

## METHODS USED FOR ANALYZING CASH FLOW TABLE AND CASH FLOW TABLE ACCORDING TO TURKEY ACCOUNTING STANDARDS<sup>1</sup>

**Doç. Dr. H. Arif TUNÇEZ**

Selçuk Üniversitesi, Akşehir İİBF, [hatuncez@selcuk.edu.tr](mailto:hatuncez@selcuk.edu.tr)

Konya / Türkiye

ORCID: 0000-0001-5834-3450

**Dr. Öğr. Üyesi Aytaç DEMİRAY**

Selçuk Üniversitesi, Akşehir MYO, [demiray@selcuk.edu.tr](mailto:demiray@selcuk.edu.tr)

Konya / Türkiye

ORCID: 0000-0003-3872-172X

### ABSTRACT

The combination of businesses in the globalizing economy and different countries has led to different accounting practices. Businesses have thus been forced to maintain different financial statements and accounting records for each foreign market in which they operate. With the development of international trade, a common financial report for businesses operating in foreign markets has been evaluated and interpreted. It is to eliminate the differences in accounting of the businesses operating in the international markets and to ensure that a common accounting system is used. In this case, international accounting standards were published. To ensure compliance with standards, International Accounting Standards (UMS) and International Financial Reporting Standards (UFRS) have been translated into Turkish for better understanding and interpretation. Turkish Accounting Standards (TMS) and Turkish Financial Reporting Standards (TFRS) were created and published in the Official Gazette in 2005. Financial reporting standards require that the financial status table, comprehensive revenue table and equity exchange sheet and cash flow table be reported and presented together. Considerations for the preparation of the cash flow table are regulated by the "TMS 7: Cash Flow Tables" standard as a separate standard. TMS 7 was released for the purposes of performing the account period, which started after 31.12.2005. The cash flow table shows the increase and decrease in cash flows arising from business activity transactions and business activities. The purpose of the cash flow table is to explain the variation between an asset item that is equal to cash and cash. The cash flow table traces the collections, payments, and uses for the payments that the business has made. This study outlines descriptions and concepts regarding the aspects, methods and cash flow statement that should be considered when preparing the cash flow table.

**Keywords:** cash flow statement, direct method, indirect method

<sup>1</sup> This study is an extended version of the paper which was presented at the International Conference On Global Practice Of Multidisciplinary Scientific Studies-IV held in Girne, Turkish Republic of Northern Cyprus on April 28-30, 2023.

## INTRODUCTION

The impact of globalization has been seen in the economy as well as in art, society, politics and technology. Globalization in the economy has increased the importance of investment in the International Markets, and since businesses no longer want to operate on their own markets but also on different markets, they need a common accounting language in which financial information can mean the same thing, express the same simplicity and compare. Due to these improvements and needs, the worldwide setting up of Accounting Standards has accelerated adoption and compliance efforts.

International Accounting Standards (UMS) are created for the accuracy and reliability of financial statements and are intended to provide financial table readers with more explicit and more reliable information. International accounting standards and the regulation and submission of the cash flow table are mandatory, with respect to the preparation of this table regulated by the TMS 7 Cash Flow Table standard.

In a constantly evolving economy, with the highest level of competition, businesses are able to maintain their cash assets by very well planning and controlling them. For businesses looking to ensure their own profits and the continuity of activities the business is operating it is important to adopt a rationalist approach to managing and analyzing cash flows. The cash flow chart is an important tool in evaluating business performance and presenting financial results as a means of improving technology capabilities. Provides the ability to track payments made by the business with the resources of the collections and their usage fields using the cash flow table.

The cash flow table shows the increase and decrease in cash flows arising from business activity transactions and business activities (Kısakürek, Ayarlıoğlu, 2007).

The cash flow table helps businesses plan for cash by pre-empting what amount of cash they need to be able to maintain continuity. With the help of a cash flow table, businesses can help prevent timely measures by planning for cash in order to avoid future cash jams or adverse situations. Enables businesses to optimally spend excess cash on good cash planning.

Cash management through the cash flow table is to ensure cash flow to maximize profits without lowering the efficiency of financial institutions to ensure that they do not become financially strapped (Sakarya, 2008).

## CASH MANAGEMENT

Cash management is the optimum amount of money that a business must retain without allowing cash surplus and cash deficits. The purpose of cash management is to increase the importance of the amount of money the business pays, not the amount of cash the business will pay between payments and receipts in a given period. In addition, cash management provides the most appropriate form of surplus and lack of cash due to payment and collection for the company and company's financial activities (Apak, Tunali, 2004).

Possession of less or more cash than is required by the business results in some adverse effects. That's why a good cash management business should eliminate these glitches and regulate cash management to increase the profits of the business. Management of cash of the enterprise is a key to the business's financial success. Many problems will arise if the business's cash inflows are not kept to good use. Delays in collections, delays in product or service production, or problems may result in both loss of credibility and material costs of the business.

## THE REGULATORY PURPOSE AND BENEFITS OF THE CASH FLOW TABLE

The cash flow table aims to explain the variation between an item of assets that is equal to cash and cash. The cash flow table traces the collections, payments, and uses for the payments that the business has made. The cash flow table shows how the business creates cash and how this cash is used. Knowing where cash is coming from among businesses is important to anticipating whether cash may be available in the future.

The business' knowledge of where the cash is used provides information about the business' power to generate cash. Information from the cash flow chart is evaluated based on the business's economic conditions, business criteria such as growth rate (Gücenme, Arsoy, 2006).

The cash flow table describes that profit made at the end of the period in equivalent assets of cash and cash is not in the safe. The reason why the business is short of cash assets and tight on dividend payment is understood through the cash flow matrix, even though it made a profit at the end of the quarter (Çiftçi, Sarıoğlu, 2007).

The cash flow table, when used with other financial statements, provides the partners with the information needed to evaluate the ability of the business to influence the change in net activities generated by the business to ensure that the business is aligned with the amount and timing of the financial flows and the conditions and opportunities that are constantly changing (TMS 7, m.4). One of the main objectives of the Cash Flow Chart is to provide information to corporate executives, investors, lenders.

The cash flow table is an important factor for the business. The business cannot realize its financial activities without adequate cash flow. Helps us see clearly the activities causing the cash outflow (Cavlak, Cebeci, Güneş, 2017).

## **METHODS USED IN CASH FLOW TABLE**

Two methods are used in the preparation of the cash flow table, direct (gross) method and direct (net profit) method.

### **Direct Method**

The direct method, also called the gross method, differentiates cash inflows from activities into sources and cash outflows from activities into between uses. In other words, if the items on the revenue table have provided cash inflows, then they are included among the resources, if they have resulted in cash outflows. According to this method, editing the cash flow table takes advantage of the balance sheet and revenue table and creates the starting point for the editing of the revenue table cash flow. Starting calculations from revenue line in preparation of cash flow table is the basic property of cash flow table prepared according to direct method (Çiftçi, Sarıoğlu, 2007).

The direct method for reporting cash flows for business activities is the model for which gross cash inflow and gross cash outflows are specified by the parent groups. Parent groups are formed by examining the accounting records of the business. In this method, each of the items in the revenue table will be adjusted based on the increase or decrease in related financial status table items, converting revenue table items that are recognized based on accrual to cash in or out. This method is also called the revenue table method. This method shows gross cash inflows and outflows (Şensoy, 2002).

Preparation of cash flow table using direct method easily reports cash flow resulting from business operations, cash and cash-like inflows generated from customers, cash outflows resulting from acquisition of goods and services from suppliers, employees and other businesses (Kisakurek ve Demir, 2006).

Direct management cash flows relating to business operations differentiate between cash receipts and payments related to business operations (Gücenme ve Arsoy, 2006).

When businesses prepare cash flow tables directly according to the method, they also provide information about the cash flow table prepared according to the direct method. The net cash flow amount generated by the business from its core activities appears to be the same in both methods. However, the direct and indirect methods have different beginnings.

## Indirect Method

The derogatory method is another method used in the editing of the cash flow table. In the indirect method, calculations are started from the amount of period profit or loss in the revenue table. In the Indirect method, corrections are made to revenues that do not provide cash inflows and expenses that do not require cash outflows (Rai, 2003).

In the most direct method, there is no cash-flow depreciation, redemption fees, reciprocity charges, outstanding asset sales profits or losses, the amount of lump sum charges for the period, and the share of lump sum revenue for the period being added or removed. In addition, the revenue reported in the revenue table, which has not yet been collected, is being deducted from the total based on the accrual, and the expense elements that have not yet been paid are added back to the total. These operations result in the use of net cash due to cash inflows or activities resulting from business, investment, and financing activities ((Kısakürek ve Ayarlıoğlu, 2007).

There are two factors in preferring the nonstop method. The first is that direct management is very costly to implement, and the second is a direct method that does not explicitly communicate accrual-based financial situations.

The nonstop method makes it easier to understand the balance sheet and income table—its emphasis clearly on the cash flow table as a result of cash inflows and outflows derived from what activities are between the balance sheet and the revenue table—is another factor in the preference of this method (Wallance, Choudhury, Adhikari, 1999).

The direct method is not as detailed and descriptive as the direct method. Preparation of cash flow table by direct method indicates a net cash surplus or shortage from business operations but does not itemize cash inflows or outflows resulting from activities. The reporting of cash flows through activities is more easily understood than reporting according to the direct method. Because the direct method is how the distribution of cash inflows and outflows in important items happens. The derogatory method does not show the impact of deferrals and accruals from activity items. This makes it difficult to understand the indirect method (Çiftçi and Sarıoğlu, 2007).

The direct method better demonstrates the quality of real cash flows and the authenticity of cash uses, according to the indirect method. This method also works better in predicting future cash flows. The derogatory method is the exchange of working capital in net income. The main advantage of this method is that it differentiates the operating profit of the business from its net cash flows (Cavlak, Cebeci, Gunes, 2017).

It is the method by which pre-tax profit or loss is reported by correcting according to the effects of income or expense items for cash flows related to accruals or deferrals that do not require cash outflows or inflows at that time. A method by which profit or loss is calculated based on accrual basis in a sense, or deducted to cash profit or loss in the period. The net profit and activity illustrates the relationships between cash flow.

## DEPARTMENTS OF CASH FLOW TABLE

In the cash flow table, businesses classify cash flows for the period as "business activities", "investment activities", and "financing activities", offering a structure of their own (Gurbuz, Cakici, Akgul, 2006). The inclusion of cash flows in three groups is due to basic finance theory. The collection of cash flows in three groups is due to a fundamental financial theory. Businesses can fulfill their "investment activities" — they can provide cash from domestic and international sources to meet their financial obligations. Cash from internal sources is provided as a result of the "business operations" of the business. Cash from outside sources is provided from the "financing activities" of the business, such as borrowing, stock issuance, etc. (Gücenme and Arsoy, 2006).

### **Business Operations**

Business operations refer to the operation's accomplishments in order to achieve the grossing of the key business area. Businesses make different decisions for their purposes and there is a common function for each different business to implement these actions. These different editions are considered various functions such as supply production.

Cash flows from business activities are as follows (TMS 7, m., 14):

- 1-Cash inflows from sold goods and services,
- 2-Cash inflows for commission, fee and other revenue,
- 3-Cash outflows resulting from payments for goods and services,
- 4-Cash outflows resulting from payments to employees and workers,
- 5-Cash inflows or outflows incurred by insurance companies due to premiums, compensation, annual payments and other policy-related obligations, including
- 6-Cash outflows related to other taxes not directly related to funding or investment activities, or cash inflows for tax returns incurred under the applicable taxes.

### **Investment Activities**

Cash flows due to various business activities represent the basis of the long-term funds of the business, making it the most important part of the cash flow table. Business is an activity that leads to the ability to pay its own debts, maintain the continuity, distribute the dividend at the end of the term, and provide new investments without anyone needing them. The process and events involved in identifying losses incurred by a variety of cash flows due to business activity.

Cash flows from investment activities are as follows:

- 1-Cash inflows and outflows related to the acquisition and sale of material and non-financial assets and other long-term assets. These payments also include capitalized development spending and cash outflows from the business-owned, seemingly tangible assets that are being built and manufactured.
- 2-Cash outflows from a different business to participate in or to buy the borrowing tool of that business, and to participate in the joint management partnership of that business, unless they are related to the cash-like or purchase-held vehicles, cash inflows from the sale of another business's share of the stock or business in a joint venture, were an opportunity for the sale of the company's share.
- 3-Cash outflows and cash inflows associated with collecting, and other financial institutions' advance and borrowing from third parties by businesses, excluding transactions that financial institutions perform,
- 4-Cash inflows and outflows for futures or forward, option and swap agreements including those related to purchasing and financing activities.

### **Funding Activity**

It can be described as a whole of the activities that differentiate between funding activities and business equity and the costs of foreign resources. Various financing activities of the business can be identified as activities that alter the nature and amount of the business's resources and foreign sources (TMS 7, m., 6). Financing includes many funding business activities such as cash flows, debt repayment, new borrowings, stock export, and dividend. Cash flows resulting from these activities include multiple business finances, such as cash flows occurring in the current and future financing of the business, the emergence of different and new liabilities, and stock purchases.

Cash flows related to funding activities include the funding flow to the business - covering the part described by the subsidiaries and creditors to determine the part of the business that will be claimed from future cash flows (Whitfield, 2004).

Cash flows from funding activities are as follows (Örten, Kaval, Karapınar, 2007):

- 1-Cash inflows generated from the export of stock and other equity vehicles,
- 2-Cash outflows resulting from a reduced capital or the start of the business's buying stock,

- 3-Cash inflows from other long- and short-term credits derived from lending tools export,
- 4-Cash outflows for debit payments,
- 5-Cash outflows resulting from debit payment originating from financial leasing agreements.

### **METHODS USED IN CASH FLOW TABLE ANALYSIS**

The objective of financial statement analysis is to analyze, interpret, and evaluate assets and resources from one or more periods, through various technical and methodologies, through the means and conditions of the business. It is important to provide accurate and complete information to business decision makers in order to analyze financial statements.

The cash flow table can be analyzed and interpreted using different techniques and methods. Techniques used for analyzing cash flow tables are analysis of comparative tables, trend percentages analysis, and rate analysis.

#### **Comparative Tables Analysis**

Financial statements from two or more periods of a business benefit from the analysis of comparative financial statements if they are to be analyzed in the sequential periods. Business tables from multiple periods are created using this method. These tables enable us to see the difference between how a business finances past and present, and how it finances over past years. Furthermore, with the help of analysis of comparative tables, inferences can be made about the future financial situation of the business.

The main purpose of the comparison charts is to identify each of the different items in the financial statements as of the current and past period, and to lead to the determination of the future based on the information gathered. The greatest benefit of the analysis of comparative tables is that it provides information about the area of business development that is being analyzed or done. For analysis to be useful, the information contained in the tables must be the same length, reported according to the same and common accounting principles, and the amounts must be comparable to each other without the impact of inflation.

#### **Trend Percentages (Trend Analysis)**

Trend analysis helps the company's financial managers and analysts learn about the current state of affairs. This technique is used when business analyzes over a long period of time. In the trend analysis method, the goal is to calculate percentages of the increments or decreases represented by sample financial statement items of items in subsequent years in financial statements. The trend analysis method is based on examining the course of items in the financial statement that they eventually reveal. This method provides a number of forecasts and future activities for businesses, taking into account the financing and economic activities of the past years. Financial statements of many years are needed before a trend of percentages analysis can take place.

#### **Ratio (Rate) Analysis**

When we look at the ratio conceptually, it's the relationship between two amounts that's predisposed to logic. The relationship between these two amounts is considered a fraction or a percentage. In a different way, the financial function of the business or the relationship between the meaningful numbers within it. The most widely used method of financial analysis to measure and interpret business financial performance is the rate analysis method (Sarıkamış, 2007). Another name for rate analysis methods is the rational analysis method. This analysis method assumes that the assets and items in the cash flow table are many times the amount each other has. Calculated rates based on the cash flow table are the method of comparisons for the same period or different periods in both the same business and different businesses, as calculated from the cash flow tables in the current period or the previous period. In other words, algebraic functions are established between accounts and groups to demonstrate the business's economic and financial incomes and profitability.

The rate analysis method is applied to all financial statements apart from other analysis techniques, allowing the disclosure of the relationships between the hidden items contained in the financial statements, resulting in easier and more understandable financial statements. The rates for the cash flow table are as follows (Kargin and Aktas, 2011).

**Overall Cash Flow Rate**

General cash flow ration measures the capacity to cover cash flows for investment and financing activities of amounts generated from business activities (Yilmaz, 1999). The overall cash flow rate is calculated as follows:

Overall Cash Flow Rate	=	Cash from Business Activities
		Cash outflows For Financing and Investment

**Short-Term Cash Delivery Power Rate**

Specifies the ratio of cash inflows from actual activities the business has done to activity, investment, and financing activities. Over the short term, the cash-delivery power ratio is calculated as follows:

Short-Term Cash Delivery Power Rate	=	Net Cash Provided From Core Activities
		Cash inflows provided From Activities, Investments and Financing Activities

**Rate for Investment Evaluation**

Shows how the business is able to cover its investment expenditures without borrowing. The rate at which investments are evaluated is calculated as follows:

Rate for Investment Evaluation	=	Net Cash Provided From Core Activities
		Net Cash Used in Investment Activities

**Rate of Cash Flow Competency**

The cash flow sufficiency scheme is used to allow businesses to pay the resulting debts and examine the power to generate cash to the extent that they can use to ensure continuous business operations and distribute dividends to their partners at the end of the quarter. Rate of cash flow competency is calculated as follows:

Rate of Cash Flow Competency	=	Cash From Business Activities
		Long Term Debit Payment + Asset Purchase + Royalty Paid

**Debit Fulfillment Rate**

The debt reimbursement rate indicates the number of years debt incurred by business operations can be repaid (Yilmaz, 1999). The debt reimbursement rate is calculated as follows:

Debit Fulfillment Rate	=	Total Debit
		Cash from Business Activities

### Ratio of Cash Return For Sales From Business Activities

The cash return rate of sales derived from business activities shows that sales contribute to the cash quantity obtained from return rate activities on the business activity. The ratio of return of sales from business operations is calculated as follows:

Ratio of Return of Sales from Operating Activities	=	Cash from Business Activities
		Sales

### Assets' Cash Creation Power Rate

This is the ratio of the assets in the financial statement to the ability to generate cash. The power of assets to generate cash is calculated as follows.

Assets' Cash Creation Power Rate	=	Cash from Business Activities
		Total Entities

### Asset Purchase Rate

This rate method shows the level of coverage of capital expenditures made by the business through internal resources. VSAO is a tool to gage the link between business's ability to generate cash and investment expenditures for entities that stop. The asset purchase rate is calculated as follows:

Asset Purchase Rate	=	Cash from Business Activities
		Cash Paid For Asset Purchase

## RESULT

The cash flow chart is presented as a critically significant picture of how investors and their respective companies benefit the business to invest in management and business owners. The cash flow table helps ensure that the business is not faced with any issues, but with appropriate actions before a potential downturn occurs. The cash flow statement is important in that measures are taken to improve the efficiency of the business's possible activities and to ensure that the activities are fully executed in the event that the cash is insufficient. Due to various problems in many countries, including various economic fluctuations, inflation, and crises, many businesses have raised the importance and added value to the cash flow chart of business and financial institutions due to various problems, such as financial crises.

The ability of today's businesses to sustain their various activities without disrupting them depends on their ability to generate cash, which is just as important as the ability to make a profit. Businesses that have made profits but failed to generate the cash needed for the business will sell assets they have at a fraction of their value and close the liabilities. The business has taken this action to halt many of the business's activities, as well as to close them down. The cash flow table organized in TMS 7 examines the cash flow structures of businesses, providing the necessary information about the cash generated by the business through various activities.

As a result, it helps business owners and managers ensure continuity of the business by determining whether they have enough cash to sustain the business, and how to evaluate new cash creation opportunities if the cash supply is insufficient.

## References

- Apak, S., Tunalı, E. (2007). "İnşaat Sektöründe Nakit Yönetimi", Muhasebe ve Finansman Dergisi, 36: 50-59.
- Cavlak, H., Cebeci, Y., Güneş, N. (2017). "Nakit Akış Tablolarının İçerik Analizi Yöntemi İle Değerlendirilmesi", International Journal of Academic Value Studies, 13: 234-246.



Çiftçi, Y. ve Sarıoğlu, L. (2007). “Nakit Akış Tablosu İlgili Türkiye`deki Düzenlemeler ve Uluslararası Uygulamalarla Karşılaştırılması”, Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi. 10 (1-2): 181-200.

Gücenme, Ü., Arsoy, A. P. (2006). “Muhasebe Standartlarındaki Sınıflandırılmış Nakit Akım Tablosu Formatı İle Performansın Ölçülmesi”, Muhasebe ve Finansman Dergisi, 30: 66-74.

Gürbüz, G., Çakıcı, C., Akgül, B. A. (2006). Türkiye Muhasebe Standartları Uygulamaları. Beta Basım Yayın. İstanbul.

Karğın, M., Aktaş, R. (2011). “Türkiye Muhasebe Standartlarına Göre Raporlanmış Nakit Akış Tablosu Ve Analizi. Muhasebe ve Finansman Dergisi”, 52(7): 1-24.

Kısakürek, M. M., Ayarlıoğlu, M. A., (2007). “Endirekt Yönteme Göre Nakit Akım Tablosunun Hazırlanması”, Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 25(1): 193-213.

Kısakürek, M. M., Demir, M.. (2006). “Nakit Akım Tablosunun Hazırlanmasında Direkt-Endirekt Yöntem Tartışması”, Muhasebe ve Finansman Dergisi, 30: 201-209.

Örten, R., Kaval, H., Karapınar, A. (2007). Türkiye Muhasebe-Finansal Raporlama Standartları. Gazi Kitabevi, Ankara.

Rai, A. (2003). Reconciliation of Net Income to Cash Flow From Operations: An Accounting Equation Approach. Journal of Accounting Education, 21.

Sakarya, Ş. (2008). “Nakit Yönetiminde Nakit dönüş Süresi Analizinin Kullanılması: IMKB'deki KOBİ'ler Üzerine Ampirik Bir Çalışma”, Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 13(2): 227-248.

Şensoy, N. (2002). Nakit Akış Tabloları. Yayılım Yayıncılık, İstanbul.

TMS 7 Nakit Akış Tablosu Standardı

Wallance, R. S., Choudhury, M. S.I., Adhikari, A. (1999). “The Comprehensiveness of Cash Flow Reporting in the United Kingdom: Some Characteristics and Firm-Specific Determinants”, The International Journal of Accounting, 3(34): 311-347.

Whitfield, O. B. (2004). “Statement of Cash Flows: Time for Change”, Financial Analysis Journal, 60: 16-22.

Yılmaz, H. (1999). “İşletmelerin Finansal Yönetimde Nakit Akış Rasyo Analizi”, Dokuz Eylül Üniversitesi İİBF, 14(1): 185-198.