Evaluation of Foreign Trade Incentives in Food Industry in Cukurova Region of Turkey

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Abstract

Purpose: In this study, in at the Cukurova Region, the effect of incentives applied for export oriented in Turkey in the food industry was investigated, how effective is of these incentives, problems revealed encountered in exports and solutions were presented.

Design/Methodology/Approach: The data obtained through the face-to-face survey study were analyzed with the SPSS package program and the structure of the enterprises, the extent to which they benefited from export incentives, the perceptions and risks of these incentives were tried to be revealed. Chi-square test and factor analysis methods were used in the analysis of the data.

Findings: Although the majority of enterprises as a result of the study they stated that foreign trade incentives were insufficient, they stated that incentives contribute to the creation of new markets, growth potential in production and employment.

Originality/Value: The level of utilization, perceptions and attitudes of the companies benefiting from export incentives in the food industry against the incentives were determined and the things to be done in the short, medium and long term were determined.

Key words: Enterprise; Export Incentive; Food Export; Food Manufacturing; Turkey

1. INTRODUCTION

Agriculture has entered the development process with the settled life of human beings, and the agriculture-based food industry has come to the fore with its transfer to the industry as a result of the processes. Contribution to the economy has increased with the development process of agriculture and countries started to contribute to the economy by exporting the surplus product to other countries.

The share of the agricultural sector in national income, because of the absolute value of other sectors increases at a faster rate its share in the economy has decreased from 50% to 5.80% in the last 70 years. Production's dependence on natural conditions, excess of risk and uncertainty, diminishing yield law restricted production, is higher of added value in other sectors the most important reasons of this have been (İnan, 1998).

Incentives provided to agricultural products have taken place in all Development Plans since the 1930s, when the first Development Plan was made and has become an important state policy on applied to generate foreign currency income. With the "Export-Oriented Development Strategy", which entered into force with the "Economic Decisions" that it was started to apply in the transition to a free economy in 1980, policies that increased the importance of exports in the economy has begun to be implemented.
With the establishment in 1994 of the World Trade Organization (WTO) the export-oriented policies were rearranged with the "Decision on Export-oriented Government Aids" dated 27/12/1994 and numbered 94/6401 (Legal Gazette, 1995). Incentives were lastly attached to the Ministry of Commerce by Presidential Decree on 10 July 2018 (Legal Gazette, 2018).

Incentives provided in foreign trade, especially after the establishment of the WTO, measures were taken to distort competition has been prevented with non-tariff barriers and they were started to provided at the production and marketing stages instead of cash aid (Atayer and Erol, 2011). Providing incentives in this way it is happened a right application to increase new products and market share.

The export incentives being applied in the national literature; utilization level (Erol, 2005), influencing factors (Onder, 2005), activity (Isleker, 2010; Akca, 2011; Buyukakın and Ozylmaz, 2016) and performance (Taspinar, 2008; Bayraktaroglu et al., 2015; Yalcın, 2015) studies have been done upon. As a result of the studies have been identified negative of incentive legislation is incomplete and incomprehensible (Taspinar, 2008), length of bureaucratic procedures (Yalcın, 2015), inadequate utilization of incentives due to lack of funding (Isleker, 2010; Buyukakın and Ozylmaz, 2016), incentives are short-term and togetherness between institutions is unsustainable (Sandalci, 2010) and lack of information about incentives (Avcı, 2015). In the studies on export incentives in the international literature, the of incentives; its effectiveness (Ahmed et al., 2006; Lowry, 2014), impact on marketing performance (Julian and Ali, 2009), their attitude and awarenesses (Garg, 2013) realized upon.

Cukurova Region thanks to its features has become an important center of agriculture, trade and industry and in the plans prepared for the region, these strategic purposes came to the fore. In this direction the main purpose of the study, in the Cukurova Region, is to put forth the general structure of the enterprises that export in the food industry and benefit from export incentive, to detect the size and perception of benefiting from export incentives, to identify the problems encountered in export and export incentives, to put forth reveal on what level should be of export incentives and it was determined as develop suggestions with the data obtained.

2. MATERIALS and METHODS

The main material of the study was the collected data generated between September and December 2018, using a face-to-face survey method applied to enterprises operating in the food products and beverage manufacturing sector in Mersin, Adana and Hatay provinces and benefiting from export incentives. The sample of the research is consist of the research universe, universe was determined as 75 by the full-count method. The survey could not be conducted with a total of 11 enterprises, since five of them that constitute the research sample did not want to participate in the survey, two of them could not be contacted due to bankruptcy and four of them were in the same organization. For these reasons, the number of enterprises that were interviewed and constituted the sample of the study was n=64.

Within the scope of study has been demonstrated structure of enterprises, to what extent and in what way they were benefited of export incentives, what kind of export incentives are applied in which sub-sector and perception and risks to these export incentives. Survey form, experts person with serving in research-related institutions and organizations, interviews held with enterprise representatives or owners involved in the universe and has been prepared using from similar studies previously conducted in national and international literature (Onder, 2005; Ahmed et al., 2006; Julian and Ali, 2009; Boso, 2010; Isleker, 2010; Akca, 2011). Survey work are consists of three parts on survey participant and enterprise general information, the size to benefit from export incentives of the enterprise and counter perceptions of export and export incentives of enterprises.

After the data obtained through the questionnaire was entered into the statistical package program and the frequency distribution and rates were obtained, it was examined whether the data was normally distributed in order to determine the tests to be performed. In the research in order to analyze the data better, enterprises were divided into three groups according to their export value. Hearing and injury situations of the enterprises from export incentives were taken as dependent variables, and the chi-square test was applied to determine whether they differ significantly according to export value. Within the scope of the research, the questions were prepared by the researcher according to the 5-point Likert scale in line with the current literature in order to determine the problems encountered in exports with the perceptions of the enterprises on export and export incentives. The Likert scale was scored according to whether the enterprises agree with the proposal or not (5: Strongly Agree… 1: Strongly Disagree) and the data related to the problems are given using descriptive statistics such as mean and standard deviation, factor analysis method was applied for collect less number of components (Joshi et al., 2015).

The hypotheses intended to be measured in the study are as follows:

H₁: Export value of enterprises differentiates significantly depending on the age of the enterprises.
H₂: Export value of enterprises differentiates significantly according to presence of foreign trade department.
H₃: Export value of enterprises differentiates significantly according to export experience.
H₄: The export value of enterprises differentiates significantly according to the utilization status of the enterprises from intermediary exporters in their export transactions.
H₅: Export value of enterprises differentiates significantly according to conducting the foreign trade department of export incentive procedures.
H₆: Export value of enterprises, differentiates significantly according to finding export incentives sufficient.
Factor analysis
Factor analysis is a statistical method bringing together of a large number variables interrelated, revealing on conceptually a small number of new variables and structural theories (Kalaycı, 2015). Whether the factor analysis is scaled appropriately is determined by Kaiser-Meyer-Olkin sampling adequacy measurement (KMO) and Bartlett's Sphericity Test. Internal reliability of scales is measured with Cronbach's alpha test and it is expected to be 0.7 and above. The Internal reliability of the scales is measured with Cronbach's alpha test and it is expected to be 0.7 and above. Above this value indicates that the reliability level of the scale is quite high (Cronbach, 1951).

Factor analysis is the method based on the correlation coefficient, reveal whether the correlation coefficient is an adequate estimate of population correlation (Kyriazos, 2018). When analyzing the total covariance matrix of the variables observed in the single level factor analysis, in multi-level ones sets apart the total sample covariance matrix into in-group and between-group covariance matrix (Kim et al., 2016).

Chi-square
Chi-square test is a non-parametric (nonparametric) test that shows the relationship between one or two independent variables that do not show normal distribution. The basis of the chi-square test compose of whether there is a difference between the observed value and the expected value (whether it comes from the same universe). The number of categories whose expected value is less than 5 in order to could be done test, it is not to exceed 20% of the number total categories and this value in all categories must be greater than 1 (Buyukozturk et al., 2015).

The chi-square test is a significant statistic, robustness in terms of the distribution of the data, ease of calculation, detailed information to be obtained from the test result and provides advantage in terms of usage flexibility. In chi-square test, which is one of the most suitable tests to test hypotheses, the sample numbers of the groups are not equal, assumes random selection of data (McHugh, 2013).

The formula for the chi-square test is as follows:

$$\sum \chi^2_{ij} = \frac{(O - E)^2}{E}$$  \hspace{1cm} (1)

O = Observed value
E = Expected value
$$\chi^2$$ = The cell Chi-square value
$$\sum\chi^2$$ = Formula instruction to sum all the cell Chisquare values (Equation 1).

t-Test for Independent Groups and Mann-Whitney U Test
The t-Test for independent groups is a parametric test that shows the relationship between two independent groups in terms of means, whether there is a statistical difference. The Mann-Whitney U test, on the other hand, when the number of groups does not show normal distribution or the number of groups does not meet normality is a non-parametric test used to between two independent groups the t-Test to compare the medians (means). in both tests for the difference between the means of the two groups to be significant, the p value must be less than or equal to 0.05 (p≤0.05) (Buyukozturk et al., 2015).

One-Way ANOVA and Kruskal Wallis Test
ANOVA is a statistical method used to compare the medians (means) of more than two normally distributed independent groups. ANOVA is also referred to as the F test and a method used because as the number of groups increases, the t-test increases the margin of error and reduces the level of reliability. It is an analysis method that is used when the variables do not show normal distribution in the case of an ANOVA test with the Kruskal Wallis-H test (Buyukozturk et al., 2015).

3. FINDINGS and DISCUSSION
Incentives provided by the state are divided into investment and export incentives. Failure to achieve maximum efficiency of export incentives with limited resources and due to for causing a loss of welfare effective use is essential (Lowry, 2014). Effective use of export incentives will contribute to making them suitable for the world by using them together with investment incentives. (Taspınar, 2008).

Food industry, United Nations Statistics Department (UNSD) ISIC Rev 3.1. and NACE Rev. According to 2 international statistical classification method the food manufacturing industry is divided into 5 branches, It consists of 17 subgroups (UNSD, 2018).

Although Contribution of agriculture to the economy is delayed, contribution to foreign trade should not be ignored. Turkey's food industrial production in the world and Its share in agro-food products foreign trade is at the level of 1%. The export of agricultural and food products of the Cukurova Region in 2019 years was realized as 2 billion dollars.
Close to half these exports are realized by the enterprises in Mersin province, while Hatay and Adana have the ratio of respectively 28% and 22%, and share of Osmaniye remained below 1% (TurkStat, 2020).

**General characteristics and distribution of enterprises**

In the study, there are businesses that both produce food and export businesses. Enterprises due to the presence of the port, which has an important place in the development of international trade, Mersin in the province is concentrated, as activity ground grain products belongs to is in the subgroup sector. The presence of pulses and flour industry in this group causes the number to be high, apart from this, there are enterprises in 10 different sub-sectors, mainly Soft Drinks - Mineral Waters, Vegetable and Animal Oil-Sugar Manufacturing - Starch and Starch Products. To achieve the purpose of the study and can be done better of statistical analysis, enterprises are divided into 3 groups according to their export value in 2017. Enterprises are classified as, exporting under 1 million USD 1st group enterprises, Enterprises that export between 1 million USD and 10 million USD 2nd group enterprises, Enterprises that export 10 million USD and above 3rd group enterprises (Table 1).

![Table 1. Distribution of General Characteristics of Enterprises](Duru, Gül / Tarım Ekonomisi Dergisi 28 (1), 2022)

The fact that the raw materials and intermediate goods required for production in the food industry are dependent on imports caused the raw material to be the most prefer expense item in the research period (2018) due to the fluctuations in the exchange rate. In previous studies production and sales costs, it has been observed to be the most important expense item (Ozdemir and Karaca, 2007).

Enterprises have quality and system certificates, they have become compulsory in order to able to place obtain in international markets. The proportion of enterprises that have to any quality system certificate is 84.38%, most of enterprises owner to ISO 22000 (HACCP) which is a quality system certificate that is specific to the food industry. According to the export value of the enterprises it has been observed that the state of having a quality system certificate differs ((H2)=6.941; p=0.031). 75.56% of the enterprises have stated that one of the export purposes is to increase the sales income, this was followed by providing new customers-markets.
### Table 2. Structural Features of Enterprises

| Variables                        | Enterprises by Export Value | Statistics                              |
|----------------------------------|-----------------------------|-----------------------------------------|
|                                  | 1.Group                    | 2.Group                   | 3.Group                   | Average | St. Dev. |
| **Number of workers**            | 0-49                        | 13                        | 23                        | 3       | 4,320,756 | 8,556,149 |
|                                  | 50-249                      | 2                         | 5                         | 10      | 20,336,269 | 17,566,459 |
|                                  | ≥250                        | -                         | 2                         | 6       | 36,490,696 | 30,120,451 |
|                                  | **p<0.05**                  |                           |                           |         | 101.70     | 156.97     |
| **Enterprise Age**               | <5                          | 1                         | 5                         | 1       | 3,911,152  | 5,472,330  |
|                                  | 5-15 year                   | 6                         | 9                         | 3       | 10,796,092 | 24,510,823 |
|                                  | >15 years                   | 8                         | 16                        | 15      | 14,985,741 | 17,110,138 |
|                                  | **F=3.000; df=2; p=0.057**  |                           |                           |         | 19.97      | 12.67      |
| **Export Experience Time**       | <5                          | 3                         | 7                         | 1       | 3,173,010  | 4,513,502  |
|                                  | 5-15 year                   | 10                        | 14                        | 10      | 12,573,515 | 20,900,762 |
|                                  | >15 years                   | 2                         | 9                         | 8       | 18,092,053 | 18,494,095 |
|                                  | **H=0.580; df=2; p=0.032**  |                           |                           |         | 12.84      | 10.29      |
| **Commercial Title**             | Limited                     | 11                        | 17                        | 5       | 4,049,100  | 5,640,513  |
|                                  | Incorporate                 | 4                         | 13                        | 14      | 20,625,137 | 23,035,516 |
|                                  | **χ²=12.645; df=2; p=0.002**|                           |                           |         | U=235.00   | z=3.588    | p=0.013    |
| **Working Capital ($)**          | <1,000,000                  | 2                         | 4                         | -       | 1,360,632  | 1,945,541  |
|                                  | <10,000,000                 | 7                         | 22                        | 4       | 5,344,355  | 9,587,566  |
|                                  | >10,000,000                 | 1                         | 4                         | 15      | 26,508,266 | 22,989,864 |
|                                  | **H=25.234; df=2; p=0.000** |                           |                           |         | 29,826,674 | 58,215,466 |
| **Machinery Equipment Value (b)**| <1,000,000                  | 7                         | 6                         | -       | 1,372,871  | 1,658,478  |
|                                  | <10,000,000                 | 7                         | 22                        | 4       | 5,105,030  | 6,222,691  |
|                                  | >10,000,000                 | 1                         | 4                         | 15      | 34,435,462 | 22,983,447 |
|                                  | **H=31.900; df=2; p=0.000** |                           |                           |         | 17,946,981 | 43,053,167 |
| **Contractual Agriculture**      | Yes                         | 2                         | 8                         | 11      | 21,707,479 | 24,568,601 |
|                                  | No                          | 13                        | 22                        | 8       | 8,146,377  | 13,504,528 |
|                                  | **χ²=8.518; df=2; p=0.014** |                           |                           |         | U=252.00   | z=2.853    | p=0.004    |
| **Agricultural Production**      | Yes                         | 3                         | 9                         | 5       | 10,072,110 | 12,849,609 |
|                                  | No                          | 12                        | 21                        | 14      | 15,688,837 | 23,716,386 |
|                                  | **χ²=0.831; df=2; p=0.774** |                           |                           |         | U=359.00   | z=0.616    | p=0.538    |
| **Foreign Trade Department**     | Yes                         | 5                         | 17                        | 16      | 19,040,623 | 22,066,784 |
|                                  | No                          | 10                        | 13                        | 3       | 3,177,229  | 4,123,276  |
|                                  | **χ²=9.167; df=2; p=0.010** |                           |                           |         | U=212.00   | z=3.755    | p=0.000**  |
| **R&D Department**               | Yes                         | 4                         | 10                        | 12      | 19,945,320 | 23,438,272 |
|                                  | No                          | 11                        | 20                        | 7       | 7,567,719  | 12,973,791 |
|                                  | **χ²=5.872; df=2; p=0.035** |                           |                           |         | U=312.00   | z=-2.488   | p=0.013*   |
| **Corporate E-Mail**             | Yes                         | 13                        | 27                        | 19      | 13,538,229 | 19,318,854 |
|                                  | No                          | 2                         | 3                         | -       | 1,479,217  | 1,564,038  |
|                                  | **χ²=1.700; df=2; p=0.295** |                           |                           |         | U=65.00    | z=-2.064   | p=0.037*   |
| **Intermediary Firms**           | Yes                         | 6                         | 20                        | 16      | 16,201,473 | 21,033,720 |
|                                  | No                          | 9                         | 10                        | 3       | 5,713,171  | 11,125,747 |
|                                  | **χ²=7.29; df=2; p=0.026**  |                           |                           |         | U=288.00   | z=-2.460   | p=0.014*   |

*p<0.05  **p<0.01
Employment is one of the most important contributions of exports to the economy. They are small and medium sized enterprises on according to the number of workers 87.50% (n:56) of enterprises and it has been observed that as the export value increases. According to the Kruskal Wallis test, the average personnel of the enterprises differ statistically. Working capital and machinery equipment values too it was observed that also differed (increased) according to the export value same way. Enterprises participating in the survey consists of companies whose capital is divided into shares, such as 51.60% limited and 48.40% incorporated, the export value averages of incorporated title companies were happened 5 times higher. Since the subgroups did not show normal distribution, the Mann-Whitney U test was applied and it was determined that there was a significant difference between the export averages (Table 2).

About three quarters of businesses (n:45) have more than five years of export experience time, the average duration of export experience time was realized as 12.84 ± 10.29 years. Statistically, it has been observed that the export value averages differ as the duration of export experience increases. Onder (2005) found export experience increases although it was observed that the index of benefiting from incentives has increased no a data could be found on the increase in export value.

Research and Development department (R&D), although it is an expensive process, by contributing to the scientific and technological development of enterprises it is a process that strengthens its competitive structure and contributes to export development (Korkmaz et al., 2009). Although the R&D department is widely used in the food industry on packaging, only 26 enterprises have R&D departments. Statistically, enterprises with R&D departments it was observed that the averages of exports differed significantly. Since the vast majority of enterprises for used of information communication technologies such as web address and corporate e-mail, it was observed that there was statistically significant difference according to export value.

For the food industry on capacity utilization rate low specified in the 11th Development Plan, has pushed enterprises to different paths about raw material supply. Contractual agriculture is one of these methods, 32.81% of the enterprises (n:21) participating on the survey stated that they apply this production method. The number of enterprises carrying out agricultural production activities is 17, the agricultural production activity execution status does not differ significantly according to while the amount of export, it differs statistically significantly according to the amount of exports engaged at contractual agriculture activities. Enterprises that employ periodic workers enterprises does not differ according to the amount of exports (p=0.660).

While the number of enterprises with foreign trade department was 38, 86.84% of the enterprises with an exporting value of 1 million USD and above has a foreign trade department. Finding a foreign trade department in enterprises is an in terms of institutionalization important indicator (Akca, 2011). More than half of the enterprises (n:33) are carried out by accounting department with incentive procedures, besides 24 enterprises are carried out incentives procedures with foreign trade department. However, there is not statistically significantly difference between the foreign trade department and conducting incentive procedures (p>0.05).

Enterprise representatives participating in the survey are working under the 16 different titles, only 14.06% of participants are on duty as the foreign trade department manager, responsible or export manager on related to directly foreign trade. Take part of experts related to foreign trade in enterprises and these people in decision making to acting on independently will increase opportunities (Boso, 2010).

Enterprises on regarding foreign trade utilizes intermediary firms in subjects such as market research, loading and transportation, promotion, documentation, finance, market research and promotion (Basar, 2002). Foreign trade transactions on 65.60% of the enterprises (n:42) in has stated that they benefited from intermediary firms, enterprises with high export value of benefit situation from intermediary firms to it was observed to differ statistically significantly.

The dimension on benefit from export incentives of enterprises

In accordance with the purpose of the study, in enterprises surveyed hearing and benefiting situation in export incentives with impact situations on beneficiary enterprises were measured. The foreign trade incentive system that enterprises benefit most while becomes inward processing regime (IPR), least beneficial incentive system patent utility model support realized as. While the incentive with the highest effect level was foreign fair and export financing loan support, it was observed that the effect level of foreign office support differed significantly compared to export averages.
### Table 3. Distribution of Enterprises' Hearing-Benefiting from Export Incentives

| Export Incentives | 1.Group | 2.Group | 3.Group |
|-------------------|---------|---------|---------|
|                   | Hearing Benefit | Hearing Benefit | Hearing Benefit |
| **Inward Processing Regime (IPR)** |         |         |         |
| Yes               | 15      | 15      | 30      | 30      | 19      | 18      |
| No                | -       | -       | -       | -       | -       | 1       |
| Impact Score      | 3.6     | 3.67    | 4.16    |         |         |         |
| H=3.816; df=2; p=0.148 | Average=3.82 |         |         |         |         |         |
| **Support and Price Stabilization** |         |         |         |
| Yes               | 6       | 4       | 17      | 7       | 16      | 6       |
| No                | 9       | 11      | 13      | 23      | 3       | 13      |
| Impact Score      | 3.75    | 3.57    | 3.67    |         |         |         |
| H=0.50; df=2; p=0.975 | Average=3.65 |         |         |         |         |         |
| **Market Research** |         |         |         |
| Yes               | 4       | 2       | 10      | 4       | 17      | 7       |
| No                | 11      | 13      | 20      | 26      | 2       | 12      |
| Impact Score      | 3.50    | 2.25    | 3.57    |         |         |         |
| H=5.206; df=2; p=0.074 | Average=3.15 |         |         |         |         |         |
| **Export Financing Credit** |         |         |         |
| Yes               | 4       | 2       | 20      | 17      | 15      | 6       |
| No                | 11      | 13      | 10      | 13      | 4       | 13      |
| Impact Score      | 3.50    | 3.94    | 4.17    |         |         |         |
| H=0.935; df=2; p=0.627 | Average=3.96 |         |         |         |         |         |
| **International Fair Support** |         |         |         |
| Yes               | 4       | 2       | 18      | 12      | 17      | 12      |
| No                | 11      | 13      | 12      | 18      | 2       | 7       |
| Impact Score      | 2.50    | 3.92    | 4.25    |         |         |         |
| H = 4.033; df=2; p=0.133 | Average=3.96 |         |         |         |         |         |
| **Office Support Abroad** |         |         |         |
| Yes               | 4       | 2       | 12      | 1       | 15      | 5       |
| No                | 11      | 13      | 18      | 29      | 4       | 14      |
| Impact Score      | 3.00    | 3.00    | 3.80    |         |         |         |
| H=4.200; df=2; p=0.043* | Average=3.50 |         |         |         |         |         |
| **R&D Support** |         |         |         |
| Yes               | -       | -       | 7       | -       | 10      | 4       |
| No                | 15      | 15      | 23      | 30      | 9       | 15      |
| Impact Score      | -       | -       | 3.25    |         |         |         |
| *Average=3.25      |         |         |         |         |         |         |
| **Supports for employment** |         |         |         |
| Yes               | 3       | 2       | 11      | 6       | 15      | 8       |
| No                | 12      | 13      | 19      | 24      | 14      | 21      |
| Impact Score      | 3.00    | 3.67    | 4.25    |         |         |         |
| H=5.201; df=2; p=0.074 | Average=3.88 |         |         |         |         |         |
| **Patent Utility Model Certificate** |         |         |         |
| Yes               | 1       | 3       | 1       | 9       | 2       |        |
| No                | 14      | 15      | 27      | 29      | 10      | 17      |
| Impact Score      | -       | -       | 3.00    |         |         |         |
| *Average=3.33      |         |         |         |         |         |         |
| **International Unit, Brand Support** |         |         |         |
| Yes               | 1       | 9       | 5       | 10      | 5       |        |
| No                | 14      | 15      | 21      | 25      | 9       | 14      |
| Impact Score      | -       | 4.00    | 3.00    |         |         |         |
| H=3.588; df=2; p=0.166 | Average=3.90 |         |         |         |         |         |
| **TMO Grain Supply Support** |         |         |         |
| Yes               | 4       | 1       | 12      | 8       | 11      | 9       |
| No                | 11      | 14      | 18      | 22      | 8       | 10      |
| Impact Score      | 4.00    | 4.00    | 4.33    |         |         |         |
| H=0.630; df=2; p=0.730 | Average=4.18 |         |         |         |         |         |
| **C Sugar Allocation Support** |         |         |         |
| Yes               | 5       | 1       | 2       | 2       | 3       | 2       |
| No                | 10      | 14      | 28      | 28      | 16      | 17      |
| Impact Score      | 5.00    | 5.00    | 5.00    |         |         |         |
| *Average: 5.00     |         |         |         |         |         |         |

Note: - Statistical analysis could not be done since there was no differentiation between the groups. - TMO: Turkish Grain Board  *p<0.05  **p<0.01
In general, it has been observed that the export averages of beneficiaries and beneficiaries do not differ in the same way in all incentives, although they are more aware of incentives in enterprises with high export value (2nd and 3rd groups) (Table 3). The enterprises stated the reasons for this, as not fit with the terms of benefit, conditions be heavy, late collection of progress payments related to incentives, and incentive amounts not meeting the expenditures.

Result of the research, on the highest impact level international fair supports, for their contribution to product and company promotion in previous research, it has been determined to be one of the most benefited incentive systems (Yalman et al., 2015; Buyukakın and Ozyılmaz, 2016). Although export financing credit support it is affects positively export performance, it has been the cause to preferred less (Yalcın, 2015) due to the fluctuations in the exchange rate (Bozkurt and Tunc, 2018), insufficient limit and legal procedures (Metin and Kucukbay, 2019). As a result of the research, it is observed that enterprises with high export value benefit from this support, despite the patent utility model support of the least beneficial ones.

Table 4. General Situation Regarding Incentives

| Variables                  | Enterprises by Export Value | Statistics |
|----------------------------|----------------------------|------------|
|                            | 1.Group                    | 2.Group    | 3.Group   | Average     | St. Dev.  |
| Awareness of Export Incentives | Exporter Unions            | 11         | 27        | 19          | 13,782,408 | 19,579,996 |
|                            | Other Enterprise            | 4          | 3         | 0           | 2,936,342  | 4,550,934  |
| Encounter With Sanctions   | Yes                        | 1          | 9         | 5           | 16,788,860 | 27,108,101 |
|                            | No                         | 14         | 21        | 14          | 11,312,627 | 15,608,781 |
|                            | χ²:3.159; df:2; p:0.206     | U:287.00   | z:1.178; p:0.264 |
| Export Incentives Sufficient | Yes                       | 5          | 11        | 7           | 14,790,855 | 23,259,444 |
|                            | No                         | 10         | 19        | 12          | 11,364,926 | 16,009,179 |
|                            | χ²:0.58; df:2; p:0.971     | U:452.00   | z:0.273; p:0.785 |

Note: *Statistical analysis could not be done since there was no differentiation between the groups.

In the case of being awareness of export incentives, it was observed that the Exporter Unions (n:57) had the most effect. In previous studies, in being aware of export incentives the effectiveness of web addresses (Garg, 2013) with Chambers of Industry and Commerce (Buyukakın and Ozyılmaz, 2016) has also come to the fore. The effectiveness of the incentives are gone to be put into operation of institutions of expert persons (Onder, 2005) or increase the seminars (Yalcın, 2015) are contributed.

Like it provided in benefit to enterprises in general on incentives, sanctions (penalties) are imposed for failure to fulfill or violation of special conditions regarding incentives. Implementation of sanctions are payment of the customs duty resulting from import, in export credits, taxes such as Resource Utilization Support Fund (RUSF) and Bank Insurance Transaction Tax (BITT) are paid. 23.44% (n:15) of the enterprises have encountered sanctions, in case of encountering sanctions according to export value no statistically any differentiation occurred.

The rate of enterprises that found their export incentives sufficient was realized on 35.94% (n:23). Finding situation the export incentives sufficient did not differ as statistically according to the export value. The vast majority of enterprises (n:41), due to length of bureaucratic procedures, conditions not being regulated by time and conditions with lack of coordination between competent institutions, incentives were not found sufficient. In previous studies exporters, from export incentives lack of organization (Ozdemir and Karaca, 2007), financial difficulties and bureaucratic procedures (Buyukakın and Ozyılmaz, 2016) they stated that they could not benefit enough from export incentives due to reasons such as.

While three of the six hypotheses formed within the scope of the study were statistically significant (p<0.05), other three hypotheses were not statistically significant (p>0.05). Hypotheses, which were created in according to export value of enterprises, it was observed that the differ in presence status of foreign trade department of enterprises, export experience and benefiting situation from intermediary firms in export transactions. It is observed that there is no significant differentiation in the enterprise age, carry out of foreign trade department in export incentives procedures and status on finding the incentives sufficient (Table 5).
Perceptions of Export and Export Incentives in Enterprises

To ensure the integrity of the study of the enterprises participating in the survey and for the purpose of measure general points of view on exports and exports incentives; expert on the subject and interviews held with authorized people related to the sector, national and international studies and 5-point Likert scale was created as a result of the literature review.

The applied to measure the impact on enterprises to export, it was calculated that, which determines the internal consistency of the scale, contains High reliability with Cronbach’s Alpha value of 0.881 (\(\alpha\geq0.7\)). Determining to the estimated by the other variable of each variable in the scale in Kaiser-Meyer-Olkin (KMO) 0.821 and Bartlett’s sphericity test, which is indicator of sample size adequacy (\(\chi^2=279.274\); p=0.000) to because it results to suitable for factor analysis as it results in significant. The variance explained in the scale is 63.32%, of the greatest impact of exports on enterprises has had a positive effect to firm growth speed and contribution to employment (Table 5). Providing assurance against domestic market contraction in exports and product differentiation in competition in the market, the to change according to political conditions of exports and because of product demand in certain molds of export markets caused factor loads to be lower than 0.7.

Since Cronbach’s Alpha value, which determines the internal consistency of the scale applied to measure the effect of export incentives, was determined as 0.858, it was calculated to contain high reliability (0.7). Kaiser-Meyer-Olkin (KMO) 0.788, which determines the estimation of each variable in the scale by the other variable and Bartlett’s sphericity test, which is indicator of sample size adequacy (\(\chi^2=455.274\); p=0.000) to because it results to suitable for factor analysis as it results in significant. Scale intended for export incentives is performance impact, weakness and threat perception in consists of three factors. Enterprises were the most in scale, were preferred the items that provide the creation of new markets and growth potential in production (Table 5). In previous studies, profitability and accounting investments of export incentives (Bayraktaroglu et al., 2015) with it has been determined that it has positive effects such as creating new investment thinking forming (Onocak, 2015). However, in other studies legislation on incentives is incomprehensible (Taspınar, 2008) and it has also been determined that there are negative aspects such as insufficiency of incentives (Al-Hyari et al., 2012).

Table 5. Distribution of the Results of the Hypothesis Test

| Items | Hypothesis (Variables) | \(\chi^2\) | p  | Support/ Reject |
|-------|-------------------------|-------------|-----|-----------------|
| H1    | Export value of enterprises → Age of enterprises | 0.057 |   | Rejected        |
| H2    | Export value of enterprises → Availability of foreign trade department | 9.16 \(p=0.010^*\) |   | Supported       |
| H3    | Export value of enterprises → Enterprises export experience | 6.88 \(p=0.032^*\) |   | Supported       |
| H4    | Export value of enterprises → Utilization status from intermediary exporters in export transactions of enterprises | 7.29 \(p=0.026^*\) |   | Supported       |
| H5    | Export value of enterprises → Foreign trade department conducting export incentive transactions | 1.57 \(p=0.456\) |   | Rejected        |
| H6    | Export value of enterprises → Finding export incentives in sufficient | 0.58 \(p=0.971\) |   | Rejected        |

*p<0.05

Perceptions of Export and Export Incentives in Enterprises

Table 6. Factor Analysis Regarding as on the Effects to Enterprises of Exports

| Items                  | Factor | Mean | SD    |
|------------------------|--------|------|-------|
| Positively affects firm growth rate | 0.876  | 4.55 | 0.754 |
| Contributes to employment | 0.864  | 4.55 | 0.733 |
| Contributes to the efficient operation of the capacity | 0.891  | 4.42 | 0.922 |
| Contributes to the institutionalization of the company | 0.735  | 4.20 | 0.912 |
| Has a positive effect on reducing stocks | 0.797  | 3.95 | 1.278 |
| Provides assurance against domestic market contraction | 0.692  | 3.86 | 1.271 |
| Provides product differentiation in the market competition | 0.685  | 3.81 | 1.207 |
| Total Variance Explained (%) | 63.32 |      |       |

Note: 1: Strongly Disagree, 2: Disagree, 3: Moderately Agree, 4: Agree, 5: Strongly Agree

Since Khi-Square test (\(\chi^2\)) did not show any significance, it was determined to have no relationship with the scale. The variance explained is high, which is 63.32%, of the greatest impact of exports on enterprises has had a positive effect to firm growth speed and contribution to employment (Table 6). Providing assurance against domestic market contraction in exports and product differentiation in competition in the market, the to change according to political conditions of exports and because of product demand in certain molds of export markets caused factor loads to be lower than 0.7.
For the purpose of measure the problems encountered in export it was calculated that, which determines the internal consistency of the scale on applied, contains High reliability with Cronbach's Alpha value of 0.771 (α≥0.7). Kaiser-Meyer-Olkin (KMO) 0.717, which determines the estimation of each variable in the scale by the other variable and Bartlett's sphericity test, which is indicator of sample size adequacy (χ²=215.015; p=0.000) to because it results to suitable for factor analysis as it results in significant. According to the factor analysis results, to problems in exports are consists of five factors explaining 71.67% in technical problems, organizational problems, out of organization problems, procedural issues and political problems (Table 8). In previous studies most encountered problems in export, high competition in the international market (Al-Hyari et al., 2012), take a long time of bureaucracy (Taspınar, 2008), insufficient of market conditions (Yalman et al., 2015), instability of exchange rate (Korkmaz et al., 2009) and fluctuate as were determined (Bozkurt and Tunc, 2018).

Table 7. Factor Analysis of Firms’ Perception of Export Incentives

| Factors, Items and Scales* | Component | Mean | SD |
|---------------------------|-----------|------|----|
| Factor 1: Perception of Performance | 1 | 2 | 3 |
| Contributes to the creation of new markets | 0.847 | -0.073 | -0.017 | 4.03 | 1.18 |
| Provides growth potential in production | 0.899 | -0.045 | -0.145 | 4.00 | 1.07 |
| Incentives contribute to employment | 0.894 | 0.054 | -0.207 | 3.97 | 1.15 |
| Contributes to the institutionalization of the company | 0.817 | -0.061 | -0.048 | 3.78 | 1.15 |
| The promotion of new products is affect to fair incentives | 0.722 | 0.060 | 0.009 | 3.59 | 1.35 |
| Contributes to foreign companies to invest | 0.737 | 0.324 | -0.069 | 3.50 | 1.29 |
| Achieves its overall purpose | 0.554 | -0.589 | -0.165 | 3.27 | 1.24 |
| Highly attractive | 0.702 | -0.118 | 0.310 | 3.20 | 1.28 |
| Contributes to increasing RandD activities | 0.732 | 0.047 | 0.140 | 3.16 | 1.26 |

Factor 2: Perception of Weakness

| Factors, Items and Scales* | Component | Mean | SD |
|---------------------------|-----------|------|----|
| The long bureaucratic works cause companies to keep away from incentives | 0.136 | 0.558 | -0.553 | 4.02 | 1.13 |
| Sectoral incentives are remain to insufficient | 0.032 | 0.845 | 0.057 | 3.56 | 1.31 |

Factor 3: Threat Perception

| Factors, Items and Scales* | Component | Mean | SD |
|---------------------------|-----------|------|----|
| Implementation of sanctions in some incentives is cause to negative thoughts | 0.335 | 0.280 | 0.770 | 2.86 | 1.25 |

Total Variance Explained (%)

| Component | Total Variance Explained (%) | Note: 1: Strongly Disagree, 2: Disagree, 3: Moderately Agree, 4: Agree, 5: Strongly Agree |
|---------------------------|-------------------------------|--------------------------------------------------|
| Component | Total Variance Explained (%) | Kaiser-Meyer-Olkin | 0.788 |
| Component | Total Variance Explained (%) | Bartlett's Test (p) | 0.000 |

For the purpose of measure the problems encountered in export it was calculated that, which determines the internal consistency of the scale on applied, contains High reliability with Cronbach's Alpha value of 0.771 (α≥0.7). Kaiser-Meyer-Olkin (KMO) 0.717, which determines the estimation of each variable in the scale by the other variable and Bartlett's sphericity test, which is indicator of sample size adequacy (χ²=215.015; p=0.000) to because it results to suitable for factor analysis as it results in significant. According to the factor analysis results, to problems in exports are consists of five factors explaining 71.67% in technical problems, organizational problems, out of organization problems, procedural issues and political problems (Table 8). In previous studies most encountered problems in export, high competition in the international market (Al-Hyari et al., 2012), take a long time of bureaucracy (Taspınar, 2008), insufficient of market conditions (Yalman et al., 2015), instability of exchange rate (Korkmaz et al., 2009) and fluctuate as were determined (Bozkurt and Tunc, 2018).

Table 8. Factor Analysis on Problems Encountered in Export

| Factors, Items and Scales* | Factor | Mean | SD |
|---------------------------|--------|------|----|
| Factor 1: Technical Problems | High currency risk | 0.801 | 4.50 | 1.28 |
| Factor 1: Technical Problems | High logistics cost | 0.749 | 3.89 | 1.15 |
| Factor 1: Technical Problems | Instability in export regions | 0.678 | 4.08 | 0.87 |

Factor 2: Organizational Problems

| Factors, Items and Scales* | Factor | Mean | SD |
|---------------------------|--------|------|----|
| Lack of qualified staff | 0.806 | 3.42 | 1.26 |
| Lack of organization | 0.797 | 3.16 | 1.16 |

Factor 3: Out-of-Organization Problems

| Factors, Items and Scales* | Factor | Mean | SD |
|---------------------------|--------|------|----|
| Insufficient incentives | 0.820 | 3.37 | 1.16 |
| Inadequate of raw materials | 0.716 | 3.20 | 1.17 |
| High customs tax and tariffs | 0.560 | 3.38 | 1.16 |

Factor 4: Procedural Problems

| Factors, Items and Scales* | Factor | Mean | SD |
|---------------------------|--------|------|----|
| In different countries product standardization | 0.819 | 3.59 | 1.10 |
| Excess of bureaucratic affairs | 0.682 | 3.92 | 1.09 |
| Difficultly providing financing | 0.512 | 3.83 | 1.09 |

Factor 5: Political Problems

| Factors, Items and Scales* | Factor | Mean | SD |
|---------------------------|--------|------|----|
| Negative image of Turkish goods | 0.914 | 2.17 | 1.16 |
| Total Variance Explained (%) | 71.67 | KMO 0.717 |

Chisquare (χ²) 215.015 Bartlett's Test 0.000
4. CONCLUSIONS

As the export value of enterprises increases as a result of the study employment, capital, machinery and equipment value, export experience time and utilization from intermediary firms observed that the status increased. Although enterprises are foreign trade departments, export incentives procedures mainly carry out accounting departments. The main reasons for this, due to companies not being able to complete their institutionalization processes it was unable to form a foreign trade department and the foreign trade departments have concentration on more on sales and marketing.

Generally, despite of significant difference increases in hearing status of export incentives as the export value of enterprises increases, except for export financing credit support, RandD assistance and TMO support, were no significant difference in the benefiting from incentives and the effect level of the beneficiaries. The reasons for this are listed as that some terms of the foreign trade incentives applied do not fit with the enterprises, the expenses required to benefit from the incentives cannot meet the incentive amounts, payback long on incentives and the incentives are not line to market targets. Although the impact value is high in incentives such as TMO and C sugar, in some sub-sectors of the merely food industry and due to its periodically application, number of beneficiaries enterprises has caused it to be limited.

As a result of the study, in export incentives, in the short term; flexible decisions should be taken to prevent sanctions, by transferring the incentive transactions to the electronic environment the number of procedures should be reduced, persons outside the enterprises must be provide to able to be assigned to carry out incentives operations. In the medium term; commission should be established for the evaluation of incentives, it should be ensured that benefit to one incentive of more than one company, machinery equipment support and quality system certification supply should be considered together with export incentives, contractual agriculture should be supported and on incentives regarding in customs procedures should be requested to product detection. If in the long term determined that; export purposeful regional areas and by expert person should be encouraged giving voluntary counseling, the performances according to their benefits providing situations of export incentives should be measured, it should be policies such as providing market diversification against various crises.

Contribution Rate of Researchers Declaration Summary

The research is derived from the first author's doctoral worked under the supervision of the second author, and they declare that they did not plagiarize in the study.

Conflict of Interest Declaration

No potential conflict of interest was reported by the authors.

Additional Info

This study was produced from the first author's doctoral thesis.

REFERENCES

Ahmed, Z.U. Julian, C.C. Baalbaki, I.B. and Hadidian, T.V. (2006). Firm Internationalisation and Export Incentives from a Middle Eastern Perspective. Journal of Small Business and Enterprise Development, 13(4): 660-669. doi: 10.1108/14626000610705804.

Akca, M. (2011). Effects of Export Encourages on Companies: One Practice of Gaziantep Industry [Unpublished Master's Thesis]. Gaziantep University, Graduate School of Social Sciences, Department of Economic, Gaziantep, Turkey.

Al-Hyari, K. Al-Weshah, G. and Alnsour, M. (2012). Barriers to Internationalisation in SMEs: Evidence from Jordan. Marketing Intelligence and Planning, 30(2): 188-211. doi:10.1108/02634501211211975.

Bayraktaroglu, H. Karaman, D. and Kalkan, A. (2015). The Contribution of the Incentives Provided for SMEs to Export Performance of the Firms: An Application in Antalya Organized Industrial Zone. Alkent İİBF Journal, 15(31): 89-105.

Basar, A.B. (2002). Accounting Procedures for Export Operations in Export Intermediary Firms [Unpublished Doctoral Dissertation]. Eskisehir Anadolu University, Graduate School of Social Sciences, Department of Business Administration, Eskisehir, Turkey.

Boso, N. (2010). Export Entrepreneurial-Oriented Behevior and Export Performance [Unpublished Doctoral Dissertation]. Loughborough University, Loughborough, England.

Bozkurt, O.C. and Tunc, H. (2018). Foreign Trade Problems in SMES: Sample of Antalya. International Journal of Management Economics and Business, 14(2): 381-397. doi: 10.17130/ijmеб.2018239938.

Buyukakın, F. and Ozyılmaz, S. (2016). The Effectiveness of Export Incentive Policies: The Sample of Afyonkarahisar. Eskisehir Osmangazi University Journal of Economics and Administrative Sciences, 11(2): 47-68.

Buyukozturk, S. Akgun, O.E. Demirel, F. Karadeniz, S. and Cakmak, E.K. (2015). Scientific Research Methods in Education. Ankara: PegemA Yayıncılık.
Cronbach, L. J. (1951). Coefficient Alpha and The Internal Structure of Tests. Psychometrika, 16(3): 297-334.

Erol, A. (2005). Export Incentives Granted in Turkey and Analysis of Usage Level in the Eastern Black Sea Region by the Exporter Companies [Unpublished Doctoral Dissertation]. Blacksea Technical University, Graduate School of Social Sciences, Department of Business Administration, Trabzon, Turkey.

Garg, N. (2013). Study of Awareness and Attitude Towards Incentive Schemes for Exporters of Agricultural Products. Punjab Agricultural University, Master of Business Administration in Agri-Business Management. Research Project Report. Ludhiana.

Isleker, A. (2010). The Impacts of the Incentive Policies on Adana City [Unpublished Master's Thesis]. Cukurova University, Graduate School of Social Sciences, Department of Business Administration, Adana, Turkey.

Josh, A. Kale, S. Chandel, S. and Pal, D.K. (2015). Likert Scale: Explored and Explained. British Journal of Applied Science and Technology, 7(4): 396-403. doi: 10.9734/BJAST/2015/14975.

Julian, C. C. and Ali, M. Y. (2009). Incentives to Export for Australian Export Market Ventures. Journal of Small Business and Enterprise Development, 16(3): 418-431. doi: 10.1108/14626000910977143.

Kalayci, S. (2015). SPSS Applied Multivariate Statistics Techniques. Dinamik Akademi, Ankara.

Kim, S. Dedrick, R. Cao, C. and Ferron, M. (2016). Multilevel Factor Analysis: Reporting Guidelines and a Review of Reporting Practices. Multivariate Behavioral Research, 51(6): 881-898. doi: 10.1080/00273171.2016.1228042.

Korkmaz, S. Ernec, A. and Yucedag, N. (2009). Firms Innovation Capabilities and Their Effects on Export Performances. Anadolu University Journal of Social Sciences, 9(2): 83-104.

Kyriazos, T. A. (2018). Applied Psychometrics: Sample Size and Sample Power Considerations in Factor Analysis (EFA, CFA) and SEM in General. Psychology, 9 (08): 881-898. doi: 10.4236/psych.2018.98126.

Legal Gazette. (1995). Decision on State Aid to Export. 11.01.1995 Date and 22168 Numbered Legal Gazette, Ankara.

Legal Gazette. (2018). Presidential Decree on the Presidential Organization. 10.07.2018 Date and 30474 Numbered Legal Gazette, Ankara.

Lowry, S. (2014). Small Business Administration Trade and Export Promotion Programs. Congressional Research Service, 7-5700. 23p.

McHugh, M. L. (2013). The Chi-Square Test of Independence. Lessons in Biostatistics 23(2): 143-149. doi: 10.11613/BM.2013.018.

Metin, I. and Kucukbay, F. (2019). A multi-Criteria Approach to Determination of the Source of Export Financing: Promethee Method. Bingol University Journal of Social Sciences Institute, 9(18): 931-948. doi: 10.29029/husded.56328.

Onder, H. (2005). The Factors Effecting Utilizations of Export Subsides (An Application in Kutahya) [Unpublished Master's Thesis]. Dumlupinar University, Graduate School of Social Sciences, Department of Economic, Kutahya, Turkey.

Onocak, D. (2015). An Research for Determining the Impact on Investment Incentives, Accounting of Incentives and the Business Performance of Incentives: Sivas Instance [Unpublished Master's Thesis]. Inonu University, Graduate School of Social Sciences, Department of Business Administration, Malatya, Turkey.

Ozdemir, S. and Karaca, Y. (2007). Foreign Trade Method for Small and Medium Sized Enterprises and Export Problems: An Investigation in Ayvon Natural Stone Sector. Journal of Economics and Administrative Sciences, 8(1): 1-19.

Taspınar, M. (2008). The Effects of Incentives and Support Used in Exports on Export Performance in Manufacturing Companies and Problems in Use and Solutions Proposals [Unpublished Master's Thesis]. Selcuk University, Graduate School of Social Sciences, Department of Business Administration, Konya, Turkey.

TSI (Turkish Statistical Institute) (2020). Statistical Data Portal. https://brun.tuik.gov.tr/dstcaretapp/menu.zul. Erişim Tarihi 05.07.2020.

UNSD, (2018). United Nations Statistics Division. United States. New York. https://unstats.un.org/unsd/cr/registry/records.asp?C1=17andD1=1andD2=15. Date Accessed 05.07.2020

Yalman, I.N. Turkoglu, C.M. and Yalman, Y. (2015). Small and Medium Sizes Enterprises (SMEs) and Foreign Trade Policy. Session 4C: International Trade II, 461-468. doi: 10.36880/C06.01207

Yalcın, G. (2015). The Comparison of Export Performances of the Companies in Turkey That Benefit from Export Incentives and Development Tools and That Do Not Benefit from These Tools: An Empirical Study in the Manufacturing Sector in Konya [Unpublished Master's Thesis]. KTO Karatay University, Graduate School of Social Sciences, Department of Business Administration, Konya, Turkey.