

COMPARISON OF METHODS FOR THE RECOGNITION OF DERIVATIVE FINANCIAL PRODUCTS WITHIN THE SCOPE OF TURKISH FINANCIAL REPORTING STANDARDS (TFRS)

Burak TERİM, Ph.D

Asst. Professor

Manisa Celal Bayar University

Faculty of Economics and Administrative Sciences

Department of Business Administration, Manisa/Turkey

ABSTRACT

In the global competition environment, the companies' areas of usage regarding derivative financial products became widespread and these instruments started to take an important place in the liability statements of the businesses. In terms of financial accounting, the companies need to reflect the usage of derivative financial products in their financial statements, and in terms of administrative accounting, they search for methods that will facilitate the follow-ups for the performance assessment and decision making procedures regarding the processes of large scale derivatives.

The companies making investments in the derivatives in hopes of risk management or speculation acquire mutual rights and liabilities through the contracts they make. For the assessment and recognition of these rights and liabilities, the standards numbered TMS 32, TMS 39, TFRS 7 and TFRS 9 were published by the Public Oversight Authority of Turkey. These standards coincide with the standards published by the International Accounting Standards Board (IASB).

In this study, attention is drawn to the assessment and recognition of the derivatives in line with the aforementioned standards, and alternative solutions are discussed.

Key words: Derivatives, Hedge Accounting, IAS 32, IAS 39

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1. INTRODUCTION

In terms of provisions and sales, the companies currently continuing their operations sustain their relations with the outer world in their production and sales operations, with the capacity of importer and/or exporter. Additionally, they supply their financial needs not only from internal sources (national banks, national money), but also from external financial sources (foreign banks, foreign leasing companies).

As a result of this, the companies have the capacity to determine the hedge prices (fixing the late charges or foreign exchange rates) in accordance with the sectors and market types in which they carry out their operations. However, while the competition in the markets usually makes the practices of price hedging difficult, it also increases financial risks.

Just like the investors, it can be said that the total risk encountered by the businesses during their operating periods is the total systematic and non-systematic risks, depending upon the uncertainty. Systematic risk factors can be market risks, political risks, interest rate risks and foreign exchange rate risks. These risk types concern the economy in whole, and comprise the risks that the business administration cannot intervene.

Nonsystematic risks can be defined as financial risks, management risks, industrial risks and operations risks; and these risks are usually encountered by the businesses due to their own characteristics. The business administration can intervene in these kinds of risks (Sayılğan, 2003, p.340).

The businesses usually prefer the usage of derivatives while diversifying the liability factors for optimizing the systematic and non-systematic risks.

In this study, the aim is to discuss an alternative approach concerning the recognition of the financial transactions made by the businesses according to TMS 32 and TMS 39, in order for the businesses to be protected from various risks.

2. DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGING

Derivatives have been used for years as an effective risk management (hedging) instrument. When the Bretton Woods system (fixed exchange rate system) ended in 1972, the fluctuations in the exchange rates caused the companies to face exchange rate risks. On the other hand, fluctuations in the exchange rates in international money markets brought up the issue of high interests to the agenda. As a result of these developments, the derivative instruments, which were implemented only for commercial goods before, started to be used with the intent of prevention from the aforementioned risks (Kaygusuzoğlu, 2011, p.138).

The fast development of the derivative financial instruments and the widespread usage of the derivative instruments in businesses brought up the recognition of these to the agenda. Recognition of the derivative financial instruments and demonstration of the relevant risks accurately in the financial statements and their disclosure has been set out in the accounting standards and financial reporting standards by the International Accounting Standards Board. Also in Turkey, the Turkish Accounting Standards Board published the standards regarding the derivative financial instruments in parallel with the international accounting standards. These standards are as follows:

- TMS 32 “Financial Instruments: Presentation”
- TMS 39 “Financial Instruments: Recognition and Measurement”
- TFRS 7 “Financial Instruments: Disclosures”
- TFRS 9 “Financial Instruments” (Bal and Öztürk, 2013, p.124-125).

In TMS 32, a financial instrument is defined as “a contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity”.

The derivative financial instruments can be defined as financial products, which can be assessed in association with the asset prices, foreign currency, interests or stock market. The concerned products are various, depending upon the types of wares, interest rates, foreign exchange rates, share indices and share certificates.

Hedging is defined as the methods of protection ensuring that the losses that may be originated from the fluctuations in the future interests, prices or foreign exchange rates are maintained minimum (Uzun, 2004, p. 10). The companies’ objective is to be protected from the damages incurred due to price movements by hedging the risks in order not to undergo the unexpected developments in foreign exchange rates, interest rates, stock quotes and asset prices.

Derivatives can be used to transfer the risk from the parties wanting to be protected from the risks to the parties wanting to undertake the risks, and they can also be used for profits (Kaygusuz, 1998, p.11, Uzun, 2004, p.10).

Derivatives are described in TFRS 9 Financial Instruments Standard as follows:

Derivative: A financial instrument or other contract within the scope of this TFRS (see paragraph 2.1) with all three of the following characteristics.

- (a) Its value changes in response to the change in a specified interest rate, financial instrument price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variable, provided in the case of a non-financial variable that the variable is not specific to a party to the contract (sometimes called the ‘underlying’).
- (b) It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- (c) It is settled at a future date.

Derivatives can be used in organized markets and over-the-counter markets. Organized markets are the markets buying and selling standard derivatives in line with legal arrangements. All other transactions made outside of these markets can be referred as transactions in over-the-counter markets.

Derivatives are used to decrease the cost of the used capital and to furnish these instruments with incentive characteristics for the investors, by bringing up the financial instruments that can keep up with the changes in the financial markets. In addition, derivatives can also be used with the intention of protecting the businesses from the future risks, which may occur in the stock exchange values, interest rates and foreign exchange rates. The main intended usages of derivatives are as follows (Ocakoglu, 2013, p.53):

- To reduce the debt costs,
- To increase the debt capacity,
- To increase the net cash flows,
- To protect the existing assets and liabilities from risks,
- To protect the foreign currency commitments from risk,
- To protect the net investments of the associated companies.

In addition to the main intended usages regarding the derivatives, the usages with the intent of speculation and arbitrage should also be addressed (Dizman, 2014, p.21);

- Speculation: Based on the estimations and expectations, speculation is the act of buying or selling an asset with the intent of generating a profit from the increases and decreases of the asset's price. For the estimation to be successful, it is necessary to possess more information than the others and to be able to evaluate this information better.
- Arbitrage: Arbitrage is the purchase of an asset at a lower price than the market, and selling the asset at a higher price in another market.

The main derivatives are: forward contracts, futures contracts, options and swaps. Brief definitions of these contracts are given below:

Forward contracts are used in over-the-counter (off-exchange) trades. A forward contract is a contract between the parties to buy or sell a specific number of commercial products or financial instruments at a specified price on a specific future date. These contracts generally cannot be transferred or exchanged, and it can be terminated with the parties' mutual agreement. The price of the forward cannot be updated in line with the market value. Therefore, since the profits or losses cannot be known before the settlement date, there can also be no cash flow during this time. The profits and losses appear at the settlement date (Kaygusuzoglu, 2011, p.141).

Forward contracts can generally be used for all kinds of goods. In accordance with its general usage in the markets, frequently encountered forward contract types are foreign exchange forward contracts, interest forward contracts and commercial goods/commodity forward contracts.

Futures contracts have the same intentions and functions as the forward contracts. The main difference between them is that the futures contracts are standardized and used in organized markets. A futures contract is a contract of a standard time period and amount, which is used in organized stock market and based on the daily settlement procedures (Chambers, 2012, p.6). Although there is no commitment liability in forward contracts, there is a liability to fulfill the daily commitments in futures contracts. In addition, while the true market value cannot be determined in forward contracts, it is possible to determine the daily market price in futures contracts (Ocakoglu, 2013, p. 51).

Options, which can be defined as “right to choose” in line with its lexical meaning, are financial instruments newer than the forward and futures contracts.

An option also represents a contract including the future delivery of a property or financial asset at a price agreed upon today. However, its functioning is different than forward and futures contracts. The option contract offers the right to buy or sell a property or a financial asset in a specific period of time and at an agreed-upon price. The option holder has the right to use, or not to use the option in the exercise date in exchange for a certain premium. The option holder is not obliged to use the option at the exercise date. The maximum loss of the option buyer is the premium s/he pays. In return, the option seller receives the premium; however, the party buying the option has the right to use or not to use the option. In return for the premium received, the option seller acts in accordance with the decision of the option buyer (Adigüzel and Yılmaz, 2015, p.18).

A swap is a contract through which two companies exchange future cash flows. The most frequently used derivative contracts in global markets are the swaps. Even though it is not used in official markets in Turkey, swaps are the leading contracts used frequently by the banks and companies in their interest risk management processes. A swap is a contract through which two parties exchange future cash flows. While one of the parties makes fixed payment, the other chooses a payment plan based on a certain variable and an index price. Within the framework of their payment plans made in accordance with the swap contract, the parties exchange a cash flow. Each party has different expectations regarding the price received in the future period by the underlying asset which will be exchanged. In swaps, the underlying asset is usually the interest payment. However, there are also swaps that use foreign exchange rates and commodity products as underlying assets (Saltoğlu, 2014, p.92).

Most swaps involve foreign exchange swaps and interest rate swaps. A foreign exchange swap is a contract that consists of swapping two different currencies or the liabilities arising from the different currencies on the date of the contract, along with an agreement on swapping them again at a later date.

In an interest rate swap, the independent parties, who borrowed the same amount of capital with a similar settlement date from a different borrowing source, exchange their interest payment liabilities, usually through an intermediary bank (Dizman, 2014, p.21).

3. HEDGE ACCOUNTING

Hedge accounting is a method of accounting where the derivatives are used for the purpose of protection from the risk (Haftacı, Pehlivanlı, 2007, p.141). Hedge accounting eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as ‘an accounting mismatch’) that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases (TMSK, notification regarding tms39 S. No: 41, p.3).

The purpose of its accounting policy is to reflect, as much as possible, the aim of the recognized transaction and its economic effects (Parlakkaya, 2003, p.168, Haftacı, Pehlivanlı, 2007, p. 141).

Within the scope of the standard “TMS 39 Financial Instruments” it is stated that Hedge accounting recognizes the offsetting effects on profit or loss of changes in the fair values of the hedging instrument and

the hedged item. In the same standard, hedging relationships are divided into three types: These are as follows:

- Fair value hedge: A hedge of the exposure to changes in fair value of a recognized asset or liability or an unrecognized firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss.
- Cash flow hedge: A hedge of the exposure to variability in cash flows that (i) is attributable to a particular risk associated with a recognized asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction and (ii) could affect profit or loss.
- Hedge of a net investment in a foreign operation: As defined in TMS 21.

Moreover, in TMS 39, it is stated that a hedge of the foreign currency risk of a firm commitment may be accounted for as a fair value hedge or as a cash flow hedge.

Using the hedge accounting ensures that the gain or loss on the hedging instrument and the hedged item are documented in the financial statements of the same periods. When a company becomes a party of a derivative instrument contract, the company can optionally use the hedge accounting to document the gains and losses it receives from derivative instruments and the gains and losses concerning the risk it faces. Currently, within the framework of the decisions of the Public Oversight, Accounting and Auditing Standards Authority (KGK) in Turkey, the companies' accounting records are kept in accordance with TMS/IFRS and TDHP. However, to reflect the profit/loss emerged due to use of derivative instruments in the financial statement of the period of the relevant profit/loss, it is important for businesses to recognize such activities according to TMS, and to prepare their financial statements in line with IFRS (Çakır ve Sabuncu, 2016, p.136).

4. HEDGE ACCOUNTING PRACTICES

Up to the present, in many practices regarding the recognition of derivatives, the transactions regarding the derivatives have been kept in memorandum accounts, because these derivatives create conditional rights and liabilities.

The globalization of financial markets and developments in communication technology has increased the importance of the needs regarding the comparability and transparency of financial statements. Especially the transparency of the financial statements is very important for all parties associated with the businesses. Therefore, the businesses' all kinds of commercial transactions imposing obligations and providing rights to the business must be shown clearly in the financial statements. Because, when this company goes public, is transferred or becomes partners with a business, the concerned party should be able to acquire all information of the company from the company's financial statements (Kırlioğlu ve Altınkaynak, 2016, p. 608).

Furthermore, memorandum accounts are the accounts acting as a reminder for the businesses, with their areas of usage such as the tracking of the letters of guarantee, of sureties and warranties, of the cases filed that can result in favor/against and that can impose a compensation liability, and of fixed assets, machines, equipment, tools, materials etc., which are brought outside of the company. Since the transactions kept in the memorandum accounts do not reflect an asset, resource or income/expense, these accounts cannot be compared with an asset, resource or operating account (Sevilengül, 2014, p. 610).

At the end of the period, the memorandum accounts must be controlled one by one. If there is no remaining condition requiring the usage of the memorandum accounts, these accounts should be closed. If it is determined at the end of the period that these accounts should be further used, no changes in the memorandum items must be made. For this reason, the accounting units do not carry out the relevant controls regarding the state of the memorandum accounts, which is a wrong act in practice.

Kırlioğlu and Altınkaynak used a company operating in agricultural markets and addressed forward contracts. Emphasizing that the companies need to be transparent in their financial statements, they have reached the following opinion:

“As a result of this study, it is seen that forward contracts impose liabilities to the signatory companies (parties) of the contract. These are the liabilities preventing them from transfer or unilaterally waive from the contract, and liabilities such as debt obligation and the right to claim. With the contracts reflected in the memorandum accounts in certain studies, after the contract is signed, if the company is sold or closed, the debt liability and the right to claim will not be shown in the financial statements and when the settlement date of the contract has come, there will be an unjust situation because this liability and right cannot be tracked. In this case, the certainty and transparency in terms of accounting would disappear. Reflecting these rights and liabilities, which start with the signing date of the contract and end only with the payment of the value of this contract, in the financial statements of the companies signed the contract is of vital importance in terms of the transparency of the financial statements and the company (Kırlioğlu ve Altınkaynak, 2016, p.613).”

Tracking by periods of the performance regarding the usage of derivative products are very important in terms of management. For this reason, reflecting the gains and losses of the businesses by using derivatives completely, timely and with full explanation is necessary.

Especially for the large-scale companies making productions based on imports and exports and in which the derivatives are used widely, when important production factors with foreign currencies and variable prices are used, the alternative use of free accounts can also be discussed in order to eliminate the management problems and to create more transparent financial statements.

5. EXAMPLES OF THE PRACTICES

In this part of the study, the practices on the recognition of an accounting record concerning a forward contract one by one by using memorandum accounts and free accounts.

Case Study: GLO Plastik San. A.Ş. An injection machine at a price of 250.000 € was ordered; the machine will be received on 01/12/2016 and its price will be paid at the same date. In order to be protected from the currency fluctuations till the settlement date, the company bought a foreign currency forward contract for an amount of 250.000€ with the forward currency rate of 1€=3,60₺ on 01/06/2016 (VAT, Commission Expenses and Warranty Payments excluded from the calculation) The currencies of those dates are as follows:

01/06/2016 1€=3,2953₺

01/12/2016 1€=3,6686₺

The relevant accounting records would be:

	01.06.2016		
9XX FORWARD CONT. DEBTORS		900000	
9XY FORWARD CONT. CREDITORS			900000
<i>(Entering the Forward Contract in the Memorandum Accounts)</i>			
<i>250000€ x 3,60₺/€</i>			
	01.12.2016		
116 DERIVATIVE FINANCIAL RESOURCES		17150	
562 DERIVATIVE FIN. INSTR. FAIR VALUE DIFFERENCES			17150

<i>(Currency Change Valuation Record regarding the Forward Contract)</i>			
250000€ x (3,6686-3,60)£/€			
	01.12.2016		
253 MACHINERY, EQUIP. AND INST.		917150	
102 BANKS			900000
116 DERIVATIVE FINANCIAL RESOURCES			17150
<i>(Tangible Asset Purchase Record)</i>			
250000€ x 3,6686£/€			
	01.12.2016		
9XY FORWARD CONT. CREDITORS		900000	
9XX FORWARD CONT. DEBTORS			900000
<i>(Closing the Forward Contract in the Memorandum Accounts)</i>			
	01.12.2016		
562 DERIVATIVE FIN. INSTR. FAIR VALUE DIFFERENCES		17150	
648 DERIVATIVE FIN. INSTR. PROFITS			17150
<i>(Entering the Gains made from Forward Contract)</i>			

If the company bought the foreign currency forward contract for a purchase of 250.000€ with the forward exchange of 1€=3,70 £ on 01/06/2016:

	01.06.2016		
9XX FORWARD CONT. DEBTORS		925000	
9XY FORWARD CONT. CREDITORS			925000
<i>(Entering the Forward Contract in the Memorandum Accounts)</i>			
250000€ x 3,60£/€			
	01.12.2016		
562 DERIVATIVE FIN. INSTR. FAIR VALUE DIFFERENCES		7850	
116 DERIVATIVE FINANCIAL RESOURCES			7850

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<i>(Currency Change Valuation Record regarding the Forward Contract)</i>			
250000€ x (3,70-3,6686)£/€			
	01.12.2016		
253 MACHINERY, EQUIP. AND INST.		917150	
116 DERIVATIVE FINANCIAL RESOURCES		7850	
102 BANKS			925000
<i>(Tangible Asset Purchase Record)</i>			
250000€ x 3,6686£/€			
	01.12.2016		
9XY FORWARD CONT. CREDITORS		925000	
9XX FORWARD CONT. DEBTORS			925000
<i>(Closing the Forward Contract in the Memorandum Accounts)</i>			
	01.12.2016		
658 DERIVATIVE FIN. INSTR. LOSS		7850	
562 DERIVATIVE FIN. INSTR. FAIR VALUE DIFFERENCES			7850
<i>(Entering the Losses arising from Forward Contract)</i>			

Following is the recommended accounting record by using free accounts if the company bought the foreign currency forward contract for a purchase of 250.000€ with the forward exchange of 1€=3, 60£ on 01/06/2016:

	01.06.2016		
8XX MACHINE ORDER		900000	
8XX.01. Machine Order Made			
With the Forward Contract			
336 OTHER MISCELLANEOUS PAYABLES			900000
336.01.Forward Cont. Payabl.			
<i>(Record of the Machine Order, price fixed through Forward Contract)</i>			
	01.12.2016		
253 MACHINERY, EQUIP. AND INST.		917150	
8XX MACHINE ORDER			900000
8XX.01.Machine Order Made			
with the Forward Cont.			
648 DERIVATIVE FIN. INSTR.			17150

		PROFITS		
		<i>(Machine Purchase Record)</i>		
		01.12.2016		
		336 OTHER MISCELLANEOUS PAYABLES	900000	
		336.01. Forward Cont. Payables		
		102 BANKS		900000
		<i>(Payment Record)</i>		

Following is the recommended accounting record by using free accounts if the company bought the foreign currency forward contract for a purchase of 250.000€ with the forward exchange of 1€=3,70₺ on 01/06/2016:

		01.06.2016		
		8XX MACHINE ORDER	925000	
		8XX.01. Machine Order Made		
		With the Forward Contract		
		336 OTHER MISCELLANEOUS PAYABLES		925000
		336.01.Forward Cont. Payabl.		
		<i>(Record of the Machine Order, price fixed through Forward Contract)</i>		
		01.12.2016		
		253 MACHINERY, EQUIP. AND INST.	917150	
		658 DERIVATIVE FIN. INSTR. LOSS	7850	
		8XX MACHINE ORDER		925000
		8XX.01.Machine Order Made		
		with the Forward Cont.		
		<i>(Machine Purchase Record)</i>		
		01.12.2016		
		336 OTHER MISCELLANEOUS PAYABLES	925000	
		336.01. Forward Cont. Payables		
		102 BANKS		925000
		<i>Payment Record</i>		

6. CONCLUSION

In a globalized economic structure, business enterprises are increasing their use areas of derivatives day by day in order to gain competitive advantage and optimize their financial risks. Furthermore, various accounting methods have been developed in accordance with published standards in order for the enterprises to be featured on both recognition and financial reports related to derivatives within international accounting circles.

Standards developed by national and international bodies are about the explanation of accounting essentials regarding the acquisition purposes and recognition of derivatives when assessment and

income/expense are the case. Besides these features in using these products, ensuring traceability also for administrative accounting is essential.

Where the use of derivatives for both ensuring transparency in presentation of financial tables and facilitating administrative follow-ups, recognition by the use of free accounts as well as recognition by the use of memorandum accounts which is frequently preferred in practice are also considered to be favorable.

Thus, business top management will be able to access faster and more efficiently to data on both production planning and financial position within the decision-making process.

REFERENCES

- [1] Adıgüzel, Hümeýra, Altıok Yılmaz, Ayşe, (2015), Türev Ürünlerin Riskten Korunma Aracı Olarak Uluslar Arası Muhasebe Standartları Kapsamında Muhasebeleştirilmesi, Mali Çözüm Dergisi, Eylül-Ekim 2015, pp.15-31.
- [2] Chambers, Nurgül, (2012), **Türev Piyasalar**, Beta Basım Yayım Dağıtım A.Ş., İstanbul.
- [3] Çına Bal, Emine, Öztürk, Veli, (2013), Türkiye Muhasebe Standardı TMS-39 “Finansal Araçlar: Muhasebeleştirme ve Ölçüm” Kapsamında Türev ürünlerin Nakit Akış Riskinden Korunma Amaçlı Kullanımı: Forward Örneği, İşletme Araştırmaları Dergisi, 5/2, pp.123-140.
- [4] Dızman, Şakir, (2014), Türev Finansal Ürünlerin; Türkiye Muhasebe Standartları (TMS), Türkiye Finansal Raporlama Standartları (TFRS) ve Yeni Hesap Planı Taslağı Kapsamında Muhasebeleştirilmesi, Erzincan Üniversitesi SBE Dergisi, VII-I, pp.17-30.
- [5] Haftacı, Vasfi, Pehlivanlı Davut, (2007), **UMS 39 ve Uygulamada Karşılaşılan Sorunlar**, Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (13) 2007/1, pp. 139-151.
- [6] Kaygusuz, Sait Yüksel, (1998), **Finansal Türev Ürünlerinde Muhasebe Esasları**, SPK, Ankara.
- [7] Kaygusuzoğlu, Mehmet, (2011), **Finansal Türev Ürünlerden Forward Sözleşmeleri ve Muhasebe İşlemleri**, Ankara Üniversitesi İktisadi ve İdari Bilimler Dergisi, Cilt: 25, Sayı: 2, pp.137-149.
- [8] Kırılıoğlu, Hilmi, Altınkaynak, Fırat, (2016), **Forward Sözleşmelerin Günümüz Piyasalarında Yeri ve Muhasebeleştirilmesi**, Uluslar arası Yönetim İktisat ve İşletme Dergisi, ICAFR 16 Özel Sayısı, pp.604-614.
- [9] Meder, Çakır, Hafize, Sabuncu Birsal, (2016), **Riskten Korunma Amaçlı Türev Araçların Türkiye Muhasebe Standartları Kapsamında Muhasebeleştirilmesi**, Pamukkale Üniversitesi, Sosyal Bilimler Enstitüsü Dergisi, Sayı: 25, 2016, pp.121-137.
- [10] Ocakoğlu, Orçun, (2013), **Türev Ürünlerin Muhasebeleştirilmesi**, Mali çözüm dergisi, Kasım-Aralık 2013, pp.49-63.
- [11] Parlakkaya, Raif, (2003), Finansal Türev Ürünler ile Mali Risk Yönetimi ve Muhasebe Uygulamaları, Ankara, Nobel Yayınevi.
- [12] Saltoğlu, Burak, (2014), **Türev Araçlar, Piyasalar ve Risk Yönetimi**, Lisanslama Sınavları Çalışma Kitapları, Boğaziçi Üniversitesi ve Risktürk, Ekim 2014.
- [13] Sayılğan, Güven (2003), **Soru ve Yanıtlarla İşletme Finansmanı**, Turhan Kitabevi, Ankara.
- [14] Sevilengül, Orhan, (2014), **Genel Muhasebe**, 17. Baskı, Gazi Kitabevi.
- [15] Ms. G. Jayashree and Dr. I. Carmel Mercy Priya, An Overview on Financial Management Techniques for Organization Effectiveness. International Journal of Management, 7(7), 2016, pp. 16–22
- [16] Uzun, Ebru, (2004), “Türkiye’deki Uygulamalar, 39 Numaralı Uluslararası Muhasebe Standardı ve Avrupa Merkez Bankası Uygulamaları Çerçevesinde Türev Ürünlerin Muhasebeleştirilmesi ve Finansal Tablolara Yansımaları”, TCMB Uzmanlık Yeterlilik Tezi.