NEVŞEHİR HACI BEKTAŞ VELİ ÜNİVERSİTESİ
Ara, bul.

Sosyal Bilimler Enstitüsü Dergisi
Cilt: 13 Sayı: 3 Eylül 2023
E-ISSN: 2149-3871

HYBRID COSTING METHOD IN THE READY-TO-WEAR CLOTHING INDUSTRY

HAZIR GİYİM SEKTÖRÜNDE KARMA MALİYET YÖNTEMİ

Hakan ALİUSTA
Sinop Üniversitesi
Ayancık MYO
Dış Ticaret Bölümü
haliusta@sinop.edu.tr
ORCID: 0000-0002-6301-6339

Geliş Tarihi:
06.01.2023

Kabul Tarihi:
31.07.2023

Yayın Tarihi:
25.09.2023

Anahtar Kelimeler
Maliyet Muhasebesi
Karma Maliyetleme
Safha Maliyetleme
Sipariş Maliyetleme

Keywords
Cost Accounting;
Hybrid costing;
Process Costing
Job-Order Costing

ABSTRACT

In today's world where competition is increasing, one of the main objectives of the firms is to determine the production costs correctly and to reduce these costs by taking into account the targeted quality standards. Thus, efficiency and sustainable profitability will be ensured. For this, it becomes necessary to choose and apply the most appropriate cost calculation methods that can be used. One of these methods is the hybrid cost method, which is a combination of job-order cost and process cost methods. In this research, it is aimed to determine the product costs of a firm operating in the ready-to wear clothing sector and using the job-order costing method, according to the hybrid costing method and compare them with the current results. For this, the case study method was used. For this purpose, the existing cost data of the firm were rearranged within the framework of the hybrid costing method, and total and unit costs were determined. The results of the hybrid costing method obtained were compared with the results of the job-order costing method. As a result, five out of nine orders resulted in cost reductions, and in others, cost increases. In addition, it was determined that the total sales costs determined by the hybrid costing method for the implementation period decreased and the gross sales profit increased.

ÖZ

Rekabetin gittikçe arttığı günümüzde işletmelerin temel amaçlarından birisi de üretim maliyetlerini doğru tespit etmek ve bu maliyetleri hedeflenen kalite standartlarını da dikkate alarak azaltmaktır. Böylelikle verim ve sürdürülebilir karlılık sağlanabilecektir. Bunun için kullanılabilecek maliyet hesaplama yöntemleri içerisinde en uygun olanını seçmek ve uygulamak gerekli hale gelmektedir. Bu yöntemlerden birisi de sipariş maliyet ve safha maliyet yöntemlerinin birleşimi olan karma maliyet yöntemidir. Bu çalışmada hazır giyim sektöründe faaliyette bulunan ve sipariş maliyet yöntemini kullanan bir işletmenin karma maliyet yöntemine göre mamul maliyetlerinin belirlenmesi ve mevcut sonuçlarla karşılaştırılması amaçlanmaktadır. Bunun için örnek olay yöntemi kullanılmıştır. Bu amaçla işletmenin mevcut maliyet verileri karma maliyet yöntemi çerçevesinde yeniden düzenlenmiş, toplam ve birim maliyetler tespit edilmiştir. Elde edilen karma maliyet yöntemi sonuçları sipariş maliyet yöntemi sonuçlarıyla karşılaştırılmıştır. Sonuç olarak dokuz siparişin beşinde maliyet azalması diğerlerinde maliyet artışı ortaya çıkmıştır. Ayrıca uygulama dönemi için karma maliyet yöntemiyle belirlenen toplam satış maliyetlerinin azaldığı brüt satış karının arttığı belirlenmiştir.

DOI: https://doi.org/10.30783/nevsosbilen.1230683
Atıf/Cite as: Aliusta, H. (2023). Hybrid costing method in the ready-to-wear clothing industry. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi, 13*(3), 1365-1387.

Introduction

The main purpose of the firms is to make a profit by delivering the products or services they produce to the users and thus to ensure the continuity of their activities. However, today's competitive environment, developing technology and production styles make it necessary for firms to correctly determine, manage and reduce their costs in this profit-making process. For this reason, choosing the right cost calculation method to be obtained from the accounting system for the right data to be used in management decisions becomes more important.
Factors such as the sector in which the firms are located, their size, the product they produce, the technology they use, the decisions of the management can cause differences in cost calculation systems. In addition, rapid changes and developments that may occur in global trade make it impossible for firms to stick to a uniform cost method for many years and to continue without updating their cost systems. Because the validity, reliability and usefulness of the obtained cost data may vary depending on the conditions and time.
Turkey has an important place in the world market in the ready to wear clothing industry. According to 61 and 62 GTIP chapters, exports in 2022 increased by approximately 6 % compared to 2021, in 2021 increased by approximately 22% compared to 2020. Its share in total exports exceeded 8% in 2021. In 2022, this rate decreased to 7.6% (TSI, 2023). The sector, which draws attention with its growing foreign trade volume and increasing exports, also significantly supports the development of the country's economy and employment. However, maintaining the competitive advantage of the sector requires taking the right decisions at the right time. In order to be able to take these decisions, it is necessary to provide relevant and realistic, understandable, comparable and timely data from the accounting department. One of these data is production cost data.
In this article, the cost data that emerged in the production process of the firm were recalculated using the hybrid costing method, which is one of the methods used according to the cost calculation method. The results obtained were compared and evaluated with the results obtained according to the current job-order costing method of the firm.

Literature Review

As a result of the literature review, it has been seen that although there are many articles and theses on the job-order and process costing method, there are very few studies directly related to the hybrid costing method. The closest article to this article is Yereli et al. (2015)'s work. However, the related article is an application of the textile sector related to yarn production. This article belongs to the ready-to wear clothing section, which is about the production of clothes from fabric. In this respect, the article provides an originality to the literature. The available studies are listed below.
Drobyazko et al. (2019), in their article studies, aimed to develop and propose a hybrid cost model that can be used in the raw cotton processing process. As a result of the application made using the production simulation model, it was stated that the proposed hybrid method would make a significant contribution to the comparison of costs with revenues in the reporting period. It is also stated that it will be useful in management decisions regarding additional ordering, manufacturing of new product types, income and expense budgeting, financial results analysis and pricing.
Yereli et al. (2015), in their article studies, aimed to calculate the product costs with hybrid costing using the case study method in a company engaged in yarn production in the textile sector. For this purpose, unit and total costs of the products were determined by using hybrid costing, and the results were compared with the existing ones. In addition, the effects of both methods on the financial statements are evaluated.
Edmonds et al. (2011) explains job-order, process and hybrid cost methods with examples in a part of their book studies.
Altıntaş (2010), in his article, applied cost accounting in a manufacturing firm operating in the ready-to-wear clothing sector. For this, the job-order cost method was used. As a result, it has been determined that it is appropriate to use the order cost system in determining the production costs of the firm, the unit cost of an order is calculated by using the firm data, and suggestions are made about the cost accounting system of the enterprise.
Kişin (2000), in his study, investigated the operation of the job-order cost method in a textile firm. As a result, it has been determined that the method is suitable for the firm, and it has been stated that the drawbacks of the method can be eliminated as long as the technology is used. The study provides information about the application process and operations of the job-order cost method in textile firms.

Conceptual Framework

Hybrid Cost Method

The type of product a company produces affects the type of costing system required to determine product cost (Edmonds et al., 2011). The Cost System consists of documents, tables and records used to classify and monitor the operating expenses, to allocate these expenses to the expense centers, to transfer them into the product cost, and thus to determine the unit costs of the product (Büyükmirza, 2015). The operation of the cost system is shown in Figure 1.

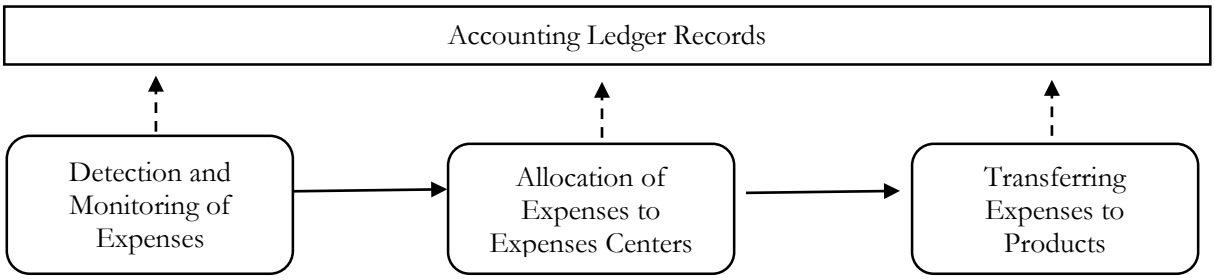

Figure 1. Operation of the Cost System

Source: (Büyükmirza, 2015)

There are many methods that can be used in cost calculations within this system for firms. However, it is not always easy to find the right one or to tell whether what is available is sufficient. In order to understand this, the current system can be evaluated according to the following three dimensions (Fisher-Krumwiede, 2015; Özçelik, 2019).

- Convenience: Ease of obtaining the desired cost information
- Accuracy: The accuracy measure of the desired cost information
- Implementation costs: The level of cost of obtaining the desired cost information

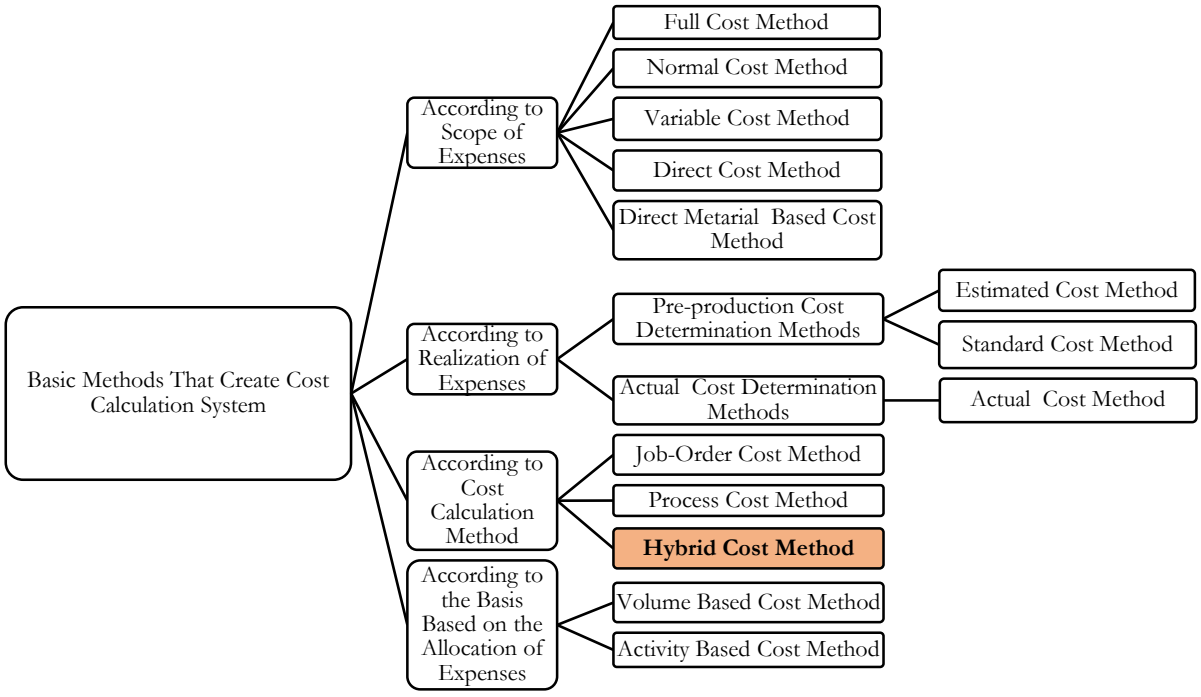

Figure 2. Basic Methods that Create a Cost Calculation System

Source: (Prepared by the author using Karakaya, 2007)

The basic methods that make up the cost calculation systems can be classified according to the cost calculation method, the scope of the expenses, the basis on which the allocation of expenses is taken, and the realization of the expenses, as in Figure 2.

The basic methods that make up the cost calculation system according to the cost calculation method of the firms are the job-order cost method and the process cost method. Job-order cost method; It is a cost calculation method that determines each cost element separately for each product or order produced in the firm or allows to calculate the product cost specifically (Yükçü, 2011). In this method, a cost card is opened for each order and all expenses incurred during the production of the order are accumulated in the cost card. All accumulated expenses make up the total order cost. In other words, it can be expressed as a method where the actual expenses related to each order are collected in the cost cards opened for the order and form the total order cost. The unit order cost is obtained by dividing the total order cost by the total order quantity.

In the process cost method, there is a process in which products that are generally similar to each other or that cannot be physically separated from each other are produced continuously. The unit costs are calculated by dividing the period costs by the amount of products produced in the period (Can, 2013). The comparison of job-order and process costing methods is given in Figure 3.

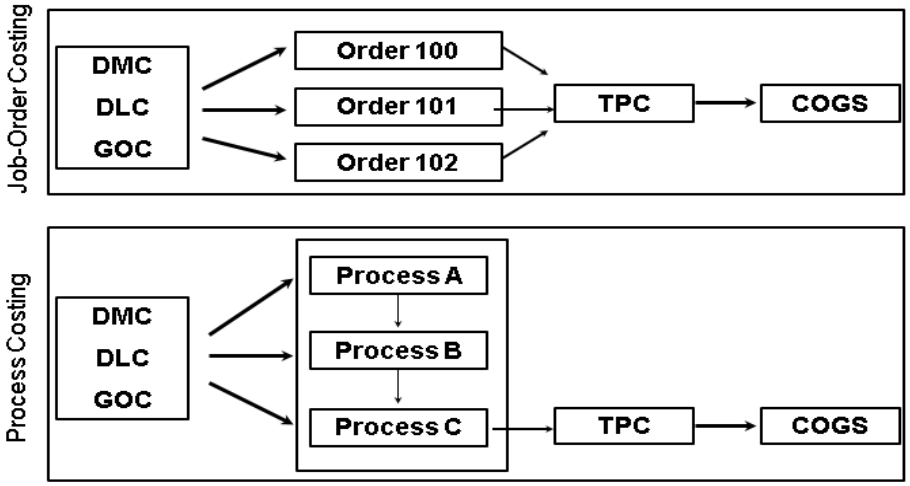

Figure 3. Comparison of Job-Order and Process Cost Methods

TPC: Total Product Cost, COGS: Cost of Goods Sold, DLC: Direct Labour Cost
OC: Overhead Cost, DMC: Direct Material Cost

Source: (Can, 2016)

The hybrid cost method, on the other hand, is based on the combination of the principles and procedures of these two methods. In other words, the hybrid cost method increases the efficiency of corporate cost management by combining these two methods in accordance with the characteristics of firm and management policies (Drobyazko et al., 2019). The method can be used in firm lines where different products with many common features are produced in batches. Although different products are produced in many firms, it is seen that some standard production processes are applied to them. For this reason, it is necessary that the cost system to be applied should be a mixture of job-order and process methods (Gürsoy, 1997).

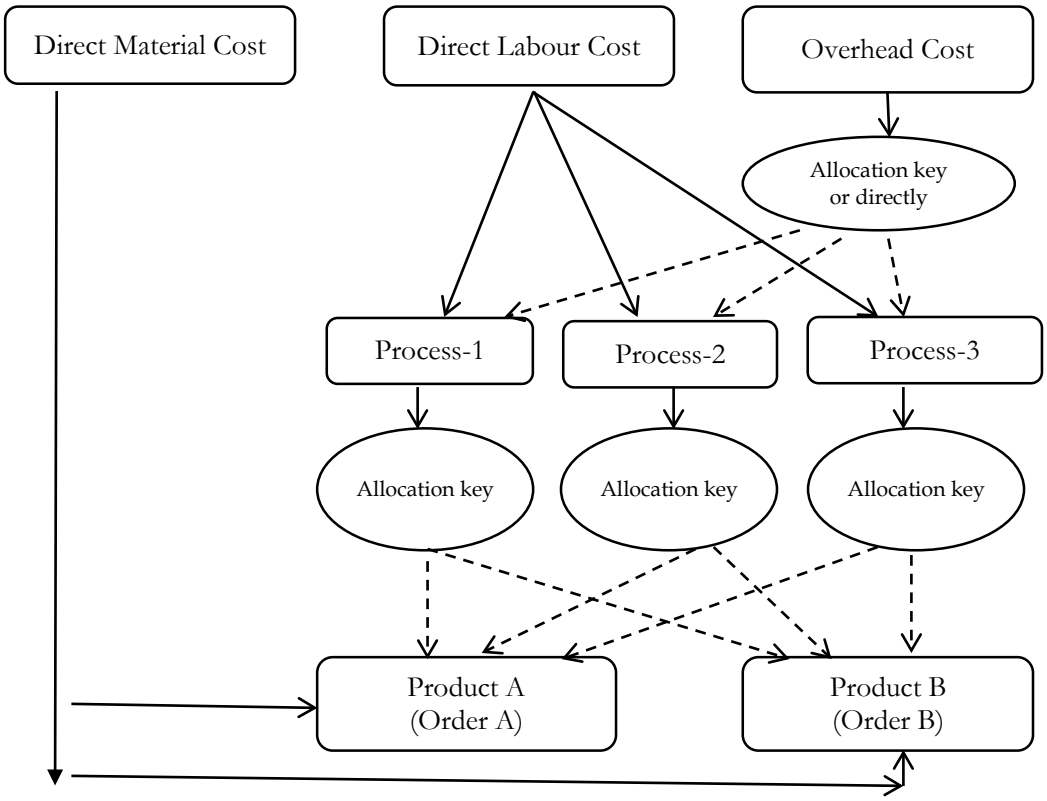

Figure 4. Cost Flow in Hybrid Cost Method

Source: (Karakaya, 2007)

The cost flow in the hybrid cost method is given in Figure 4. In the hybrid cost method, direct material costs are tracked separately in terms of orders, and in this respect, it is similar to the job-order cost method. For this, order cost cards are opened on a lot basis. Direct labour and overhead costs (processing or conversion costs) are tracked on a process basis and allocated to the products that use the process. In this respect, the method is similar to the process cost method (Karakaya, 2007). Allocation keys are used to assign the process costs to the process.

Ready to Wear Clothing Sector

The ready to wear clothing industry, unlike textiles, includes the production process of clothing. In other words, the process from fiber to yarn and then to obtaining fabric product is considered within the textile sector, and the process from the obtained fabric to obtaining clothing is evaluated within the ready to wear clothing industry (OKA, 2014).

The products of the ready to wear clothing sector consist of 61 and 62 GTIP chapters in international trade. In these chapters, the exports of the ready to wear clothing sector in the world in 2020 were approximately 418 billion dollars, and the exports in 2021 were 505 billion dollars. In 2021 total exports, China has the largest share with approximately 31%. Turkey's share is about 4%. Some of the prominent countries of the sector in exports and their shares are as in Figure 5.

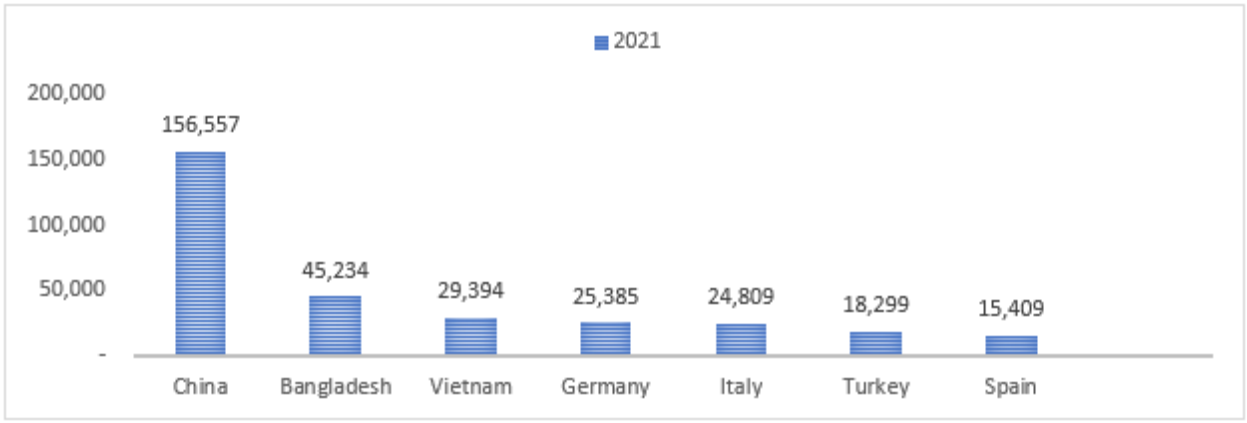

Figure 5. World Ready to Wear Clothing Exporters (million dollars)
Source: (ITC Trademap, 2022)

According to these chapters, the USA has the largest share in the world's 2021 total imports, with approximately 20%. Germany, France, and Japan follow respectively. Other prominent countries and their shares in the import sector are as in Figure 6. However, it is seen that Turkey is not in an importer position in the ready-to wear clothing sector.

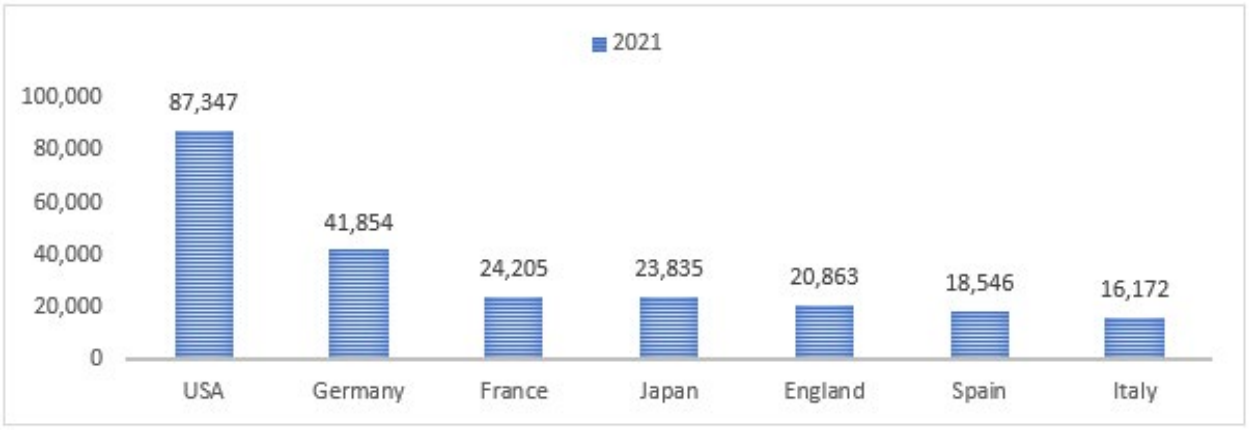

Figure 6. World Ready to Wear Clothing Importers (million dollars)
Source: (ITC Trademap, 2022)

Turkey's total export and import values according to 61 and 62 GTIP chapters between the years 2017-2021 are given in Figure 7. As can be seen, total exports increased by approximately 19% from 2017 to 2021. On the other hand, total imports decreased by 26% in the same time period. In the relevant time period, exports are at the highest level in 2021, while imports are at the lowest level in 2020.

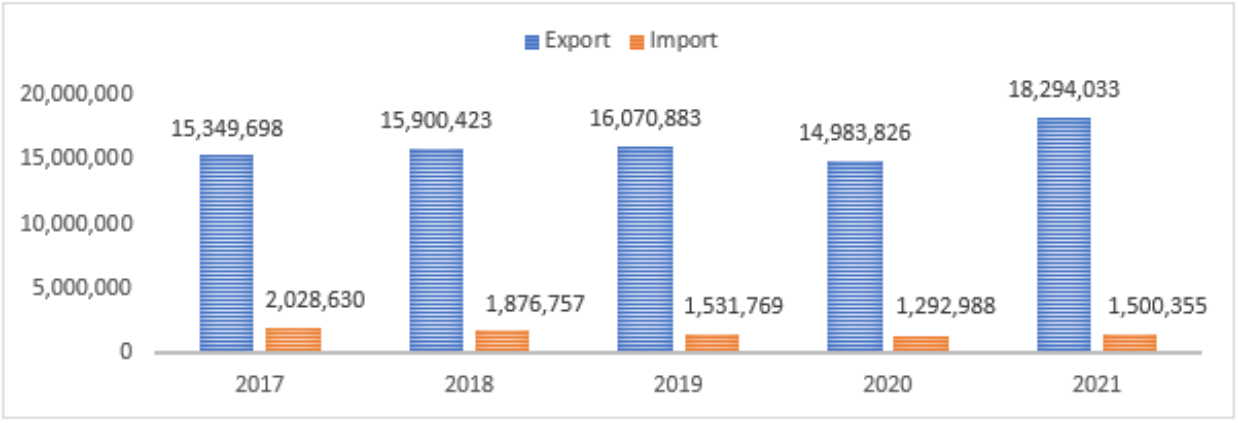

Figure 7. Turkey Ready to Wear Clothing Export and Import (thousand dollars)
Source: (TSI, 2022)

Table 1 shows the top 5 countries and trade values of the Turkish ready to wear clothing sector in 2021 according to the 61 and 62 GTIP chapters. Accordingly, it is seen that the first five countries to which exports are made consist of European countries. On the other hand, it is seen that a significant part of the import is made from far eastern countries. Germany is in the first place in Turkey's export. China is in the first place in imports.

Table 1. Major Countries of Import/Export in Turkish Ready to Wear Clothing Sector (thousand dollars)

N	2021		2021	
	Country of Export	Export Value	Country of Import	Import Value
1	Germany	3,083,610	China	289,706
2	Spain	2,690,665	Bangladesh	190,885
3	England	1,991,157	Georgia	116,607
4	Netherland	1,429,172	Italy	114,670
5	France	876,734	Spain	102,452

Source: (ITC Trademap, 2022)

According to the Central Bank of the Turkish Republic (CBTR)statistics, some basic indicators regarding the firms operating in the production of clothing in Turkey in 2021 are as in Table 2. Accordingly, more than half (54.6%) of the firms in Turkey are on a micro scale. The highest number of employees is in medium-sized firms. Only 2.5% of total firms are large-scale. About half of total net sales are made by large-scale companies.

Table 2. Basic Indicators of Turkish Ready to Wear Clothing Sector-2021

Scale	Number of Firms	Number of Employees	%	Net Sales		Total Assets		Shareholder's equity	
				Thousand TL	%	Thousand TL	%	Thousand TL	%
Micro	8,417	23,084	54.6	6,306,033	2.8	13,175,098	6.3	2,376,545	4.0
Small	4,496	84,717	29.2	36,765,746	16.1	35,335,652	17.1	9,338,531	15.8
Middle	2,106	201,944	13.7	71,245,833	31.2	65,552,832	31.7	15,640,939	26.5
Large	385	200,633	2.5	114,112,678	50.0	92,943,362	44.9	31,749,803	53.7
TOTAL	**15,404**	**510,378**		**228,430,290**		**207,006,944**		**59,105,818**	

TL: Turkish Lira
Source: (CBTR, 2022)

In 2021, a total of 15,404 firms consisted of 1,760 joint stock companies, 13,605 limited companies, 26 cooperatives and 13 others. In the relevant year, 9,079 of the firms made a profit, 5,968 suffered a loss and the other 357 did not experience any profit/loss (CBTR, 2022).

Methodology

Importance, Scope and Limitations

Turkey is one of the world's leading countries in ready-to wear clothing exports (See Figure 6). It is an important sector in terms of both foreign exchange input and employment. However, one of the ways for firms to survive in an increasingly competitive environment is to manage their costs well. The cost method used in this process is also important. The study is important in terms of showing that these two methods can be used together, unlike the separate use of job-order cost and process cost methods in determining production costs. In addition, the study is important in terms of showing the applicability and results of the hybrid cost method in the ready-to-wear clothing industry. In addition, other important factors are that the study includes real cost data, the results help managers in making decisions, there is no previous application in ready-to-wear clothing production, and the results are comparable with the results of the current method.

The study covers the cost and production data of an firm operating in the textile sector and producing ready-to-wear clothing in the province of Sinop for the period of November 2017. The data were obtained by using document analysis, observation and interview methods.

The limitations of the study are;

Privacy constraint: Due to competition and privacy issues, data for a more recent year could not be obtained.

Data constraint: Reasons such as not being able to access all documents of production data, insufficient information flow in the production system, experience of employees may have caused data loss.

Time constraint: One-month implementation period was considered sufficient due to the explanation of the hybrid cost method and implementation difficulties.

Purpose and Method

The aim of the study is to show the application of the Hybrid Cost Method in the ready-to-wear clothing industry. In addition, the results of the application were compared with the results of the current cost method of the firm and the differences and reasons were tried to be revealed. For this purpose, the case study method covering a period of one month was used in a ready-to-wear clothing firm. In this process, the current cost process of the firm was monitored and cost data were determined. These data have been rearranged within the framework of the Hybrid Cost Method.

Firm Production Process

ABC firm operates in the ready-to-wear sector in Sinop / Turkey and manufactures men's and women's clothing according to incoming orders. Although the firm exports in general, it also produces for domestic firms as a subcontractor.

It has been determined that Full Costing is used in terms of the scope of expenses in the production process, Actual Cost Method is used in terms of the realization of the expenses, Volume-Based Costing is used in terms of the allocation of expenses, and Job-Order Costing Method is used in terms of the calculation of the product costs.

According to the job-order cost system, an order cost card is opened by giving an order number to each order during the production process. While the order flows through the production process, it passes through many expense points (710-DMC, 720-DLC and 730-OC) and costs are charged to the order from these expense points. Thus, the expenses charged to the order constitute the total cost of the order. When the total cost collected in the order card is divided by the total number of orders, the unit cost is determined.

Although unit costs are determined according to the job-order cost method, different processes are applied at many processes until the order becomes a product. In this respect, the production process is similar to the process cost method. Thus, considering the process and characteristics of production, it can be said that the application of the Hybrid Cost Method is appropriate.

The basic raw material used in production and constituting a significant part of the costs is fabric. Fabrics are supplied from domestic or imported materials in line with the request of the orderer.
Production in the firm consists of the basic process of Model Preparation - Testing, Cutting, Sewing, Washing-Ironing, Quality Control and Packaging. In addition, there is a "Raw Material" store that supplies fabric to the cutting process, and an "Auxiliary Material" store that supplies accessories to the sewing process. In addition, there are auxiliary expense centers such as maintenance and repair, cafeteria, personnel service, security and management that support production in the enterprise.

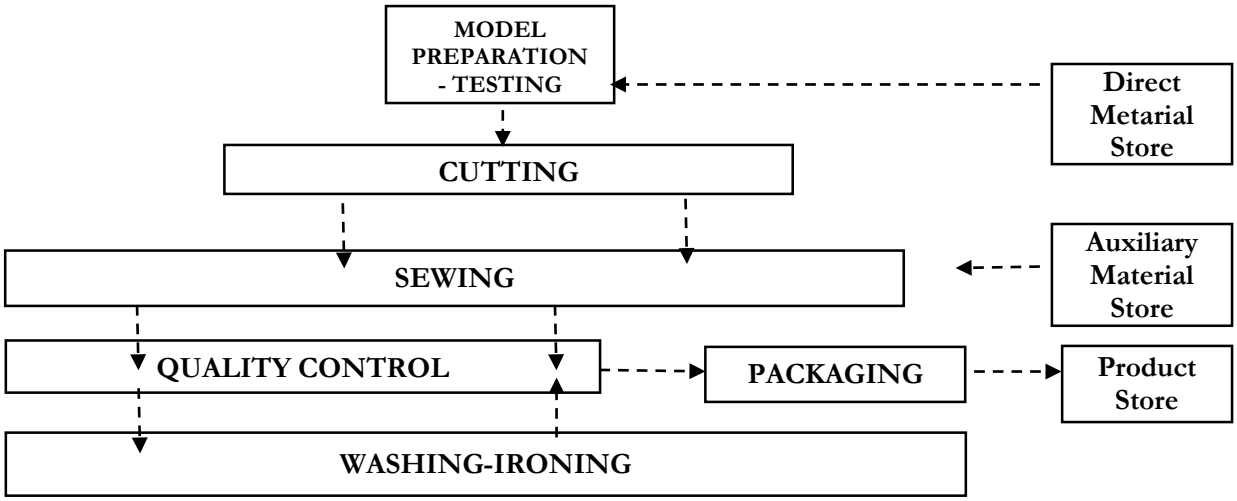

Figure 8. Production Process in the Firm

As can be seen in Figure 8, the production process starts with the model preparation and quality testing of the fabrics coming from the Direct metarial store at the testing process. The fabrics that pass the quality test successfully are taken to the cutting process. Then, the fabrics are cut according to the computer-aided layout plans, in a way that minimizes wastage. The cut fabrics are transferred to the sewing process. The sewing process is the stage where the most intensive production and the most workers work. Here, the cut fabric pieces and the accessories (yarn, label, trimmings, etc.) coming from the auxiliary material store are brought together and the product is formed. Afterwards, the product is transferred to the control process and production errors are checked and corrected. Some products are transferred to the washing - ironing process from here, while others are sent directly to the packaging process. At the end of the packaging process, the product is taken to the product store to be sent.

Firm Production Status

In the November 2017 period, when the sample application was made, 9 orders were produced. In the relevant month, 26 days were worked and the quantities in Table 3 were produced from the orders. Only November cost data and produced quantities were used in the study. Production of orders in other months is not taken into account. In addition to the order numbers determined within the scope of the application, the order information given by the company is also included.

Table 3. Orders Produced

Orders	Firm Code	Production Amount (Number)		
		October	November	December
Order 1	Aydın 7149-247	10,419	6,290	
Order 2	Aydın 7149-248		3,116	
Order 3	Aydın 7149-201		10,506	41
Order 4	Uja Atlas		917	
Order 5	Aydın 7149-056		10,092	52
Order 6	Laurie 21012		454	249
Order 7	Laurie 25457		662	603
Order 8	APS 231		3,648	
Order 9	LCW Check		251	747
TOTAL			**35,936**	

As can be seen in Table 3, Order 3 and Order 5 were the most produced in the period of November 2017. The least produced is Order 9. When we include the other months, it is seen that the highest production is order 1. Figure 9 shows the allocation of orders by periods.

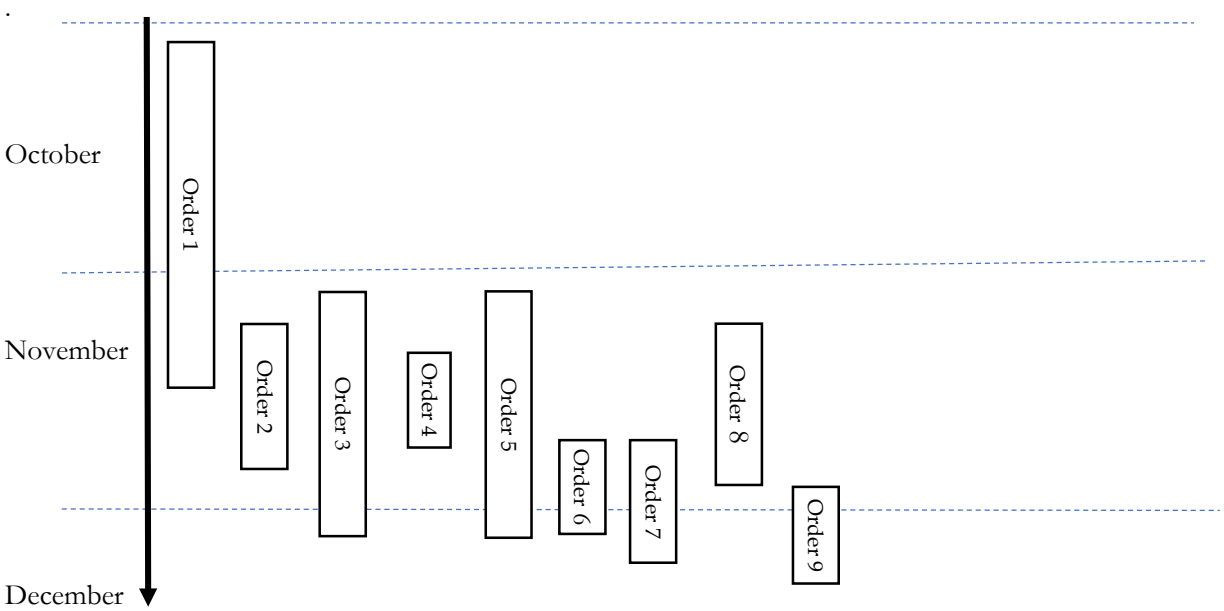

Figure 9: Production of Orders in Periods

As can be seen from Figure 9, the production of Order 1 started in October and was completed in November. Production of Orders 2, 4 and 8 started in November and was completed in the same period. Production of Orders 3, 5, 6, 7 and 9 started in November and was completed in December. Since the sample application was made only during the November period, the amount and price data are only for the November period. Data for October and December are not included.

Current Cost Calculation According to the Current Job-Order Cost Method of the Firm

According to the expense data received from the firm records, the costs for the November period when the application was made (DMC + DLC + OC) were realized as in Table 4. Here, direct and indirect material and labour costs are shown separately. Indirect material and labour cost values determined on the basis of orders consist of values allocated to orders with the help of allocation keys.

Table 4: Company's November 2017 Production Costs by Job-Order Cost Method (TL)

Orders	COSTS					TOTAL
	Direct Material Cost	Direct Labour Cost	Indirect Material Cost	Indirect Labour Cost	Other Overhead Cost	
Order 1	179,905.04	67,628.72	20,400.56	41,553.28	11,023.50	320,511.11
Order 2	89,617.22	28,478.71	10,162.26	20,699.19	5,457.39	154,414.77
Order 3	309,712.04	114,879.82	35,120.20	71,535.25	18,455.50	549,702.81
Order 4	28,287.42	18,914.02	3,207.69	6,533.64	1,627.40	58,570.17
Order 5	249,059.28	104,434.61	28,242.40	57,526.07	17,575.17	456,837.53
Order 6	12,492.02	8,129.71	1,416.55	2,885.33	787.39	25,711.00
Order 7	17,534.77	8,128.44	1,988.38	4,050.06	1,141.63	32,843.28
Order 8	116,207.05	39,497.12	13,177.45	26,840.74	6,462.23	202,184.59
Order 9	10,601.27	5,093.91	1,202.14	2,448.61	489.27	19,835.20
TOTAL	**1,013,416.11**	**395,185.05**	**114,917.63**	**234,072.18**	**63,019.48**	**1,820,610.45**

As can be seen from Table 4, the highest expense was made for Order 3 with TL 549,702.81. The minimum expense was made for Order 9 with TL 19,835.20. This situation is compatible with the quantities produced. The most realized expense type is Direct Material Costs with TL 1,013,416.11. On the other hand, the least realized type of expense is Other Overhead Costs with TL 63,019.48. The total production cost in the relevant month is TL 1,820,610.45. The material cost is about 60% of the total cost, and the labour cost is about 35% of the total cost.

Table 5. Costs of the Firm by Job-Order Cost Method

Orders	Total Production Costs	Total Production Amount	Unit Cost
Order 1	320,511.11	6290	~50.96
Order 2	154,414.77	3116	~49.56
Order 3	549,702.81	10506	~52.32
Order 4	58,570.17	917	~63.87
Order 5	456,837.53	10092	~45.27
Order 6	25,711.00	454	~56.63
Order 7	32,843.28	662	~49.61
Order 8	202,184.59	3648	~55.42
Order 9	19,835.20	251	~79.02
TOTAL	**1,820,610.45**	**35936**	**~50.66**

Table 5 shows the total and unit costs of the products produced in the November period according to the order cost method. To find the unit costs, the total (material, labour and other) costs of the orders in Table 4 are divided by the quantity of orders produced in the relevant month. According to these results, Order 9 with TL 79.02 has the highest unit cost and Order 5 with TL 45.27 has the lowest unit cost. The average unit cost of all orders was determined as TL 50.66.

Cost Calculation According to The Firm's Hybrid Cost Method

The firm determines its costs according to the job-order cost method, but at the same time, the production consists of processes. For this reason, the November period data of the firm will be recalculated according to the Hybrid Cost Method, where both the job-order and process cost methods can be used together. Therefore, DMC will be transferred to orders directly, and DLC and OC will be transferred to orders indirectly using allocation keys.

Allocation of Costs to Orders

The allocation of DMC (Direct Material Cost), DLC (Direct Labour Cost) and OC (Overhead Cost) that occurred in the firm in the November period, on the basis of orders is included in this section. As a requirement of the hybrid cost method, Direct Material Costs are allocated directly to the orders. Direct and indirect labour costs, indirect material costs and other overhead costs were first allocated to the processes with the help of store material output records or allocation keys. Then, the total costs collected in the processes were allocated to the orders with the help of allocation keys. Calculations related to allocations and the values found are explained and shown in the relevant sub-headings.

Allocation of Direct Material Costs to Orders.

In the job order cost method, direct material costs are allocated to the orders according to the material output/entry records. The same process and situation is in question in the hybrid cost method. Therefore, Direct Material Costs of the firm in the November period will be allocated directly to the orders as in the job-order method. The values in Table 6 were taken from the actual values according to the job-order cost method in Table 4.

Table 6. Allocation of DMC to Orders

Orders	Direct Material Cost
Order 1	179,905.04
Order 2	89,617.22
Order 3	309,712.04
Order 4	28,287.42
Order 5	249,059.28
Order 6	12,492.02
Order 7	17,534.77
Order 8	116,207.05
Order 9	10,601.27
TOTAL	**1,013,416.11**

As can be seen in Table 6, the total direct material cost incurred for all orders in the relevant month is TL 1,013,416.11. The highest cost belongs to Order 3 (TL 309,712.04). The lowest cost belongs to order 9 (TL 10,601.27).

Allocation of Processing (Conversion) Costs to Processes and Orders.

In the hybrid cost method, processing costs consist of direct labour costs (DLC) and overhead costs (OC). Direct labour and indirect material costs, which can be related to processes according to worker time cards and store material output records, are directly transferred to the relevant processes. Indirect labour and other overhead costs that cannot be related with the processes are allocated to the processes with the help of allocation keys. The allocation of DLC and OC in the November period of the firm, first to the processes and then to the orders, is explained in detail in the sub-headings.

Allocation of Direct Labour Costs to Process.

According to the hybrid cost method, direct labour costs are considered as processing or conversion costs. The direct labour costs that can be related with the processes are allocated to the relevant processes. This relationship is made according to the worker time cards. Worker time cards include which worker worked at which processes. The labour costs incurred on the basis of processes according to the results of the worker time card in the November period are as in Table 7.

Table 7. Allocation of Direct Labour Costs by Processes

Processes	**Direct Labour Cost**
- Model preparation and testing	1,563.36
- Cutting	17,770.15
- Sewing	275,535.99
- Washing - Ironing	35,957.26
- Quality control	53,414.78
- Packaging	10,943.51
TOTAL	**395,185.05**

The data in Table 7 are calculated by taking into account the payroll prepared by the firm for the November period and the reports regarding the working time, process and status (direct/indirect) of the workers in the payroll. Total direct labour cost in the related month was TL 395,185.05. The highest cost was realized in the sewing process (TL 275,535.99). This value corresponds to approximately 70% of the total cost. The lowest cost was realized during the model preparation and testing process (TL 275,535.99).

Allocation of Indirect Material Costs to Processes.

Indirect materials consist of auxiliary materials and operating materials. Output records of these materials from the auxiliary material store are kept. According to these records, the processes of the materials can be followed. Allocation of indirect material costs to processes according to store material output records regarding which processes and how much auxiliary material or operating material is sent from the auxiliary material store is as in Table 8.

Table 8. Allocation of Indirect Material Costs by Processes

Processes	**Indirect Material Costs**
- Model preparation and testing	0.00
- Cutting	50,240.28
- Sewing	45,034.74
- Washing - Ironing	75.31
- Quality control	9.08
- Packaging	19,558.22
TOTAL	**114,917.63**

In Table 8, the reports regarding the amount and prices of the auxiliary materials or operating materials sent from the auxiliary material store in the November period of the firm are taken into account. According to these reports, it was determined that indirect materials were sent to which processes, how much and at what cost. The cutting processes caused the most indirect material cost (TL 50,240.28). Because a significant amount of auxiliary fabric material (interlining fabric, pocketing fabric, etc.) has been released from the material store to this process. Similarly, a significant amount of indirect materials (zippers, trimmings, labels, thread etc.) went out from the

auxiliary material store to the sewing process. In the packaging process (price card, other cards, nylon bag, package, etc.) indirect materials were used. In total, TL 114,917.63 indirect materials were used in the relevant month.

Allocation of Indirect Labour Costs to Processes.

The allocation of indirect labour costs to the processes will be made according to the direct labour costs determined on a process basis. In other words, direct labour costs were used as the allocation key. Except for the normal wages of the workers who work directly in the testing, cutting, sewing and washing-ironing processes, labour costs are considered as indirect labour costs. Total direct labour costs are TL 395,185.05. Total indirect labour costs are TL 234,072.18.

Indirect labour cost allocation rate = 234,072.18 / 395,185.05
= 0.592310311

Table 9. Allocation of Indirect Labour Costs by Processes

Processes	DLC	Allocation Rate	Indirect Labour Cost
- Model preparation and testing	1,563.36	~0.59	925.99
- Cutting	17,770.15	~0.59	10,525.44
- Sewing	275,535.99	~0.59	163,202.81
- Washing - Ironing	35,957.26	~0.59	21,297.85
- Quality control	53,414.78	~0.59	31,638.12
- Packaging	10,943.51	~0.59	6,481.96
TOTAL	**395,185.05**		**234,072.18**

In the calculation in Table 9, indirect labour costs determined according to firm payrolls and worker time cards are divided into direct labour costs and a allocation ratio is determined. The allocation to the processes was made according to this ratio (about 0.59). Accordingly, the most indirect labour cost was reflected in the sewing process (TL 163,202.81). This value corresponds to 70% of the total indirect labour. These rates are the same as the ratio allocation of direct labour costs used as the allocation key.

Allocation of Other Overhead Costs by Processes.

Other overhead costs consist of expenses such as meals, maintenance-repair, worker transportation, electricity, water, depreciation. The allocation of other overhead costs to the processes will be made according to the direct labour costs determined on a process basis. Direct labour costs were used as the allocation key of the total cost to the processes. Total direct labour cost is TL 395,185.05. Total other overhead cost is TL 63,019.48.

Other overhead cost allocation rate = 63,019.48/ 395,185.05
= 0.159468279

Table 10. Allocation of Other Overhead Costs by Processes

Processes	DLC	Allocation Rate	Other Overhead Cost
- Model preparation and testing	1,563.36	~0.16	249.31
- Cutting	17,770.15	~0.16	2,833.78
- Sewing	275,535.99	~0.16	43,939.25
- Washing - Ironing	35,957.26	~0.16	5,734.04
- Quality control	53,414.78	~0.16	8,517.96
- Packaging	10,943.51	~0.16	1,745.14
TOTAL	**395,185.05**		**63,019.48**

In the calculation in Table 10, the other overhead costs determined according to the firm cost tables are divided by the total direct labour costs and a allocation ratio is determined. The allocation to the processes was made according to this ratio (about 0.16). Total other overhead costs are TL 63,019.48. The process where other overhead costs are most reflected is the sewing process (TL 43,939.25). The process where other overhead costs are reflected the least is the model preparation and testing process (TL 249.31).

Allocation of Total Processing (Conversion) Costs by Processes.

In the hybrid cost method, processing costs consist of direct labour costs, indirect labour costs, indirect material costs and other overhead costs. In Tables 7, 8, 9 and 10, these costs are allocated among the processes. As a result, the allocation of the total processing costs (DLC, ILC, IMC and OOC) to the processes will be as in Table 11.

Table 11. Allocation of Total Processing Costs by Processes

Processes	Direct Labour Cost	Indirect Labour Cost	Indirect Material Cost	Other Overhead Cost	Total
- Model preparation and testing	1,563.36	925.99	0.00	249.31	2,738.66
- Cutting	17,770.15	10,525.44	50,240.28	2,833.78	81,369.65
- Sewing	275,535.99	163,202.81	45,034.74	43,939.25	527,712.79
- Washing - Ironing	35,957.26	21,297.85	75.31	5,734.04	63,064.46
- Quality control	53,414.78	31,638.12	9.08	8,517.96	93,579.94
- Packaging	10,943.51	6,481.96	19,558.22	1,745.14	38,728.83
TOTAL	**395,185.05**	**234,072.18**	**114,917.63**	**63,019.48**	**807,194.34**

Table 11 contains a combined version of Tables 7,8,9 and 10. In the table, the total processing costs are allocated among the processes. In Table 7, the total direct labour costs are allocated to the processes, taking into account the worker time cards and worker payrolls. Table 8, total indirect material costs are allocated to the processes according to store material output records. In Table 9, total indirect labour costs are allocated to processes using a allocation key. In Table 10, the total other overhead costs are allocated to the processes using an allocation key. Total processing cost is TL 807,194.34. The sewing processes received the highest share (TL 527,712.79) from all this allocation.

Allocation of Processing (Conversion) Costs Collected in Processes to Orders.

The allocation keys in Table 12 are used in the allocation of the Processing (Conversion) Costs (DLC, ILC, IMC and OC) accumulated at the processes to the orders. The allocation key is determined by the firm according to the best relationship between the cost to be allocated and the allocation location. Allocation amounts are as in Table 13.

Table 12. Table of Allocation Keys

Processes	Allocation Keys	Introduction
- Model pr. and testing	Production Amount	All fabrics have been tested.
- Cutting	Production Amount	All fabrics have been cut.
- Sewing	Sewing Time	Total sewing times during the sewing process are followed.
- Washing - Ironing	Production Amount	All products have been ironed. There was no washing.
- Quality control	Production Amount	All products have been checked.
- Packaging	Production Amount	All products are packed

As can be seen in Table 12, a allocation key is determined in the allocation of the accumulated costs in the processes to the orders. For the sewing process, the sewing time was determined as the allocation key. In others, the amount of production is determined as the allocation key.

Table 13. Allocation of Processing Expenses to Orders

Orders	Allocation Keys		Processes						TOTAL
	Production amount	Sewing time	Model P. and Testing	Cutting	Sewing	Washing - Ironing	Quality control	Packaging	
Order 1	6290	287,988.9	479.36	14,242.41	90,308.43	11,038.39	16,379.61	6,778.84	139,227.03
Order 2	3116	121,273.2	237.47	7,055.54	38,029.22	5,468.30	8,114.29	3,358.17	62,262.98
Order 3	10506	489,202.1	800.66	23,788.67	153,405.48	18,437.09	27,358.38	11,322.49	235,112.76
Order 4	917	80,543.1	69.88	2,076.36	25,256.95	1,609.25	2,387.93	988.27	32,388.64
Order 5	10092	444,722.4	769.10	22,851.25	139,457.40	17,710.56	26,280.30	10,876.32	217,944.92
Order 6	454	34,619.4	34.60	1,027.99	10,856.06	796.73	1,182.25	489.28	14,386.91
Order 7	662	34,614.0	50.45	1,498.96	10,854.36	1,161.75	1,723.90	713.45	16,002.87
Order 8	3648	168,193.8	278.01	8,260.14	52,742.72	6,401.91	9,499.66	3,931.51	81,113.95
Order 9	251	21,691.8	19.13	568.34	6,802.18	440.48	653.62	270.51	8,754.26
TOTAL	**35936**	**1.682,848.7**	**2,738.66**	**81,369.65**	**527,712.79**	**63,064.46**	**93,579.94**	**38,728.83**	**807,194.34**

In Table 13, processing costs determined on the basis of processes in Table 11 are allocated to orders using the allocation keys in Table 12. For example, the processing costs collected (TL 2,738.66) during the model preparation and testing process are divided by the total production amount (35.936) and a allocation ratio (0.076) is obtained. The ratio found is multiplied by the production amount of the orders and the cost allocation is made over this value. In other words, costs are allocated to orders using this allocation ratio. Similarly, the processing costs collected (TL 527,712.79) during the sewing process are divided by the total sewing time (1,682,848.7) and a allocation ratio (0.31) is obtained. According to the distribution result, the highest cost (TL 235,112.76) is loaded on order 5. According to the distribution result, the lowest cost (TL 8,754.26) is loaded on order 9.

Allocation of All Costs to Orders.

Direct material costs can be tracked on the basis of orders and reflected directly on orders. These values are taken from Table 6. Processing costs reflected on orders according to the hybrid cost method are taken from Table 13. The allocation of direct material costs, direct labour and overhead costs to orders will be as in Table 14.

Table 14. Allocation of All Costs to Orders in November

Orders	DMC	Processing Costs (DLC+OC)	TOTAL
Order 1	179,905.04	139,227.03	319,132.07
Order 2	89,617.22	62,262.98	151,880.20
Order 3	309,712.04	235,112.76	544,824.80
Order 4	28,287.42	32,388.64	60,676.06
Order 5	249,059.28	217,944.92	467,004.20
Order 6	12,492.02	14,386.91	26,878.93
Order 7	17,534.77	16,002.87	33,537.64
Order 8	116,207.05	81,113.95	197,321.00
Order 9	10,601.27	8,754.26	19,355.53
TOTAL	**1,013,416.11**	**807,194.34**	**1,820,610.45**

Table 14 is the combined data in tables 6 and 13. In the table, direct material costs, and processing costs are shown collectively on the basis of orders. The total cost reflected on the orders is TL 1,820,610.45. Most of this cost is reflected in order 3 (TL 544,824.80). The least of this cost is reflected in order 9 (TL 19,355.53). This is similar to the allocation of direct material costs and the allocation of processing costs. After these values are determined, unit costs of orders can now be determined. Unit costs will be found by dividing the values determined on the basis of the order by the production amount of the order in the relevant month.

Determination of Order Unit Cost

All costs collected on the basis of orders are divided by the production quantities of the orders in the relevant period and order unit costs are determined as in 16. Table 16 shows the total costs of orders, total production quantities and calculated unit costs separately. Table 15 contains a sample order cost chart showing all costs for Order 1.

Table 15. Order Cost Card-1

ORDER COST CARD				
Starting date:….			Order Number	1
End date: …			Orders Name:	Aydın 7149-247
Amount: 6290				
DMC	Date	Material	Amount	Cost
				179,905.04
	Total			179,905.04
PROCESSING COSTS	Processes		Allocate Rate	
	Model prep. and testing			479.36
	Cutting			14,242.41
	Sewing			90,308.43
	Washing - Ironing			11,038.39
	Quality control			16,379.61
	Packaging			6778.84
	Total			139,227.03
Order Cost Total				319,132.07
Order Unit Cost		=319,132.07/6290		50.74

In Table 15, the detailed total costs (direct material costs and processing costs) of order 1 in Table 14 are shown on the order cost card. Total direct material costs are TL 179,905.04 and can be tracked on an order basis. Total processing costs are TL 139,227.03. The total cost of the order in the relevant month is TL 319,132.07. The unit cost (TL 50.74/unit) was found by dividing this value by 6290, which is the production amount of the order.

Table 16. Order Unit Costs for November Period

Orders	**Total**	**Produce amount**	**Unit Cost**
Order 1	319,132.07	6,290	~50.74
Order 2	151,880.20	3,116	~48.74
Order 3	544,824.80	10,506	~51.86
Order 4	60,676.06	917	~66.17
Order 5	467,004.20	10,092	~46.27
Order 6	26,878.93	454	~59.20
Order 7	33,537.64	662	~50.66
Order 8	197,321.00	3,648	~54.09
Order 9	19,355.53	251	~77.11
TOTAL	**1,820,610.45**	**35,936**	

In Table 16, the total costs of orders are divided by the total order quantity and unit order costs are obtained. The highest unit cost belongs to order 9 and the lowest unit cost belongs to order 5. According to the hybrid cost method, the unit cost of 9 of the order was found to be TL 77.11. The unit cost of 5 of the order was found to be TL 46.27. In the next step, the results of the job-order cost method and the hybrid cost method will be compared.

Comparison of Job-Order Cost Method and Hybrid Cost Method

In this section, the results of the job-order cost method used in cost calculation in the firm and the hybrid cost method are compared. Order costs were compared as total and unit costs, results determined on the basis of orders are as in Table 17.

Table 17. Comparison of Job-Order Cost and Hybrid Cost Method Results

	Job-Order Cost Method		Hybrid Cost Method	
Orders	**Total cost**	**Unit Cost**	**Total cost**	**Unit Cost**
Order 1	320,511.11	~50.96	319,132.07	~50.74
Order 2	154,414.77	~49.56	151,880.20	~48.74
Order 3	549,702.81	~52.32	544,824.80	~51.86
Order 4	58,570.17	~63.87	60,676.06	~66.17
Order 5	456,837.53	~45.27	467,004.20	~46.27
Order 6	25,711.00	~56.63	26,878.93	~59.20
Order 7	32,843.28	~49.61	33,537.64	~50.66
Order 8	202,184.59	~55.42	197,321.00	~54.09
Order 9	19,835.20	~79.02	19,355.53	~77.11
TOTAL	**1,820,610.45**		**1,820,610.45**	

When the results in Table 17 are evaluated, it is seen that the total and unit costs of Orders 1, 2, 3, 8 and 9 determined according to the Job-Order Cost Method have decreased in the Hybrid Cost Method, while the total and unit costs of Orders 4, 5, 6, 7 have increased. Since it is known that the Direct Material Costs are the same in both methods, some of the reasons that make up the difference are as follows. In the Job-Order Cost Method, DLC is transferred directly to the orders, while in the Hybrid Cost Method, it is first transferred to the process and then to the orders using allocation keys. Another reason is that in the job-order cost method, OC is transferred to the orders with allocation keys, while in the hybrid cost method, it is transferred to the processes by using allocation keys, and then transferred from the processes to the orders using another allocation key.

Table 18. November Sales Amounts of Orders Produced in November

Orders	**Sales Quantities**
Order 1	6,290
Order 2	3,116
Order 3	8,930
Order 4	917
Order 5	9,083
Order 6	300
Order 7	185
Order 8	3,648
Order 9	196
TOTAL	**32,665**

As can be seen in Figure 9, all of the orders that were completed in November were sent to the customer. On the other hand, some of the orders that started to be produced but not completed in November were sent to the customer. The quantities sold from the orders produced in the firm in November are as in Table 18. Accordingly, the first part of the income statements that will be formed according to "Job-Order Cost Method" and "Hybrid Cost Method" in the November period will be as in Table 19.

Table 19: Income Statement by Job-Order Cost Method and Hybrid Cost Method

	Job-Order Cost Method	Hybrid Cost Method	Difference
GROSS SALES	**2,897,871.23**	**2,897,871.23**	**JOCM- HCM**
Order 1	548,110.60	548,110.60	
Order 2	260,996.16	260,996.16	
Order 3	822,274.40	822,274.40	
Order 4	101,328.50	101,328.50	
Order 5	748,348.37	748,348.37	
Order 6	28,203.00	28,203.00	
Order 7	15,969.20	15,969.20	
Order 8	343,678.08	343,678.08	
Order 9	28,962.92	28,962.92	
COST OF SALES (-)	**(1,655,742.37)**	**(1,654,666.25)**	**1,076.12**
Order 1	320,511.11	319,132.07	1,379.04
Order 2	154,414.77	151,880.20	2,534.57
Order 3	467,242.16	463,095.89	4,146.26
Order 4	58,570.17	60,676.06	-2,105.89
Order 5	411,162.83	420,313.03	-9,150.20
Order 6	16,989.65	17,761.41	-771.76
Order 7	9,178.26	9,372.30	-194.04
Order 8	202,184.59	197,321.00	4,863.59
Order 9	15,488.84	15,114.28	374.57
GROSS PROFIT ON SALES	**1,242,128.86**	**1,243,204.98**	**(1,076.12)**
Order 1	227,599.49	228,978.53	-1,379.04
Order 2	106,581.39	109,115.96	-2,534.57
Order 3	355,032.24	359,178.51	-4,146.26
Order 4	42,758.33	40,652.44	2,105.89
Order 5	337,185.54	328,035.34	9,150.20
Order 6	11,213.35	10,441.59	771.76
Order 7	6,790.94	6,596.90	194.04
Order 8	141,493.49	146,357.08	-4,863.59
Order 9	13,474.08	13,848.64	-374.57

As can be seen from Table 19, the sales costs (TL 1.654,666.25) calculated according to the Hybrid Cost Method are lower than those realized according to the Job-Order Cost Method. Since the sales amounts have not changed, the gross sales profit (TL 1.243,204.98) calculated according to the Hybrid Cost Method has been higher than the realized according to the Job-order Cost Method. The cost difference between both methods is TL 1,076.12. The biggest difference occurred in order 5 (TL 9,150.20). The smallest difference occurred in order 7 (TL 194.04). Sales costs incurred in order 1,2,3,8 and 9 are less in the hybrid cost method. On the other hand, the sales costs incurred in orders 4,5,6 and 7 are less in the job-order cost method.

Conclusion

The Turkish ready-to wear clothing industry has a significant market share in the world export market. The sector is one of the important production areas of Turkey in terms of increasing export potential, investments, employment and contribution to macroeconomic development. However, increasing competition in the globalizing world also requires effective control of production costs. Firms want to know the total and unit costs of their products, which are the result of production processes. This information may be necessary for many reasons such as product pricing decisions, marketing strategies, future investment and financing plans of management. In order to obtain the desired cost information, firms choose and apply the cost method appropriate to their production structure and activities. The methods that can be applied according to the cost calculation method are the job-order cost method, the process cost method and the hybrid cost method in which these two methods are used together.

The current production process in the firm operates according to the orders and within this framework, the costs are determined by the job-order cost method. batches. In this respect, it is suitable for the order cost method. But at the same time, the product types are similar and production is made in processes, and some standard processes are applied for all products throughout the process. Hybrid cost method can be a suitable cost method in calculating more reliable production cost. In this respect, the study is important in terms of showing that the hybrid cost method can be used in such firms. In addition, the study is based on real cost data, can help managers make decisions because the results of the study are comparable with the results of the current method, and contributes to the literature because it is a unique application in ready-to wear clothing production. In this way, it is shown how the costs are calculated with the hybrid cost method for firms whose production process is similar. Although the application does not contain up-to-date data due to privacy issues, it is important in terms of showing the application of the method and offers a different alternative for firms to determine their costs and compare them with the current one.

The study shows how the use of job-order and process costing methods together (hybrid cost method) affects firm production costs. The variation of total and unit product costs on the basis of orders has been revealed. The whole process of obtaining these results has been examined step by step in the study. Direct material costs, direct labour costs, overhead costs and the flow of these costs towards orders are shown in the tables, and related table explanations are made. The effect of the hybrid cost method on the profitability was determined according to the current method applied in the firm. An income statement comparison was made regarding these results.

As a result, the cost data of nine orders produced in November were re-determined within the framework of the hybrid cost method, and it was observed that the total and unit costs of five orders decreased and four orders increased. One of the reasons for this difference is that in the hybrid cost method, direct labour costs are allocated to processes first and then allocated from processes to orders with the allocation key. In addition, processing costs cannot be directly associated with orders, they are associated indirectly using allocation keys. However, the sales costs determined using the hybrid cost method in the this period were lower than those calculated according to the current job-order cost method of the firm, and the gross sales profit was determined higher. It can be said that these results will be beneficial for the management units of the firm to make more reliable and effective decisions.

References

Altıntaş, N. (2010). Bir konfeksiyon işletmesinde sipariş maliyet sistemi uygulamasi. *Sosyal Bilimler Dergisi*, (2), 140-152

Büyükmirza, H.K. (2015). *Maliyet ve yönetim muhasebesi.* Ankara: Gazi Kitabevi

Can, A.V. (2013). *Maliyet muhasebesi.* Sakarya: Sakarya Yayınları

Can, A.V. (2016). *Maliyet sistemleri.* Slideplayer. https://slideplayer.biz.tr/slide/8920237/

CBTR (2022). *Industry balance sheets statistics.* https://www.tcmb.gov.tr/

Drobyazko, S., Pavlova, H., Suhak, T., Kulyk, V. & Khodjimukhamedova, S. (2019).Formation of hybrid costing system accounting model at the enterprise. *Academy Of Accounting and Financial Studies Journal,*23(6),1-6

Edmonds, T., Tsay, B. & Olds, P.R. (2011). *Fundamental managerial accounting concepts*. Newyork: The McGrawHill

Fisher, J. G. & Krumwiede, K. (2015). Product costing systems: finding the right approach. *The journal of corporate accounting & finance*, 23(3), 13-21.

Gürsoy, C.T. (1997). *Yönetim ve maliyet muhasebesi.* İstanbul: Lebib Yalkın Yayınları

ITC Trademap (2022). *Trade statistics*. International Trade Centre. https://www.trademap.org

Karakaya, M. (2007). *Maliyet muhasebesi.* Ankara: Gazi Kitabevi

Kişin, E. (2000). *Sipariş maliyet sistemi ve pamuklu tekstil terbiye işletmelerinde uygulanmasi.* İstanbul Üniversitesi SBE Yayınlanmamıış Yüksek Lisans Tezi. İstanbul

OKA (2014). *Tekstil ve hazir giyim sektör raporu*. Orta Karadeniz Kalkınma Ajansı

Özçelik, F. (2019). Maliyet yöntemlerinin değerlendirilmesi ve seçimi. *Ömer Halisdemir Üniversitesi Iktisadi ve Idari Bilimler Fakültesi Dergis*i, 12(4), 607—622.

TSI (2023). *Export by chapters*. Turkey Statistical Institute. https://www.tuik.gov.tr/

Yereli, A.N., Kayalı, N. & Demirlioğlu, L. (2015). Karma maliyet yöntemi ve bir tekstil işletmesinde uygulama. *Çankırı Karatekin Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(2): 437-464.

Yükçü, S. (2011). *Yönetim açisindan maliyet muhasebesi*, 7. Baskı, İzmir: Altın Nokta

GENİŞLETİLMİŞ ÖZET

İşletmelerin temel amacı ürettikleri mamul veya hizmetleri kullanıcılara ulaştırarak karşılığında kar elde etmek ve böylelikle faaliyetlerinin sürekliliğini sağlayabilmektir. Fakat günümüzün rekabetçi ortamı, gelişen teknoloji ve üretim biçimleri bu kar elde etme sürecinde işletmelerin maliyetlerini doğru tespit etmesi, iyi yönetmesi ve azaltmasını zorunlu hale getirmektedir. Bu nedenle yönetim kararlarında kullanılacak doğru veri için muhasebe sisteminden elde edilecek doğru maliyet hesaplama yönteminin seçimi daha fazla önem kazanmaktadır.

Hazır giyim sektörü tekstilden farklı olarak giyim eşyası üretim sürecini kapsamaktadır. Başka bir ifade ile elyaftan iplik ve sonrasında kumaş mamulü elde etmeye kadar olan süreç tekstil, elde edilen kumaştan giyecek eşya elde etmeye kadar olan süreç ise hazır giyim sektörünün içinde değerlendirilmektedir (OKA, 2014). Türkiye hazır giyim sektöründe dünya pazarında önemli bir yere sahiptir. 2022 yılında toplam ihracat içindeki payı ise % 7'yi aşmıştır. Büyüyen dış ticaret hacmi ve artan ihracatıyla dikkat çeken sektör ülke ekonomisinin gelişimine ve istihdama da önemli ölçüde destek olmaktadır. Fakat sektörün rekabet avantajının sürdürülebilmesi doğru kararların doğru zamanda alınmasını gerektirmektedir. Bu kararların alınabilmesi içinde muhasebe departmanından ihtiyaca ve gerçeğe uygun, anlaşılabilir, karşılaştırılabilir ve zamanında sunulmuş verilerin sağlanması gerekir. Bu verilerden birisi de üretim maliyet verileridir.

İşletmelerin maliyet hesaplama şekline göre maliyet hesaplama sistemini oluşturan temel yöntemler sipariş maliyet yöntemi ve safha maliyet yöntemleridir. Sipariş maliyet yöntemi; işletmede üretimi gerçekleştirilen her bir mamul veya siparişe ilişkin her maliyet unsurunu ayrı ayrı belirleyen veya mamul maliyetini özel olarak hesaplamaya imkân sağlayan bir maliyet hesaplama yöntemidir (Yükçü, 2011). Bu yöntemde her bir sipariş için maliyet kartı açılmakta ve siparişin üretimi sürecinde gerçekleşen tüm giderler maliyet kartında birikmektedir.

Safha maliyet yönteminde genel olarak birbirine benzeyen veya fiziksel olarak birbirinden ayrılamayan mamullerin sürekli bir şekilde üretildiği bir süreç vardır. Dönem maliyetleri dönemde üretilen mamul miktarına bölünerek birim maliyetler hesaplanır. Mamuller aynı olduğundan, sipariş maliyet yöntemindeki gibi maliyetlerin mamullere dağıtımı durumu yoktur (Can, 2013).

Karma maliyet yöntemi ise bu iki yöntemin ilke ve prosedürlerinin birleşimine dayanır. Başka bir ifade ile karma maliyet yöntemi bu iki yöntemi iş ve yönetim politikalarının özelliklerine uygun olarak birleştirerek kurumsal maliyet yönetiminin verimliliğini artırır (Drobyazko vd., 2019). Karma (işlem) maliyet yönteminde direkt ilk madde malzeme giderleri siparişler açısından ayrı olarak izlenmekte olup bu açıdan sipariş maliyet yöntemine benzemektedir. Bunun için parti bazında sipariş maliyet kartları açılmaktadır. Direkt işçilik ve genel üretim giderleri (işlem veya dönüştürme giderleri) ise işlem bazında izlenmekte ve işlemi (safha) kullanan mamullere dağıtılmaktadır. Bu açıdan da yöntem safha maliyet yöntemine benzemektedir (Karakaya, 2007).

Araştırmanın amacı hazır giyim sektöründe Karma Maliyet Yöntemi'nin uygulanmasını göstermektir. Ayrıca uygulama sonuçları işletmenin mevcut maliyet yöntemi sonuçları ile karşılaştırılarak farklılıklar ve nedenler ortaya konulmaya çalışılmıştır. Bu amaçla bir hazır giyim işletmesinde bir aylık bir süreci kapsayan örnek olay yöntemi kullanılmıştır. Bu süreçte işletmenin mevcut maliyet süreci izlenmiş, maliyet verileri belirlenmiştir. Bu veriler Karma Maliyet Yöntemi çerçevesinde yeniden düzenlenmiştir.

Araştırma hazır giyim sektöründe karma maliyet yönteminin uygulanabilirliğini ve sonuçlarını göstermesi açısından önemlidir ve bir hazır giyim firmasının 2017 Kasım dönemi verilerini kapsamaktadır Rekabet ve gizlilik sorunları nedeniyle daha güncel bir yıla ait veriler elde edilememiştir.

Hazır giyim sektöründe faaliyette bulunan işletme gelen siparişlere göre üretimi gerçekleştirmektedir. Üretim sürecinde giderlerin kapsamı açısından Tam Maliyetleme, giderlerin gerçekleşme durumu açısından Fiili Maliyet Yöntemi, giderlerin dağıtım bazı açısından Hacim Tabanlı Maliyetleme, Mamül maliyetlerinin hesaplama şekli açısından ise Sipariş Maliyeti Yöntemi kullanıldığı belirlenmiştir. İşletmede üretim Model Hazırlama-Test, Kesim, Dikim, Yıkama-Ütüleme, Kalite Kontrol ve Paketleme temel safhalarından oluşmaktadır. Ayrıca Kesim bölümüne kumaş sağlayan "İlk Madde Malzeme" deposu ve Dikim bölümüne aksesuar sağlayan "Yardımcı Malzeme" deposu bulunmaktadır. Bununla birlikte işletmede üretime destek veren bakım onarım, yemekhane, personel servis, güvenlik ve yönetim gibi yardımcı gider yerleri de yer almaktadır. Her ne kadar birim maliyetler sipariş maliyet yöntemine belirlense de, sipariş mamul haline gelene kadar üretim süreci boyunca ilerlerken birçok safhada farklı işleme tabi tutulmaktadır. Bu açıdan üretim süreci safha maliyet yöntemine de benzemektedir.

Böylelikle üretimin süreci ve özelliği dikkate alındığında Karma Maliyet Yöntemi'nin uygulanmasının mümkün olduğu söylenebilir.

Araştırmada öncelikle işletmenin mevcut üretim maliyet verileri tespit edilmiştir. Sonrasında direkt ilk madde malzeme maliyetleri siparişlere doğrudan yüklenmiştir. İşlem maliyeti olarak kabul edilen direkt işçilik giderleri safhalar açısından izlenebildiğinden doğrudan yüklenmiş, genel üretim giderleri ise safhalara dağıtım anahtarları kullanılarak yüklenmiştir. Daha sonra safhalarda biriken maliyetler uygun dağıtım anahtarları kullanılarak siparişlere yüklenmiştir. Siparişlere yüklenen maliyetler ilgili dönemde üretilen tüm siparişlerin maliyeti olduğundan toplam maliyet ilgili sipariş sayısına bölünerek birim sipariş maliyetleri bulunmuştur.

Sonuç olarak ilgili dönemde üretimi gerçekleştirilen dokuz siparişin maliyet verileri karma maliyet yöntemi çerçevesinde yeniden belirlendiğinde beş mamulün toplam ve birim maliyetlerinin azaldığı belirlenmiştir. Diğer dört mamulün toplam ve birim maliyetlerinin ise arttığı görülmüştür. Bu farklılığın nedenlerinden birisi karma maliyet yönteminde direkt işçilik maliyetlerinin önce süreçlere tahsis edilmesi ve ardından tahsis anahtarı ile süreçlerden siparişlere tahsis edilmesidir. Ayrıca işlem maliyeteri siparişlerle direkt olarak değil dağıtım anahtarları kullanılarak dolaylı olarak ilişkilendirilmektedir. Bununla birlikte ilgili dönemde karma maliyet yöntemi kullanılarak belirlenen satış maliyetleri işletmenin mevcut sipariş maliyet yöntemine göre hesaplanandan daha düşük, brüt satış karı ise daha yüksek olarak belirlenmiştir. Bu sonuçların işletmenin yönetim birimleri tarafından daha güvenilir ve etkin kararlar almasında fayda sağlayacağı söylenebilir.