts Receivable. Cash sales should be reported as \$85.000 (\$100.000 - \$15.000), and total cash payments for operating expenses should be reported at \$54.000 (\$60.000 - \$6.000).

Cash flows from operating activities		
Cash received from customers		\$85.000
Salaries paid	\$46.000	
Utilities paid	\$8.000	<u>\$54.000</u>
		\$31.000

Since the write off the accounts receivable is not a cash collection, simply adjusting sales for the change in accounts receivable will not provide the proper amount of cash sales, an additional adjustment is necessary.¹⁰⁷

¹⁰⁷ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1332-1334.

4.8.3. Acquisitions and Divestitures

Changes in reported balances of operating asset and liability accounts may include the effects of both operating activities and acquisitions or divestitures. For example, the inventory account may be increased as a result of:

1. Purchase of inventory from a supplier (an operating activity)
2. Acquisition of (merger with) another firm that has inventory as a component of its balance sheet (an investing activity)

Operating cash flows include only operating transactions and events. For firms that acquire operating assets and liabilities, the changes reported in the statement of cash flows as adjusted to income to arrive at operating cash flow will not match the increase or decrease reported on the balance sheet.

The difference between the changes reported in the two statements provides useful information to the analyst. If the difference for any balance sheet account represents the amount of that component acquired through a merger, the analyst can reconstruct the assets and liabilities obtained by the firm through an acquisition. This information is generally not provided anywhere else.

It should be noted that although the reporting requirements accomplish the necessary segregation in the period of the acquisition (or divestiture), cash flows for subsequent periods may be distorted. For example, cash paid for the accounts receivable of an acquired firm is reported as investment cash (out) flow. However, the subsequent cash collection of that receivable will be a component of operating cash flows. The result is overstated cash flows from operations, as the cost of acquiring the accounts receivables was never reflected in cash outflows for operations. Acquisitions, divestitures, and continued corporate reorganizations can distort trends in both cash flows from operations and investing cash flows.

4.8.4. Other Working Capital Changes

Some changes in working capital, although they affect cash, do not affect net income. Generally, these are investing or financing activities of a current nature. For example, the purchase of short-term available-for-sale securities for \$50,000 cash has no effect on net income but it does cause a \$50,000 decrease in cash. This transaction is reported as a cash flow from investing activities and reported gross.

Another example is the issuance of a \$10,000 short-term non-trade note payable for cash. This change in a working capital item has no effect on income from operations but it increases cash \$10,000.

Another change in a working capital item that has no effect on income from operations or on cash is a cash dividend payable. Although the cash dividends when paid will be reported as a financing activity, the declared but unpaid dividend is not reported on the statement of cash flows.

Because trading securities are bought and held principally for selling them in the near term, the cash flows from purchases and sales of trading securities should be classified as cash flows from operating activities.

4.8.5. Translation of Foreign Subsidiaries

The assets and liabilities of foreign subsidiaries must be translated into the reporting currency upon preparation of consolidated financial statements. This process generates reporting currency balance for each asset and liability account that includes both operating changes (representing real cash flow effects) and exchange rate effects that have no current cash flow consequences.

For example, assume a firm has a foreign subsidiary that has an operating and closing accounts receivables balance of 10,000 lira. Assume further that at the

beginning of the year, 1 lira is worth \$1.00, but at the end of the year, a lira is worth \$1.10. Upon consolidation, the parent's balance sheet will include the effect of exchange rate changes.

Suppose the foreign subsidiary had a cash balance of 4000 lira at the beginning and at the end of the year. Upon consolidation, the parent has reported cash balance includes \$4000 at the beginning of the year and \$4.400 (4000lira*1, 1) at the end of the year. This change of \$400 needs to be reported, as it does not appear as an operating, investing or financing activity.

Translation gains or losses arising from exchange rate changes are excluded from cash flows from operating, investing and financing activities. The sum of these excluded gains and losses is reported as the effect of exchange rate changes on cash.¹⁰⁸

Foreign operations must prepare a separate statement of cash flows and translate the statement to the reporting currency using the exchange rate in effect at the time of the cash flow (a weighted-average exchange rate may be used if the result is substantially the same). This translated statement is then used in the preparation of consolidated statement of cash flows. Non-cash exchange gains and losses recognized on the income statement should be reported as a separate item when reconciling net income and operating activities.

4.8.6. Net Losses

If an enterprise reports a net loss instead of a net income, the net loss must be adjusted for those items that do not result in a cash inflow or outflow. The net loss after adjusting for the charges or credits not affecting cash may result in a negative or a positive cash flow from operating activities. For example, if the net loss was \$50.000 and the total amount of charges to be added back was \$60.000, then net cash provided by operating activities is \$10.000, as shown in this computation:

Net loss	(\$50.000)
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¹⁰⁸ Gerald I. White, Ashwinpaul C. Sondhi, Dov Fried, **The Analysis and use of Financial Statements**, New York: John Wiley and Sons, 1998, p. 100-101.

Adjustments to reconcile net income to net cash provided by operating activities:

Depreciation of plant assets	\$55.000	
Amortization of patents	<u>\$5.000</u>	<u>\$60.000</u>
Net cash provided by operating activities		\$10.000

If the company experiences a net loss of \$80.000 and the total amount of the charges to be added back is \$25.000, the presentation appears as follows:

Net loss		(\$80.000)
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Adjustments to reconcile net income to net cash provided by operating activities:

Depreciation of plant assets		<u>\$25.000</u>
Net cash provided by operating activities		(\$55.000)

4.8.7. Gains

If a gain from a sale of equipment is experienced, it requires that net income be adjusted. Because the gain is reported in the statement of cash flows as part of the cash proceeds from the sale of equipment under investing activities, the gain is deducted from net income to avoid double counting.

4.8.8. Postretirement Benefit Cost

If a company has postretirement cost such as an employee pension plan, changes are that the pension expense recorded during a period will be higher than the cash funded (when there is an unfunded liability) or lower than the cash funded (when there is a deferred or prepaid pension cost). If the expense is higher or lower than the cash paid, net income must be adjusted by the difference between cash paid and the expense reported in computing net cash flow from operating activities.

4.8.9. Extraordinary items

Cash flows from extraordinary transactions and other events whose effect are included in net income but, which are not related to operations, should be reported as investing activities or as financing activities. For example, if a company has extinguished its long-term bond debt of \$40,000 by paying the bondholders \$35,000 in cash it would have recognized a \$3,000 extraordinary gain. (\$5,000 gain less \$2,000 of taxes). In the statement of cash flows (indirect method), the \$5,000 gain would be deducted from net income in the operating activities section and the \$35,000 cash outflow for debt extinguishment would be reported as a financing activity as follows:

Cash flows from financing activities

Retirement of long term bond	(\$35,000)
------------------------------	------------

Note that in this example the gain is handled at its gross amount (\$5,000), not net of tax. The cash paid to retire the bond is reported as a financing activity at \$35,000, also exclusive of the tax effect. The FASB requires that all income taxes paid be classified as operating cash outflows. Some suggested that income taxes paid be allocated investing and financing transactions. However, the Board decided that allocation of income taxes paid to operating, investing, and financing activities would be so complex and arbitrary that the benefit, if any, would not justify the cost involved.

Under both the direct and indirect method, the total amount of income taxes paid must be disclosed.¹⁰⁹

4.8.10. Gross vs. Net Basis

The emphasis in the statement of cash flows is on gross cash receipts and cash payments. For instance, reporting the net change in bonds payable would obscure the financing activities of the entity by not disclosing separately cash inflows from issuing bonds and cash outflows from retiring bonds.

IAS 7 specifies two exceptions where netting of cash flows is allowed. Items with quick turnovers, large amounts and short maturities may be presented as net cash flows. Cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customers rather than those of the enterprise may also be reported on a net rather than a gross basis.

4.8.11. Cash Flow per Share

There is presently no requirement either under the international accounting standards under US GAAP to disclose such information in the financial statements of an enterprise, unlike the requirement to report earnings per share (EPS). In fact, cash flow per share is a somewhat disreputable concept, since it was sometimes touted in an earlier era as being indicative of an entity's real performance, when of course it is not a meaningful alternative to earnings per share because, for example, enterprises that are self-liquidating by selling productive assets can generate very positive total cash flows and hence, cash flows per share, while decimating the potential for future earnings. Since, unlike a comprehensive cash flow statement, cash flow per share cannot reveal

¹⁰⁹ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1332-1334.

the components of cash flow (operating, investing and financing), its usage could be misleading.

4.8.12. Net Reporting By Financial Institutions

IAS 7 permits financial institutions to report cash flows arising from certain activities on a net basis. These activities and the related conditions under which net reporting would be acceptable, are as follows:

1. Cash receipts and payments on behalf of customers when the cash flows reflect the activities of the customers rather than those of the bank. For example, the acceptance and repayment of demand deposits.
2. Cash flows relating to deposits with fixed maturity dates.
3. Placements and withdrawals of deposits from other financial institutions.
4. Cash advances and loans to banks customers and repayments thereon.

4.8.13. Reporting Futures, Forward Contracts, Options and Swaps

IAS 7 stipulates that cash payments for and cash receipts from futures contracts, forward contracts, option contracts and swap contracts are normally classified as investing activities, except

1. When such contracts are held for dealing or trading purposes and thus represent operating activities
2. When the payments or receipts are considered by the enterprise as financial activities and are reported accordingly.
- 3.

4.8.14. Acquisitions and Disposals of Subsidiaries and Other Business Units

IAS 7 requires that the aggregate cash flows from acquisitions and from disposals of subsidiaries or other business units should be presented separately as part of the investing activities section of the statement of cash flows. The following disclosures have also been prescribed by IAS 7 in respect to both acquisitions and disposals:

1. The total consideration included
2. The portion thereof discharged by cash and cash equivalents
3. The amount of cash and cash equivalents in the subsidiary or business unit acquired or disposed
4. The amount of assets and liabilities (other than cash and cash equivalent) acquired or disposed, summarized by major category.

4.8.15. Other Disclosures Required or Recommended by IAS 7

Certain additional information may be relevant to the users of financial statements in gaining an insight into the liquidity or solvency of an enterprise. With this objective in mind, IAS 7 sets forth other disclosures that are required or in some cases, recommended.

1. Required disclose: Amount of significant cash and cash equivalent balances held by an enterprise that are not available for use by the group should be disclosed along with a commentary by management
2. Recommended Disclosures: The disclosures that are encouraged are the following:
 - a) Amount of indrawn borrowing facilities, indicating restrictions on their use, if any

b) In case of investments in joint ventures, which are accounted for using proportionate consolidation, the aggregate amount of cash flows from operating, investing and financing activities that are attributable to the investment in the joint venture

c) Aggregate amount of cash flows that are attributable to the increase in operating capacity separately from those cash flows that are required to maintain operating capacity

d) Amount of cash flows segregated by reported industry and geographical segments.¹¹⁰

4.9. SOURCES OF INFORMATION FOR THE STATEMENT OF CASH FLOWS

Unlike the other major financial statements, the statement of cash flows is not prepared from the adjusted trial balance. The information to prepare this statement usually comes from three sources:

Comparative balance sheets provide the amount of the changes in assets, liabilities and equities from the beginning to the end of the period.

Current income statement data help the reader determine the amount of cash provided by or used by operations during the period.

Selected transaction data from the general ledger provide additional detailed information needed to determine how cash was provided or used during the period.

An analysis of the Retained Earnings account is necessary. The net increase or decrease in Retained Earnings without any explanation is a meaningless amount in the

¹¹⁰ Barry J. Epstein, Abbas Ali Mirza, s. 73-75

statement, because it might represent the effect of net income, dividends declared, and appropriations of retained earnings or prior period adjustments.

Write-downs, amortization charges and similar “book” entries, such as depreciation of plant assets, are considered as neither inflows nor outflows of cash because they have no effect on cash. To the extent that they have entered into the determination of net income, however, they must be added back to or subtracted from net income to arrive at net cash flow operating activities.¹¹¹

4.10. STEPS IN PREPARATION OF CASH FLOW STATEMENT

Preparing the statement of cash flows from the data sources above involves three major steps:

1) **Determine the change in cash.** This procedure is straightforward because the difference between the beginning and the ending cash balance can be easily computed from an examination of the comparative balance sheets.

2) **Determine the net cash flow from operating activities.** This procedure is complex; it involves analyzing not only the current year’s income statement but also comparative balance sheets as well as selected transaction data.

A useful starting point in determining net cash flow from operating activities is to understand why net income must be converted. Under generally accepted accounting principles, most companies must use the accrual basis of accounting requiring that revenue be recorded when earned and that expenses be recorded when incurred. Net income may include credit sales that have not been collected in cash and expenses incurred that may not have been paid in cash. Thus, under the accrual basis of accounting, net income will not indicate the net cash flow from operating activities

¹¹¹ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1334-1336.

To arrive at net cash flow from operating activities, it is necessary to report revenues and expenses on a cash basis. These are done by eliminating the effects of income statement transactions that do not result in a corresponding increase or decrease in cash.

The conversion of net income to net cash flow from operating activities may be done either through a direct method or in direct method.

3) **Determine net cash flows from investing and financing activities.** All other changes in the balance sheet accounts must be analyzed to determine their effects on cash.¹¹²

4.11. PREPARATION OF THE INDIRECT METHOD WORK SHEET

When numerous adjustments are necessary, or other complicating factors are present, a work sheet is often used to assemble and classify the data that will appear on the statement of cash flows. The work sheet (a “spreadsheet” when using computer software) is merely a device that aids in the preparation of the statement; its use is optional.

The work sheet approach employs a special format that allows for the systematic analysis of all the changes in the balance sheet accounts to arrive at the statement of cash flows. The work sheet approach uses the indirect method of determining cash flows from operating activities because of its basis in changes in the balance sheet accounts.

In a pure cash system, the only way to get anything that might be considered an asset is to buy it for cash and the only way to reduce a debt is to pay it off in cash. The only way to decrease net worth is to pay it out as a dividend or lose it through a negative net profit figure. The consequence such direct cash happenings is that all increases in assets and all decreases in either liabilities or net worth between balance sheet dates

¹¹² Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1314-1315

necessary imply cash outflows. For that reason, the cash flow statement adjusts the related income statement line from both ends of the time horizon that is, the starting and ending balance sheets. That opposite movements in these balance sheet items imply cash flowing in so that, for example, a decrease in the asset inventory from one balance sheet to the next implies that cash came in an amount equal to the excess of inventory use over inventory acquisition.¹¹³

XYZ COMPANY Statement of Cash Flows

For the Year Ended ...

<u>Reconciling Items</u>	End of			
<u>Balance Sheet Accounts</u>	<u>Prior Year Balances</u>	<u>Debits</u>	<u>Credits</u>	<u>Current Year Balances</u>
Debit balance accounts	XX	XX	XX	XX
	<u>XX</u>	XX	XX	<u>XX</u>
Totals	<u>XXX</u>			<u>XXX</u>
Credit balance accounts	XX	XX	XX	XX
	<u>XX</u>	XX	XX	<u>XX</u>
Totals	<u>XXX</u>			<u>XXX</u>
Statement of				
<u>Cash Flows Effects</u>				
Operating activities				

¹¹³ **Statements of Cash Flows & Analysis of Ratios**, [Electronic Version], Cash Rules 2003, p. 49-75, (26.10.2006).

Net Income	XX	
Adjustments	XX	XX
Investing activities		
Receipts & Payments	XX	XX
Financing activities		
Receipts & Payments	<u>XX</u>	<u>XX</u>
Totals	XXX	XXX
Increase (decrease) in cash	<u>(XX)</u>	<u>XX</u>
Totals	<u>XXX</u>	<u>XXX</u>

Chart9: Format of Work Sheet for Preparation of Statement of Cash Flows
Source: Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1338

The following guidelines are important in using a work sheet:

1) In the balance sheet accounts, **accounts with debit balances are listed separately from those with credit balances.** This means, for example, that Accumulated Depreciation is listed under credit balances & not as a contra account under debit balances. The beginning & ending balances of each account are entered in the appropriate columns. The transactions that caused the change in the account balance during the year are entered as reconciling items in the two middle columns. After all reconciling items have been entered, each line pertaining to a balance sheet account should foot across. That is, the beginning balance plus or minus the reconciling item(s) must equal the ending balance. When this agreement exists for all balance sheet accounts, all changes in account balances have been reconciled.

2) The bottom of the work sheet consists of the operating, investing, and financing activities sections. Accordingly, it provides the information necessary to prepare the formal statement of cash flows. **Inflows of cash are entered as debits in the reconciling columns and outflows of cash are entered as credits in the reconciling columns.** Thus, in this section, the sale of equipment for cash at book value is entered as a debit under inflows of cash from investing activities. Similarly, the purchase of land for cash is entered as a credit under outflows of cash from investing activities.

3) **The reconciling items shown in the work sheet are not entered in any journal or posted to any account.** They do not represent either adjustments or corrections of the balance sheet accounts. They are used only to facilitate the preparation of cash flows.¹¹⁴

Below you can find the sequence of procedures to complete the work sheet:

1) Enter net income as an operating cash inflow (a debit) and as a credit to Retained Earnings.

2) In the statement of cash flows section, adjustments to net income are entered as debits if they increase cash inflows and as credits if they decrease cash inflows. Following this rule, adjust net income for the change in each non-cash current asset & current liability related to operating activities. For each adjustment to net income, the offsetting debit or credit should reconcile the beginning and ending balances of a current asset or current liability.

3) Enter the adjustments to net income for income statement items such as depreciation that did not provide or use cash during the period. For each adjustment, the offsetting debit or credit should help reconcile a non-cash balance sheet account.

4) Adjust net income to eliminate any gains or losses from investing and financing activities. Since the cash inflow of a gain is excluded from operating

¹¹⁴ Donald E. Kieso, Jerry Weyngandt, Terry Warfield, s.1338

activities, it is entered as a credit. On the other hand, losses are entered with debits. For each of these adjustments, the related debits and/or credits help reconcile balance sheet accounts and involve entries to show the cash flow from investing or financing activities.

5) After reviewing any unreconciled balance sheet accounts and related information, enter the reconciling entries for all remaining investing and financing activities. These include items such as purchases of plant assets, issuance of long-term debt, sale of capital stock, and dividend payments. Some of these may require entries in the non-cash investing and financing activities section of the work sheet.

6) Confirm the accuracy of your work by totaling the Analysis of Changes columns and by determining that the change in each balance sheet account has been explained.¹¹⁵

¹¹⁵ Kermit D. Larson, **Fundamental Accounting Principles**, 13. Edition, Homewood: Irwin, 1993, s. 781-782.

PART 5

STANDARDS FOR CASH FLOW STATEMENT

Every country has different standards for Cash flow statement according to their financial reporting standards. The standards of Financial Accounting Standards Board (American), Accounting Standards Board (English), International Accounting Standards Board and Turkish Accounting for the preparation of Cash Flow Statements will be explained in this chapter.

5.1. CASH FLOW STATEMENT ACCORDING TO FINANCIAL ACCOUNTING STANDARDS BOARD (FASB)

Financial Accounting Standards Board (FASB) determines the standards of financial reporting in USA. The standards are called Statement of Accounting Standards (SFAS). According to SFAS, cash flow statement is one of the main statements that should be prepared by every country by compulsory. The collections and payments are classified as operational, investing and financing.

FASB95 (about cash flow statements), FAS102 (about trading securities), FAS104 (about hedging) are related standards.

Cash flow statement explains the changes in cash and cash equivalents in one accounting period. Cash includes petty cash and demand deposits in banks. Cash equivalents are short term, highly liquid investments that can be converted to cash in any time without change in their value. There should be three months or less to their maturity. However, any security that has been acquired three years ago and now has three months to its maturity is not accepted as cash equivalent.

According to FAS95, all cash receipts and cash payments should be reported as gross, they should not be reported as net. For example, cash collections from sales of

fixed assets and cash payments to purchase of fixed assets should be reported separately. However, such cases can be reported net:

- Investments excluding cash equivalents
- Receivables from advances given
- Debts that have less than three months to their maturities

According to FAS interest received and paid and dividend received are accepted as operating activities. FASB wants cash flow from operating activities to reflect all effects of income generating activities. Since interest received and paid and dividend received is included in net income, they are accepted as operating activities. Since the dividend paid is not the part of net income calculation, it is not the part of operating activities.

Operating activities are all activities for the production and delivery of goods and rendering service. Cash flow from operating activities shows the cash effects of these activities. Operating activities involve the cash effects of transactions that enter into the determination of net income, such as a cash receipts from sales of goods and services and cash payments to suppliers and employees for acquisition of inventory and expenses.

Investing activities generally involve long term assets include making and collecting loans and acquiring and disposing of investments and productive long-lived assets.

Financing activities involve liability and stockholders' equity items and include obtaining cash from creditors and repaying the amounts borrowed and obtaining capital from owners and providing them with a return on and a return of their investment.

Cash flows with foreign currency that are gained from the investments in foreign country should be converted into local currency with a reporting date's rate or with an average rate.

FASB let the companies to use indirect method but encourage them to use direct method. Companies prefer to use indirect method but creditors want companies to use direct method. If companies use direct method, FASB wants them to prepare the reconciliation table of net income and cash flow from operating activities.

According to FAS 95 interest paid and tax paid should be declared separately as explanatory notes of financial statements. All non-cash financing and investing activities should be declared too. It is forbidden to declare cash per share.¹¹⁶

SFAS 95, Statements of cash flows classifies income tax payments as operating outflows in the cash flow statement, even though some income tax payments relate to gains, losses on investing and financing activities, such as gains, and losses on plant assets disposals and early debt extinguishments. As a result, net cash flow from operating activities is contaminated by the income tax effects of investing and financing activities. However, by allocating income taxes in the cash flow statement, the income tax effects of transactions and events would be reported in the same section of the cash flow statement as the transactions and events themselves, resulting in a more precise presentation of the net cash flows from operating, investing and financing activities.¹¹⁷

5.2. CASH FLOW STATEMENT ACCORDING TO ACCOUNTING STANDARDS BOARD (ASB)

Accounting Standards Board (ASB) determines the standards of financial reporting In England. The standards are called Financial Reporting Standards (FRS).

According to ASB, cash means petty cash plus demand deposit minus overdrafts. Cash equivalents are not accepted as cash.

¹¹⁶Doç. Dr. Necdet Şensoy, s. 99-108.

¹¹⁷Nurnberg, Hugo, **Income Taxes in the Cash Flow Statement**, [Electronic Version], CPA Journal, June 2003, Vo.73 issue 6, p 48, 7p, 1c, (26.10.2006).

ASB cash flow statement has nine parts:

- 1) Operating activities
- 2) Income from subsidiaries and from associates
- 3) Returns on investments and servicing of finance
- 4) Taxation
- 5) Capital expenditure and financial investment
- 6) Acquisitions and disposals
- 7) Equity dividends paid
- 8) Management of liquid resources
- 9) Financing

1) Operating activities: Operating cash flow can be presented as net but reconciliation between net income and operating cash flow must be shown either in cash flow statement or in explanatory notes. FRS lets the usage of indirect method but encourages the usage of direct method.

2) Income from subsidiaries and from associates: Interests received from subsidiaries and from associates should be accepted as a part of equity income and reported under that title.

3) Returns on investments and servicing of finance: Interests received from investments and paid for financial sources are classified under that title. Interest payments of leasing are also classified under this title. However, principle payment for leasing is classified under financial title.

4) Taxation: Income tax is presented under this title. If value added tax (VAT) or any other taxes related to sales are not irrecoverable, cash flow should not include them. Customs taxes should be reported under operating activities, unless they are

irrecoverable. In such case, they should be reported under cash outflow of the related imported asset. Income taxes for employees should be reported under operating activities.

5) Capital expenditure and financial investment: Acquisitions and disposals of all non current assets that are not reported under acquisitions and disposals title and all current assets that are not reported under liquid resources. For example: purchase and sale of fixed assets and trading securities.

6) Acquisitions and disposals: Acquisitions and disposals of subsidiary and associates.

7) Equity dividends paid: Dividends paid are classified under this title.

8) Management of liquid resources: Trading securities and available for sale securities are reported under this title. Their sale does not cause the end of the business and they can be sold without any change of their book value or with a little difference from its book value.

9) Financing: Cash inflow from issuing share capital, cash outflows for repurchasing these shares, cash inflows from bank loans, cash out flows for leasing principle payment.

Material amounts of non-cash operations should be presented under explanatory notes of financial statements.

5.3. CASH FLOW STATEMENT ACCORDING TO TURKISH FINANCIAL REPORTING SYSTEM

There are three cash flow format according to Turkish Financial Reporting System. One of them is according to Turkish Uniform Accounting, the other one is according to Capital Markets Board (CMB) and the last one is according to Turkish Accounting Standards.

Turkish Uniform Accounting requires fund flow table & cash flow table as a supplementary financial table. Recently, fund flow table is not so common in the world, but against that Turkish Uniform Accounting requires fund flow table. Since 1998, it is not compulsory to prepare cash flow table with income tax statement for tax purpose.

Capital Markets Board requires fund flow table & cash flow table as a supplementary financial report.

Turkish Accounting Standards three accepted cash as a cash and demand deposit & cash equivalence are accepted as high liquid asset which can be changed at any time without any change in their value. Any change in cash and cash equivalent should be disclosed in supplementary notes of cash flow statement.

Capital Markets Board explains cash as a petty cash & demand deposit. Checks without any maturity date are accepted also as cash. Capital Markets Board don't mention about cash equivalence.

According to Turkish Accounting Standards 3, cash flow statement consists of 3 parts: cash flow from operating, investing & financial activities. But, Capital Markets Board and Turkish Uniform Accounting have different classification. Cash flow statement consists of 2 parts : Cash sources & uses of cash.

Cash flows from operating activities: It shows cash effect of financial activities, which are about revenue & cost. Sales of fixed asset are accepted as investing activity. Extraordinary income & loss can be classified as financial investment & operating activity according to regarding activity.

Cash inflows from sales & from ordinary and extraordinary income are the cash sources. According to Turkish Accounting Standards 3/21, cash inflow from interest & dividend can be accepted as operating, investing & financial activities cash flow. According to FASB, cash inflows from interest & dividends are accepted as operating activities cash flows. IAS standard 7 accepts them as financial & investment activity.

Main cash outflows are payment to employees & suppliers. Turkish Accounting Standards 7 accept interest payment as operating activity. FASB accept the same rule, but according to IAS 7, interest payment can also be accepted as financial activity. Taxes paid are accepted as operational activities like FASB & IAS.

Cash flows from investing activities: Cash inflows from sale of non-current assets, cash flows from the collection of loans given are accepted as cash inflows from investing activities. Cash outflows for purchase of non-current asset & cash outflows for loans given are accepted as investing cash outflows.

Cash flows from financing activities: Cash inflows from long & short term borrowing and issuing new shares are cash inflows from financing activities. Principle payments of borrowing and debt payments for financial leasing agreements & cash outflows for decreasing the equity are cash outflows for financial activities. Dividend payments are accepted as financial activities according to FASB. According to IAS 7, dividend payments can be classified as financing & operating activity. Turkish Accounting Standards 3 accept dividend payment as financing activity.

According to Capital Markets Board and Turkish Uniform Accounting, fund flow table & changes in working capital table are prepared according to indirect method. However, cash flow statements are prepared according to direct method. FASB & IAS 7 says that cash flow statement can be prepared also with indirect method.

Turkish Accounting Standards 3 only allows the usage of direct method & does not require the reconciliation of net income & cash. Turkish Accounting Standards 3 does not allow the usage of indirect method.

The indirect methods of Capital Markets Board & Turkish Uniform Accounting do not begin with net income. They begin with net revenue. This method is called as modified indirect method.

Non-cash activities are excluded from cash flow statements according to Turkish Accounting Standards 3/31-32 but Turkish Accounting Standards 3 do not

mention about the disclosure of non-cash items in supplementary notes or with additional table.

5.4. SIMILARITIES AND DIFFERENCES OF CASH FLOW STATEMENT ACCORDING TO IAS, US GAAP and UK GAAP

Exeptions:

IAS: There is no exeption.

US GAAP: There is limited exeptions for some investment partnerships.

UK GAAP: There are some exeptions. If the parent company discloses consolidated financial statements(cashflow statement), and the parent company has at least %90 of the shares of the subsidiary, subsidiaries do not have to prepare cash flow statement.

Direct or indirect method:

IAS: Direct or indirect method can be used. The IASC has expressed a preference for the direct method of presenting net cash from operating activities. IAS 7 offers yet another alternative way of the presenting the cash flows from operaitng activities. This could be referred to as the modified indirect method. Under this variant of the indirect method, the starting point is not net income but rather revenues and expenses as reported in the income statement.

US GAAP: Direct method is encouraged but US GAAP also let indirect emthod to be used. SFAS 95 requires that when the direct method is used, a supplementary schedule be prepared reconcilign net income to net cash flows from operaitng activities, which effectively means taht both the direct and indirect methods must be employed. This rule does not apply under IAS.

UK GAAP: The UK board encourages the direct method only where the potential benefits to users outweigh the costs of providing it.

Cash concept:

IAS: Overdrafts are accepted as cash but short term borrowings are not accepted as cash. Cash equivalents are highly liquid assets which can be changed at any time without any change in their value. There must be three months or less to their maturity date from the date of purchase.

US GAAP: It is the same as IAS, but overdrafts are shown in the financing activities.

UK GAAP: Cash is defined as petty cash plus time deposits minus overdrafts. Cash equivalents are not mentioned here.

Format:

IAS: Classified as operating, investing and financing activities

US GAAP: Same as IAS.

UK GAAP: Classified as:

- 1) Operating activities
- 2) Income from subsidiaries and from associates
- 3) Returns on investments and servicing of finance
- 4) Taxation
- 5) Capital expenditure and financial investment
- 6) Acquisitions and disposals
- 7) Equity dividends paid
- 8) Management of liquid resources
- 9) Financing

Interest paid:

IAS: Operating or financing activity

US GAAP: Operating activity

UK GAAP: Investing or financing activity

Interest received:

IAS: Operating or financing activity

US GAAP: Operating activity

UK GAAP: Investing or financing activity

Dividends paid:

IAS: Operating or financing activity

US GAAP: Financing activity

UK GAAP: Investing or financing activity

Dividends received:

IAS: Operating or financing activity

US GAAP: Operating activity

UK GAAP: Generally investing or financing activity. Partnerships and associates can be operating.

PART6

ANALYSIS OF FINANCIAL STATEMENTS AND CASH FLOW STATEMENTS

6.1. ANALYSIS OF FINANCIAL STATEMENTS

A firm's financial statements are used by various external parties to evaluate the firm's financial performance. The firm's financial statements contained in the annual report are the end products of the accounting process. To report on the progress of a firm during the year, most publicly held firms also issue interim reports each quarter. Interim reports focus primarily on the income statement and contain summary data rather than a full set of financial statements. Still, they provide additional information for evaluating the financial position and the profitability of the firm's operations. Unlike the annual report, however, interim reports are unaudited reports. Annual and interim reports, with their accompanying schedules and explanatory notes, are one of the primary means by which management communicates information about the firm to interested outside parties.

A comparison of the company under study with firms in a similar line of business and industry norms is also useful. Industry data are available from a number of financial services. In making comparisons with other companies, an analyst must recognize that the company under review may not be similar to other companies because of diversification into other product lines. For the same reason, industry data may not clearly resemble the company under study. In such cases, the analyst must attempt to identify the industry that the company best fits, and use that industry's data and companies in that industry group for comparison.

When the absolute amounts for most items reported in the financial statements are considered individually, they are generally of limited usefulness. Significant relationships may not be apparent from a review of absolute amounts because no

indication is given whether that absolute amount is good or bad for a firm. For example, merely knowing that a company reported earnings of \$100,000 for the current year is of limited use unless the amount is compared to other sales, the earnings of other companies in the same business, or some predetermined standard established by the statement user.

To simplify the identification of significant changes and relationships, the absolute amounts reported in the financial statements are frequently converted into percentages or ratios by the statement user. Some commonly recognized percentages are sometimes shown in supplementary schedules to the financial statements as part of the annual report. The analysis of relationship between dollar amounts of each item to some base amount is referred to as horizontal analysis and vertical analysis. Ratio analysis is the interpretation of the relationship between two items, such as current assets to current liabilities.

6.2. OBJECTIVES OF FINANCIAL STATEMENT ANALYSIS

Percentage analysis and ratio analysis were developed to provide an efficient means by which a statement user can identify (1) important relationships between items in the same statement and (2) trends in financial data. Percentages and ratios simplify the evaluation of financial conditions and past operating performance.

The information is used primarily to forecast a firm's ability to pay its debts when due and to operate at a satisfactory profit level. However, because the analytical techniques are almost limitless – and so are the users' special interests and objectives – the choice of proper ratios and percentages must fit their purpose. For example, some users of financial data are concerned with evaluating the firm's ability to meet its current obligations and still have sufficient cash left to carry out its other activities. In other words, they are concerned about the firm's liquidity. The focus of this type of investigation is generally on the firm's current assets and current liabilities.

Other users, such as long-term creditors and stockholders, are also concerned with the firm's liquidity but, in addition, are interested in a firm's ability to pay its long-term obligations. This aspect of the analysis is concerned with the solvency of the firm. In an solvency analysis, the statement user assesses the financial structure of the firm and its prospects for operating at an earnings level adequate to provide sufficient cash for the payment of interest, dividends and debt principal.

It can not be emphasized too strongly that for the statement analysis of an individual company to be useful, the relationships must be compared to other data or standards. Comparisons of the company under study may be made to industry averages, to the past performance of the company, and to the performance of individual companies in the same industry.¹¹⁸

6.3. HORIZONTAL ANALYSIS

Many business decisions hinge on whether the numbers – in sales, income, expenses and so on – are increasing or decreasing over time. We may find that the net sales figure has risen by \$20,000. This may be interesting, but considered alone it is not very useful for decision making. An analysis of the percentage change in the net sales figure over time improves our ability to use the dollar amounts. It is more useful to know that sales have increased by 20 percent than to know that the increase in sales is \$20,000.

The study of percentage changes in comparative statements is called horizontal analysis. Computing a percentage change in comparative statements requires two steps: (1) Compute the dollar amount of the change from the earlier (base) period to the later period and (2) divide the dollar amount of change by the base period amount. Horizontal analysis is illustrated as follows:

¹¹⁸ Leroy F. Imdieke, Ralph E. Smith, p:683-685

	<u>Increases (Decreases)</u>								
	<u>During Year 3</u>		<u>During Year 2</u>						
	<u>Year 3</u>	<u>Year 2</u>	<u>Year1</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>		
Sales	\$120.000	\$100.000	\$80.000	\$20.000	20%	\$20.000	25%		
Net Income	12.000	8.000	10.000	4.000	50%	(2.000)	(20%)		

The increase in sales is \$20.000 in both year 3 and year 2. However, the percentage increase in sales differs from year to year because of the change in the base amount. To compute the percentage change for year 2, we divide the amount of increase (\$20.000) by the base period amount (\$80.000), an increase of 25 percent. For year 3, the dollar amount increases again by \$20.000. However, the base period amount for figuring this percentage change is \$100.000. Dividing \$20.000 by \$100.000 computes a percentage increase of only 20 percent during year 3. Observe that net income decreases by 20 percent during year 2 and increases by 50 percent year 3.

In addition, we compute no percentage change when a base-year amount is negative. For example, when a company goes from a net loss one year to a profit the next year we would be dividing a positive number by a negative amount.

Percentage changes must be evaluated in terms of the item's relative importance to the company as a whole.

Trend Percentages:

Trend percentages are a form of horizontal analysis. Trends are important indicators of the direction a business is taking. How have sales changed over a five-year period? What trend does gross profit show? These questions can be answered by an analysis of trend percentages over a representative period, such as the most recent five years or the most recent 10 years. To gain a realistic view of the company, it is often necessary to examine more than just a two or three year period.

Trend percentages are computed by selecting a base year, with each amount during that year set equal to 100 percent. The amounts of each following year are expressed as a percent of the base amount. To compute trend percentages, divide each item for years after the base year by the corresponding amount during the base year.

(Amounts in thousands)

	<u>19x7</u>	<u>19x6</u>	<u>19x5</u>	<u>19x4</u>	<u>19x3</u>	<u>19x2</u>
Net Sales	\$858	\$803	\$781	\$744	\$719	\$737
Cost of goods sold	<u>513</u>	<u>509</u>	<u>490</u>	<u>464</u>	<u>450</u>	<u>471</u>
Gross Profit	<u>\$345</u>	<u>\$294</u>	<u>\$291</u>	<u>\$280</u>	<u>\$269</u>	<u>\$266</u>

Assume we want trend percentages for a five-year period starting with 19x3. We use 19x2 as the base year. Trend percentages for net sales are computed by dividing each net sales amount by the 19x2 amount of \$737,000. Likewise, dividing each year's cost-of-goods-sold amount by the base-year amount (\$471,000) yields the trend percentages for cost of goods sold. Gross-profit trend percentages are computed similarly. The resulting trend percentages follow (19x2, the base year = 100%):

	<u>19x7</u>	<u>19x6</u>	<u>19x5</u>	<u>19x4</u>	<u>19x3</u>	<u>19x2</u>
Net Sales	116%	109%	106%	101%	98%	100%
Cost of goods sold	109	108	104	99	96	100
Gross Profit	130	111	109	105	101	100

Company's sales and cost of goods sold have trended upward since a downturn in 19x3. Gross profit has increased steadily, with the most dramatic growth coming during 19x7. What signal about the company does this information provide? It suggests that operations are becoming increasingly more successful. A similar analysis can be performed for any related set of items in the financial statements. For example,

an increase in inventory and accounts receivable, coupled with a decrease in sales, may reveal difficulty in making sales and collecting receivable.

6.4. VERTICAL ANALYSIS

Horizontal analysis highlights changes in an item over time. However, no single technique provides a complete picture of a business. Another way to analyze a company is called vertical analysis.

Vertical analysis of a financial statement reveals the relationship of each statement item to the total, which is the 100 percent figure. For example, suppose under normal conditions a company's gross profit is 50 percent of net sales. A drop in gross profit to 40 percent may cause the company to report a net loss on the income statement. Management, investors and creditors view a large decline in gross profit with alarm.

Percentages on the income statement are computed by dividing all amounts by net sales. The vertical analysis presents each amount as a percentage of net sales. The vertical analysis of balance sheet shows all amounts as a percentage of total assets or the sum of liabilities and stockholders equity.

The gross profit percentage is one of the most important pieces of information in financial analysis because it shows the relationship between net sales and cost of goods sold. A company that can increase its gross profit percentage over a long period is more likely to succeed than a business whose gross profit percentage is steadily declining.

Vertical analysis gives a view of the income statement that is different from the view provided by horizontal analysis. Decision makers use these two forms of analysis together.

Common-size Statements:

On a common size income statement each item is expressed as a percentage of the net sales amount. Net sales is the common size to which we relate the

statements other amounts. In the balance sheet, the common size is the total on each side of the accounting equation (total assets or the sum of total liabilities and equity). A common size statement eases the comparison of different companies because their amounts are stated in percentages.

What could cause a decrease in cash and an increase in accounts receivable as a percentage of total assets? Company may have been lax in collecting accounts receivable, which may explain a cash shortage and reveal that the company needs to pursue collection more vigorously. Or the company may have sold to less creditworthy customers. In any event, the company should monitor its cash position and collection of accounts receivable to avoid a cash shortage. Common size statements provide information useful for this purpose.¹¹⁹

6.5. RATIO ANALYSIS

Financial statements provide information about a firm's position at a point in time as well as its operations over some past period. However, the real value of financial statements lies in the fact that they can be used to help predict the firm's financial position in the future, and to determine expected earnings and dividends. From an investor's standpoint, predict the future is what financial statements analysis is all about, while from management's standpoint, financial statements analysis is useful both as a way to anticipate future conditions and more important as a starting point for planning actions that will influence the future course of events.

An analysis of the firm's ratios generally is the first step in a financial analysis. The ratios are designed to show relationship between financial statement accounts within firms and between firms. Translating accounting numbers into relative values or ratios allows us to compare the financial position of one firm to another, even if their size is significantly different.

¹¹⁹ Charles T. Horngren, Walter T. Harrison, s. 740-745.

6.5.1. Liquidity Ratios

A Liquid asset is one that can be easily converted to cash without significant loss of its original value. Converting assets, especially current assets such as inventory and receivables to cash is the primary means by which a firm obtains the funds needed to pay its current bills. Therefore, a firm's liquid position deals with the question of how well the firm is able to meet its current obligations. Short term or current assets are more easily converted to cash than long-term assets. One firm would be considered more liquid than another firm would, if it has a greater proportion of its total assets in the form of current assets.

Two commonly used liquidity ratios are current ratio and quick ratio.

Current Ratio: The current ratio is calculated by dividing current assets by current liabilities.

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets normally include cash, marketable securities, accounts receivable and inventories. Current liabilities consist of accounts payable, short term notes payable, current maturities of long-term debt, accrued income taxes, and other accrued expenses.

If a company is getting into financial difficulty, it begins paying its bills more slowly, borrowing more from its bank. If current liabilities rising faster than current assets, the current ratio will fall and this means trouble. Because, the current ratio provides the best single indicator of the extent to which the claims of short term creditors are converted by assets that are expected to be converted to cash quickly. It is most commonly used measure of short-term solvency. Just because a firm has a low current ratio, this does not mean the current obligations cannot be met. Industry average is not a magic number that all firms should maintain. However, if it is far from the average, an analyst should be concerned about why this variance occurs.

Because, current assets, which are considered liquid generally, generate lower rates of return than long-term assets, it might be argued that firms with too much liquidity are not investing wisely.

Quick or Acid Test Ratio:

The quick or acid test ratio is calculated by deducting inventories from current assets and then dividing the remainder by current liabilities.

$$\text{Quick or acid test ratio} = \frac{\text{Current assets} - \text{Inventories}}{\text{Current Liabilities}}$$

Inventories are the least liquid of a firm's current assets; hence, they are the assets on which losses are most likely to occur in the event of liquidation. Therefore, a measure of the firm's ability to pay off short term obligations without relying on the sale of inventories is important.¹²⁰

6.5.2. Asset Management Ratios

Asset management ratios indicate how efficiently management utilizes its assets. The acquisition and use of assets are costly. Unless the assets generate sufficient sales, overall profitability will suffer. Four commonly used activity ratios are total assets turnover, fixed asset turnover, accounts receivable turnover, and inventory turnover.

The total asset turnover ratio is obtained as follows:

$$\text{Total asset turnover} = \frac{\text{Total Sales}}{\text{Average total assets}}$$

¹²⁰ J. Fred Weston, Scott Besley, Eugene F. Birgham, **Essentials of Managerial Finance**, 11.Edition, USA: The Dryden Press, 1996, s. 94-95.

Obviously, a company would like to have this number as high as possible, because that would indicate high asset productivity. Too high a number could indicate that the company is merely milking old assets that will need to be replaced in the short term.

$$\text{Fixed asset turnover} = \frac{\text{Total Sales}}{\text{Average total fixed assets}}$$

A relatively low ratio would likely indicate that the company's largest asset group was inefficiently used.

Accounts receivable turnover indicates how many times a year a company collects its receivable.

$$\text{Accounts receivable turnover} = \frac{\text{Credit Sales}}{\text{Average net accounts receivable}}$$

The final activity ratio of interest to an analyst is inventory turnover. The number of times a year a company sells its inventory.

$$\text{Inventory turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

6.5.3. Leverage Ratios

Leverage refers to the amount of debt a company uses in its capital structure. The use of leverage has advantages and disadvantages. Its chief advantage is that by using someone else's money, owners can maximize their returns. The primary disadvantage of leverage is that it increases the riskiness of a firm. Increased leverage brings with it increased interest payments (affixed expense) and the possibility that the company will not have the cash available to meet either this expense or these future principle payments.

Leverage ratios measure the extent to which a company uses debt and the implicit of leverage on the company's ability to meet its interest payments. The most basic measure of leverage is the debt ratio.

$$\text{Debt ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

Another leverage ratio commonly used with the debt ratio is the times interest earned ratio. Creditors often want to know how secure their interest payments are. One way of measuring this is to determine how much earning before interest and taxes exceed interest payments. This figure shows how much earnings could decline before the payment of interest was risked.

$$\text{Times interest earned} = \frac{\text{Earnings before interest and taxes}}{\text{Interest payments}}$$

6.5.4. Profitability Ratios

Profitability ratios measure the overall effectiveness of management in operating the business and are therefore probably the most important to financial statement users.

The return on sales (profit margin) measures how much the company earns on every unit of sales.

$$\text{Return on Sales} = \frac{\text{Net earnings}}{\text{Total revenue}}$$

Another variation of the profit margin, used in particular by retailers, is the gross profit margin.

$$\text{Gross profit margin} = \frac{\text{Sales} - \text{Cost of Goods Sold}}{\text{Sales}}$$

Normally, the higher the gross profit margin, the better off the company, because the gross profit margin shows how much is available to cover no manufacturing expenses and provide net earnings. The only way the management can increase the gross profit margin is to raise prices or to reduce manufacturing costs. These figures are helpful in evaluating potential price increases and assessing plans to reduce manufacturing costs.

The profitability ratio most important to management is return on investments (ROI), because it measures how well the company is doing given its investment in assets.

$$\text{ROI} = \frac{\text{Net earnings}}{\text{Average total assets}}$$

$$\text{ROE} = \frac{\text{Net earning available to common shareholders}}{\text{Average common shareholder's equity}}$$

6.5.5. Market Ratios

Investors are most concerned with the amount of dividends paid by the company and the potential for capital appreciation on their stock investment. In determining the attractiveness of a stock investment, individuals look at a number of market ratios.

One of the first things an investor might look at to determine if a stock is under-valued or overvalued is the relationship between market value per share and book value per share. The market value per share equals the current selling price in the open market. It is the price the investor would have to pay to acquire the stock. In contrast, the book value per share is determined as follows:

$$\text{Book value per share} = \frac{\text{Common shareholders equity}}{\text{Number of shares outstanding}}$$

Shareholders are also interested in knowing a stock's earnings and dividend yields.

$$\text{Earnings yield} = \frac{\text{Earnings per share available to common shareholders}}{\text{Market value per share}}$$

The earnings yield is a rough approximation of the percentage return shareholders earn on their investment, especially if a company pays out all its earnings in dividends. The reciprocal of price/earnings ratio is probably of more interest to investors, because it measures investor's perspectives on the quality of the company and its stock. The higher the ratios are, the more investors are willing to pay for the company's earnings stream.

In evaluating a company's dividend policy, investors usually are interested in the stock's dividend yield and the company's dividend payout.

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Market value per share}}$$

Dividend payout is determined as follows:

$$\text{Dividend payout} = \frac{\text{Dividends}}{\text{Net earnings}}^{121}$$

¹²¹ Mark F. Asman, Scott S. Cowen and Steven L. Mandell, **Accounting Today - Principles and Applications**, New York, Los Angeles, San Francisco and St. Paul: Wets Publishing Company, 1986, s. 573- 583.

6.6. ANALYSIS OF CASH FLOW INFORMATION

The cash flow statement is intended to help predict the firm's ability to sustain (and increase) cash from current operations. In doing so, the statement provides information that is more objective about:

- A firm's ability to generate cash flows from operations
- Trends in cash flow components and cash consequences of investing and financing decisions
- Management decisions regarding such critical areas as financial policy (leverage) dividend policy and investment for growth

Neither the statement of cash flows nor the income statement alone contains sufficient information for decision-making. Income statement and balance sheet data must be combined with cash flows for insights into the firm's ability to realize assets based on reported revenues, settle liabilities resulting from accrued expenses, and thereby assists the analyst in the development of other valuation – relevant measures.

When it comes to liquidity analysis, cash flow information is more reliable than balance sheet or income statement information. Balance sheet data are static--measuring a single point in time--while the income statement contains many arbitrary noncash allocations--for example, pension contributions and depreciation and amortization. In contrast, the cash flow statement records the changes in the other statements and nets out the bookkeeping artifice, focusing on what shareholders really care about: cash available for operations and investments.

For years, credit analysts have been using ratios to mine cash flow statements for practical revelations. The major credit-rating agencies use cash flow ratios prominently in their rating decisions. Bondholders and leveraged buyout specialists use free cash flow ratios to clarify the risk associated with their investments.

Finance executives apparently feel less pressure to toy with the cash flow statement. A joint survey of 401 American financial executives by Duke University, the University of Washington and the National Bureau of Economic Research found that “CFOs believe that earnings, not cash flows, are the key metric considered by outsiders.” However, contrary to the understanding of those 401 CFOs, some experts in the investment community declare that the cash flow statement is the touchstone for investment decisions. “Follow the cash flow,” they say. “They cannot hide the cash.”. Based on that logic, many business and stock valuation rely heavily on cash flow figures.¹²²

An imported but elusive concept often used in cash flow analysis is free cash flow (FCF) intended to measure the cash available to the firm for discretionary uses after making all required cash outlays. The concept is widely used by analysts and in the fiancé literature as the basis for many valuation models. The basis elements required to calculate FCF are available from the cash flow statement.

The basic definition used by many analysts is cash from operations less the amount of capital expenditures required to maintain the firms present productive capacity. Discretionary uses include growth- oriented capital expenditures and acquisitions, debt reduction and stockholder payments (dividend and stock repurchase). The larger the firms FCF, the healthier it is because it has more cash available for growth, debt payment and dividends.

When periodic financial statements are prepared, estimates of the revenues earned and expenses incurred during the reporting interval are required. These estimates require management judgment and are subject to modification as more information about the operating cycle becomes available. Accrual accounting can therefore be affected by management choice of accounting policies and estimates. Furthermore, accrual accounting by itself fails to provide adequate information about the liquidity of

¹²² McClearn, Matthew, **Cash Flow Shell Games**, [Electronic Version], Canadian Business, 10.25.2004, Vol. 77 issue 21, p163-164, 2p,1c, (26.10.2006).

the firm and long-term solvency. Some of these problems can be alleviated by the use of the cash flow statement in conjunction with the income statement.

Cash flow is relatively (but not completely) free of the drawbacks of the accrual concept. It is less likely to be affected by variations in accounting principles and estimates, making it more useful than reported income in assessing liquidity and solvency.

Cash flow statements should be used together with information from the income statement. The balance sheet and footnotes to assess the cash generating ability of a firm. Income statements amount based on accrual accounting are generally presumed to be good predictors of future cash flows that predictive ability is subject to a number of implicit assumptions, including the going concern assumptions. For example, the classification of the inventories as assets rather than expenses implicitly assumes that they will be sold in the normal course of business. Similarly, the accrual of revenue from credit sales and the valuation of receivables assume that the firm will continue to operate normally; failing firms may find that customers are unwilling to pay.

When the going concern assumption is subject to doubt, revenue recognition and asset valuation can no longer be taken for granted. The value of inventory and receivables declines sharply when they must be quickly liquidated. Long term assets also must be reexamined when the going concern assumption is questioned. In this respect, the statement of cash flows serves as a check on the assumptions inherent in the income statement.

To find out why income can fail as a predictor of cash generating ability (un collected receivables or unsold inventories) requires a comparison of amounts recorded as sales and cost of goods sold on the income statement with the pattern of cash collections from customers and cash paid for inventories on the cash flow statement. A direct method cash flow statement is helpful in this regard.

The data contained in the statement of cash flows can be used to:

-Review individual cash flow items for analytic significance.

-Examine the trend of different cash flow components over time and their relationship to related income statement items.

- Consider the interrelationship between cash flow components over time.

There are many examples of growth companies that generated impressive increases in earnings per share for a sustained period while operating cash flow was negative. After many bankruptcies including fiascos in Enron Corporation, in which warning signs were most evident in their cash flow statements, the investment community has tempered its fixation on earnings per share in favor of a greater reliance on cash flows. Cash flow from operations is increasingly viewed as the best measure of business performance because it cannot be easily manipulated by adjusting reserves or through creative interpretations of generally accepted accounting principles accounting.¹²³

6.7. Length of Cash Cycle

Short-term lenders and creditors (such as suppliers) must assess the ability of a firm to meet its current obligations. That ability depends on the cash resources available as of the balance sheet date and the cash to be generated through the operating cycle of the firm.

A schematic representation of the operating cycle of a firm is below. The firm purchases or manufactures inventory, requiring an outlay of cash and/or the creation of the trade payables debt. The sale of inventory generates receivables that, when collected are used to satisfy the payables, and the cycle is began again. The ability to repeat this cycle on a continuous basis depends on the firm's short-term liquidity and cash generating ability.

¹²³ Randerson, Erik, **In an Era of Full Disclosure, What about Cash?**, [Electronic Version], Financial Executive, Sept 2004, Vol. 20 issue 6, p48-50, 3p, (26.10.2006).

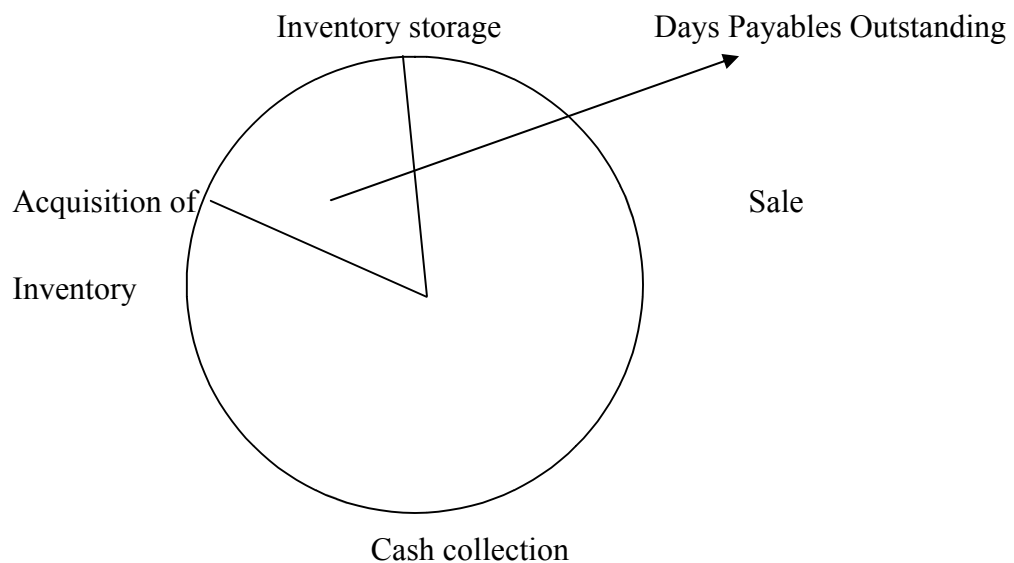


Chart10: Operating and cash cycles Source: Gerald I. White, Ashwinpaul C. Sondhi, Dov Fried, **The Analysis and use of Financial Statements**, New York: John Wiley and Sons, 1998, p. 156.

One indicator of short-term liquidity uses the activity ratios as a liquidity measure. The operating cycle of a merchandising firm is the sum of the number of the days it takes to sell inventory and the number of days until the resultant receivables are converted to cash. The circumference of the circle in chart represents the length of this cycle. If a firm operates without credit, it also represents the total number of days cash is tied up in operating assets.

To the extent a firm uses credit, the length of the cash (operating) cycle is reduced. Subtracting the number of days of payables outstanding from the operating cycle, results in the firm's cash cycle, the number of days a company's cash is tied up by its current operating cycle. The cash cycle captures the interrelationship of sales, collections, and the trade credit in a manner that the individual numbers may not. The shorter the cycle, the more efficient the firms operations and cash management.¹²⁴

¹²⁴ Gerald I. White, Ashwinpaul C. Sondhi, Dov Fried, **The Analysis and use of Financial Statements**, New York: John Wiley and Sons, 1998, p. 156.

6.8. CASH BURN RATE

Cash generating ability is so important for the future of any company. It is so important especially for the internet companies. In the first years, they make so much cost for experienced and high quality employee, computer systems, research and advertising but they have to wait for the product they will improve to get cash. Therefore, in the first years cash flow from operations is minus. Cash burn rate is so important to find how long will it take them to finish their cash reserve. Months to burnout calculates how long a firm can continue its operations without borrowing or issuing new shares. There are two ways to calculate cash burn rate:

Cash burn rate = Cash used for operating activities

+ Cash outflow for purchasing non current assets and acquiring
other Companies

Cash flow table period (yearly 12, quarterly 3)

Cash burn rate = Earnings before tax, interest and depreciation

(Excluding extraordinary income and loss)

Income table period

Months to burnout = Cash + assets excluding cash + short term securities

Cash burn rate¹²⁵

¹²⁵ Doç. Dr. Necdet Şensoy, s. 138-139.

6.9. CASH RATIO

$$\text{Cash ratio} = \frac{(\text{Cash} + \text{Marketable securities})}{\text{Current Liabilities}}$$

Cash ratio defined as is the most conservative of measures of cash resources as only actual cash and securities easily convertible to cash are used to measure cash resources.

The use of either the current or the quick ratio implicitly assumes that the current assets will be converted to cash. In reality, however, firms do not actually liquidate their current assets to pay their current liabilities. Minimum levels of inventories and receivables are always needed to maintain operations. If all current assets are liquidated, the firm has effectively ceased operations.

Cash ratio shows if the cash and securities easily convertible to cash are enough to cover the current liabilities. It is more sensitive than current or quick ratio. This ratio shows if all sales finish and all receivables cannot be collected, the current liabilities can be paid or not.¹²⁶

A thing to remember when using the cash ratio formula is that it ignores timing of both cash received and cash paid out.

6.10. THE CASH FLOW FROM OPERATIONS RATIO

$$\text{Cash Flow from Operations Ratio} = \frac{\text{Cash Flow from Operations}}{\text{Current Liabilities}}$$

¹²⁶ Doç. Dr. Necdet Şensoy, s. 139.

The cash flow from operations ratio measures liquidity by comparing actual cash flows with current liabilities. A measure of how well current liabilities are covered by the cash flow generated from a company's operations. The numerator of the OCF ratio consists of net cash provided by operating activities. This is the net figure provided by the cash flow statement after taking into consideration adjustments for noncash items and changes in working capital. The denominator is all current liabilities, taken from the balance sheet.

The purpose of this ratio is to assess whether or not a company's operations are generating enough cash flow to cover its current liabilities. If the ratio falls below 1.00, then the company is not generating enough cash to meet its current commitments. In this case, the company is likely to have to find other sources to fund its operations or slow the rate at which it is spending its cash. Any existing cash balance can help the company meet these needs, but there has to be some concern about whether or not the company will be able to continue operating without raising additional funds, as the existing cash balance cannot last forever.¹²⁷

Cash flow to debt is an interesting table for the investors and gives hints as to which companies can afford rewarding shareholders with dividends.¹²⁸

6.11. INTEREST COVERAGE RATIOS

The ability to stay current with interest payment obligations is absolutely critical for a company as a going concern. While the non-payment of debt principal is a seriously negative condition, a company finding itself in financial/operational difficulties can stay alive for quite some time as long as it is able to service its interest expenses. Debt to equity ratios examines the firm's capital structure and indirectly its

¹²⁷ Weis, **Calculating Cash Flow Ratios**, <http://www.fool.com/research/2000/features000707.htm>, July 07, 2000

¹²⁸ **Let's Get Physical**, [Electronic Version], Finance Week 3.28.2005 Supplement, p54-57, 4 p, (26.10.2006).

ability to meet current debt obligations. A more direct measure of the firm's ability to meet interest payments is¹²⁹

$$\text{Interest coverage ratio} = \frac{\text{Earnings before interest and taxes}}{\text{Interest Expense}}$$

It is a ratio used to determine how easily a company can pay interest on outstanding debt. The ratio is calculated by dividing a company's earnings before interest and taxes (EBIT) of one period by the company's interest expenses of the same period. The lower the ratio the more the company is burdened by debt expenses.

When a company's interest coverage ratio is 1.5 or lower, its ability to meet interest expenses may be questionable. An interest coverage ratio below 1 indicates the company is not generating sufficient revenues to satisfy interest expenses.

However, where the numerator of the coverage ratio begins with earnings from the income statement, the numerator of the cash interest coverage ratio begins with cash from the cash flow statement. Cash interest coverage gives a more realistic indication of the company's ability to make the required interest payments. Earnings figures include all manner of noncash charges like depreciation, pension contributions, some taxes and stock options. A company with a low income-based coverage ratio may actually be able to meet its payment obligations, but the mask of noncash charges makes it difficult to see that. A cash-based coverage ratio gives a direct look at the cash available to pay interest.¹³⁰

$$\text{Cash interest coverage ratio} = \frac{\text{cash from operations} + \text{interest paid} + \text{tax paid}}{\text{Interest Expense}}$$

¹²⁹ Richard Loth , **Debt Ratios: Interest Coverage Ratio**,
<http://www.investopedia.com/university/ratios/debt/ratio5.asp>

¹³⁰ American Institute of CPA's, **The power of cash flow ratios**
<http://www.thefreelibrary.com/The+power+of+cash+flow+ratios-a021224654>

6.12. CAPITAL EXPENDITURE AND OPERATING CASH FLOWS TO DEBT RATIOS

Internally generated cash flows are needed for investments as well as debt service. The coverage ratios discussed do not consider this. Cash flow from operations ignores the cost of additions to operating capacity. Net income with its provision for depreciation, amortizes the original cost of existing fixed assets. However, given their relatively long service life, the replacement cost of these assets may be significant higher and historical cost depreciation cannot provide for their replacement. Neither net income nor cash from operations makes any provision for the capital required for growth. A firm's long-term solvency is a function of:

- its ability to finance the replacement and expansion of its investment in productive capacity

- its generation of cash for debt repayment

Beyond questions of immediate corporate solvency, auditors need to measure a client's ability to meet ongoing financial and operational commitments and its ability to finance growth. How readily can the company repay or refinance its long-term debt? Will it be able to maintain or increase its current dividend to stockholders? How readily will it be able to raise new capital?

Banks, credit-rating agencies and investment analysts understandably are very concerned with these questions. Accordingly, they have developed several ratios to provide answers to them. Auditors, who are more concerned about full disclosure, can use these same ratios to pinpoint areas for closer scrutiny when planning an audit.

$$\text{The capital expenditure ratio} = \frac{\text{Cash from operations}}{\text{Capital Expenditures}}$$

The capital expenditure ratio measures the relationship between the firm's cash generating ability and its investment expenditures. Capital expenditure ratio. The numerator is cash flow from operations. The denominator is capital expenditures. A financially strong company should be able to finance growth. This ratio measures the capital available for internal reinvestment and for payments on existing debt. When the capital expenditure ratio exceeds 1.0, the company has enough funds available to meet its capital investment, with some to spare to meet debt requirements. The higher the value, the more spare cash the company has to service and repay debt. As with all ratios, appropriate values vary by industry. Cyclical industry, such as housing and autos, may show more variation in this figure than noncyclical industry, such as pharmaceuticals and beverages. Also, a low figure is more understandable in a growth industry, such as technology, than in a mature industry, such as textiles.

$$\text{Cash from operations to Debt} = \frac{\text{Cash form operations}}{\text{Total Debt}}$$

Cash from operations to Debt measures the coverage of principal repayment requirements by the current cash from operations. Low cash from operations to debt ratio could signal along term solvency problem as the firm does not generate enough cash internally to repay its debt.

The numerator is cash flow from operations. The denominator is total debt-- both long term and short term. Total cash flow to debt is of direct concern to credit-rating agencies and loan decision officers.

This ratio indicates the length of time it will take to repay the debt, assuming all cash flow from operations is devoted to debt repayment. The lower the ratio, the less financial flexibility the company has and the more likely that problems can arise in the future. Auditors should take diminished financial flexibility into account when identifying high-risk audit areas during planning.

6.13. NET FREE CASH FLOWS RATIOS

Free cash flow (FCF) represents the cash that a company is able to generate after laying out the money required to maintain or expand its asset base. Free cash flow is important because it allows a company to pursue opportunities that enhance shareholder value. Without cash, it's tough to develop new products, make acquisitions, pay dividends and reduce debt. FCF is calculated as:

$$\begin{array}{l} \text{Net Income} \\ + \text{Amortization/Depreciation} \\ - \text{Changes in Working Capital} \\ - \text{Capital Expenditures} \\ \hline = \text{Free Cash Flow} \end{array}$$

It can also be calculated by taking operating cash flow and subtracting capital expenditures.

Funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment. This type of outlay is made by companies to maintain or increase the scope of their operations. These expenditures can include everything from repairing a roof to building a brand new factory. In terms of accounting, an expense is considered to be a capital expenditure when the asset is a newly purchased capital asset or an investment that improves the useful life of an existing capital asset. If an expense is a capital expenditure, it needs to be capitalized; this requires the company to spread the cost of the expenditure over the useful life of the asset. If, however, the expense is one that maintains the asset at its current condition, the cost is deducted fully in the year of the expense.

Earnings can often be clouded by accounting gimmicks, but it's tougher to fake cash flow. For this reason, some investors believe that FCF gives a much clearer view of the ability to generate cash (and thus profits).

It is important to note that negative free cash flow is not bad in itself. If free cash flow is negative, it could be a sign that a company is making large investments. If

these investments earn a high return, the strategy has the potential to pay off in the long run.

Free cash flow is not necessarily a better indicator of company performance than net income. But FCF tends to be less influenced by accounting manipulations.¹³¹

The numerator of total free cash (TFC) ratio is the sum of net income, accrued and capitalized interest expense, depreciation and amortization and operating lease and rental expense less declared dividends and capital expenditures. The denominator is the sum of accrued and capitalized interest expense, operating lease and rental expense, the current portion of long-term debt and the current portion of long-term lease obligations.

Total free cash (TFC) ratio = (Net income + Accrued and capitalized interest expense + Depreciation and amortization + Operating lease and rental expense - Declared dividends - Capital expenditures) / (Accrued and capitalized interest expense + Operating lease and rental expense + Current portion of long-term debt + Current portion of capitalized lease obligations)

Cash flow adequacy (CFA) ratio: The numerator is earnings before interest, taxes, depreciation and amortization (EBITDA) less taxes paid (cash taxes) less interest paid (cash interest) less capital expenditures (as qualified above). The denominator is the average of the annual debt maturities scheduled over the next five years. Cash flow adequacy helps smooth out some of the cyclical factors that pose problems with the capital expenditure ratio. It also makes allowances for the effects of a balloon payment.

Companies with strong NCF compared with upcoming debt obligations are better credit risks than companies that must use outside capital sources. Thus, a high CFA means high credit quality.

¹³¹ **Stock Picks, Attractively Valued Free-Cash-Flow Growers**, Dow Theory Forecast, [Electronic Version], July 24 2006, (26.10.2006).

Cash flow adequacy (CFA)=(EBITDA - taxes paid - interest paid - capital expenditures) / (Average annual debt maturities scheduled over next 5 years)¹³²

6.14. CASH FLOW PER SHARE

Cash flow per share is calculated using cash flow from operations as the numerator. Computed in a manner it reports on the cash generating ability of the firm.

A measure of a firm's financial strength, calculated as follows:

$$\text{Cash Flow Per Share} = \frac{\text{Operating Cash Flow} - \text{Preferred Dividends}}{\text{Common Shares Outstanding}}$$

Many analysts, as well as some of the greatest investors of all time, place more weight on cash flow per share than earnings per share. Because EPS is more easily manipulated, its reliability can at times be questionable. Cash, on the other hand, is difficult - if not impossible - to fake. You either have cash or you don't. Therefore, cash flow per share is a useful measure for the strength of a firm and the sustainability of its business model.

Like all summary measures, cash flow per share should be used with caution. Cash flow from operations per share suffers from the following problems:

- variability from year to year
- dependent on accounting methods
- does not reflect cash needed for required debt payments
- does not reflect cash required for maintenance of productive capacity

¹³² <http://www.thefreelibrary.com/The+power+of+cash+flow+ratios-a021224654>

PART 7

CASH FLOW STATEMENT ANALYSIS IN A LEADING FIRM IN FOOD INDUSTRY

7.1. FINANCIAL REPORTING OF THE COMPANY

ABC Corporation is a leading food company in Turkey. Two different financial report's sets are prepared at every month end. One of them is prepared according to Turkish Accounting System and the other one is prepared according to IFRS. Financials, which are prepared according to Turkish Accounting System, are only for tax purposes. On the other hand, the management uses financials, which are prepared according to IFRS. Since the company is a multinational company, the Head Quarter requires all countries to send them their financials in the same format and with the same accounting rules. Therefore, the financials for the parent company are prepared according to IFRS.

First, all transactions are made according to Turkish Accounting System on the system, and then all IFRS adjustments are made via Excel. The financial statements, which are prepared at the end of every month, are Balance Sheet, Income Statement and Cash Flow Statement. Cash flow statement is prepared according to indirect method.

7.2. PREPARATION OF CASH FLOW STATEMENT

Below you can find the Balance Sheet of ABC Corporation:

ABC CORPORATION

Comparative Balance Sheet

(YTL)

<u>ASSETS:</u>	IFRS 1.period	IFRS 2.period	Difference
Cash and banks	7.297.826	3.774.876	-3.522.950
Marketable securities	0	0	0
Trade receivables	16.642.439	14.500.350	-2.142.089
Other current receivables	1.100	300	-800
Inventories	5.515.154	4.657.439	-857.715
Prepaid expenses	127.024	162.242	35.218
Other current assets	5.351.049	6.350.429	999.380
Total Current Assets	34.934.591	29.445.635	-5.488.956
Non-current receivables	8.160	35	-8.125
Tangible Assets- net	14.369.983	14.208.705	-161.278
Intangible Assets-net	135.951	134.374	-1.577
Investment in subsidiaries	0	0	0
Deferred tax asset	0	0	0
Total Non-Current Assets	14.514.094	14.343.114	-170.980
TOTAL ASSETS	49.448.685	43.788.749	-5.659.936

LIABILITIES:

Short-term loans	6.310.780	0	-6.310.780
Short-term lease obligations	0	0	0
Trade payables	8.249.165	7.724.809	-524.357
Taxes & funds payable	137.386	6.184	-131.202
Other payables & accruals	369.324	194.042	-175.282
Other current liabilities	0	0	0
Total Current Liabilities	15.066.655	7.925.035	-7.141.620
Long-term loans	0	0	0
Long-term lease obligations	0	0	0
Employee Termination Benefits	1.972.804	2.052.726	79.922
Deferred tax liability	662.400	1.383.409	721.008
Total Non-Current Liabilities	2.635.204	3.436.134	800.930
Shareholder's Equity			
Capital	49.728.933	49.728.933	0
Revaluation Funds	0	0	0
Reserves	0	0	0
Translation Reserves	0	0	0
Retain Earnings	- 17.982.107	- 17.301.353	680.754
Total Shareholders' Equity	31.746.826	32.427.580	680.754
TOTAL LIABILITIES & S/H's EQUITY	49.448.685	43.788.749	-5.659.936

Table1: ABC Company Balance Sheet

Below you can find the Income Statement of ABC Corporation:

ABC CORPORATION

Income Statement

(YTL)

<u>ASSETS:</u>	IFRS 1.Period	IFRS 2.Period
Gross Sales Value	15.332.511	14.182.449
Discounts	-4.755.638	-4.353.546
Net Proceed of Sales	10.576.873	9.828.902
COGS	-7.999.460	-7.576.553
Income of olive oil	129.433	180.270
COGS of olive oil	-131.653	-165.592
Gross Profit	2.575.193	2.267.028
G&A expenses	-316.516	-178.395
Sales commission	-300.958	-154.011
Selling and distribution expenses	-719.502	-672.715
Advertising expense	-12.377	-37.412
Variable distribution exp	-412.437	-451.106
Mnf fixed indirect	-196.426	-241.265
Warehousing	-95.190	-128.607
Finance income	170.439	469.674
Finance expense	-151.674	-264.887
Other income/(exp)	35	-39.724
Profit before tax	540.587	568.580

Income tax charge	-126.896	279.685
Deferred tax charge	-167.511	-167.511
Monetary gain/(loss)	0	0
Net income/(expense)	246.180	680.754

Table2: Income Statement of ABC Corporation

The preparation of cash flow statement is made via worksheet. Below you can find the work sheet for cash flow statement transactions:

(YTL) ASSETS:	Reconciling Items				Balance IFRS 2.period	
	Balance IFRS 1.period	Debits		Credits		
Cash and banks	7.297.826		16	3.522.950	3.774.876	
Marketable securities	0				0	
Trade receivables	16.642.439		2	2.142.089	14.500.350	
Other current receivables	1.100		3	800	300	
Inventories	5.515.154		4	857.715	4.657.439	
Prepaid expenses	127.024	5	35.218		162.242	
Other current assets	5.351.049	6	999.380		6.350.429	
Total Current Assets	34.934.591				29.445.635	
Non-current receivables	8.160		7	8.125	35	
Tangible Assets- net	14.369.983	8	12.355	8	173.633	14.208.705
Intangible Assets-net	135.951		9	1.577	134.374	
Investment in subsidiaries	0				0	
Deferred tax asset	0				0	
Total Non-Current Assets	14.514.094				14.343.114	
TOTAL ASSETS	49.448.685				43.788.749	
LIABILITIES:						
Short-term loans	6.310.780	10	6.310.780		0	
Short-term lease obligations	0				0	
Trade payables	8.249.165	11	524.357		7.724.809	
Taxes & funds payable	137.386	12	131.202		6.184	
Other payables & accruals	369.324	13	175.282		194.042	
Other current liabilities	0				0	
Total Current Liabilities	15.066.655				7.925.035	
Long-term loans	0				0	
Long-term lease obligations	0				0	
Employee Termination Benefits	1.972.804		14	79.922	2.052.726	
Deferred tax liability	662.400		15	721.008	1.383.409	
Total Non-Current Liabilities	2.635.204				3.436.134	
Shareholder's Equity						
Capital	49.728.933				49.728.933	
Revaluation Funds	0				0	
Reserves	0				0	

Translation Reserves	0				0
Retain earnings	-17.982.107			1	680.754
Total Shareholders' Equity	31.746.826				32.427.580
TOTAL LIABILITIES & S/H's EQUITY					
	49.448.685				43.788.749

Statement of Cash Flows Effects

Cash flows from operating activities

Net income before tax and monetary gain loss
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1	680.754		
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Adjustment to reconcile net income to net cash provided by operating activities

Depreciation of tangible assets
Amortization intangible assets
Reserve for list price difference
Reserve for salaries and wages
Reversal of prior months provision for discounts
Provision for current month's discounts
Fx gain from fc trade payables
Fx gain on borrowings
Loss on closing of Cunda
Reversal of reserve for advertising expense
Reserve for employee termination benefits
Notice payment expense
Gain on sale of fixed asset
Interest expense
Interest income

8	173.456		
9	1.577		
		11	233.666
		10	158.400
		8	12.823
10	11.289		
		6	63.312

Operating Activities
Decrease in inventories
Decrease in trade receivables
Decrease in other current receivables
Increase in prepaid expense
Increase in other current assets
Decrease in non current receivables
Increase in tangible assets
Increase in intangible assets
Decrease trade payables
Increase in tax & funds payable
Decrease in other payables & accruals
Increase in other current liabilities
Increase in non-current assets
Increase in employee termination benefits
Increase in deferred tax liability
Increase in investment in subsidiaries
Interest paid
Interest received
Notice liability paid
Employee termination benefits paid
Taxes paid
Prepaid tax paid

4	857.715		
2	2.142.089		
3	800		
		5	35.218
		6	998.843
7	8.125		
		11	290.691
12	41.800		
		13	175.282
14	79.922		
15	721.008		
		10	350.398
6	62.775		
		12	173.002

Cash flows from investing activities
Purchase of property, plant and equipment

		8	12.355
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Purchase of intangible assets				
Change in retained earnings				
Proceed from closing of Cunda				
Proceed from sale of fixed asset	8	13.000		
Cash flows from financing activities				
Repayment of borrowings			10	5.854.348
Borrowings	10	41.077		
Dividends paid				
Net change in S/T leasing obligation				
Repayment of S/T leasing obligation				
Net change in L/T leasing obligation				
Repayment of L/T leasing obligation				
Net decrease in cash and cash equivalents	16	3.522.950		
Totals		8.358.337		8.358.337

All transactions are assigned to a number. In addition, every transaction is explained detailed below:

1) Net Income

Net income is reported on the bottom section of the work sheet and is the starting point for preparation of the statement of cash flows under the indirect method. Under this method, additions and deductions are made to net income to arrive at cash flows from operating activities. Work sheet entry 1 is as follows:

Cash flows from operating activities: Net income	680.754	
Net income		680.754

2) Trade Receivable

The decrease in trade receivable of 2.142.089 means operations that did not result in income statement caused increase in cash. As a result, the decrease of 2.142.089 would be added to net income. The following work sheet entry is made:

Operating-Decrease in Trade receivable	2.142.089	
Trade receivable		2.142.089

3) Decrease in other current receivables

The balance sheet item other current receivable represents for the trial balance account “Due from personal”. Decrease in due from personal means that, the personal made the back payment of his debt to company. Because of his payment, there is increase in cash but there is no effect to income statement. Therefore, the decrease of 800 should be added to net income. The following work sheet entry is made:

Operating-Decrease in other current receivable	800	
	Other current receivable	800

4) Inventories

A net decrease in the balance of the inventory account over the period indicates that the cost of goods sold (reported in the income statement) exceeds purchases made during the period. To the extent that the cost of goods sold consists of a decrease in inventory, no cash payment is required in the current period. Therefore, we add to net income the amount of a net decrease in inventory. The work sheet entry is made as following:

Operating-Decrease in inventories	857.715	
	Inventories	857.715

5) Prepaid expenses

The prepaid expense item in balance sheet represents the prepaid taxes and funds account in trial balance. The increase in prepaid expense means outflow of cash without any change in income statement. The withholding tax for time deposits is deducted from cash interests received from banks and these amounts are booked on the prepaid tax account. The corporate tax is calculated every month and accrual for corporate tax expense is made every month end. On January, April, July and Oct the corporate tax for the past three months is paid, this payment is booked on the prepaid

tax expense account. The balance of the corporate tax for the past year is net off with prepaid tax expense account in March.

The increase in prepaid expense means outflow of cash, which has no effect on income statement, and it should be deducted from net income through the following entry:

Prepaid expense	35.218	
	Operating-Increase in prepaid expense	35.218

6) Other Current Assets

The other current assets contain items below:

TURKISCH ACC. CODE	ACCOUNTS NAME	1. Period	2.period	DIFF.
136	OTHER MISCELLANEOUS RECEIVABLES	0	0	0
159	ADVANCES GIVEN TO SUPPLIERS	0	0	0
(1)181	ACCRUED INCOME	228.502	235.548	7.046
(2)190	VAT TO BE TRANSFERRED	4.291.578	5.079.139	787.561
(2)191	VAT DEDUCTIBLE	2.106.427	2.231.531	125.104
(3)195	JOB ADVANCES	641	0	-641
(4)196	ADVANCES GIVEN TO PERSONNEL	3.431	0	-3.431
(2)391	VAT PAYABLE	-1.279.530	-1.195.790	83.740
TOTAL		5.351.049	6.350.429	999.380

1) Accrued income:

Details of accrued income are presented below:

TURKISCH ACC. CODE	ACCOUNTS NAME	1.period	2.period	DIFF.
a)181-01-010	INTEREST INCOME ACCRUAL	2.913	3.450	537
b)181-01-020	FAIR INCENTIVE	14.707	12.368	-2.339
c)181-01-030	AGRICULTURAL INCENTIVE	210.882	219.731	8.848

TOTAL	228.502	235.548	7.046
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a) Interest income accrual is made for the time deposits interests, which is earned but not received yet. If there is, increase in that account, income statement effected but cash is not affected and not increased from that. Therefore, the increase of this account should be deducted from net income. Real cash amount, which is received, should be added to operating cash flow. Below you can find the interest income account movements:

Interest income accrual	
Beginning	2.913
Interest income	63.312
Interest received	-62.775
Ending	3.450

b) Fair incentives are incentives, which are reimbursed by government. If companies attend fairs in foreign countries, government give incentives to the firms for some limited part of their costs for fairs. These payments are made after some time, which is needed by the government to check the attendance and cost documents of the company. Therefore, these incentives are earned but not received. Decrease on this account means that government made payment to the company. This operation has and cash effect but no effect on income statement. Therefore, this decrease should be added back to net income.

c) Agricultural incentive is given by government to the company for their exports of olive oil. It is based on the export tonnage. When all documents are given to government, company makes accrual for this incentive and release the accrual when payment make by government. There is an increase on this account, which effects net income but not effects cash. Therefore, that amount should be subtracted from net income.

2) VAT Receivable/ Payable (Net)

According to IFRS, all VAT accounts are netted. VAT to be transferred, VAT deductible and VAT payable are netted. As a result, VAT receivable increased 996.405. That increase should be deducted from net income.

3) Job advances

Job advances are advances given to suppliers as an advance payment. The advance 641, which was taken in 1.period, was closed in 2.period. That amount should be added back to net income.

4) Advances given to personal

These are advances given to employee as an advance payment of their salary. The advance 3431, which was taken in 1.period, was closed in 2.period. That amount should be added back to net income.

Because of all current asset items operations, increase in other current assets should be deducted from cash.

Other current assets	999.380
Operating- Interest Received	62.775
Interest income-Adjustments to net income for	63.312
Reconciling to operating act.	
Operating-Increase in other current assets	998.843

7) Non-current receivables

The non-current receivables contain items below according to Turkish accounting trial balance. All prepaid expenses which is belong to next year are

transferred from prepaid expenses (180 Turkish accounting code) to long term prepaid expense account (280 Turkish accounting code) at yearend according to Turkish accounting rules.

TURKISCH ACC. CODE	ACCOUNTS NAME	1.period	2.period	DIFF
226	DEPOSITS & GUARANTEES GIVEN	35	35	0
280	LONG-TERM PREPAID EXPENSES	8.125	162.242	154.117
TOTAL		8.160	162.277	154.117

According to IFRS, there is no need for this transfer, therefore reclassification is made from non-current receivables to prepaid expenses and all prepaid expenses are represented in one balance sheet item. Below you can find the detail of non-current receivables according to IFRS:

TURKISCH ACC. CODE	ACCOUNTS NAME	1.period	2.period	DIFF
226	DEPOSITS & GUARANTEES GIVEN	35	35	0
280	LONG-TERM PREPAID EXPENSES	8.125		-8.125
TOTAL		8.160	35	-8.125

Since non-current receivables decreased, this amount should be added to net income.

Operating-Decrease in non current receivables 8125

Non current receivables 8125

8) Tangible Assets

Below you can find the tangible assets movement table:

Tangible assets	
Beginning-net	14.369.983
Additions	12.355
Disposals	-177
Depreciation	-173.456
Ending-net	14.208.705

a) Additions

The company purchased tangible assets in that period. The purchase amount is 12.355. Because of purchase, cash is reduced and the purchase of fixed assets is reported in the investing activities caption of the cash flow statement. The entry to record this transaction on the work sheet is as follows:

Tangible assets	12.355	
	Investing-Purchase of tangible assets	12.355

b) Disposals

The motor vehicle, which was bought for 382YTL in 2003, was sold for 13.000YTL. The cost for the motor vehicle was 457YTL and accumulated depreciation for the motor vehicle was 280 YTL. The book value was 177. The transaction for the disposal is below:

Investing- Sale of tangible asset	13.000	
	Accumulated depreciation- sold asset	280
	Operating-Gain on sale of tangible asset	12.823
	Tangible assets	457

Cash received from sale of tangible assets are represented under investing activities. As we reported on the balance sheet net amount of tangible assets net amount of 177 is deducted from tangible assets. The gain from the sales of asset is reduced from net income to report accurately cash provided by operating activities.

c) Depreciation

The depreciation expense is added back to net income because it reduced income but did not affect cash. The depreciation was reported 173.456 and is presented on the work sheet in the following manner:

Operating- Depreciation Expense tangible assets 173.456

Accumulated Depreciation tangible assets 173.456

9) Intangible Assets

Below you can find the intangible assets movement table:

Intangible assets	
Beginning-net	135.951
Additions	0
Depreciation	-1.577
Ending-net	134.374

The only transaction is depreciation in intangible assets. The depreciation was reported 1.577 and is presented on the work sheet in the following manner:

Operating- Depreciation Expense intangible assets 1.577

Accumulated Depreciation-intangible assets 1.577

10) Short Term Loans

All borrowings to banks are closed in that period. Decreases in loans means that cash payment for closing the borrowings are made. Therefore, on the work sheet entry, there must be a debit for short-term borrowings balance sheet item and credit for the financing activities cash flow section.

Below you can find the loan movement table:

Loan Movement inc int exp accrual	
Beginning	6.310.780
Addition	41.077
Interest exp	11.289
Fx (gain)/loss	-158.400
Interest paid	-350.398
Paid	-5.854.348
Ending	0

According to table, new additional loans are received during the month and closed at the end of the month. The interest expense accrued relating only this month and total interest expense paid is separately shown. The loan payment is made on this month and related FX gain/loss is shown in the table. The work sheet entry must be like the following:

Short Term Loans	6.310.780
Financing-Borrowing	41.077
Interest expense-Adjustments to net income for reconciling to operating act.	11.289
Fx gain on borrowings- Adjustments to net income for reconciling to operating act.	158.400

Financing-Repayment of borrowings 5.854.348

Operating- Interest Paid 350.398

11) Trade Payables

Trade payables decreased 524.357. Because of this decrease, net income should be decreased too. Because, decrease in trade payable means that payments in that period is higher than the purchases and the cost in that period. Therefore, the excess amount should be decreased from net income.

Foreign exchange gain from foreign currency trade payables:

Below you can find the details of Trade payables denominated in USD. These payables are revaluated at month ends and foreign exchange gain or loss is reflected on Trade Payable. Here we should make a reclassification for the gain and gain should be reported as an adjustment to reconcile net income to net cash provided by operating activities.

Supplier	USD Amount	Invoice rate/ Priod monthend rate	Month- end rate /payment Rate	FX gain/(loss)	Payment Status
Xxxx	464.400	1,46	1,4288	14.489	Paid
Xxxx	3.281.490	1,46	1,4305	96.804	Paid
Xxxx	484.952	1,4544	1,4056	23.666	Payable
Xxxx	1.032.417	1,4496	1,4056	45.426	Payable
Xxxx	1.917.953	1,4305	1,4056	47.757	Payable
Xxxx	194.491	1,434	1,4056	5.524	Payable
Total	7.375.703			233.666	

Trade payables 524.357

Operating- Decrease in Trade Payables 290.691

Fx gain from fc trade payables 233.666

12) Taxes & funds payable

Below you can find the details of taxes and funds payable balance sheet item:

TURKISCH ACC. CODE	ACCOUNTS NAME	1.period	2.period	DIFF
360	TAXES & FUNDS PAYABLE	94.251	143.380	49.129
361	SOCIAL SECURITY PREMIUM PAYABLE	81.774	190.509	108.736
370	PROVISION FOR TAXATION	0	0	0
371	PREPAID TAX	0	0	0
	CORPORATE TAX	2.486.357	2.206.672	279.685
193	PREPAID TAXES & FUNDS	2.524.996	2.534.378	-9.382
		-	-	-
TOTAL		137.386	6.184	131.202

There is a decrease in taxes and funds payable account as net.

Taxes and funds payable account (income tax) and social security premium payable increased. The increase of these accounts should be added to net income. Because these increases have effect on income, but have no effect on cash. The real payment should be deducted from operating cash flow.

Taxes and funds payable	
Beginning	94.251
Addition	90.460
Paid	-41.331
Ending	143.380

Social Security Premium Payable	
Beginning	81.774
Addition	240.406
Paid	-131.671
Ending	190.509

Corporate tax decreased in December. That means an adjustment for the corporate tax calculation was made and because of correction transaction, corporate tax

decreased and this transaction have gain effect on the income statement. This effect should be eliminated.

Prepaid tax increased but according to IFRS corporate tax and prepaid tax are netted and reclassification for prepaid tax is made.

Tax and Funds payable	131.202	
Operating-Increase in tax & funds payable	41.800	
		Operating- Tax paid
		173.002

13) Other payables & accruals

Below you can find the details of other payables and accruals balance sheet item:

TURKISCH ACC. CODE	ACCOUNTS NAME	1.period	2.period	DIFF
331	DUE TO SHAREHOLDERS			0
332	DUE TO INVESTMENTS			0
(a)335	DUE TO PERSONNEL	66.825	64.396	-2.428
336	OTHER MISCELLANEOUS PAYABLE			0
369	OTHER LIABILITIES	3.545	3.545	0
373	ALLOWANCE FOR COST	783.946		-783.946
379	OTHER ALLOWANCES			0
380	SHORT-TERM DEFERRED INCOME			0
381	ACCRUED EXPENSES			0
(b) 373-01-010	DEPRECIATION ACCRUAL	400.348	-	400.348
(c)	VACATION PAY LIABILITY	86.295	126.815	40.520
(d)	ACCRUAL FOR MANAGEMENT BONUS	169.036		-169.036
(e)	ACCRUAL FOR BANK CREDIT INTEREST	339.109	-	339.109
	RECLASS OF NEGATIVE BALANCES	-866	-715	151
TOTAL		369.324	194.042	-175.282

Below you can find the details of allowance for cost account:

TURKISH ACC. CODE	ACCOUNT NAME	1.period	2.period	DIFF
(b)373-01-010	DEPRECIATION ACCRUAL	400.348		-400.348
373-02-010	SHORT TERM BANK CREDIT INTEREST ACCR.	0		0
(e)373-02-020	EXPORT CREDIT INTERST ACCR.	339.109		-339.109
(f)373-03-010	BONUS ACCR.	64.139		-64.139
373-03-020	RAMADAN BAYRAM GIFT ACCR.	-6.516		6.516
373-03-030	BAYRAM GIFT ACCR.	-1.887		1.887
373-03-040	PAYMENT IN KIND ACCR.	-2.473		2.473
373-03-050	YEAREND PAYMENT IN KIND ACCR.	-2.063		2.063
373-03-060	HEATING HELP ACCR.	-4.825		4.825
373-03-070	VACATION PAYMENT ACCR.	-1.887		1.887
TOTAL		783.946	0	-783.946

a) Due to personal

Due to personal decreased, that means payment from that accrual account was made and cash decreased. Therefore, decrease amount should be subtracted from net income.

b) Depreciation Accrual

Monthly depreciation cost is being charged to allowance for cost account – depreciation accrual account (373-01-010 Turkish accounting code) and at the yearend total accrual amount is transferred to accumulated depreciation account (257 Turkish accounting code) according to Turkish Accounting Rules. According to IFRS, reporting, monthly depreciation charge to depreciation accrual is transferred to accumulated depreciation account every month end as a reclassification transaction. As a result, depreciation accrual is not included at the balance of other payables and accruals account.

c) Vacation Pay Liability

Vacation pay liability is not included in Turkish Accounting trial balance. It is included in reporting as IFRS adjustment. This accrual is made only at the yearend. The increase of vacation pay liability cause decrease in net income but have no cash effect. Therefore, this decrease amount should be added to net income.

d) Accrual for Management Bonus

Every month end accrual for management bonus is taken. This bonus is paid to management of the company at the yearend according to performance of the company. Since the payment is made on December, the accrual is released at that month. Therefore, this decrease on accrual for management bonus should be deducted from net income.

e) Accrual for Bank Credit Interest

As we see in short term loan item of the balance sheet, all bank borrowings are closed at the yearend. The principle amount and total interest of the borrowing is paid together. According to Turkish accounting monthly interest accrual and the principle amount of the bank borrowing tracked separately. Bank principle amount is followed in bank loan account but the interest is tracked in accrual for bank credit interest account. However, according to IFRS, principle amount and accrued interest should be together. Therefore, reclassification of bank credit interest should be made from accrual account to bank loan account. Because of this reclassification, bank credit interest accrual is not included in the balance of other payables and accruals.

f) Bonus Accrual

Every month end accrual for bonus is taken. This bonus is paid to employees of the company at the yearend according to performance of the employees. Since the payment is made on December, the accrual is released at that month. Therefore, this decrease on accrual for management bonus should be deducted from net income.

Other payables & accruals 175.282

Operating- Decrease in other payables & accruals 175.282

14) Employee Termination Benefits

Employee termination benefits is an accrual account for the employee payment, which will be paid to them when they retired or fired. The accrual increased and net income effected from that but there is no effect to cash. Therefore, this increase should be added back to net income.

Operating- Increase in employee termination benefits 79.922

Employee termination benefits 79.922

15) Deferred tax liability

Deferred tax liability becomes from the accounting differences of Turkish accounting system and IFRS accounting. IFRS adjustments like IAS39 cause changes in Gross Sales and Cost of Goods Sold. Therefore, net income for Turkish accounting system and IFRS is different from each other. The increase of deferred tax liability has no effect to cash, so that we should add back the increase to net income.

Operating- Increase in deferred tax liability 79.922

Deferred tax liability 79.922

16) Final Reconciling Entry

The final entry to reconcile the change in cash and to balance the worksheet is shown below.

Decrease in Cash 3.522.950

Cash 3.522.950

As a result of all these transactions, the cash flow statement is prepared. Below you can find the Cash Flow Statement of ABC Corporation:

ABC CORPORATION
Statement of Cash Flows

Cash flows from operating activities

Net income before tax and monetary gain loss	680.754
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Adjustment to reconcile net income to net cash provided by operating activities

Depreciation of tangible assets	173.456
Amortization intangible assets	1.577
Fx gain from fc trade payables	-233.666
Fx gain on borrowings	-158.400
Gain on sale of fixed asset	-12.823
Interest expense	11.289
Interest income	-63.312
Operating income before working capital changes	398.875

Operating Activities		
Decrease in inventories	857.715	
Decrease in trade receivables	2.142.089	
Decrease in other current receivables	800	
Increase in prepaid expense	-35.218	
Increase in other current assets	-998.843	
Decrease in non current receivables	8.125	
Decrease trade payables	-290.691	
Increase in tax & funds payable	41.800	
Decrease in other payables & accruals	-175.282	
Increase in employee termination benefits	79.922	
Increase in deferred tax liability	721.008	
Interest paid	-350.398	
Interest received	62.775	
Taxes paid	-173.002	
Net cash provided by the operating activities		2.289.675

Cash flows from investing activities		
Purchase of property, plant and equipment	-12.355	
Proceed from sale of fixed asset	13.000	
Net cash provided by the investing activities		645

Cash flows from financing activities		
Repayment of borrowings	-5.854.348	
Borrowings	41.077	
Net cash used by the financing activities		-5.813.271

Net decrease in cash and cash equivalents		-3.522.950
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Cash and cash equivalents at beginning of the month		7.297.826
Cash and cash equivalents at end of the month		3.774.876

Table4: Cash Flow Statement of ABC Company

7.3. FINANCIAL STATEMENTS ANALYSE

Below you can find the balance sheet, income statement and cash flow statement of the company with monthly data. We want to make the analyse of the company's financial data monthly and analyse the company's operation. The effects of seasonality, VAT refund, dividend payment and other operational activities could be seen by the help of monthly data and the cash exceeds and shortages during the year can be seen and, some actions to prevent these cash shortages or using the money in more efficient ways could be found.

Main cash flow activities during the year:

- We know that the company paid 1.000.000 YTL dividend in October.
- The company had 1.300.000\$ export credit, which was paid in December.
- The company received 2.160.742 YTL VAT refund in April.
- The company paid 362.565 YTL corporate tax in May.

ABC CORPORATION
BALANCE SHEET
(YTL)

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Cash and banks	15,283	2,208	86,826	2,031,136	3,395,093	3,222,932	2,892,728	3,335,144	2,882,387	1,726,883	2,432,609	1,258,292
Marketable securities	0	0	0	0	0	0	0	0	0	0	0	0
Trade receivables	4,035,727	5,470,593	6,763,127	7,111,678	6,431,596	5,654,592	5,132,794	4,586,495	8,092,296	7,814,891	5,547,480	4,833,450
Other current receivables	217	67	383	267	250	133	0	933	700	467	367	100
Inventories	1,813,980	2,000,850	1,607,421	1,596,295	1,845,789	2,359,576	2,160,932	3,420,883	2,265,062	1,384,903	1,838,385	1,367,981
Prepaid expenses	26,647	29,545	20,323	10,996	67,564	45,443	46,786	62,729	53,611	52,472	42,341	54,081
Other current assets	2,403,240	2,512,204	2,678,695	717,969	938,396	1,184,881	1,335,216	1,494,696	1,706,815	1,835,151	1,783,683	2,116,810
Total Current Assets	8,295,093	10,015,467	11,156,776	11,468,342	12,678,688	12,467,558	11,568,457	12,900,881	15,000,872	12,814,767	11,644,864	9,630,713
Non-current receivables	725	725	725	725	487	487	487	2,430	2,430	2,430	2,720	12
Tangible Assets- net	5,267,824	5,265,915	5,206,529	5,115,255	5,066,403	5,052,296	5,005,280	4,951,487	4,905,723	4,846,425	4,789,994	4,736,235
Intangible Assets-net	45,732	45,274	49,270	48,741	48,213	47,684	47,155	46,626	46,379	45,848	45,317	44,791
Investment in subsidiaries	0	0	0	0	0	0	0	0	0	0	0	0
Deferred tax asset	0	0	0	0	0	0	0	0	0	0	0	0
Total Non-Current Assets	5,314,281	5,311,913	5,256,523	5,164,721	5,115,103	5,100,467	5,052,922	5,000,543	4,954,532	4,894,703	4,838,031	4,781,038
TOTAL ASSETS	13,609,374	15,327,381	16,413,300	16,633,063	17,793,791	17,568,025	16,621,379	17,901,424	19,955,404	17,709,470	16,482,895	14,411,751
LIABILITIES:												
Short-term loans	2,789,136	2,366,189	2,399,725	1,805,827	2,156,434	2,249,143	2,107,152	2,086,635	2,094,137	2,078,200	2,103,593	0
Short-term lease obligations	45	0	0	0	0	0	0	0	0	0	0	0
Trade payables	490,466	2,293,338	2,920,422	3,257,049	4,544,018	4,167,467	3,157,063	4,094,361	5,565,680	3,872,867	2,749,722	2,574,936
Taxes & funds payable	-110,807	-74,876	28,944	223,063	-86,555	-23,880	27,017	55,521	181,992	348,339	38,479	2,061
Other payables & accruals	57,411	87,415	81,663	83,448	115,141	92,689	99,600	125,196	91,422	85,389	123,108	64,681
Other current liabilities	12,913	0	13,210	23,041	16,629	16,629	0	0	6,975	6,975	0	0
Total Current Liabilities	3,239,165	4,672,066	5,443,965	5,392,428	6,745,668	6,502,047	5,390,832	6,361,712	7,940,205	6,391,770	5,014,902	2,641,678
Long-term loans	0	0	0	0	0	0	0	0	0	0	0	0
Long-term lease obligations	45	0	0	0	0	0	0	0	0	0	0	0
Employee Termination Benefits	628,150	633,066	639,034	628,864	633,500	652,638	639,991	634,202	651,343	652,522	657,601	684,242
Deferred tax liability	762,659	724,980	697,240	669,500	641,760	599,635	554,536	524,506	183,238	164,963	220,800	461,136
Total Non-Current Liabilities	1,390,854	1,358,047	1,336,274	1,298,364	1,275,260	1,252,273	1,194,527	1,158,708	834,581	817,485	878,401	1,145,378
Shareholder's Equity	0	0	0	0	0	0	0	0	0	0	0	0
Capital	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311	16,576,311
Revaluation Funds	0	0	0	0	0	0	0	0	0	0	0	0
Reserves	0	0	0	0	0	0	0	0	0	0	0	0
Translation Reserves	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated profit / (loss)	-7,748,827	-7,596,955	-7,279,044	-6,960,699	-6,634,040	-6,803,448	-6,762,606	-6,540,292	-6,195,307	-6,506,805	-6,076,096	-5,994,036
Net income	151,872	317,912	335,793	326,659	-169,408	40,842	222,314	344,984	799,613	430,709	89,376	42,419
Total Shareholders' Equity	8,979,356	9,297,268	9,633,061	9,942,271	9,772,863	9,813,705	10,036,019	10,381,004	11,180,617	10,500,215	10,589,592	10,624,694
TOTAL LIABILITIES & S/H's EQUITY	13,609,374	15,327,381	16,413,300	16,633,063	17,793,791	17,568,025	16,621,379	17,901,424	19,955,404	17,709,470	16,482,895	14,411,751

**ABC CORPORATION
FINANCIAL RATIOS
(YTL)**

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEARLY
<i>Current Ratio</i>													
<u>Current Assets</u>	3	2	2	2	2	2	2	2	2	2	2	4	2
Current Liability													
<i>Quick or acid test ratio</i>													
<u>Current assets – Inventories</u>	2	2	2	2	2	2	2	1	2	2	2	3	2
Current Liabilities													
<i>Total asset turnover</i>													
<u>Total Sales</u>	0	0	0	0	0	0	0	0	0	0	0	0	3
Total assets													
<i>Fixed asset turnover</i>													
<u>Total Sales</u>	1	1	1	1	1	1	1	1	1	1	1	1	10
Fixed assets													
<i>Accounts receivable turnover</i>													
<u>Credit Sales</u>	1	1	1	1	1	1	1	1	1	1	1	1	11
Net accounts receivable													
<i>Accounts receivable days</i>													
<u>Accounts Receivables</u>	33	35	32	41	28	35	33	25	27	36	33	31	32
Daily revenue													
<i>Inventory turnover</i>													
<u>Cost of Goods Sold</u>	1	1	2	2	2	1	1	1	2	3	1	2	0
Inventory													

**ABC CORPORATION
FINANCIAL RATIOS
(YTL)**

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	YEARLY
Inventory turnover days													
<u>Inventory</u>	26	22	13	16	15	24	23	33	14	12	21	16	19
Daily COGS													
Accounts payable days													
<u>Accounts Payables</u>	7	25	24	33	36	43	33	39	33	33	31	31	32
Daily COGS													
Working Capital Days (DSO+DII-DPO)													
	52	32	21	24	6	17	22	18	7	14	22	16	19
Debt ratio													
<u>Total debt</u>	0	0	0	0	0	0	0	0	0	0	0	0	0
Times interest earned													
<u>Earnings before interest and taxes</u>	5	22	5	15	1	1	1	5	7	9	3	1	2
Interest expense													
Return on Sales													
<u>Profit before tax</u>	0	0	0	0	0	0	0	0	0	0	0	0	0
Total revenue													
Gross profit margin													
<u>Sales – Cost of Goods Sold</u>	0	0	0	0	0	0	0	0	0	0	0	0	0
Sales													
ROI													
<u>Net earnings</u>	0	0	0	0	0	0	0	0	0	0	0	0	0
Total assets													

**ABC CORPORATION
INCOME STATEMENT
(YTL)**

INCOME STATEMENT	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	FULL YEAR
Gross Sales Value	3.639.790	4.708.636	6.404.958	5.175.312	6.909.076	4.786.902	4.729.076	5.547.861	9.109.869	6.521.601	5.110.837	4.727.483	67.371.399
Discounts	-865.597	1.064.282	1.591.672	1.263.919	1.712.052	-842.979	1.110.103	1.361.380	2.561.750	1.858.335	1.585.213	1.451.182	17.268.465
Net Proceed of Sales	2.774.193	3.644.354	4.813.286	3.911.393	5.197.024	3.943.923	3.618.972	4.186.480	6.548.119	4.663.266	3.525.624	3.276.301	50.102.934
COGS	2.082.864	2.701.106	3.623.079	2.919.840	3.771.747	2.918.361	2.828.577	3.127.801	5.019.930	3.471.593	2.666.487	2.525.518	37.656.903
Income of olive oil	76.037	69.699	66.198	78.007	82.454	67.210	70.186	45.291	71.673	54.834	43.144	60.090	784.824
COGS of olive oil	-97.141	-37.139	-26.479	-41.276	-40.638	-56.676	-65.845	-38.796	-49.159	-47.637	-43.884	-55.197	-599.869
Gross Profit	670.225	975.808	1.229.926	1.028.284	1.467.092	1.036.096	794.736	1.065.173	1.550.703	1.198.870	858.398	755.676	12.630.987
G&A expenses	-82.163	-94.048	-98.569	-83.578	-115.617	-106.934	-105.853	-83.884	-117.557	-109.432	-105.505	-59.465	-1.162.605
Sales commission	-77.969	-90.622	-108.082	-89.720	-124.571	-84.850	-78.023	-138.848	-171.327	-140.453	-100.319	-51.337	-1.256.121
Selling and distribution expenses	-111.164	-249.098	-248.751	-194.670	-280.174	-179.609	-174.847	-259.308	-354.799	-205.564	-239.834	-224.238	-2.722.058
Advertising expense	-1.183	-1.482	-2.771	-2.705	-22.090	-27.783	-2.754	-5.021	-4.921	-38.346	-4.126	-12.471	-125.653
Variable distribution exp	-114.314	-117.277	-187.214	-173.427	-206.040	-144.643	-168.790	-165.060	-236.321	-211.978	-137.479	-150.369	-2.012.911
Mnf fixed indirect	-55.171	-59.491	-59.931	-57.966	-61.257	-95.341	-82.316	-59.510	-76.040	-60.656	-65.475	-80.422	-813.575
Warehousing	-18.228	-19.768	-20.954	-19.070	-21.396	-19.908	-20.439	-24.216	-40.335	-41.244	-31.730	-42.869	-320.157
Finance income	27.027	31.413	-11.358	97.881	30.372	57.214	235.436	100.019	60.205	168.380	56.813	156.558	1.009.959
Finance expense	-38.471	-15.390	-95.462	-23.916	-787.827	-371.053	-166.560	-72.616	-80.175	-42.661	-50.558	-88.296	-1.832.985
Other income/(exp)	-8.680	-4.094	-13.064	-40.759	8.741	191	-711	-231	121	-1.038	12	-13.241	-72.754
Profit before tax	189.910	355.950	383.770	440.354	-112.769	63.380	229.879	356.499	529.553	515.878	180.196	189.527	3.322.127
Income tax charge	-75.717	-75.717	-75.717	-141.436	-84.380	-64.663	-52.663	-41.544	-71.208	-103.443	-34.982	93.228	-728.241
Deferred tax charge	37.678	37.678	27.740	27.740	27.740	42.125	45.099	30.030	341.268	18.275	-55.837	-240.336	339.200
Monetary gain/(loss)	0	0	0	0	0	0	0	0	0	0	0	0	0
Net income/(expense)	151.872	317.912	335.793	326.659	-169.408	40.842	222.314	344.984	799.613	430.709	89.376	42.419	2.933.086
Capex	1.930	52.029	17.604	7.051	2.765	43.352	10.615	3.905	12.334	5.115	1.385	4.118	162.202

ABC CORPORATION CASH FLOW STATEMENT (ytl)	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Net income before tax and monetary gain loss	189.910	355.950	383.770	440.354	-112.769	63.380	229.879	356.499	529.553	515.878	180.196	189.527
<i>Adjustment to reconcile net income to net cash provided by operating activities</i>												
Depreciation and amortization	58.276	54.397	58.199	57.743	57.892	57.988	58.160	58.227	58.345	58.328	58.346	58.344
Reversal of reserve for salaries	0	81.925	0	0	0	0	0	0	0	0	0	0
Reserve for salaries and wages	169.765	66.453	106.125	88.965	96.883	101.077	134.393	88.496	114.645	96.941	63.513	99.484
Reversal of prior months provision for discounts	-4.378	-647.069	-814.718	-963.184	-878.084	-990.835	-480.072	-383.915	-1.363.322	-1.427.136	-1.191.726	-936.231
Provision for current month's discounts	647.069	713.961	860.776	865.449	935.066	337.349	451.918	928.497	1.450.125	1.489.103	859.244	-285.152
Fx gain/loss from fc trade payables	-5.084	-15.672	46.869	-57.929	545.050	229.062	-128.499	-31.660	31.375	-73.985	12.392	-77.889
Fx gain/loss on leasing & borrowings	-20.867	-14.223	41.867	-36.267	295.067	88.133	-143.333	0	38.533	-62.667	13.200	-52.800
Loss on closing of Cunda	8.011	0	0	0	0	0	0	0	0	0	0	0
Reserve for employee termination benefits	15.633	4.916	5.967	-10.170	4.636	19.138	7.086	6.384	17.141	1.179	5.079	26.641
Loss on sale of fixed asset	1.332	0	14.100	41.111	-5.884	0	0	0	0	2.476	0	-4.274
Interest expense	27.509	11.554	22.214	12.107	17.189	12.211	3.991	7.656	10.528	5.737	9.296	3.763
Interest income	0	0	0	-4.671	-22.323	-27.535	-21.672	-25.765	-22.554	-19.820	-34.034	21.104
Net income adjusted for non-cash items	1.087.176	612.193	725.168	433.509	932.724	-110.030	111.850	1.004.418	864.370	586.035	-24.493	-957.484
(Increase)/Decrease in inventories	614.672	-186.871	393.429	11.126	-249.494	-513.787	198.644	-1.259.951	1.155.821	880.159	-453.481	470.404
Increase in trade receivables	537.746	1.583.684	1.338.592	-250.817	623.101	1.430.490	549.952	1.717	-3.592.604	215.437	2.599.893	1.935.412
Increase trade payables	-3.636.545	1.818.544	580.215	394.555	741.919	-605.614	-881.904	932.691	1.439.944	-1.618.828	-1.135.537	-96.897
Decrease in other current assets	53.972	-111.712	-157.586	1.970.170	-275.749	-224.541	-151.143	-176.106	-201.549	-129.223	62.129	-344.778
Decrease in other current liabilities	-168.849	-58.421	-13.298	21.986	-48.468	-46.932	-63.081	-706	-8.835	-55.438	-308.637	-50.749
Increase in non-current assets	-725	0	0	0	238	0	0	-1.943	0	0	-290	2.708
Interest paid	0	0	-40.065	0	0	-5.211	0	0	-187	0	0	-116.799
Interest received	0	0	0	4.671	21.094	27.827	21.271	25.521	21.335	22.080	33.604	-20.925
Employee termination benefits paid	-26.491	0	0	0	0	0	-19.733	-12.173	0	0	0	0
Other taxes paid	-75.809	-30.728	-57.266	-64.101	-54.567	-78.586	-82.796	-75.234	-77.347	-95.743	-68.974	-57.667
Prepaid/corporate tax paid	0	0	0	0	-362.565	0	0	-7	0	0	0	0
Net cash provided by operating activities	-1.614.852	459.322	92.005	2.521.100	1.328.233	-126.384	-316.940	438.227	-399.052	-195.522	704.213	763.225
<i>Cash flows from investing activities</i>												
Purchase of property, plant and equipment	-1.930	-52.029	-13.116	-7.051	-2.765	-43.352	-10.615	-3.905	-12.052	-5.115	-1.385	-4.118
Purchase of intangible assets	0	0	-4.488	0	0	0	0	0	-282	0	0	0
Proceed from closing of Cunda	6.505	0	0	0	0	0	0	0	0	0	0	0
Proceed from sale of fixed asset	15	0	695	0	137	0	0	0	0	4.140	0	4.333
Net cash provided by investing activities	4.590	-52.029	-16.908	-7.051	-2.627	-43.352	-10.615	-3.905	-12.334	-975	-1.385	215
<i>Cash flows from financing activities</i>												
Repayment of loans	-4.940.109	1.159.308	3.298.690	-4.626.681	-413.364	-78.586	-81.404	-411.601	-77.347	-95.743	-65.267	-1.951.44
Repurchase of loans	6.550.616	738.940	3.308.212	4.056.943	451.716	76.161	78.755	419.694	35.975	136.736	68.164	13.692
Dividends paid	0	0	0	0	0	0	0	0	0	-1.000.000	0	0
Net cash provided by financing activities	1.610.508	-420.367	9.521	-569.738	38.351	-2.425	-2.648	8.093	-41.371	-959.007	2.897	-1.937.75
Net increase in cash and cash equivalents	246	(13.075)	84.618	1.944.310	1.363.957	(172.161)	(330.203)	442.415	(452.757)	(1.155.504)	705.726	(1.174.31)
Cash and cash equivalents at beginning of the month	15.038	15.283	2.208	86.826	2.031.136	3.395.093	3.222.932	2.892.728	3.335.144	2.882.387	1.726.883	2.432.609
Cash and cash equivalents at end of the month	15.283	2.208	86.826	2.031.136	3.395.093	3.222.932	2.892.728	3.335.144	2.882.387	1.726.883	2.432.609	1.258.292

ABC CORPORATION CASH FLOW RATIOS	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Cash ratio	0,005	0,000	0,016	0,377	0,503	0,496	0,537	0,524	0,363	0,270	0,485	0,476
(Cash + Marketable securities)												
Current Liabilities												
Cash Flow from Operations Ratio	- 0,50	0,10	0,02	0,47	0,20	- 0,02	- 0,06	0,07	- 0,05	- 0,03	0,14	0,29
Cash Flow from Operations												
Current Liabilities												
Cash interest coverage ratio												
Adjusted operating cash flow												
Interest Expense												
cash from operations + interest paid + tax paid	-44	28	0	103	1	0	-2	5	-6	-6	13	6
Interest Expense												
The capital expenditure ratio												
Cash from operations	-837	9	5	358	480	-3	-30	112	-32	-38	508	185
Capital Expenditures												
Cash from operations to Debt												
Cash form operations	- 0,58	0,19	0,04	1,40	0,62	- 0,06	- 0,15	0,21	- 0,19	- 0,09	0,33	-
Total Debt												

Liquidity ratios:

Current ratio and quick ratio gives us information about the current debt paying abilities of the firm. Because, current ratio and quick ratio give us the proportion of current assets to current liabilities. Short term or current assets are more easily converted to cash than long-term assets. One firm would be considered more liquid than another firm would if it has a greater proportion of its total assets in the form of current assets. During the year this ratios are almost the same. In addition, the ratios are average 2. The industry average is 1, 54. The company ratio is higher than the industry ratio. It means there is no liquidation problem in the company.

Because, current assets, which are considered liquid generally, generate lower rates of return than long-term assets, it might be argued that firms with too much liquidity are not investing wisely. The inventory is almost 17% of the current liabilities and do not have so big proportion on the current assets, therefore the quick ratio and current ratio are almost the same during the year.

Asset Management Ratios:

Asset management ratios indicate how efficiently management utilizes its assets. Yearly asset turnover ratio is 3. There is seasonality effect on sales volumes. Every year in summer sales volumes reduces and in September sales increases. Therefore, total asset turnover and fixed asset turnover ratio have the highest value in September.

Average accounts receivable days is 32. DSO has the lowest value in August, September and May and the highest value in April. An average inventory turnover day is 19 days. Inventory turnover days have the lowest value in October and March and the highest value in August. An average accounts payable day is 32 days. Accounts payable days have the lowest value in Jan and the highest value in June. Average working capital day is 19. May and September have the lowest working capital days amount which are 6 and 7. Since account payable day is 7 in Jan the working capital day has the

highest value in January, which is 52. The main reason is here, the company delays the payments at the year-ends because of working capital management activities. The delayed payments are paid at the beginning of Jan and since we delayed year-end payments, we made early payment in Jan for some of their receivables. Because of that working capital day is 52 in Jan.

Leverage Ratios:

Leverage ratios measure the extend to which a company uses debt and the implicit of leverage on the company's ability to meet its interest payments. We know that the company has 1.300.000\$ export credit, which is paid in December, and the company has excess cash beginning from April. The debts are not so high and there is no risk for the back payment. Since the payment of export credit was made in December, the debt ratio is lower at the year-end. Average debt ratio is %40. Industry average is %50 that means the company has lower debt than the other companies in the same sector and the debt payment is not a problem. Times interest earned shows how much earnings could decline before the payment of interest was risked. The interest payment of export credits were made in December and the times interest earned is 1 in that month. The company used sometimes short-term credits for making payments but these credits are taken daily and every day the credit amount changes and generally after one week the credit is being closed. The interest payment of these kinds of daily credits (overdrafts) is made quarterly. Since the credit amount and time is so small, the interest expense is so small and it cannot be risky.

Profitability Ratios:

Return on sales gives us the amount which the company earned by every unit of sales. Average return on sales is %7. Industry average for the return on sales is %6. The company is more profitable than the most of the companies in the same sector. September is the most profitable month. In May the US\$ rate increased %17. Since we

have 1.300.000\$ export credit and the rate increase huge, the foreign exchange rate loss is so high and the financial expense is so high in that month. Therefore, we have loss in that month. The credits in foreign currency are a risk for the companies in emergency market countries. If we have foreign currency credit, we should plan the cash so precise and when we get closer to maturity date, we should try to have enough money in same currency with the credit.

The gross profit margin is %25. It is so high too. It shows us that the company has enough earning to cover nonmanufacturing expenses and provide net earnings.

Average ROI is %20. We know that the industry average is %9,3. The company's profitability with the given investment is more over than the other companies in the same sector. The profitability ratio most important to management is return on investments. (ROI), because it measures how well the company is doing given its investment in assets.

The Cash Ratio:

Cash ratio shows if the cash and securities easily convertible to cash are enough to cover the current liabilities. Average cash ratio is %47. The company received 2.160.742 YTL VAT refund in April. In Jan, Feb and March the cash was not enough to pay the current liabilities. After receiving the VAT refund the company had excess cash and the cash ratio get higher. Because, current assets, which are considered liquid generally, generate lower rates of return than long-term assets, it might be argued that firms with too much liquidity are not investing wisely.

The Cash Flow from Operations Ratio:

Net cash provided by the operating activities had the highest value in April, because of the VAT refund and the lowest value in January because of the high payments in that month. Trade payable is reduced so much in that month because of

these payments (most of them are delayed from the previous year) operating cash flows has the negative value and January is the worst month for the operating cash flows.

Cash interest coverage ratio:

Cash interest coverage gives a realistic indication of the company's ability to make the required interest payments. Cash interest coverage ratio has the maximum value in April because of the VAT refund. Cash interest coverage ratio has the minimum value in January because of the high payments.

The capital expenditure ratio:

The capital expenditure ratio measures the capital available for internal reinvestment and for payments on existing debt. The company has enough funds available to meet its capital investment, with some to spare to meet debt requirements.

Cash from operations to Debt:

This ratio indicates the length of time it will take to repay the debt, assuming all cash flow from operations is devoted to debt repayment. The lower the ratio, the less financial flexibility the company has and the more likely that problems can arise in the future. Except for the months which have negative operating cash flow there is no risk for the payment of the debt.

PART8

CONCLUSION

Cash flow statement is one of the important financial statements. Because we know that balance sheet and income statement gives information, which includes accruals. Cash flow statement gives cash based data, and main cash inflows and outflows can be represented by the help of cash flow statement and with the help of that data management can make decisions that are more realistic.

There are two key financial objectives of every business organization: operating profitably and staying solvent, which means that the company has no liquidity problem. However, recently increasing the assets of the company accepted as the most important financial objectives of the company. An income statement measures the success or failure of the business in achieving its objective of profitable operations. With the help of the comparative balance sheet date, if there is increase or decrease in assets can be analyzed.

Staying solvent means being able to pay the debts and obligations of the business as they come due that means the company do not have any liquidation problem. To some extent, a balance sheet shows whether or not the business have liquidity problem. It shows the nature and amounts of current liabilities. From this information, users of the financial statements may complete such measures of liquidity as the current ratio and the amount of working capital.

However, assessing the liquidity structure of the company involves more than just evaluating the liquid resources on hand at the balance sheet date. Cash flow statement gives information about the cash sources and the usage of this cash. Therefore, the data received from cash flow statement gives information that will be used to predict the future cash structure of the company. The cash flow statement provides information that is more objective about a firm's ability to generate cash flows from operations, trends in cash flow components and cash consequences of investing

and financing decisions and about management decisions regarding such critical areas as financial policy (leverage) dividend policy and investment for growth

In our example, we know that in April, we received VAT refund and we know that we had cash excess after that month. Every year if there is no extraordinary problem we will receive VAT refund in April. Therefore, we can make more purchase of raw material in that month. Because after April in the summer the purchase price of the oil is getting higher every year. Before the price increase, making inventory with cheaper raw material is very important decision for the company's profit. We know that corporate tax payment is always made in May. We should have enough money in that month to pay the tax liability.

As explained in the thesis, there are two different cash flow statement preparation methods: Direct method and indirect method. IFRS encourages the usage of the direct method and let the usage of the indirect method. Direct method presents the all the cash inflows and outflows. With the help of the direct method, one can analyze the cash sources and uses of the company more detailed and can predict the future cash structure of the company reliably. However, companies prefer to use indirect method, since it is easier to prepare. The balance sheet and income statements items can be used without any additional computation in the indirect method. If direct method is used, some additional computations should be done to find cash received from customers, cash paid to suppliers.

Cash ratios give us very important data about the cash position and moreover these ratios gives us opportunity to make comparison of the cash data with the other firms in the same industry or make comparison of the monthly data. With the help of those ratios, managers can see the real picture more easily and can make decisions that are more realistic.

International Accounting Standards gives the rules for the format and contents of the cash flow data. With the help of the international accounting standards, all companies are talking in the same language and understanding of the external information users is easier.

SOURCES

BOOKS

Özer, Hüseyin Devrim, “**Uluslararası Standartlara Göre Nakit Akım Tablosunun Düzenlenmesi ve Türkiye Uygulaması**”, Unpressed Doctorate Thesis, Marmara Üniversitesi SBE, 2004.

Yılmaz, Nuran, “**İşletmelerde Nakit Akış Planlaması**”, Unpressed NBA Thesis, Marmara Üniversitesi SBE, 1998.

Güvemli, Oktay, **İşletmelerde Nakit Akış Planlaması**, İstanbul: Çağlayan Press, 1977.

Kieso, Donald E., Weygandht, Jerry J. and Warfield, Terry D., **Intermediate Accounting**, New York: John Wiley & Sons, Inc., 2001.

Epstein, Barry J., Mirza, Abbas Ali, **IFRS 2005 Interpretation and Application of International Accounting and Financial Reporting Standarts**, USA: John Wiley & Sons Inc, 2005.

International Accounting Standarts Board, **International Financial Reporting Standarts**, London: International Accounting Standarts Committee Foundation, 2004.

Bolak, Mehmet, **Finansman**, İstanbul: İTÜ Bibliothek, 1990.

Günege, Uğur, **Financial Accounting, Principles and Turkish Accounting Practices**, İstanbul: Marmara University Faculty of Economic and Administrative Sciences Press, 1990.

Akgüç, Öztin, **Finansal Yönetim**, 6.Edition., İstanbul: Avcıol Press, 1994.

Weston, J. Fred, Besley, Scott and Birgham, Eugene F., **Essentials of Managerial Finance**, 11.Edition, USA: The Dryden Press, 1996.

Yüksel, Ali Sait, **Para Bulma ve Yatırım, İşletmelerde Sermaye Yönetimi**, 3. Edition, İstanbul: AR Press, 1982.

Akgüç, Öztin, **Mali Tablolar Analizi**, 7. Edition, İstanbul: Avcıol Press, 1987.

Ataman, Ümit, **Genel Muhasebe, Muhasebede Dönem Sonu İşlemleri**, Voll 2, İstanbul: Türkmen Press, 1996.

Şensoy, Necdet, **Nakit Akış Tabloları Hazırlanması, Standartları, Analizi**, İstanbul: Yaylım Press, 2002.

Öz, Oktar, **“Finansal Planlama Bütçeleme Nakit Akışı Analizi ve Bir Uygulama”**, Unpressed NBA Thesis, 1993.

Çalık, Adnan, **“Firmalarda Nakit Yönetimi ve Nakit Yönetiminin Banka Karlılığı Üzerindeki Etkileri”**, Unpressed NBA Thesis, 2001.

Aşçı, Aydan, **“Halka Açık Şirketlerin Nakit Akış Esasına Göre Değerlendirilmesi”**, Unpressed NBA Thesis, 2003.

Kallberg, Jarl G., Parkinson, Kenneth L., **Current Asset Management Cash, Credit and Inventory**, 1984.

Erdoğan, Melih, **İşletmelerin Nakit Yönetiminde Nakit Bütçelerin Hazırlanması ve Bağlantılı Tablolar**, 1989.

Hoşcan, Yaşar, **İşletmelerde Finansal Veri Tabanı Tasarımı ve Nakit Akışına İlişkin Bir Uygulama Denemesi**, 1987.

Smith, Jack L., Keith, Robert M., Stephens, William L., **Accounting Principles**, New York: McGraw-Hill Book Company, 1989.

Needles, Belverd E., Anderson, Henry R., Caldwell, James C., **Principles of Accounting**, Boston: Houghton Mifflin Company, 1993.

Meigs, Walter B and Meigs, Robert, **Accounting the Basis for Business Decisions**, 1987.

Hornigren, Charles T., Harrison, Walter T. Jr., **Accounting**, New Jersey: Prentice Hall , 1989.

Dyckman, Thomas R., Dukes, Roland E. and Davis, Charles J., **Intermediate Accounting**, Vol.1, Boston, Massachusetts: Irwin/McGraw-Hill, 1998.

Dyckman, Thomas R., Dukes, Roland E. and Davis, Charles J., **Intermediate Accounting**, Vol.2, Boston, Massachusetts: Irwin/McGraw-Hill, 1998.

Helmkamp, John G., Imdieke, Leroy F. and Smith, Ralph E., **Principles of Accounting**, 3. Edition, USA: John Wiley & Sons, 1989.

Larson, Kermit D., **Fundamental Accounting Principles**, 13. Edition, Homewood: Irwin, 1993.

Meigs & Meigs, Bettner, Whittington, **Accounting the Basis for Business Decisions**, New York: McGraw Hill ,1996.

Edwards, James Don, Hermanson,Roger H., Salmonson, R.F., **A Survey of Financial and Managerial Accounting**, Boston, 1989.

Meigs , Walter B., Mosich, A.N. and Johnson, Charles E., **Intermediate Accounting**, 4. Edition, USA: McGraw-Hill Book Comp, 1978.

Indieke, Leroy F., Smith, Ralph E., **Financial Accounting**, New York: John Wiley&Sons, 1987.

Fess, Philip E., Niswonger, C. Rollin, **Accounting Principles**, 13th Edition, USA: South-Western Publishing Co., 1981.

Chasteen, Lanny, Flaherty, Richard and O'Connor, Melvin, **Intermediate Accounting**, Boston: Irwin & McGraw Hill, 1998.

Danos, Paul, Imhoff, Eugene, **Intermediate Accounting**, 1986. (yanlıs sayfalar cekilmis)

Asman, Cowen, Mandell, **Accounting Today**, 1986.

Berk, Niyazi, **Finansal Yönetim**, 5. Edition, İstanbul: Türkmen kitapevi, 2000.

Lewis, Ronello B., **Financial Controls for Management**, Prentice Hall Inc., 1961.

Welch, Glenn A., Hilton, Ronald W. and Gordon, Paul W., **Budgeting Profit Planing and Control**, 5. Edition, Prentice Hall International Editions, 1988.

Kolb, Robert W., Rodriguez, Ricardo J., **Finansal Yönetim**, Ankara : Sermaye Piyasas Kurulu, 1996.

Akdoğan, Nalan and Tenker, Nejat, **Finansal Tablolar ve Analizi**, Ankara: Savaş Yayınları 1988.

Özdemir, Muahrrem, **Finansal Yönetim**, Gazi Büro Kitapevi, 1997.

White, Gerald I., Sondhi, Ashwinpaul and Fried, C. Dov, **The Analysis and use of Financial Statements**, New York: John Wiley and Sons, 1998.

Hillman, A. Douglas, Kockanek, Richard F. and Reynolds, Isaac N., **Principles of Accounting**, 5. Edition, Chicago: The Dryden Press, 1989.

Akdoğan, Nalan and Sevilengül, Orhan, **Türkiye Muhasebe Standartlarıyla Uyumlu Tekdüzen Muhasebe Sistemi Uygulaması**, 10. Edition, Ankara: Gazi Kitabevi, 2000.

Yalkın, Yüksel Koç, **Genel Muhasebe İlkeleri ve Uygulaması**, Ankara: Turhan Press, 1989.

ARTICLE

Necdet Şensoy, “**Değerleme Esaslarında Eğilim ve Etkileşimler**”, Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü Türkiye XXII. Muhasebe Eğitimi Sempozyumu, Ankara, 2003.

Necdet Şensoy, “**Muhasebeye Gerçekleşme Kavramı ve Yansımaları “Kapsamlı Kar” (Comprehensive Income)**”, Muhasebe Bilim Dünyası Dergisi, Vol. 4, No. 2, (June2002).

Statements of Cash Flows & Analysis of Ratios, [Electronic Version], Cash Rules 2003, p. 49-75, (26.10.2006).

Monsen, Norvald, **Cameral Accounting and Cash Flow Reporting: Some Implications for Use of the Direct or Indirect Method**, [Electronic Version], European Accounting Review, Dec 2001, Vol.10, issue 4, p705-724, (26.10.2006).

Nurnberg, Hugo, **Income Taxes in the Cash Flow Statement**, [Electronic Version], CPA Journal, June 2003, Vo.73 issue 6, p 48, 7p, 1c, (26.10.2006).

Matsumoto, Keishiho, Hoban, James P., **Cash Breakeven Analyses amd Leverage Indices**, [Electronic Version], Review of Pasific Basin Financial Market and Policies, Vol.6, N0.4, (2003) p.501-547, (26.10.2006).

Brahmasrene, Tantatape, Srtupeck, C. David and Whitten, Donna, **Examining Preferences in Cash Flow Statement Format**, [Electronic Version], CPA Journal, October 2004, Vol. 74 issue 10, p 58, 3 p, (26.10.2006).

Let's Get Physical, [Electronic Version], Finance Week 3.28.2005 Supplement, p54-57, 4 p, (26.10.2006).

Stock Picks, Attractively Valued Free-Cash-Flow Growers, Dow Theory Forecast, [Electronic Version], July 24 2006, (26.10.2006).

Siegel, Marc A., **Accounting Shenanigans on the Cash Flow Statement,** [Electronic Version], CPA Journal, Mar2006, Vol. 76 issue 3, p38-43, 6 p, (26.10.2006).

McClearn, Matthew, **Cash Flow Shell Games,** [Electronic Version], Canadian Business, 10.25.2004, Vol. 77 issue 21, p163-164, 2p,1c, (26.10.2006).

Randerson, Erik, **In an Era of Full Disclosure, What about Cash?,** [Electronic Version], Financial Executive, Sept 2004, Vol. 20 issue 6, p48-50, 3p, (26.10.2006).

Rosen, Al, **Follow the Money,** [Electronic Version], Canadian Business, 2,17,2003, Vol.76 issue 3, p 25, 1p, 2c, (25.10.2006).

Benshoof, Mike, **Financial Management – Part 6,** [Electronic Version], Professional Builder, Jul2005, Vol. 70, issue 7, p45-52, 5p, (27.10.2006).

Willax, Paul, **Cash is King, in new ventures and old.** [Electronic Version], NH Business Review, May 12-25, 2006, Vol.28, Issue 10, p25, 5p (26.10.2006).

Shepherd, Connie National City Bank, **Use Your Statements to Enhance Financial Performance,** [Electronic Version], Indiana Business Magazine, May 2003, Vol. 47, Issue 5, P6 2p (27.10.2006).

INTERNET

Ben McClureFree, **Cash Flow: Free, But Not Always Easy**,
<http://www.investopedia.com/articles/fundamental/03/091703.asp>

Phill Weis, **Calculating Cash Flow Ratios**,
<http://www.fool.com/research/2000/features000707.htm>, July 07, 2000

Richard Loth , **Debt Ratios: Interest Coverage Ratio**
<http://www.investopedia.com/university/ratios/debt/ratio5.asp>

American Institute of CPA's, **The power of cash flow ratios**
<http://www.thefreelibrary.com/The+power+of+cash+flow+ratios-a021224654>