

“THE IMPACT OF THE SUPPORT SYSTEM OF THE CAP ON TRADE BALANCE FREE TRADE IN THE LIGHT OF THE TURKEY’S EU MEMBERSHIP

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1. Impact of Support Measures on Trade Balance

The balance of trade is the indicator of trade flow in current account between countries. In a nation, the balance of trade is the difference between sales of export and the cost of buying imports. “The balance on goods and services (or net export for short) is a major component of aggregate demand for expenditure on the reporting country’s aggregate output.”¹ However, current account together with the financial account is the two most important parts of the international transactions, relative to the capital account.

In the CAP system the application of support measures such as CCT, import quotas and VER prevents access of the imported product into the EU market and contributes to a reduction of the current account deficit together with export subsidies, which increases the export of internal producers. This means that the existence of internal support measures in the CAP makes an important contribution to the maintenance of current account balance at a desired level.

In the last decade, the application of CAP measures had positive effects on increasing the trade share of internal producers whilst non-member countries producers such as those in Turkey were negatively affected by the CAP measures. On the one hand, higher CCT increased the internal product prices over world prices and reduced the access of the imported product into the EU market. By this means, the value of tax revenues collected by the community agencies increased. On the other hand, the maintenance of export subsidies reduced the exported product price of internal producers and increased their market share in Turkey and in other non-member countries. Consequently, support measures had directly

¹ Chacholiades Miltiades: International Economics, 1990, p.292

affected consumers and especially producers in their decision making process, production operation and marketing of products. But CAP measures have also affected the behaviour of consumers and changed the demand for products in and outside the Union. Consequently, support measures affected the amount of exports to non-member countries and Turkey, as well as imports from Turkey and from non-members countries to the EU and this created an unfair market share for EU producers. The support measures have artificially but positively changed the trade balance.

2. General Glance on Agricultural Trade between EU and Turkey

Since 2002 the single currency has been in circulation in the EU. Over time the Euro appreciated in value against foreign currencies, especially the Turkish Lira. However, the appreciation in value of the Euro had less effect on increasing imports into the EU market, because of the CCT as explained above.

The import and export amounts of the EU and Turkey are illustrated in Table 1 below. The higher share of cereals export is the result of excessive export subsidies in the CAP which reduce the product price on the world market and increase the trade capacity. Soya cake and beans comprise almost half of the import amount, which has tax free access to the EU Union and there is very low production of Soya cake and beans in the Union. They therefore enjoy Union access without tariff restriction.

The excessive surplus amount in cereals and higher storage costs increased the amount of export subsidies for cereals which covered almost 43% of the total export, whilst import of cereals was highly protected and comprised only 11 % of the total import in the last decade. One of the other important export products of the CAP is wine which covers 25 % of the total EU export. Also sugar and fruit and vegetables become important items of the exported products in the CAP. In contrast to this, corn gluten feed together with fruit and vegetables from third world countries covered approximately 20% of the total import. The rest of the imported products were a very small percentage.

Table 1: Import and export amount of selected agricultural products in the CAP and in Turkey (in 2003)

CAP of the EU (%)			Turkey (%)		
Agri. products	Import	Export	Agricultural products	Import	Export
Cereals	11	43	Cereals	12	5
Rice	2	1	Oilseeds and oleaginous fruits	8	1
Corn gluten feed	10	0	Edible vegetables roots and tubers	3	8
Soya cake and bean	49	3	Edible fruits and nuts	2	30
Vegetables & Fruit	10	7	Live animals	1	0
Olive oil	0	0	Dairy products	1	1
Milk/ milk products	0	3	Products of animal origin	1	1
Sugar	4	12	Animal or vegetable fats & oils	13	6
Tobacco	1	0	Preparation of veg. fruits & nuts	1	13
wine	11	25	Sugar and sugar confectionery	0	7
Beef and veal	1	2	Coffee, tea mate & spices	1	1
Pig meat	0	2	Cacao and cacao preparations	2	2
Sheep & goat meat	0	0	Tobacco and tobacco products	11	12
Poultry Meat	1	2	Others	44	13

Source: for the CAP; Eurostat database, Agris database 1973-2003, CD-Rom, 2003 and for Turkey; EU Commission: Agricultural situation in the Candidate Countries, Country Report Turkey, 2003, p.18 Illustrated by the author

In the last decade about 30 % of Turkish exports consisted of edible fruits and nuts, 13% preparations of animal origin, 13% others, 12% tobacco and tobacco products, 8% edible vegetables, roots and tubers, 6% animal and vegetable fats and oils and finally cereals which covered 5% of Turkish exports. There were also some other exported products from Turkey but they were less than 1 percent in total agricultural product trade.

In the last decade 44% of imported products comprise others, which are not indicated. But cereals comprise 11.60% of agricultural import. The animal and vegetable fat and oils comprises 12% and tobacco products comprise 11% of the Turkish import on agricultural products.

In the table below the export and import amount of cereals between the EU and Turkey is shown. In the last decade imports from the EU to Turkey vary from one year to another, the reason for this being dependence on the decline in export subsidies which were reduced in the Uruguay round to about 36 % for a six year period. In 2000, a sharp decline in price gap between internal and external cereal price increased exports from the EU to Turkey. In contrast to this, exports from Turkey to the EU between 1990 and 1995 increased almost five fold. The reason for this increase was the MacSharry reform which cut the support price 15%, whilst compulsory set-aside (15%) began to be applied for cereals.

Table 2: Turkey's agricultural trade with the EU

	Imports from EU, % share						Exports to EU, % share					
	1990	1995	2000	2001	2002	2003	1990	1995	2000	2001	2002	2003
Trade with EU	44.4	47.2	48.8	44.2	45.2	45.8	55.4	51.2	52.2	51.4	51.2	51.8r
	Value of imports (euro/ mn)						Value of exports (euro/ mn)					
Cereals	448.2	359.7	458.6	234.7	429.2	--	58.5	337.1	440.1	366.0	290.0	--

Source: EU Commission: Turkey in EU, Chapter Eight: Turkey's Trade Position, EU Commission, 2004, p.125 and 128, <http://www.scirus.com>

Statistical data from one publisher differ to that of another. Therefore, it is difficult, to estimate exactly what the precise outcome of the support measures are. For example, total agricultural product trade and cereal products import and export in the Eurostat Agris database (above figures for statistics) differ from the DG VI for agriculture statistics (below given figures) and from FAO database. But, at least it is obvious that the decline in export subsidies has had less negative effect on reducing the export capacity of the CAP in the world markets, because first, cereal prices were in decline in the CAP, which reduced the price gap between internal and external producers and second, export subsidies were maintained, in spite of a sharp reduction in the price gap between external and internal products, and third, maintenance of the CCT reduced the import of third world countries producers. As a consequence of these measures, the amount of export and import changed, and this has had a positive effect on the trade balance for the EU CAP, in the last decade.

3. Estimation of Trade Balance

In the following part an estimation of the trade balance and the applied formula have been reformulated and adapted to the CAP system to better calculate the correct value of the trade balance for the CAP.

The deficit on the balance of payments increases the financial burden of the Community budget. It is also important to remember that within the CAP, the application of support measures, such as common custom tariff (CCT) does not only play a protective role, but also creates finance to support other non-tariff measures. This implies increasing import, which on the one hand, has a negative effect on trade balance and as a consequence of this on the balance of payments; but on the other hand, increasing imports, in particular in the EU where CCT is applied, increase the revenue incomes collected via tariff measures which in turn increase the resources of the Community budget. The CCT is actually one of the important support measures which contribute to the CAP budget in financing other non-tariff measures.

Indeed, CAP measures increase the expenditure of the CAP budget, and excessive direct payments and export subsidies, in particular, have increased the cost of the CAP budget in the last decade. Therefore, both the cost of subsidies on export and the import revenue results of the common custom tariff to estimate the trade balance of the CAP products is to be considered.

The export revenues, which are obtained from exporting goods, need to be subtracted from the amount of export subsidies to estimate the contribution to the trade balance. It is obvious that in the CAP the application of support measures creates trade distortion and the effect of this distortion is indirectly reflected in the balance of payments.

In the figure1 below, the impact of the price support system of the EU CAP is illustrated. It is supposed that the price gap, (t) between internal (Pp) and world products (Pr), is applied as a common custom tariff, resulting in a reduction of imported products from Q4 to Q2. The red line represents the import amount.

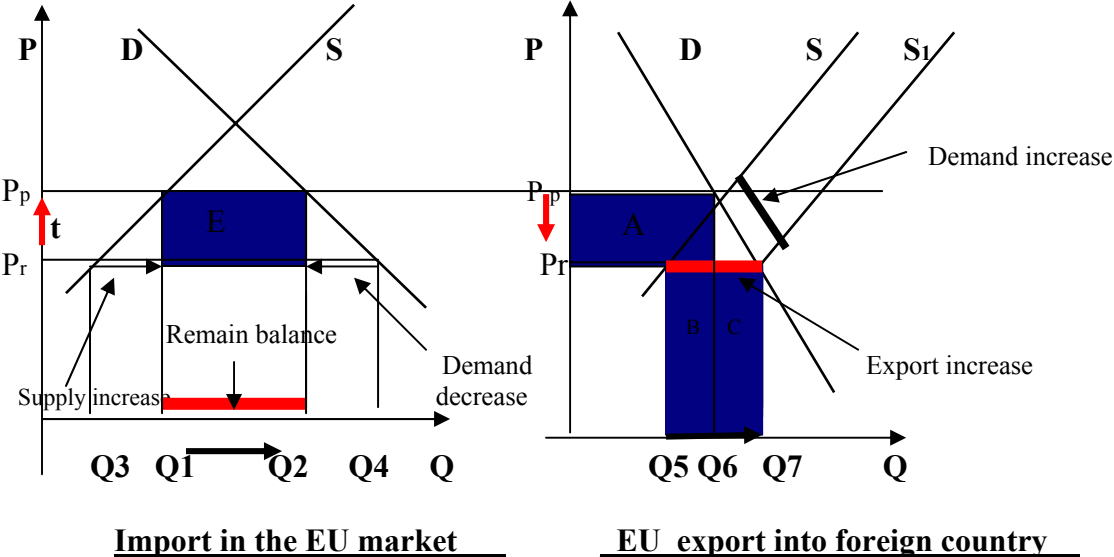
The amount of import after the application of the common custom tariff (ad valorem tax formula) can be calculated for the tariff revenues with the blue coloured area E, as shown in equation1 below.

$$\text{Ad valorem tax} = (1+t) P_r$$

Total value of net imports after tariff (It):

$$I_t = [(P_p + P_p \cdot t) (Q_1 - Q_2)]$$

Figure 1: The market price support causes a trade distortion.



However, it is obvious that for the calculation of the trade balance, it is required to subtract the tariff revenues from the import value in the case where no tariff is applied.

Therefore, it is necessary to calculate the difference between total import value without tariff and total import value with tariff. By doing so the difference between these two will give the total expenditure on import as shown below:

Total import revenue (Ir),

$$I_r = (P_p - P_r) \cdot (Q_1 - Q_2)$$

Net import expenditure (Ie),

$$I_e = I_t - I_r$$

$$I_e = [(P_r + P_r \cdot t) \cdot (Q_1 - Q_2)] - [(P_p - P_r) \cdot (Q_1 - Q_2)]$$

P_p : EU unit value at producer price (farm gate price)

t : the price gap between internal and world products, which is applied as a common custom tariff.

P_r : world reference price

$(Q_1 - Q_2)$: imported product amount

For the export,

Now it is supposed that the price gap between internal (P_p) and world products (P_r) will be applied as an export subsidy ($P_p - P_r$) which will reduce the product price below the world level and increase the EU product sales from Q_5Q_6 to Q_5Q_7 , which is shown by the blue coloured areas (B+C). Areas B and C represent the export sales, while the sales amount of importing country reduces as shown in the blue coloured areas (A+B). As a consequence of the price reduction, export demand outside the union is increased. Therefore, it is required to estimate the amount of subsidy and production increase in the market and then calculate the value of the export as given below.

$$\text{Total values of export subsidy expenditure } E_s = (P_p - P_r) \cdot (Q_5 - Q_7)$$

It is required to subtract the above given value from the total export value (without subsidy) to estimate the gain from export.

Therefore, the value of total export (E_t) is below given form:

$$E_t = P_p \cdot (Q_5 - Q_7)$$

P_p is the EU producer price, but application of the export subsidy, reduces the price level out of the Union so that the EU product price falls below the world price (P_r) level.

Hence, to estimate total export revenue E_r is then:

$$E_r = E_t - E_s$$

$$E_r = P_p (Q_5 - Q_7) - (P_p - P_r)(Q_5 - Q_7)$$

P_p : EU producer price

P_r : World reference price

$P_p - P_r$: export subsidy amount per unit

$(Q_5 - Q_7)$: exported product amount

The below given formula can be used to estimate the trade balance for CAP products which are supported with tariff and non-tariff measures. By doing so, the trade balance, which is dependent on the difference between export and import of goods, can be better estimated in the balance of payments calculation.

Trade balance (T_b) is then,

$$T_b = E_r - I_e$$

$$T_b = [P_p (Q_5 - Q_7) - (P_p - P_r)(Q_5 - Q_7)] - [[(P_p + P_p \cdot t) (Q_1 - Q_2)] - [(P_p - P_r) \cdot (Q_1 - Q_2)]]$$

4. Impact of Tariff and Export Subsidies on Trade Balance

In the CAP of the EU used method for estimating the trade balance is calculated without considering the amount of support measures given to internal producers. Due to this application estimated trade balance may cause an incorrect estimation of trade balance. However above defined trade balance formula (T_b), which considers parameters for support measures, contribute for estimating more accurate numbers on trade balance, which differs from numbers estimated by the formula (I_t).

In the table below, the above trade balance formula (T_b) has been used to illustrate the impact of the tariff and export subsidies on the trade balance. Below, in Table 3, barley export and import amounts are taken as a sample product in the given *scenario* used to illustrate the impact of the export subsidies and import tariffs on export and import values which influence the trade balance.

Table 3: The impact of the tariff and export subsidy on Trade balance of barley (Only barley is considered) (€/ t)

Year	Total Import tax (It)	Net import expenditure (Ie)	Total Export value (Et)	Net Export revenue (Er)	Balance with tariff and without subsidy effects(Et- It)	Balance without tariff and subsidy effect (Er-Ie)
1994	327.645	15.787	1,157.422	578.511	1,124.657	562.723
1995	610.745	58.346	553.938	393.008	492.864	334.661
1996	34.233	33.867	1,205.763	1,181.328	1,171.529	1,147.461
1997	59.555	57.220	598.695	556,611	539.140	499.391
1998	45.169	30.061	1,122.093	681.895	1,076.923	651.834
1999	255.627	232.240	1,597.030	1,112.474	1,341.403	880.234
2000	102.333	101.167	1,142.094	1,117.511	1,039.760	1,016.343

Source: calculated by the author from the Eurostat database, Director General for Agriculture and Fisheries, <http://www.euros.ch/agrifish.html>, Agri database 1973-2003, CD-Rom, 2003 and http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_290/l_29020021028en00010932.pdf

The tariff and export subsidies had considerable impact on import and export of barley trade and trade balance as indicated in the table above. The trade balance of 1994 has considerably increased from the result of the import tariff and export subsidy compared to the trade balance without export subsidy and import tariff in the same year. The mentioned situation has had, in almost all years, similar effects on the trade balance. The mentioned trade balance difference has surprisingly not been observed in 1996, 1997 and in 2000, where the price gap between internal and world products fell. The price gap was approximately 2.5 € in 1996 and 2000 and 8€ in 1997, which reduced the impact of these support measures on trade balance. This means the application of the export subsidies and common custom tariffs have less positive effects on trade balance when the price gap between internal and world products is reduced, because the difference between export and import values, which gives the trade balance, is almost the same, with or without support measures.

In the last decade, the decline in import has also been affected by higher import tariffs, which prevent the access of third world country producers into the market. The application of the common custom tariff is a fixed percentage. The application of fixed percentage can only be changed with commission approval. In recent years the price gap between internal and world cereal producers fell. The application of the common custom tariff was maintained. However, the application of a variable levy is adjustable. If a variable levy is preferable for use on imports then the amount of the levy is the price gap between world and EU prices. Any increase or decrease in the price gap would be reflected in the amount of the levy.

However, if a variable levy were preferred as an instrument to protect internal producers from producers outside the Union, it would have less trade distorting effect on third

world country producers, because a decline in the price gap between internal and external producers would also reduce the levy amount. A decline in the levy would reduce the imported product price and might increase the imported product access to the EU.

It is obvious that the application of a flexible levy causes less trade distortion than tariffs.

5. Conclusion

In the next decade, the CAP reform must concentrate on replacement of the CCT with the flexible levy. The flexible levy can be better and more easily adapted to changes in the price gap between internal and external producers, because any change in the CCT is required to change the measure on tax regulations. It is obvious that an application of the variable import levy could be more advantageous than the common custom tariff (CCT), which may contribute to a reduction of the trade distortion in the market. By such an application, any reduction on intervention price would be easily reflected in the variable import levy, which would be continuously regulated in the price gap between internal and world products. As a consequence of this policy change, some lower cost products from third world countries will gain access into the EU market. This will both increase fair trade and consumer welfare.

The export subsidies, which are dependent on the price gap between internal and world products, must also be continuously regulated to the price gap; this means any increase and decrease in the price gap must be reflected in the applied export subsidy for the prevention of excessive spending from the CAP budget. The better regulation of export subsidies into the price gap changes will reduce the resource transfers from lower cost production to higher cost production and increase fair trade in the world markets.

In short, the CCT and intervention price mechanism have been mostly used to prevent the access of imported products to the EU market, and excessive export subsidies were given to boost the amount of export in the world market to increase the trade balance. The application of these measures reduced self-sufficiency and market-oriented production in the market. The new measures must be planned to lessen the transfers from consumers and tax payers to producers and for greater transparency in domestic production to agriculture in order to for increase fair trade.

The negative effects of the CAP measures on the external trade balance are summarized below:

- The common custom tariff increases the revenues of the CAP budget and reduces the balance of trade deficits but increases the trade distortion,
- Export subsidies contribute to an increase in the exported product amount. Increasing exports may contribute to covering the deficits in the trade balance. However, it is required to estimate the export subsidy amount in order to determine the positive contribution to the balance of trade. It is possible that expenditure on export subsidies may go beyond the expected income from subsidized export.
- CAP reforms are oriented to support producers. But with the exception of common custom tariff other non-tariff measures increase the expenditure of the CAP budget which then reduces financial capacity.
- In recent years the price gap disappeared. Moreover, internal prices fell below the world price for cereal products, but application of common custom tariff stayed intact thus contributing to an increase in the revenue obtained from external trade.

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