



## FOREST PRODUCTS INDUSTRY AND REVOLVING FUNDS

Dursun Kemal BAYRAKTAR<sup>1\*</sup>, Hacı İsmail KESİK<sup>2</sup>

<sup>1</sup>Department Of Interior Design, Trabzon Vocational and Technical High School, The Ministry Of Education, 61040, Trabzon, Turkey  
ofdukebay@hotmail.com

<sup>2</sup> Department Forest Industrial Engineering,, Faculty of Forestry, Kastamonu University, 37100, Kastamonu, Turkey  
hismailkesik@gmail.com

Received: 13.11.2016, Accepted: 30.11.2016

\*Corresponding author

### Abstract

*This Today it is accepted that the factors of methods should be added into accounts to have very appropriate conclusions in the establishments with revolving funds. Therefore, especially, today it is unavoidable the important decisions in the field of the sliding capital And to utilize mathematics techniques to have such kind of decisions. It is commented on which factors change the level of the revolving funds and these changing should be in what quantities besides, in the light of the techniques which are determined by the method's principals, it is calculated the costs of a product or a group of products which are produced in a certain period and the costs with market prices, separately. In the conclusion section; it is considered that each work could show a different production specifications concentration on being gathered according to works and products assignments and delivered of the cost's elements which are appropriate for the liquidity and productivity aims of establishment. of finished products and packaging materials are made.*

**Keywords:** Establishments with revolving funds, Sliding capital, Order cost, Liquidity, Productivity, Specification.

## ORMAN ÜRÜNLERİ SANAYİİ VE DÖNER SERMAYE

### Özet

*Günümüzdeki döner sermayeli işletmelerde isabetli kararlara ulaşmada yöntem faktörlerinin de hesaba katılması gerektiği kabul edilmektedir. Bununla beraber, özellikle değişir sermaye alanında verilecek önemli kararlar ve bu tür kararların verilmesinde matematiksel tekniklerden yararlanmak bugün ve ilerisi için kaçınılmaz hale gelmiştir. Döner sermaye seviyesinin hangi faktörlerle değiştiği ve bu değişmelerin ne miktarlarda olacağı açıklanmıştır. Ayrıca yöntemin esasyyla belirtilen tekniklerin ışığı altında Trabzon Anadolu Teknik, Teknik Lise ve Endüstri Meslek Lisesi Döner Sermaye İşletmesinin belli bir dönemde üretilen belli bir mamul ve mamul grubunun maliyetleriyle piyasa fiyatlı maliyetler ayrı olarak hesaplanmıştır. Sonuç kısmında işletmenin sermaye ihtiyacı ve verimlilik amaçlarına uygun maliyet unsurlarının işlere ve mamul partilerine göre toplanmasına ve dağıtılmasına ağırlık vererek her işin ayrı bir üretim spesifikasyonunu temsil etmesini sağlayabileceği düşünülmektedir.*

**Anahtar Kelimeler:** Döner Sermaye İşletmeleri, Değişir Sermaye, Sipariş Maliyeti, Sermaye İhtiyacı, Verimlilik, Spesifikasyon

### 1 Introduction

The state fact which has shaped through the needs of individuals as a community, in time, has not shaped its duties towards developing communities only security, safety, justice and health. With the development of the communities, the state not only limited its duties above mentioned subjects, also has to bring innovations [1]. Within the normal operating circle of a business (generally a year), fund is the one turned into cash or realized. That is also called working capital. Manufactured goods, semi-manufactured goods, raw materials, safe, and the money in banks are used and consumed like that kind of stocks in short time with a date of one year or shorter time notes. These assets which are used to maintain the operating activities and have the ability to be turned into cash in a short time are called circulating capital. According to another definition, it is expressed, the goods, which are necessary for a business enterprise's realization and conduction, that are money or all the things can be turned into cash [2,3]. According to a different definition, it is a capital that is assigned to public corporations to run the goods and services which cannot be carried out as regards to the public administration laws. Continuation of the activities regarding goods and services can be conducted by

administrations that are set up bound to public administration. And this capital expresses that definition [4]. Circulating capital principal liberalizes the corporations within the general budget in terms of financial quality and management. In other words, those corporations attaching to principal of universality for life does not match the reality and restricts the actions and abilities. Thereby, this acceptance is applied for those corporations to move free and be successful. Hereby, general budget institutions through circulating capital liberate management ship opportunities and constitute annexed budget administrations with other types of public administrations with industrial and commercial qualities within the scope of operating rules to create profits [5]. Within this study, prime cost factors which are job order productions have been chosen incisively and been examined to reach up to the mark level. To realize that, so as to fabricate the certain time produced manufactures or manufacture groups costs of Trabzon Anatolian Technical, Technical and Industrial Vocational High School's Circulating Capital Enterprise's production which mainly depends on furniture fabrication, on the phase of recognition of the manufactures "Job Order Cost Method" was used.

## 2 Realized Studies

Kaya (2004) tackled State Hydraulic Works' encountered problems, which provides service in different fields depending General and Annexed Budget Administrations in Turkey, on accounting realizations that has reached 6.5 quadrillion of Gross Receipts by 2003 effecting a certain economical avoirdupois. To use the accounting system effectively at State Hydraulic Works, primarily staff in charge should be trained about Unified Accounting System. Moreover, he concluded that some regulations regarding associated administrative budget inclusion or privatization should be done at State Hydraulic Works [6]. Due to the administrations with circulating capitals having a number of benefits, their numbers are increasing fast and he stated that those corporations comprise autonomy at economy. Also, he identified that they were reconstructed due to some drawbacks [7]. He emphasized that states' duties are to manage their countries economically, humane and socially in the best way possible; economic development and regularity not only can be conducted by setting profit oriented administrations but also setting service oriented administrations to direct the economy. Also stated that circulating capitals need to have an important role as to audit the existing service administrations. In the research, ergonomic science was narrated, the importance and the necessity of the product design was discussed, also it was emphasized usage of ergonomic dates were essential. There were held many questionnaires in Ankara about the applicability of the ergonomic furniture design at technical and industrial vocational high schools with circulating capital system and the results were evaluated [9]. As a part of the industry sector of the country, Technical and Industrial Vocational High School Circulating Capital Administrations' applicability and efficiency of stockless production was researched and concepts, definitions and designs of production system about businesses were informed, also with the analysis of stockless production concept (JIT), its appearance, problems, techniques and elements were designated.[10]. In this study, principals of technical high schools looked for an answer to risks encountered on management of circulating capital. They stated they did not face the anticipated problems they might encounter, so they were not aware of all the risks on management of circulating capital, yet principals reported that while they were managing the circulating capital works, a decreasing structure occurred [11]. With this work, we referred the public circulating capital administrations' establishment aims and their establishment that have an important role within Turkey's economy with its legal structure. We also pointed higher education institutions' circulating capital administrations and analyzed Sivas Vocational School of Higher Education Circulating Capital Administration's establishment, fields of activity, budget and audit and realized a cost-benefit analysis to discourse a solution to make them more productive[12].Legal structure on Circulating Capital Administrations of Vocational High Schools is Taxation and Accounting Transactions. These administrations are managerially bound to Ministry of National Education. At schools, principals are chief of disbursements, administration and financing officer is vice principal, finance officer is accountant and workshop leaders are responsible for the production and statement of requirements. In the study, instead of financial circulating capital structure, corporation circulating capital administration was approached [13].

## 3 Materials and Method

### 3.1 Materials

#### 3.1.1 Data's used in the Study

Circulating capital administrations deal with a lot of laws for their organizations and operations. The dates used in this study are given at Table 1.

Table 1.Datas Used in the Study

|   |  |   |
|---|--|---|
| General Accounting Laws                         | Circulating Capital Law                      | State Personnel Law   |
| Budget Laws                                     | State Procurement Law                        | Travel Expense Law  |
| Labor Law                                       | Law of Social Insurance                      | Tax Procedure Law   |
| Revenue Law                                     | Value Added Tax Law                          | Court of Accounts Law   |
| Stamp Tax Law                                   | Turkish Criminal Law                         | Turkish Code of Commerce  |
| Law of Obligations                              | Basic Law of Turkish National Education      | Ministry of National Education Operating Department Circulating Capital Administration Auction Authority Limits Principals (2001) |
| Circulating Capital Book of Final Entry Records | Circulating Capital General Journal Records  | Circulating Capital Ledger Records  |
| Circulating Capital Control Chart Records       | Circulating Capital Year End Entries Records | Circulating Capital Annual Financial Statement Value Records  |

#### 3.1.2 General Information about Where Study Took Place

As well as general knowledge, this school aims to train strong technical educational students while it plays a huge role on the country's development to do their parts with code of ethics and knowledgeable about his and friends' rights to defend themselves when necessary, the school has developed trust at working environment to meet the requirement of technical staff. Having its first graduates in 1966-1967 school year, the school had then called "Leveling, Ironsmith, Woodwork" departments. Then in 1967-1968 "Electrical" department and in 1968-1969 "Engine" departments were opened. Afterwards, in 1973-1974 "Electronically Machine Draftsman" department, in 1979-1980 "Casting" department, in 1980-1981 "Modeling" department, in 1986-1987 "Heavy Equipment" department, in 1991-1992 "Computer- Telecommunication" departments, in 1996-1997 " Installation Technologies, Building Draftsman" departments, in 1997-1998 "Building" department has started their education. Woodwork department changed its name "Furniture and Decoration" department in 1990-1991 School year. It still continues its education and has 15 sections within. Also the school with one directorate manages Anatolian Technical High School, Anatolian Vocational High School and Technical and Industrial Vocational High School with "Circulating Capital Administration.

### 3.2 Method

#### 3.2.1 Order-Cost Method

Circulating capital administrations are Order Costs with their accounting base are to cover capital industry's needs. Order Cost Method is a system that a certain manufacture or manufacture groups' cost is calculated. In other words, to realize the system, business does not have to work on order cost. Manufacture at the business can be both to cover customer needs and for stock. Order-Cost method can be used at big and separate businesses like construction, shipping, aircraft, engine, furniture and press.

## 4 Findings and Studies

### 4.1 Calculating the Business' Sales Cost

General budget at Ministry of National Education is calculated by the Circulating Capital Rules' 18th article. General criteria's of this cost's calculation is given at Table 2.

Table 2. Business Sales Cost (2002 Model)

|                               |         |             |
|-------------------------------|---------|-------------|
| Business and General Expenses | Against | %10 to % 30 |
| Amortissement                 | Against | % 1 to %100 |
| Electricity Cost              |         | Tedaş Price |
| Profit                        | Against | %10 to % 15 |

### 4.2 Calculation of Circulating Capital Business Sales Cost

Manufacturing cost of business with circulating capital is given at Table 3, inventorial cost is given at Table 4.

Table3. Regulation of Manufacturing Cost (2002 Model)

|  |                  |
|--|------------------|
| Raw Material, Material Cost                | 4.000.659.504 TL |
| Student Claim                              | 450.900.000 TL   |
| Direct Labor Cost                          | 536.900.000 TL   |
| 1.Subtotal (Workshops Manufacture Total)   | 4.988.459.504 TL |
| Business & General Expenses of (%10 - %30) | 498.845.950 TL   |
| 2. Subtotal                                | 5.478.305.455 TL |
| Profit %10 (%10 - %15)                     | 547.830.545 TL   |
| 3. Subtotal                                | 6.026.136.000 TL |
| Prepaid income %11 (%10 - %18)             | 662.874.960 TL   |
| Total Cost (Sale Price)                    | 6.689.010.960 TL |
| VAT (%18)                                  | 1.204.021.973 TL |
| General Total                              | 7.893.032.933 TL |

Table 4. Regulation of Inventor able Cost (2002 Model)

|   |                  |
|---|------------------|
| Cost of Raw Material and Materials to Charge Workshop's Account | 4.000.659.504 TL |
| Student Claim Cost  | 450.900.000 TL   |
| Direct Labor Cost (Business & General Expenses Cost)            | 536.900.000 TL   |
| SUBTOTAL  | 4.988.459.504 TL |
| Profit  | 547.830.545 TL   |
| Prepaid Income %11  | 662.874.960 TL   |
| General Total   | 6.689.010.960 TL |
| VAT (%18)   | 1.204.021.973 TL |
| GENERAL TOTAL (Sales Price)                                     | 7.893.032.933 TL |

### 4.3 Removing the Market Pricing Business Sales Costs

Manufacture, Inventor able Cost is given at Table 5.

Table 5. Regulation of Manufacture, Inventor able Cost (2002 Model)

|                                       |                  |
|---------------------------------------|------------------|
| Cost of Raw Material and Materials    | 4.000.659.504 TL |
| Construction Work, Labor              | 800.000.000 TL   |
| 1.Subtotal(Workshop Production Total) | 4.800.659.504 TL |
| Operation Expenses                    | 280.065.950 TL   |
| 2. Subtotal                           | 5.080.725.454 TL |
| Amortissement                         | 150.000.000 TL   |
| 3. Subtotal                           | 5.230.725.454 TL |
| Electricity (Lump sum)                | 120.000.000 TL   |
| 4. Subtotal                           | 5.350.725.454 TL |
| Profit                                | 100.000.000 TL   |
| General Total                         | 5.450.725.454 TL |
| VAT (%18)                             | 981.130.582 TL   |
| GENERAL TOTAL (Sales Cost)            | 6.431.856.036 TL |

Circulating Capital Administrations are commercial enterprises. Cost factors of Circulating Capital Administrations represent unique structure of known definitions. That is why, by searching circulating capital administrations' cost value, we can compare private enterprises and public enterprises, and notice their expenses from annexed budget and earning are differ from each other. These aspects known, when compared, market price sales cost is more profitable than circulating capital market price sales cost.

## 5 Results and Suggestions

Manufacture costs are calculated with basic mathematics as far as possible. Order cost is the main element in scope of the study. Factors of order cost are referred to manufacture and manufacture groups. In order cost method, when a material's cost loaded to order, scalage related cost is loaded to orders. As a result of the definition of labor, raw material and material used at manufacture, labor-time control, raw material and material's controls can be handled. Different time bought raw materials and material parties' cost of purchase can differ. In such case, the problem of evaluation of which raw material and material dispatched to manufacture occurs. First In First out (FIFO) is used as it is the cost calculation method with floating asset administration of this study. With the base of this method, as a result, Trabzon Anatolian Technical, Technical and Industrial Vocational High School Circulating Capital Administration has generated more profit by using low-cost raw material and materials bought.

Thereby, it faces to pay more taxes. Lack of products are cut from labor and rise of raw materials and materials can arise necessity of closer (FIFO). In the regulation of these costs, necessity of scoring the paid labors total from order time till finish time. In that case, minor recorded major labor is regulated. Revolving funds are also analyzed costs system "Determination of market competition and the increasing preference of use" for the purpose of the proposals presented in this study. With the analysis of circulating capital administrations costing system, below suggestions are made in the aim of "defining the increasing choice and usage of market competition":

1. Stocks should be evaluated according to the cost of market price and purchase whichever is lower.
2. Current Daily costs should be transferred to the cost.
3. In case of a huge difference between cost of purchase and market price, costs should stick to the facts.
4. Realization of order cost method can cause indirect loss, loss for the financial year can be reduced to prevent unreal profit sharing.
5. Another important point to take into consideration is to change the selected method often. Because, different methods every year dispose data crosscheck.

## **6 Acknowledgment**

This study was presented as an oral presentation at the II. International Furniture Congress, 13-15 October 2016, Muğla, Turkey

## **7 References**

- [1] Coşkun,G. Devlet Bütçesi, 6.b., Ankara: Turhan Kitabevi, 2000, s.2.
- [2] SAĞLAM, Hüseyin, Performansa Dayalı Döner Sermaye Prim Sistemi ve Sağlık Ocaklarında Bir Araştırma, Yüksek Lisans Tezi, 2006, 56 S.
- [3] Türkhan, S. Kamu Kesiminde Döner Sermaye İşletmelerinin Yeri Ve Önemi, Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü, Maliye Anabilim Dalı Mali, Hukuk Programı Yüksek Lisans Tezi, 2009,141 S.
- [4] Resmi Gazete, 01.05.2007 Tarih, Sayı: 26509, Döner Sermayeli İşletmeler Bütçe ve Muhasebe Yönetmeliği, Madde 3.
- [5] KARACAN, S, Döner Sermaye İşletmelerinde Muhasebe Düzeni ve Bir Uygulama, Kocaeli Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, 1996, 118 s..
- [6] Kaya, Y. Döner Sermaye İşletmelerinde Muhasebe Uygulamalarının Değerlendirilmesi ve Üniversite Döner Sermaye İşletmelerinde Bir Uygulama, Z.K.Ü. Sosyal Bilimler Enstitüsü İşletme Ana Bilim Dalı, Yüksek Lisans Tezi,2004,189 s.
- [7] Özsel, H. Performansa Dayalı Döner Sermaye Sistemi ve Ofansif Tıp, İzmir Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, 2015,217 s.
- [8] KÖROĞLU, B. Döner sermaye işletmelerinde tek düzen muhasebe sisteminin uygulanması, İstanbul Kültür Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, 2011,173 s.
- [9] Aytekin, H. Döner Sermayeli Teknik Ve Endüstri Meslek Liselerinde Ergonomik Ürün Tasarımının Uygulanabilirliği, Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği ABD, 1997,130 s.
- [10] KÜÇÜKİNANÇ, L. Teknik Ve Endüstri Meslek Liseleri Döner Sermaye İşletmelerinde Stoksuz Üretim Sistemlerinin Uygulanabilirliği Ve Etkinliği, Gazi Üniversitesi, Fen Bilimleri Enstitüsü, Makine Müh. ABD,1997,138 s.
- [11] MAYA, İ.Ç. Teknik Lise Müdürlerinin Döner Sermaye İşlerinin Yönetiminde Karşılaştıkları Riskler Ve Yönetme Yöntemleri, Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü, Eğitim Bilimleri Anabilim Dalı,Doktora Tezi,2008,222 s.
- [12] Çelebi, İ. Meslek yüksekokulları döner sermaye işletmelerinde bütçeleme, denetim ve maliyet-fayda analizinin uygulanabilirliği, Cumhuriyet Üniversitesi Sivas Meslek Yüksekokulu'nda bir uygulama, Cumhuriyet Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Anabilim Dalı, Yüksek Lisans Tezi, Dalı2000,143 s.
- [13] Şenol, A. Meslek Liseleri Döner Sermaye İşletmelerinde Hukuki Yapı Vergilendirme Ve Muhasebe İşlemleri, Atatürk Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi 1999,98 s.