

Competitive Position of Egyptian Grapes Exports in World Market

Abed El Aziz M. A.¹, Hammam N. M. A.² and Elsebai M.N.M.³

¹ Department of Agricultural Economics, National Research Centre

² Department of Marketing, Research Institute of Agricultural Economics, Agricultural Research Centre.

³ Department of Agricultural Economics, Faculty of Agriculture, Ain Shams University.

Abstract: This work was carried out in order to identify the most important factors affecting the competitiveness of Egyptian grapes in major import markets. The features of the current situation for exports of Egyptian grapes, and the geographical distribution of exports, and imports from it was investigated. In addition market share, price and competitive position, and the rate of market penetration to determine the competitive position of Egyptian grape exports in the world market were investigated. The results recommended the Importance of increasing the quantity exported to Russia, Saudi Arabia and the United States of America, where those markets are increasing demand for it. Moreover, it is essential to increase the quantity exported to the British and Dutch markets, where market share is for Egypt in the markets is about 6.6%, 3.2%, respectively, despite having a comparative advantage price to Egypt in both markets. On the other hand, to reduce the quantity exported to Germany and Belgium, where these markets have lower demand for Egyptian grapes.

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1. Introduction

The study of the determinants of competition of any crop is important, and reliable to provide the right conditions to increase the competitiveness of the crop and increase its ability to penetrate foreign markets. The competitive position of Egyptian grapes is affected by many variables where the most important efficiency is export, the timing of export, the technical specifications of the fruits exported and packaging, as well as the relative price. The ability to meet export requirements, market penetration coefficient and the efficient functioning of export operations. No doubt that the relative price is one of the main determinants and important in influencing the competitive position in the global market; where different countries are trying to reduce the prices of their products to the extent that. They can win the largest number of consumers and different markets. Many countries follow different policies to help achieving this, such as reducing production costs and marketing, manufacturing and export subsidies as well as customs exemptions, and other policies in this regard (**hammam, 2012**). So the current search aims to select the most important factors affecting the competitiveness of Egyptian grapes in major import markets, in order to stand on the strengths and weaknesses to improve the competitive situation of exports in these markets, in addition to the possibility of expanding into new markets (**Demerdash, 2002**).

Despite increasing the amount of exports of Egyptian grapes during the recent period, the relative importance of the total production volume is still low,

where the percentage of the size of exported grapes about 7.7% of the total grape production in 2009, and it is identified in the research problem by several questions are :

- Is there a competitive advantage for exports Egyptian grapes in world market,
- Or is the production sector includes some of the problems that prevent the development of exports to those markets,

These questions requires answers to these to find out the strengths and weaknesses in the competitive Egyptian grapes exports, and also opportunities and the potential risks to guide the development of its export policies.

The research aims generally to identify the most important factors affecting the competitiveness of Egyptian grapes in major import markets through:

- 1 - Identifying the features of the current situation for exports of Egyptian grapes, and the geographical distribution of exports, and imports from it.
- 2 –Studying the market share, price and competitive position, and the rate of market penetration to determine the competitive position of Egyptian grape exports in the world market (**Judge, 2005**).

2. Materials and Methods

The research on methods of statistical analysis descriptive and quantitative statistics to evaluate the relative importance and the geographical distribution of Egyptian exports of grapes. Using of simple linear regression to estimate the trend overall time, as method was used linear regression, refracted Piece Wise Linear Regressions. Was also drawing on some

indicators to measure economic competitiveness such as market share Market Share, Price and competitive position Price Relative and market penetration Market Penetration Rate. In addition to drafting a statistical model to measure the most important determinants of competitiveness for Egyptian grapes during the harvest period (1995 -2009) (**Deaton and Muellbauer, 1980**).

3. Results and discussion

1. Evolution quantity, value and price per ton of exports Egyptian grapes:

Reviewing data in Table (1) showed that the amount of exports Egyptian grapes during the period (1990 - 2009) amounted to an average of about 22.81 thousand tons, ranged between edged lower reached about 135 tons in 1990, The maximum was about 199.1 thousand tons in 2009 raised about 783.3% from the average (**Dalia, 2008**).

Table (1): the evolution of the quantity and value and the export price of Egyptian grapes during the period (1990 - 2009).

Years	Export price\$/ton	Exports Quantity (tone)	Exports value 1000\$
1990	489.0	135.0	66.0
1991	659.0	473.0	311.7
1992	856.0	967.0	827.8
1993	618.0	1987.0	1228.0
1994	495.3	1271.9	629.9
1995	408.5	1142.1	466.5
1996	699.1	1304.2	911.8
1997	600.3	829.9	498.2
1998	649.5	779.5	506.3
1999	506.4	891.0	451.2
2000	414.7	2865.5	1188.3
2001	284.1	4552.3	1293.4
2002	303.2	5992.7	1816.8
2003	395.1	7416.3	2929.8
2004	740.8	14422.9	10684.5
2005	684.4	24602.0	16836.7
2006	786.0	27809.8	21859.1
2007	1109.7	53697.1	59585.5
2008	811.0	199058.4	161439.0
2009	2284.5	105977.1	242106.0
Average	689.7	22808.7	26281.8

Source: collected and calculated from data of the Central Agency for Public Mobilization and Statistics, the international information network, the Internet.

Study of the trend overall time of the evolution of the amount of exports Egyptian grapes during this period it became clear from equation (1) in table (2) study the direction of those exports to increase at an annual rate significantly Statistically amounted to about 5.17 tons and an annual growth rate was estimated at 22.9%, as the coefficient of determination about 0.41, which indicates that 41% of the changes in the amount of Egyptian grape exports due to factors which reflected the time element. The value of Egyptian exports grapes during the period (1990-2009) average of about 26.28 million U.S. dollars, which ranged between edged lower at about \$ 66 thousand in 1990 and the maximum was about 242.1 million in 2009, with an increase of around% 820.5. The general time trend estimate of the evolution of the value of the Egyptian grape exports during the study period (1990-2009), indicate the equation (7) in the same table to the direction of the value of the Egyptian grape exports towards increasing the annual rate was statistically significant with about 6.6 million dollars with an annual growth rate was estimated at 25.1% than the average (**Judge, 2005**). The data of Table (1) indicated the development of the export price of Egyptian tons of grapes during the period (1990-2009), which reported the minimum with about \$ 284.1 per ton in 2001, and declined to 58.9% of the average export price during the study period and reached \$ 689.7 per ton, and the highest was about \$ 2284.5 per ton in 2009, an increase estimated at 137.7% from the average. From equation (13) in the same table the price of exported ton of grapes reported significant statistically increase amounted to about 4.7% of the average, as was the coefficient of determination was about 0.21, which means that 21% of the changes in the export price of grapes due to factors which reflect the impact the factor of time. To study the effect of the GAT and the European Egyptian- Partnership Agreement - on the evolution of the quantity and value of exports of Egyptian grapes, using linear regression model refracted Piecewise liner Regression Using the transitional weighted variables and expressed the next model:

$$Y^i = \alpha_0 + B1 X_i + B2 (X_i - X^*) D_i + \alpha_1 D_i + u_i$$

Where: Y^i : express the estimated value of the variable in the year i , X_i : variable time.

D_i : transitional variable takes the value(one) when $X_i > X^*$, and (zero) when $X_i < X^*$ ($X_i - X^*$)

D_i : transitional variable weighted to the application of the Convention.

X^* : years of application of the Convention "GAT (1996), European Partnership (2004)."

Table (2): statistical estimate of temporal trends and the impact of the application of the GAT and the European Partnership Egyptian transitional using variables on the developing both quantity, value and price of exporting Egyptian grapes during period(1990-2009).

Quantity of exported grapes				
No	Vector equation	R ²	F	Significance
1	$Y^i = -31.78 + 5.17 X_i$ (-1.8) (3.6)	0.41	13.0	*
2	$Y^i = 0.99 + 30.78 D_1$ (0.05) (1.4)	0.09	1.96	-
3	$Y^i = 2.18 + 67.86 D_2$ (0.22) (3.8)	0.45	14.4	*
4	$Y^i = -10.88 + 7.37(X_i - X^*) D_1$ (-1.0) (4.3)	0.51	18.5	*
5	$Y^i = 1.83 + 27.61(X_i - X^*) D_2$ (0.31) (7.81)	0.77	60.9	*
6	$Y^i = 1.15 + 0.25(X_i - X^*) D_1 + 26.99(X_i - X^*) D_2$ (0.14) (0.13) (4.43)	0.77	28.8	*
Value of Egyptian exported grapes				
7	$Y^i = -43.05 + 6.6 X_i$ (-1.83) (3.4)	0.38	11.6	*
8	$Y^i = 0.59 + 36.71 D_1$ (0.02) (1.21)	0.07	1.46	-
9	$Y^i = 0.94 + 84.48 D_2$ (0.07) (3.5)	0.40	12.25	*
10	$Y^i = -16.97 + 9.51(X_i - X^*) D_1$ (-1.2) (4.12)	0.49	16.97	*
11	$Y^i = -2.88 + 38.89(X_i - X^*) D_2$ (-0.51) (11.4)	0.88	130	*
12	$Y^i = 2.79 - 2.1(X_i - X^*) D_1 + 43.98(X_i - X^*) D_2$ (0.37) (-1.12) (7.8)	0.89	66.7	*
Price of Egyptian exported grapes				
13	$Y^i = 348.68 + 32.59 X$ (1.9) (2.15)	0.21	4.6	*
14	$Y^i = 587.63 + 147.47 D_1$ (3.3) (0.70)	0.03	0.5	-
15	$Y^i = 527.03 + 546.1 D_2$ (5.6) (3.2)	0.36	10.2	*
16	$Y^i = 465.4 + 49.56(X - X^*) D_1$ (3.95) (2.7)	0.28	7.3	*
17	$Y^i = 519.77 + 228.1(X - X^*) D_2$ (8.1) (5.9)	0.65	34.8	*
18	$Y^i = 600.38 - 29.63(X - X^*) D_1 + 300.4(X - X^*) D_2$ (7.1) (-1.43) (4.75)	0.69	19.3	*

Where: Y^i : represents the estimated value of the quantity or value of exports of grapes or the price per ton thousand tons, in thousands of dollars, to the dollar., D_i : transitional variable takes the value (one) when $X^* < X_i$, (cefr) when $X^* > X_i$).

X^* : years of application of the Convention "GATT (1996), European Partnership (2004)."

$(X_i - X^*) D_1$: transitional variable weighted application of the GATT (1996).

$(X_i - X^*) D_2$: variable transitional unlikely to apply European Partnership Egyptian (2004).

The estimation of the statistical relations between variable amount of exports Egyptian grapes as the dependent variable and the other variables transitional GAT price and the Convention on the European Partnership, Egyptian and variables transitional weighted to apply the GAT and the Convention on the European Partnership - Egyptian variables

independent the significance effect of variables of Interim Partnership of European - Egyptian Agreement and variable transitional likely to application of the GAT and variable transition is likely to apply European- Egyptian Partnership Agreement in its simple form, and insignificant effect of the variable Interim GAT in its simple form (**Judge**,

2005).

The estimated relationship of the multi regressions of those variables with a time variable as independent variables using a typical linear regression refractor, stepwise model is described in equation No. (6) in Table (2). The results showed best significant performance, and contains all of the variables of Transitional weighted to apply the GAT and the application of European - Egyptian of the partnership agreement resulted in significant positive impact on the development of the amount of exports of Egyptian grapes at 0.05 level of significance.

Value in brackets refer to the value (T) calculated, (R^2) coefficient of determination, (F) moral model, (*) indicates a significant regression coefficients abstract level (0.05), (-) indicates no significant regression coefficients when any of the familiar moral levels.

Variable of transitional weighted on the application of the Egyptian- European Partnership, which means that political application of the European Partnership Agreement with Egypt have important role in increasing the amount of Egyptian exports of grapes.

Equation (12) proved to be the best application of the model, and contains all of the transitional weighed variable for Egyptian -European partnership gave significant results while it did not give significant results for the variables of Interim GAT, Interim Partnership Agreement European Egyptian, and variable time, which refers to the positive impact of the application of the Egyptian- European Partnership on the evolution of the value of exports of Egyptian grapes, and this effect was statistically significant at all levels of probability This could be clearly noticed from the positive sign for the effect of transitional variable applied on the Egyptian European partnership agreement. Equation (18) proved to be the best application of the model, and contains all of the transitional weighed variable for Egyptian -European partnership gave significant results while it did not give significant results for the variables of Interim GAT, Interim Partnership Agreement European Egyptian, and variable time, So these variables were excluded to improve the significance of the model as well as the coefficient of determination, which refers to the positive impact of the application of the European Partnership, Egyptian export price for the Egyptian grapes, and this effect was statistically insignificant at all levels of probability (**Hamdoun, 2010**).

2. Geographical distribution of Egyptian exports of grapes:

Data presented in Table (2) show the geographic distribution of Egyptian exports of grapes during the period average (2007 - 2009), and showed that the United Kingdom is the most important

importer of Egyptian exports of grapes during the study period, where it absorbs nearly about 49.1 thousand tons, representing about 41.1% of the total amount of exports of grapes estimated at 119.6 thousand tons during the study period.

The value of Egyptian exports of grapes to the United Kingdom was about 63.95 million U.S. dollars, representing about 41.4% of the average total value of exports of Egyptian grapes during the study period of about 154.4 million\$. Netherlands ranked in second order for the main importing countries for grapes Egyptian during the study period, where it absorbs about 23.1 thousand tons, representing about 19.3% of the average total quantity of exports of Egyptian grapes which estimated about \$ 29.1 million representing approximately 18.9 % of the average total value of Egyptian exports grapes during the study period. Italy ranked in the third place among the most important importers of Egyptian exports of grapes during the study period, reaching the amount of exports with about 17.7 thousand tons, representing about 14.8% of the average total quantity of Egyptian grapes exports, the value of these exports about \$ 21.4 million, which is equivalent to about 13.9% of the average total value of Egyptian exports of grapes during that period (**Hamdoun, 2010**).

The fourth and fifth countries were Belgium and Germany with an average amount was about 8.3 and 5.7 thousand tons, which represents approximately 6.9% and 4.8% each respectively of the average amount of exports Egyptian of grapes during the study value of exports to these countries amounted to about 10.4 and 9.98 million, representing about 6.8% and 6.5% of the average total value of Egyptian exports grapes for both Belgium and Germany respectively. Generally, from the previous view is clear that the Egyptian grape exports are concentrated by 86.9% in the United Kingdom, the Netherlands, Italy, Belgium, and Germany during the study period (2007 - 2009).

Features of the current situation of Egyptian grape exports to global markets:

A. Export growth in markets where demand is growing:

The increase in the market share for the Egyptian exports in markets is characterized by high rates of demand during the period (1995-2009), with a high growth rate of exports at a higher rate than the rate of market growth in imports during the study period, which means increase the competitiveness of Egyptian exports into these markets, namely Russia, Italy, Britain, the Netherlands, Saudi Arabia, United Arab Emirates and United States. Estimation of the increasing Egyptian exports of grapes to Russia, Italy, Britain, the Netherlands, Saudi Arabia, United Arab Emirates, America rates is amounted about 35.8%,

33.4%, 29.2%, 28.5%, 19.4%, 18.4%, 14.7% each respectively during the study period, while the estimated growth rate of imports of these markets

from grapes was about 16.5%, 7.8%, 6.6%, 10%, 0.83%, 1.6%, 3.4% each respectively during the same study period (Sibai, 2006).

Table (2): The geographical distribution of the quantity and value and the export price of Egyptian grapes during the average period (2007 - 2009). (Tons, value in thousands of dollars, the price in dollars per ton)

Country	Average Quantity	Relative importance (%)	Value	Relative importance (%)	Price/ton
UK	49093.36	41.06	63952.24	41.43	1303
Netherlands	23116.66	19.33	29141.14	18.88	1261
Italy	17662.16	14.77	21398.38	13.86	1212
Belgium	8280.44	6.92	10445.15	6.77	1261
Germany	5730.93	4.79	9981.04	6.47	1742
others	15693.8	13.13	19458.8	12.59	1307
Total	119577.4	100	154376.8	100	1291

Source: collected and calculated from data of the Central Agency for Public Mobilization and Statistics, foreign trade database, the international information network.

B. Export growth in declining markets where demand:

The increase in the market share for the Egyptian exports in markets is characterized by low demand during the period (1995-2009), these markets include Germany, Belgium with an estimated growth rate of exports of grapes to these markets by about 32.1% , 26.9% respectively, while the growth rate of imports of these countries about - 0.15% - 0.87% each respectively. It must then reconsider the direction of Egyptian exports of grapes.

Choosing the most important import markets for Egyptian grapes according to the growth rate of imports market (demand), and the growth rate of exports to the market (offer), and following the results of measuring the most important indicators of competitiveness:

1. Market Share Index:

Table (3) presented the market share of the amount of Egyptian exports of grapes inside the main import markets during the period (2005-2009) and it is clear that Egypt is ranked fourth in terms of market share in the British market by an average of about 6.6% and the maximum was about 8.4% in 2009 and the lowest was about 5.1% in 2005 during the study period. The first place came Chile an average market share of about 22.2% during the study period (2005-2009), while the share from South Africa and Spain in second and third orders was with an average

market share of around 21.1%, 12.1% during the study period each respectively while Greece was ranked fifth and last of these countries compete in the British market with an average market share of around 5.8% during the same period (Sibai, 2006).

For the Netherland market it is evident from the same table that South Africa occupies the first rank average share market reached 29.2% of the average total quantity of imports Netherlands of grapes, followed in order of Chile, Brazil, and India with an average share market amounted to about 27.5%, 5.8%, 5.1 % of the average total imports of the Netherlands respectively during the period (2005-2009).

Egypt ranked the fifth and last among those competing in the Netherland market with average share market amounted to about 3.2% of the average total imports Netherlands from grapes with the maximum about 5.2% in 2009 and the lowest was about 2.5% in 2005 and during the study period. This indicates that South Africa, Spain, and Chile, countries are Egypt's main competition in those markets during the study period (2005-2009). As it turns out lower market share for Egyptian exports of grapes compared to those countries in the British and Dutch markets during the same period of study, while moving the market share of the Egyptian exports of grapes within about growing markets (Deaton and Muellbauer, 1980).

Table (3): Market share index of the amount of Egyptian exports of grapes inside the main import markets during the period (2005 - 2009).

Years	British market					Dutch market				
	Greece	Spain	South Africa	Chili	Egypt	India	Brazil	Chili	South Africa	Egypt
2005	9.5	10.5	20.9	20.7	5.1	4.1	5	27.1	32.3	2.5
2006	8.1	14.9	21	23.5	5.9	5.5	5	27.7	32.1	3
2007	3.7	10.3	22.5	22.2	7.4	4.2	6.2	25	27.2	2.8
2008	4.5	13	20.5	23.1	6.8	6.3	6.6	28.5	24.9	3
2009	5.2	12.6	20.6	21.7	8.4	6	6.5	29.5	30.3	5.2

Average	5.8	12.1	21.1	22.2	6.6	5.1	5.8	27.5	29.2	3.2
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Source: collected and calculated from data of the Central Agency for Public Mobilization and Statistics, foreign trade database, the international information network.

2. Competitive Relative Price Index:

Table (4) indicated the competitive price for grape exports in the most important markets import. Egypt does not have a comparative advantage price in the export of grapes for export price compared to Chile in the British market where it increased the price > 1 for the period (2005-2009) which estimated at 1.04, where the lowest was in 2006, where the export price of Egyptian grapes represents 78.9% of the export price of Chile in the British market for the same year while they reached their highest level in 2009, where the Egyptian price surpassed the Chilean by 32.1%. However, South Africa, Spain, and Greece surpassed Egypt comparative advantage price compared to the price export of these countries in the British market, where the price of exported ton of grapes was approximately 83%, 90.3%, 73.8% of the export prices of these countries respectively during the average study period (2005-2009) (Deaton and Muellbauer, 1980).

Table (4): Competitive Price Index position of the Egyptian exports of grapes inside the main import markets during the period (2005 - 2009).

Years	Egypt / Greece%	Egypt / Spain%	Egypt / South Africa% ¹	Egypt/ Chili%	Egypt/ India%	Egypt / Brazil%	Egypt /South Africa %	Egypt / Chili%
2005	80.1	97.4	79.1	97.6	114.6	80.8	105.4	114.3
2006	62.9	88	61.7	78.9	89.5	52.7	78.6	84.9
2007	59.4	89.5	96.8	130.8	139.5	97.3	127.7	134
2008	65.5	73.2	75.6	93.2	97.5	69.9	73.4	84.2
2009	111.4	106.7	110.5	132.1	100	100	100	100
Mean	73.8	90.3	83	104.4	106.9	78	95.1	101.8

With regard to the Dutch market it is evident from data in the same table that Egypt has a comparative advantage price for export price South Africa, where the ratio of price about 95% during the period (2005-2009) which is > 1 . The ratio reached the lowest level in 2008 where the export price of Egyptian grapes was about 73.4% of the export price of South African grapes of the same year, it reached the highest level in 2007, where he was Egyptian price increases for South African price increased by 27.7%.

For the Chilean export price of grapes it is clear from the data in the same table that there is no comparative advantage to Egypt for the Chilean where it was < 1 through the study period, which estimated by 102%, and it was lower in 2008 where such export price of Egyptian grapes was about 84 % of the export price of Chilean grapes, while the increase reached the a peak during the study period in 2007, it was about 34%. As it turns out that Egypt has a comparative advantage price in the Dutch market for export price grapes Brazilian during the average period (2005-2009), where at about 0.78, and ranged percentage price between a minimum of around 0.53 in 2006 the maximum limit was about 1.0 in 2009, as well as the same data also show there was no relative price advantage for the export price of Indian grapes in the Dutch market during the average period (2005-2009) as the percentage price increase > 1 , this ratio ranged between 0.90 2006, and 1.40 in 2007, which indicates that Egypt has a comparative advantage price for both South Africa and Brazil, while there are no comparative advantage price for each of Chile, and India in the Dutch market (Hamdoun, 2010).

In general it should be noted that despite the existence of a comparative advantage price to Egypt within those markets for some competitors but the Egyptian market share had a marked decline in those markets, and the degree of price competition to Egypt in the British market is lower than in the Dutch market, as characterized by the ratio of price to Egypt and competitors instability in these markets.

3. Market penetration Index:

Table (5) showed that the import penetration rate in the most important grape markets during the period (1995-2009). The British market penetration rate was about 1.03%, and ranged between a minimum reached about 1.0% in 1995.1997 and a high of around 1.05% in 2005 and this means that it is characterized by generally relatively stable during the study period.

As for the Dutch market ,the market penetration rate was about 3.9%, and reported the lowest level in 2001 (2.34%), while the rate reached its highest level in 2005 (7.7%), but it is not relatively stable during the study period. The high value market penetration rates in the British and Dutch markets refers to the increasing adoption of these markets to imports of Egyptian grapes to satisfy domestic demand, which means easier increase in the Egyptian exports of grapes to these markets in the future. On the other hand, it gives evidence of the deterioration of internal competition for the national economy.

Table (5): Market penetration index of the most important import markets for Egyptian grapes during the harvest period (1995 - 2009).

Years	Dutch market	British market
1995	2.76	1.00
1996	5.93	1.01
1997	3.45	1.00
1998	4.50	1.01
1999	3.19	1.03
2000	3.12	1.03
2001	2.34	1.02
2002	3.14	1.04
2003	3.26	1.03
2004	6.52	1.03
2005	7.71	1.05
2006	3.18	1.05
2007	2.44	1.02
2008	3.42	1.04
2009	3.29	1.04
Average	3.88	1.03

Determinants of competitiveness of Egyptian grapes in foreign markets:

In order to determine the competitive position of the Egyptian exports of grapes this model has been formulated following determinants of competitiveness:

$$Y_i = \alpha + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3}$$

Where: (Y_i): express market share for Egyptian exports of grapes in the market i.

(X_{i1}): express the relative price: Egyptian grapes export price / export price of grapes each country compete in the market i.

(X_{i2}): variable reflects the efficiency of the performance of export operations in Egypt / export performance efficiency of operations in each country compete separately in the market (i) (proxy variable and which can be calculated from the following equation:

Efficient performance of export operations = (total exports + total imports) / GDP.

(X_{i3}): variable reflects the ratio of the source of the total production of Egyptian grapes / ratio of the source of the total production of grapes for each individual state competition in the market (i).

Due to the absence of information that reflect the changes productivity in terms of quality and production deadlines, two factors strongly influence the ability to access foreign markets, they have been replaced with a quantitative variable (the ratio of the source to the amount of total production), and the absence of detailed information regarding services export variable was replaced by export performance efficiency of operations.

The application of the above-mentioned model and after several attempts had been reached some

factors affecting the competitiveness of Egyptian exports of grapes to its most important foreign market (which proved statistical significance) described as follows:

1. British Market:

The data presented in Table (6) indicated that the signal ratio of price to export price Egyptian grapes attributed to the price of export grapes of Chilean, South African, Spanish, Greek was negative, which indicates that it has a negative impact on market share for the Egyptian exports than in the British market, it was insignificant statistical effect, and it agrees with the economic rules. The price of grapes exported from these countries to the British market is considered influential on Egypt's exports of grapes to this market (despite > 1 it was between Egypt and Chile). In addition , it is clear that the efficiency of the performance of Egyptian export operations relatively to the efficient functioning of processes export to Chile has negative impact on the share market of Egyptian grapes in the British market, and this agrees with the economic rules . It did not prove Statistical significance of this variable, which means that the performance of the operations of export in Egypt does not differ much for the performance of export operations in Chile (**Deaton, 1974**). The efficiency of the performance of operations of Egyptian export relative to the efficient performance of operations export each from South Africa, Spain, Greece has positive impact on Egyptian market share and It did not prove statistical significance of this variable except South Africa only, which means that there is a competitive advantage for Egypt in the efficiency of the performance of the operations of export within

British market compared to the efficient functioning of export operations in these three countries. Finally, the positive impact of rate source of Egyptian production of grapes relative to the same variable from Chilean, South African, Spanish, Greek grapes has proved statistical significance of this variable on the market share of Egyptian grapes in the British market, which indicates that the dates of production and quality of Egyptian grapes has a competitive advantage compared to source of grapes from these four countries, which increases the ability to force into the British market.

2. Dutch market:

The data presented in Table (6) indicated that the Dutch market is similar to the British counterpart (despite the different states) with regard export price of Egyptian grapes relative to the price of export of grapes from Chile and South Africa, Brazil and India, where the signal ratio of price to Egyptian export price of grapes relative to export price of grapes of these four countries is negative, which indicates that it has a negative impact on the market share of Egyptian exports in the Dutch market, and It did not prove Statistical significance of this variable, however, this agrees with the economic rules. The price of grapes exported from these countries to the Dutch market cannot influence Egypt’s exports of grapes to this market (despite this ratio was > 1 between Egypt and

Chile, Egypt, India). As shown by the results of the model that the efficiency of the performance of operations export Egyptian relative to the efficient functioning of processes export for Chile and Brazil has negative impact on the share market of Egyptian grapes in the Dutch market, and this agrees with the economic rules, which means that the performance of operations export in Egypt does not differ much from the performance of export operations in each (Deaton, 1974). The efficiency of the performance of operations export Egyptian relative to the efficient performance of operations export each from South Africa, India had a positive impact on the market share of Egypt, and it did not prove Statistical significance of this variable, which means that there is a competitive advantage for Egypt in the efficiency of the performance of the operations of export within the Dutch market compared with the efficiently the performance of export operations in these two countries. Finally, the positive impact of rate source of production of Egyptian grapes relative to the same variable from Chilean, South African, and Brazilian and Indian grapes has proved Statistical significance of this variable, on the market share of Egyptian grapes in the Dutch market. Moreover, it indicates that the dates of production and quality of Egyptian grapes has a competitive advantage compared to source grapes from these four countries, which increases the ability to force within this market.

Table (6): results of model determinants of the competitive position for exports of Egyptian grapes in both the British and the Dutch during the period (1995 - 2009).

Market	Competitive states	F	R ²	Model used
British	Chili	93.3	0.96	Y=3.46 - 1.74X1 - 1.27 X2 + 68.58X3 (2.020) (-1.678) (-0.522) (14.207)
	South Africa	58.77	0.94	Y= 1.086 - 1.06X1 + 1.209 X2 + 30.3X3 (0.585) (-0.697) (0.525) (8.792)
	Spain	77.14	0.95	Y=-0.08 - 0.63X1 + 3.72 X2 + 2.91X3 (-0.083) (-0.884) (2.734) (6.202)
	Greece	82.41	0.95	Y= -1.17 - 0.39X1 + 2.56 X2 + 12.76X3 (-1.053) (0.404) (2.091) (6.603)
Douche	Chili	20.6	0.84	Y= 4.02 - 1.82X1 - 2.95 X2 + 33.12X3 (2.143) (-1.639) (-1.103) (6.223)
	South Africa	12.5	0.77	Y=0.23 - 0.16X1 + 0.58 X2 + 15.28X3 (0.098) (-0.142) (0.208) (4.052)
	Brazil	9.15	0.71	Y= 1.01 - 1.37X1- 0.06X2 + 6.39X3 (0.505) (-1.032) (-0.095) (4.126)
	India	12.4	0.77	Y= 0.584 - 1.17X1 + 0.83 X2 + 5.55X3 (0.261) (-1.285) (0.402) (4.945)

Statistical estimation of external demand for Egyptian grapes:

1. Estimate of the statistical function of individual demand on Egyptian grapes in the British market:

Studying the relationship between the average per capita of Egyptian grapes imports to British market in grams to that market as a continued, and explanatory factors which believed to affect the

dependent variable, show that the picture logarithmic dual are the best mathematical formulas to represent that relationship which could be formulated in the following form:

$$\text{Log } Y^i = -9.8 - 0.34 \text{ log } X1i + 3.41 \text{ log } X2i \quad (-1.72) \quad (-0.41) \quad (7.0)$$

$$R^2 = 0.84 \quad F = 31.7$$

Where: Yⁱ: Estimated value of the average per

capita British of Egypt's exports of grapes to that market in grams per year i .

X1 i : Egyptian average export price in dollars / ton in the year i .

X2 i : British average per capita income in dollars in the year i .

It is clear from this model that the most important factors affecting the average per capita British of Egypt's exports of grapes is determined in the average export price Egyptian dollar / ton, and average per capita income in British (dollar in the year), as the value of the coefficient of determination rate was about 0.84, which means that about 84 % of changes in average per capita British Egyptian grape exports to that market due to the aforementioned factors. It is also noted the form an inverse relationship between the dependent variable and the average export price Egyptian dollar / ton, and this is consistent and agree with the economic rules, where an increase of Egyptian export price by 1% decrease per capita British exports of Egyptian grapes to that market by 0.34% during the period (1995-2009). The model is a direct correlation between the dependent variable and the average of British per capita income in dollars, since an increase of the per capita income was less 1%, the increase in British per capita exports of Egyptian grapes to that market by about 3.41% during the study period, as indicated by the value calculated (F) (Green and Julian, 1990).

2. Estimate of the statistical function of individual demand on Egyptian grapes in the Dutch market:

Studying the relationship between the average per capita of Egyptian grapes imports to Dutch market in grams to that market as a continued, and explanatory factors which believed to affect the dependent variable, show that the picture logarithmic dual are the best mathematical formulas to represent that relationship which could be formulated in the following form: -

$$\log Y^i = -5.838 - 0.97 \log X1i + 5.09 \log X2i$$

$$(-0.74) (-1.9) (8.3)$$

$$R^2 = 0.86 \quad F = 36.0$$

Where: Y^i : Estimated value of the average per capita Dutch of Egypt's exports of grapes to that market in grams per year i .

X1 i : Egyptian average export price in dollars / ton in the year (i).

X2 i : Dutch average per capita income in dollars in the year (i).

It is clear from this model that the most important factors affecting the average per capita Dutch of Egypt's exports of grapes is determined in the average export price Egyptian dollar / ton, and

average per capita income in Dutch (dollar in the year), as the value of the coefficient of determination rate was about 0.86, which means that about 86 % of changes in average per capita British Egyptian grape exports to that market due to the aforementioned factors. It is also noted the form an inverse relationship between the dependent variable and the average export price Egyptian dollar/ ton, and this is consistent and agree with the economic rules, where an increase of the Egyptian export price by 1% decrease per capita Dutch imports of Egyptian grapes by 0.97% during the period (1995 - 2009). Also the model indicates the form of positive relationship between the dependent variable and the average per capita in Dutch gross national income in dollars and this is consistent and economic logic, where an increase of that variable by 1% increase per capita Dutch imports of Egyptian grapes by 5.09% and the same period referred to above, as indicated by the value of calculated (F) (Green and Julian, 1990).

Conclusion

It could be concluded from this study that the Importance of increasing the quantity exported to Russia, Saudi Arabia, the United States of America, where those markets are increasing demand for it is curtail. Moreover, it is essential to Increase the quantity exported to the British and Dutch markets, where market share is for Egypt in the markets is about 6.6%, 3.2%, respectively, despite having a comparative advantage price to Egypt in both markets On the other hand to reduce the quantity exported to Germany and Belgium, where these markets have lower demand for Egyptian grapes.

Corresponding author

Abed El Aziz M. A

Department of Agricultural Economics, National Research Centre

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Annex

Table (1): Variables used to estimate the model parameters of competitive position for exports of Egyptian grapes in the British market during the period (1995 - 2009).

Years	Greece			Spain			South Africa			Chili			yi
	x3	x2	x1	x3	x2	x1	x3	x2	x1	x3	x2	x1	
1995	0.016	0.79	1.09	0.06	0.65	1.45	0.021	0.61	0.94	0.005	0.52	0.99	1.52
1996	0.016	0.74	0.89	0.07	0.60	1.24	0.022	0.61	0.69	0.004	0.51	0.90	1.58
1997	0.011	0.72	0.89	0.06	0.50	1.21	0.011	0.56	0.78	0.003	0.48	0.95	0.86
1998	0.009	0.72	1.30	0.05	0.53	1.84	0.007	0.63	1.09	0.002	0.54	1.25	0.93
1999	0.012	0.69	0.90	0.05	0.48	1.15	0.007	0.57	0.99	0.003	0.50	1.13	1.00
2000	0.063	0.59	0.79	0.26	0.41	1.02	0.033	0.47	0.97	0.012	0.41	1.21	1.11
2001	0.046	0.60	0.73	0.23	0.40	1.12	0.031	0.41	0.86	0.012	0.35	0.99	1.69
2002	0.107	0.68	0.94	0.31	0.45	0.93	0.041	0.43	0.89	0.015	0.39	1.13	2.66
2003	0.108	0.74	0.93	0.37	0.53	0.93	0.052	0.56	0.85	0.014	0.40	1.11	1.99
2004	0.229	0.87	0.84	0.87	0.61	1.02	0.089	0.64	0.83	0.033	0.43	1.04	3.60
2005	0.220	1.04	0.80	0.97	0.73	1.08	0.129	0.75	0.76	0.054	0.54	0.98	5.08
2006	0.257	0.95	0.63	1.04	0.70	0.55	0.120	0.66	0.60	0.054	0.50	0.79	5.87
2007	0.490	1.01	0.59	2.03	0.73	0.87	0.229	0.65	0.90	0.109	0.49	1.31	7.36
2008	0.367	1.44	0.66	1.41	1.09	0.80	0.223	0.82	0.83	0.095	0.64	0.93	6.79
2009	0.416	1.21	1.11	1.54	0.94	1.11	0.199	0.80	1.00	0.103	0.56	1.32	8.39

Where:

Yi: market share of Egyptian exports of grapes in the British market.

X1: relative price = Egypt export price / export price of each state competition in the British market.

X2: the efficient functioning of export operations in Egypt / export performance efficiency of operations in each country compete separately.

X3: ratio of the source of the total production in Egypt / ratio of the source of the total production in each country compete separately.

Table (2): the variables used to estimate the model parameters competitive position for exports of Egyptian grapes in the Dutch market during the period (1995 - 2009).

Years	India			Brazil			Chili			South Africa			Competitive countries yi
	x3	x2	x1	x3	x2	x1	x3	x2	x1	x3	x2	x1	
1995	0.05	1.19	1.20	0.19	1.69	0.91	0.01	0.52	1.15	0.02	0.61	0.77	0.41
1996	0.05	1.15	1.35	0.21	1.73	0.98	0.004	0.51	1.10	0.022	0.61	1.00	0.32
1997	0.03	1.12	1.18	0.23	1.48	1.02	0.003	0.48	1.12	0.011	0.56	0.94	0.21
1998	0.07	1.22	2.05	0.14	1.64	1.17	0.002	0.54	1.43	0.007	0.63	1.39	0.29
1999	0.07	1.06	1.37	0.10	1.20	1.20	0.003	0.5	1.35	0.007	0.57	1.31	0.39
2000	0.23	0.92	1.31	0.30	1.09	1.36	0.012	0.41	1.31	0.033	0.47	1.40	0.59
2001	0.31	0.92	1.19	0.22	0.87	1.12	0.012	0.35	1.17	0.031	0.41	1.18	0.96
2002	0.26	0.9	1.13	0.24	0.90	0.90	0.015	0.39	1.28	0.041	0.43	1.23	1.61
2003	0.29	0.99	1.10	0.18	1.01	1.04	0.014	0.4	1.10	0.052	0.56	1.12	1.05
2004	0.50	1.05	1.24	0.54	1.07	1.03	0.033	0.43	1.09	0.089	0.64	1.12	2.33
2005	0.51	1.08	1.15	0.43	1.42	0.81	0.054	0.54	1.14	0.129	0.75	1.05	2.48
2006	0.37	0.97	0.90	0.39	1.46	0.53	0.054	0.5	0.85	0.12	0.66	0.79	3.02
2007	0.63	1.07	1.40	0.63	1.58	0.97	0.109	0.49	1.34	0.229	0.65	1.28	2.83
2008	0.48	1.23	0.98	0.56	2.12	0.70	0.095	0.64	0.84	0.223	0.82	0.73	3
2009	0.55	0.95	1.00	0.53	1.83	1.00	0.103	0.56	1.00	0.199	0.80	1.00	5.25

Where:

Yi: market share of Egyptian exports of grapes in the Dutch market.

X1: relative price = Egypt export price / export price of each state competition in the Dutch market.

X2: the efficient functioning of export operations in Egypt / export performance efficiency of operations in each country compete separately.

X3: ratio of the source of the total production in Egypt / ratio of the source of the total production in each country compete separately.

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