WHAT ABOUT THE PROBLEMS AND MEASURES FOR THE INDUSTRY SECTOR OF TRNC?

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ABSTRACT

This study mainly concentrates on the competiveness of industry sector in Turkish Republic of Northern Cyprus (TRNC). In this respect, firstly current performance of the sector was examined. Secondly, main problems behind the competiveness of sector were revealed and SWOT analysis was conducted. Finally recommendations were developed to improve the competiveness of the industry sector in TRNC.

As a summary, the crucial problems of industry sector can be categorised into unfavorable investment climate and obstacles behind the competiveness of private sector such as absence of direct flight and trade embargoes. So, financial, structural and institutional measures towards the whole economy and industry sector should be taken to mitigate these crucial problems and improve competiveness.

Keywords **:** TRNC, Industry Sector, SWOT Analysis, Problems, Measures

JEL Code **:** L00, M00.

KKTC SANAYİ SEKTÖRÜNÜN SORUNLARI VE ALINACAK ÖNLEMLER HAKKINDA NE DERSİNİZ?

ÖZET

Bu çalışma esasen Kuzey Kıbrıs Türk Cumhuriyeti (KKTC) sanayi sektörünün rekabet edebilirliğine yoğunlaşmaktadır. Bu itibarla, sırasıyla sektörün mevcut durumu incelenmiş, rekabet edebilirliğini olumsuz etkileyen unsurlar açıklanmış ve FÜTZ analizi gerçekleştirilmiştir. Son olarak ise sanayi sektörünün rekabet edebilirliğini artırmak için öneriler geliştirilmiştir.

Çalışmada özet olarak sanayi sektörünün hayati sorunları; olumsuz yatırım iklimi ve doğrudan ulaşım olmaması ve ticaret ambargosu gibi rekabet edebilirlikteki engeller şeklinde kategorize edilebilir. Dolayısıyla, bu hayati sorunlardan kurtulup rekabet edebilirliğini artırmak için sektöre ve ekonominin geneline yönelik finansal, yapısal ve kurumsal önlemlerin alınması gerekmektedir.

Anahtar Kelimeler **:** KKTC, Sanayi Sektörü, FÜTZ Analizi, Sorunlar, Önlemler

JEL Sınıflaması **:** L00, M00.

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INTRODUCTION

The success and economic sustainability of any sector depend on its competiveness. Competitiveness can be defined as a power of an individual product or a group of products offered by a certain company satisfying existing customers, and also attracting potential customers to purchasing. It should be noted that competitiveness is a dynamic concept necessitating a favourable cycle between customer satisfaction and customer attraction (http://ocw.u-tokyo.ac.jp/wp-content/uploads/lecturenotes_eng/Eco_01/BusinessAdministration 1_07.pdf).

At the industry level, competitiveness is the ability of the nation's firms to achieve sustained success versus foreign competitors, without protection or subsidies. Measures of competitiveness at the industry level include the overall profitability of the nation's firms in the industrial sector, the industry's trade balance, the balance of outbound and inbound foreign direct investment, and direct measures of cost and quality at industry level (http://www.competitiveness.gov.jo/competitiveness_concept.php, July 3, 2011).

Theory and empirical evidence suggest two broad types of competitiveness. These are: competitiveness based on costs or pricing of the product (price competitiveness); and competitiveness based on product quality, design, innovation and skill intensity and flexibility (quality competitiveness, http://www.eclac.org/publicaciones/xml/0/10000/carg0576.pdf, July 3, 2011).

In this study, performance of industry sector in TRNC will be examined and SWOT Analysis will be conducted in order to formulate measures for its competiveness. Industry sector of Northern Cyprus consists of sub-sectors of quarrying, manufacturing and electricity – water that are figured as 2.1, 2.2, and 2.3 in Table 1 and in subsequent tables and figures.

There are other studies directly (CTCI 2009) or indirectly (World Bank 2006a; World Bank 2006b; YAGA 2008a; YAGA 2008b) related to industry sector of TRNC. However, this review study is the most comprehensive one unique the competiveness of the industry sector. Such that, it consists of sectorial growth rate, productivity, financial aspect, export capacity, its exposure to economic crises, obstacles behind its competiveness, SWOT analyses, conclusion and recommendations.

Aftermath of the Introduction the study will comprise main indicators, analysis of the sector, SWOT Analysis, consideration of economic crisis, conclusions and recommendations respectively.

1. MAIN INDICATORS

As shown in Table 1 and Figure 1 gross output of industry at 1977 prices increased till 2006 and started to decrease after this year. Manufacturing constituting approximately 80 percent of industry showed the same trend. Gross output of quarrying representing the least potion of industry (almost 5%) increased till 2007 and went down after this year. Electricity – Water as the sub-sector of industry is the only one showing continuous output increase between 2002 and 2008.

Table 1: Gross Output of Industry (1977 Prices TL)

	2002	2003	2004	2005	2006	2007	2008[1]
2. Industry	1.075,9	1.159,0	1.282,4	1.364,7	1.638,4	1.624,4	1.535,3
2.1. Quarrying	29,0	36,1	39,2	43,5	64,1	64,8	62,9
2.2. Manufacturing	869,6	932,9	1.028,0	1.080,9	1.313,3	1.274,7	1.168,2
2.3. Electricity - Water	177,3	190,0	215,2	240,3	261,0	284,9	304,2

Provisional FiguresSource: Tourism Planning Office, State Planning Organization

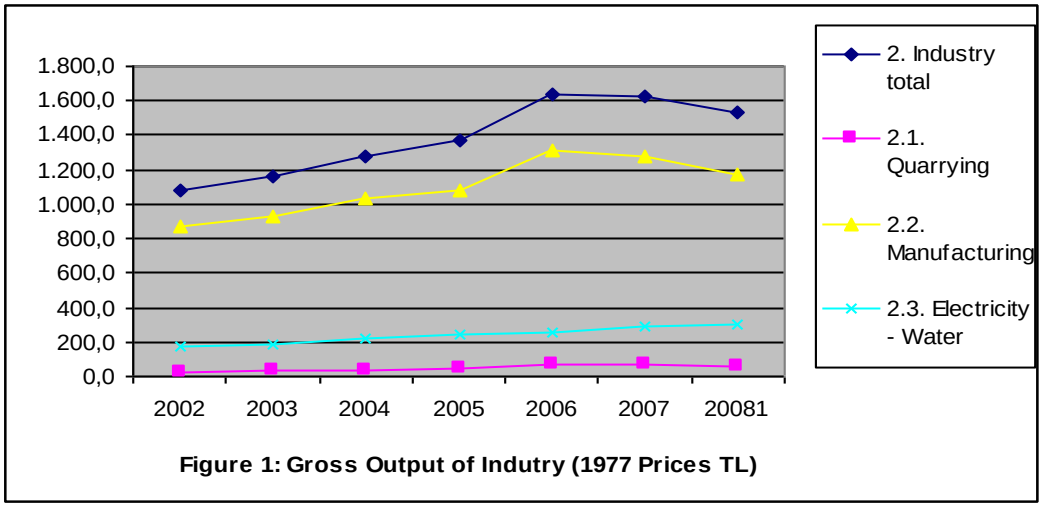


Figure 1: Gross Output of Indutry (1977 Prices TL)

Table 2: Gross Output of Industry (Current Prices TL)

	2002	2003	2004	2005	2006	2007	2008[1]
2. Industry total	157.576.560,4	191.426.017,9	231.046.611,0	281.023.837,1	377.504.439,0	430.808.660,5	509.444.862,0
2.1. Quarrying	7.823.663,0	11.094.473,8	13.109.133,2	17.596.564,2	41.080.997,3	48.681.681,6	53.639.640,1
2.2. Manufacturing	74.178.656,2	97.153.553,3	118.634.340,9	146.091.419,9	180.786.026,1	204.294.691,7	194.636.251,3
2.3. Electricity - Water	75.574.241,2	83.177.990,8	99.303.136,9	117.335.853,0	155.637.415,6	177.832.287,1	261.168.970,7

Provisional Figures Source: State Planning Organization

When gross outputs of industry at Euro values in Table 3 and Figure 2 that are derived form Table 2 are examined, it emerged that except manufacturing that started to decrease after 2007 gross output of industry total and sub-sectors demonstrated continuous increase. The difference between Euro values and 1977 prices is the result of real exchange rate putting forward that depreciation of TL against Euro became the less than the inflation rate differentials. Approximately same distinction will be observed in relation to growth rates of industry at Euro values and 1977 prices.

Table 3: Gross Output of Industry (Euro Values)

	2002	2003	2004	2005	2006	2007	2008
2. Industry total	110347731,4	112869114,3	130240479,7	167455510,1	209097396,1	241295317,9	266780929
2.1. Quarrying	5478755,602	6541552,948	7389590,304	10485379,69	22754512,74	27266540,61	28089463,81
2.2. Manufacturing	51945837,68	57283934,73	66873923,84	87052448,99	100136272,3	114425166,2	101925142,1
2.3. Electricity - Water	52923138,1	49043626,65	55976965,56	69917681,44	86206611,06	99603611,01	136766323,2

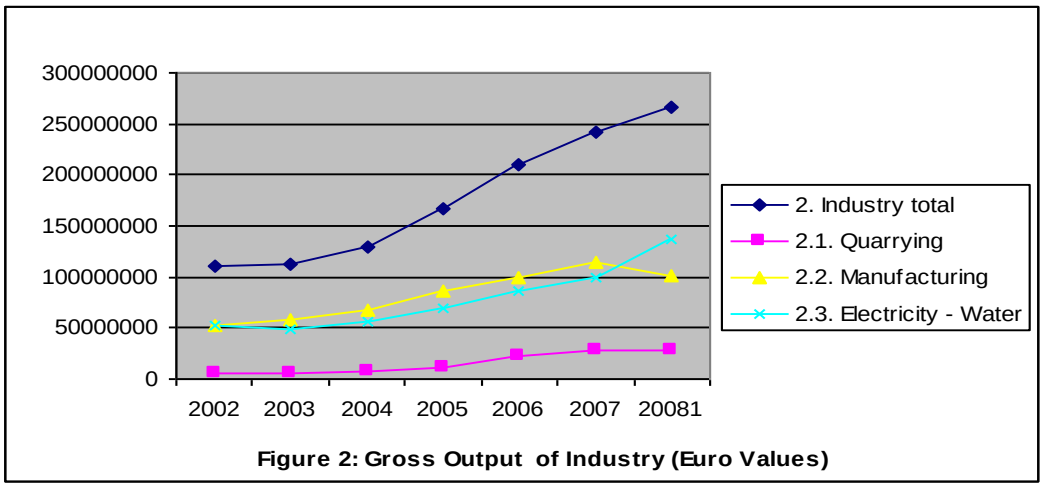


Figure 2: Gross Output of Industry (Euro Values)

According to growth rates of industry at 1977 price as indicated in Table 4 and Figure 3 both industry total and manufacturing reported almost the same trend. Especially their growth rates of last two years were negative. Furthermore, except the sub-sector of electricity-water growth rates of industry total and other sub-sectors were negative. Growth rates of electricity-water were always positive reaching to its peak level in 2004 and growing at decreasing rates after this year. When quarrying is considered it remarkably showed very high growth rate compared to other sectors especially in 2006. This was most probably the result of construction sector improvement motivated by the positive expectations of Annan Plan.

Table 4: Growth Rate of Industry (1977 Prices TL)

	2002	2003	2004	2005	2006	2007	2008
2. Growth rate of Industry total	5,0	7,7	10,6	6,4	20,1	-0,9	-5,5
2.1. Growth rate of Quarrying	7,4	24,6	8,6	11,0	47,4	1,1	-3,0
2.2. Growth rate of Manufacturing	5,7	7,3	10,2	5,1	21,5	-2,9	-8,4
2.3. Growth rate of Electricity - Water	1,2	7,2	13,3	11,7	8,6	9,2	6,8

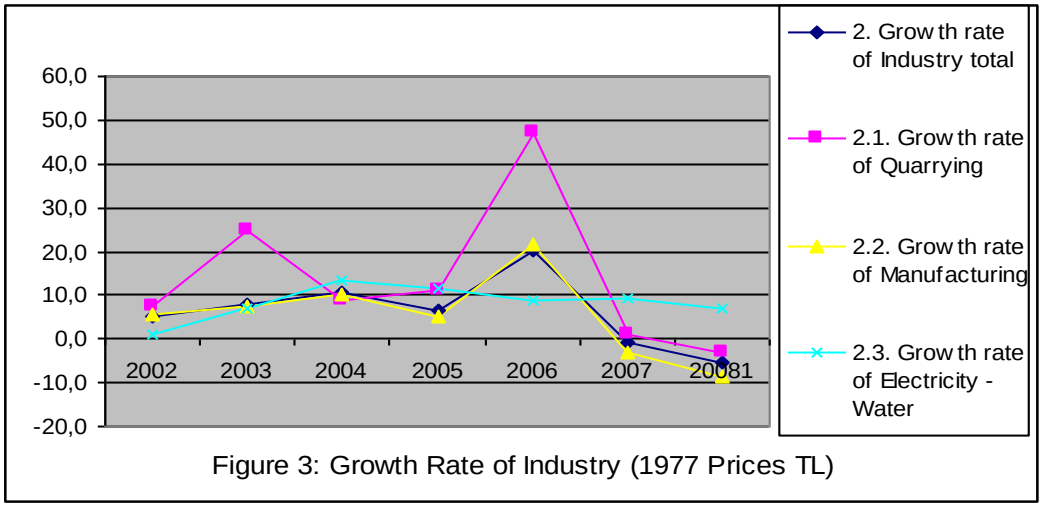


Figure 3: Growth Rate of Industry (1977 Prices TL)

When growth rates of industry at Euro values in Table 5 and Figure 4 are analyzed similar trends as the growth rates at 1977 prices are observed. However, apart from the manufacturing for the year of 2008 negative growth rates are not reported owing to the real exchange rates cited above.

Table 5: Growth Rate of Industry (Euro Values)

	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
2. Growth rate of Industry total		2,28	15,39	28,57	24,87	15,40	10,56
2.1. Growth rate of Quarrying		19,40	12,96	41,89	117,01	19,83	3,02
2.2. Growth rate of Manufacturing		10,28	16,74	30,17	15,03	14,27	-10,92
2.3. Growth rate of Electricity - Water		-7,33	14,14	24,90	23,30	15,54	37,31

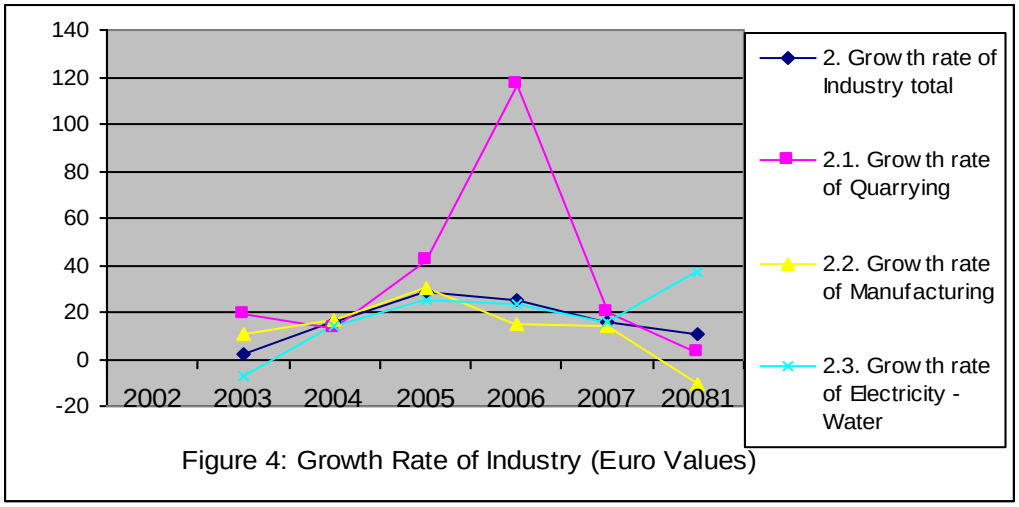


Figure 4: Growth Rate of Industry (Euro Values)

Starting from 2004 State Planning Organization started to prepare employment statistics according to Household Labor Force Survey rather then value added used till 2005. However, these figures are only available for the years between 2004 and 2007 as shown in Table 6. This explains the reason of why we used only these four years in calculating productivities. Even though the real output of industry in 2007 is higher than that of 2004, employment in 2007 is lower compared to 2004. This can be explained either by productivity increase or by unrecorded (illegal) employment.

Table 6: Employment in the Industry Sector

	2002	**2003**	**2004**	**2005**	**2006**	**2007**
2. Industry			10211	9225	8767	8897
2.1. Quarrying			114	144	113	115
2.2. Manufacturing			9.490	8.440	8.006	7.679
2.3. Electricity - Water			607	641	644	1.103

Source: SPO (2009a), Economic and Social Indicators 2007, State Planning Organization Follow up and Coordination Department, Nicosia.

Given the output and employment figures of industry, employment based productivities in terms of 1977 prices and Euro values can be assessed in Table 7-Figure 5 and Table 8- Figure 6 respectively. Between 2004 and 2007 productivity of industry total based on real prices increased by 45 percent. Compared to industry total productivity increase of manufacturing almost became the same while the productivity of quarrying nearly doubled. Among them electricity – water is the only sub-sector experiencing negative productivity growth as -29 percent. This can be explained by excessive public employment evidenced by 82 percent rise while the employment in industry total and manufacturing remarkably decreased.

Table 7: Productivity of Industry Sector (Output at 1977 Prices per Employee)

	2002	2003	2004	2005	2006	2007
2. Industry total			0,12559005	0,147934959	0,186882628	0,182578397
2.1. Quarrying			0,343859649	0,302083333	0,567256637	0,563478261
2.2. Manufacturing			0,108324552	0,12806872	0,16403947	0,165998177
2.3. Electricity - Water			0,354530478	0,374882995	0,405279503	0,258295558

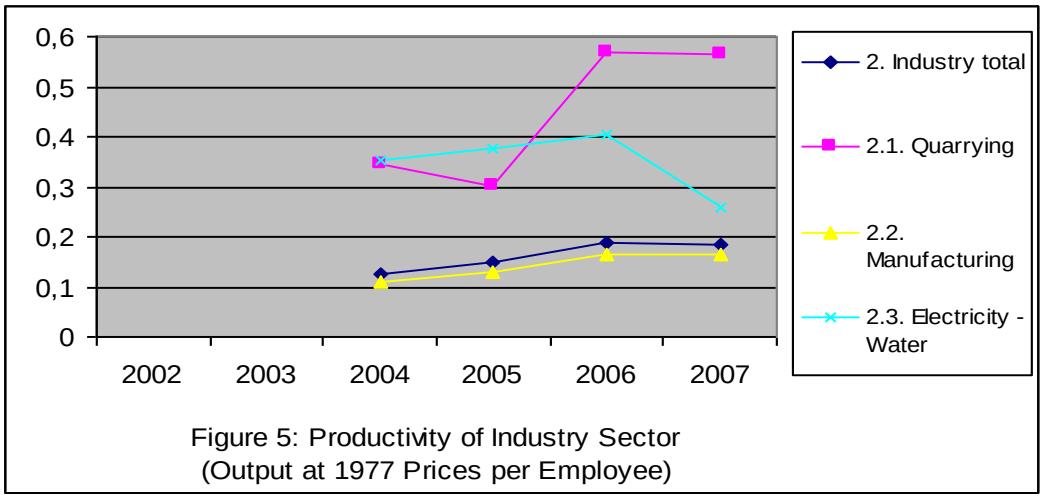


Figure 5: Productivity of Industry Sector (Output at 1977 Prices per Employee)

When the productivity of industry total and sub-sectors based on Euro values are examined for the same period, except quarrying they showed the similar pattern as seen in Table 8 and Figure 6. Differently, productivity of quarrying continuously improved. Naturally, productivity at Euro values became higher due to the reason explained above.

Table 8: Productivity of Industry Sector (Euro Value of Output per Employee)

	2002	2003	2004	2005	2006	2007
2. Industry total			12754,91918	18152,35882	23850,50715	27120,97537
2.1. Quarrying			64820,96758	72815,13675	201367,3694	237100,3531
2.2. Manufacturing			7046,778066	10314,27121	12507,6533	14901,05042
2.3. Electricity - Water			92219,05364	109075,9461	133861,1973	90302,45785

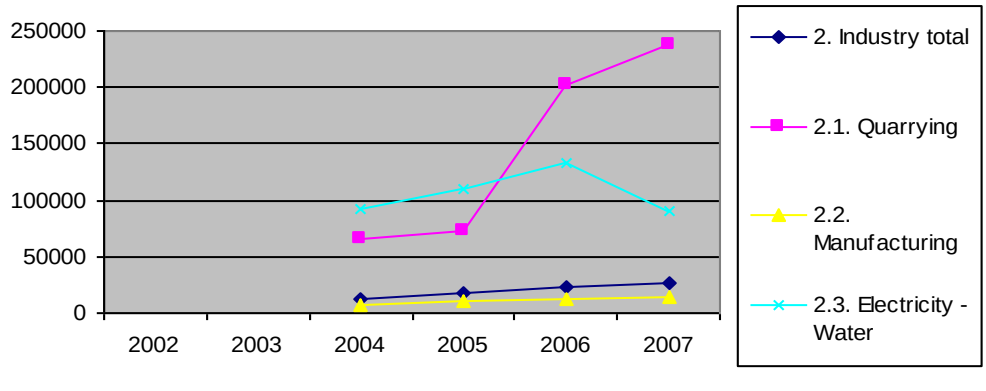


Figure 6: Productivity of Industry Sector
(Euro Value of Output Per Employee)

2. ANALYSYS OF SECTOR

2.1. FINANCIAL ASPECT OF THE SECTOR

Growth and productivity of industry sector mainly depend on the sectoral investments and the financing of these investments. Therefore, investments and the various sources of financing these investments in industry sector will be referred in this section. Fixed capital investments of industry sector at Euro values and share of industry sector within total investments are indicated in Table 9 and Figure 7. Fixed capital investment of industry and its subsectors increased between 2002 and 2007. However, especially after 2005 higher rate of fixed capital investments made in electricity-water relative to other subsectors also created parallel growth rate in the fixed capital investments of industry sector as a whole.

Table 9: Fixed Capital Investments of Industry Sector at Euro Values (2002-2007)

	2002	2003	2004	2005	2006	2007
2. Industry	15776914	23962307	39849544	50395661	85565810,7	105506109
2.1. Quarrying	168151,26	343009,91	411539,52	721422,3	827704,996	961563,179
2.2. Manufacturing	10244573	15859227	31544353	35589182	36911740,1	38922427,2
2.3. Electricity - Water	5364189,6	7760070,6	7893651,6	14085056	47826365,6	65622118,7
Share of Industry Total (%)	10,86	11,31	13,27	15,15	13,10	15,98

Source: State Planning Organization

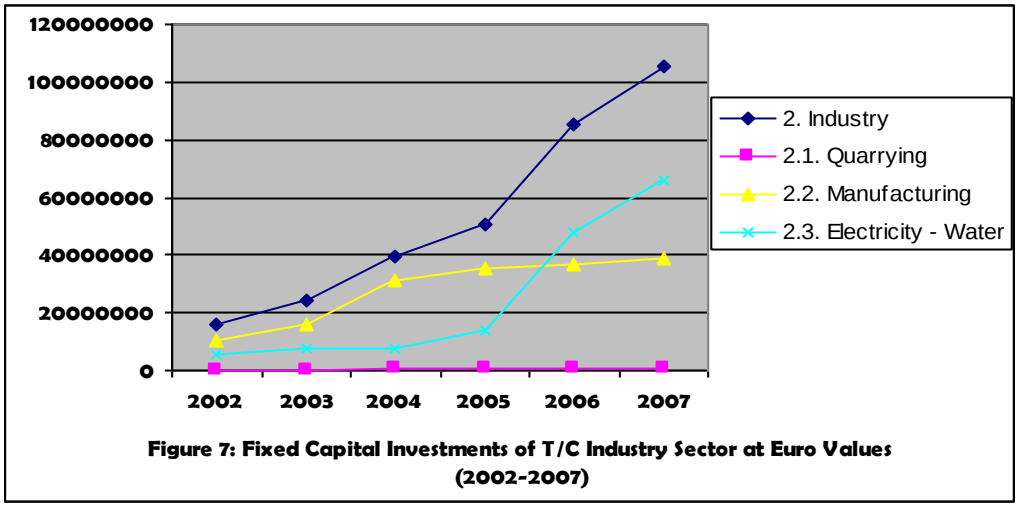


Figure 7: Fixed Capital Investments of T/C Industry Sector at Euro Values (2002-2007)

Source: State Planning Organization

Even though the fixed capital investments of industry sector continuously increased bank loans granted to the same sector continuously went down till 2006 and increased in 2007 relative to 2006 as shown in Figure 8.

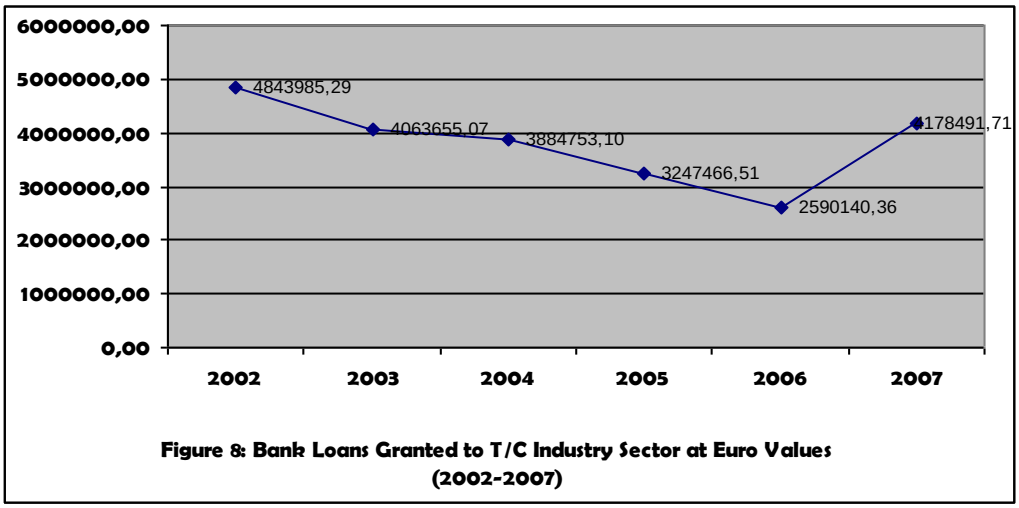


Figure 8: Bank Loans Granted to T/C Industry Sector at Euro Values (2002-2007)

Source: State Planning Organization

Parallel to the findings in Figure 7 and Figure 8, industry share of fixed capital investments increased from 10.9 % to 16 % whereas industry share of bank loans decreased from 1.2 % to 0.3 % between 2002 and 2007 (Figure 9).

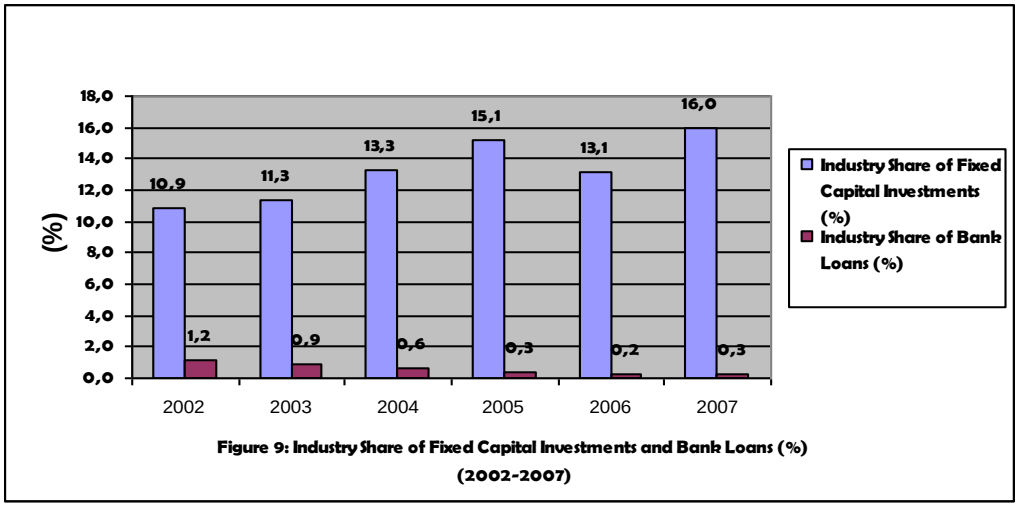


Figure 9: Industry Share of Fixed Capital Investments and Bank Loans (%) (2002-2007)

Source: State Planning Organization

The ratio of bank loans to fixed capital investments for industry sector decreased from 30.7 % in 2002 to 4 % in 2007 as indicated in Figure 10. This finding overlaps with the previous results.

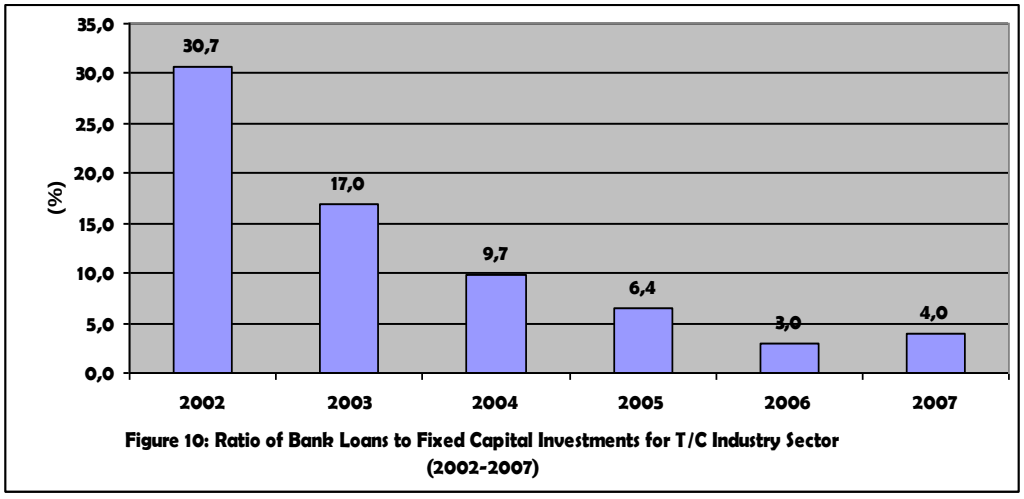


Figure 10: Ratio of Bank Loans to Fixed Capital Investments for T/C Industry Sector (2002-2007)

Source: State Planning Organization

When induced fixed capital investments of Industry are analyzed it can be asserted that there is no stable and programmed investment and financing policy (Table 10 and Figure 11). Such that starting from 2002 to 205 induced fixed capital investment at Euro values subsequently reflected positive and negative growth rates. After 2005 it showed continues increase at low rates. Moreover, industry shares of induced fixed capital investments within total induced fixed capital investments became very instable for the relevant period. Between 2002-2007 industry share of induced fixed capital investments fluctuated between 9 % and 34.6 %. Industry share rose from 23.4 % in 2002 to 34.6 % in 2004 and then declined to 20.4 % in 2007.

Table 10: Induced Fixed Capital Investments of Industry Sector (2002-2007)

	2002	2003	2004	2005	2006	2007
Induced Fixed Capital Investments of Industry Sector (Euro Values)	173393666	22246137	41612101	28097406	28827719,6	34330990,8
The Ratio of Induced Fixed Capital Investments of Industry to total Fixed Capital Investments in Industry Sector	1099,0	92,8	104,4	55,8	33,7	32,5
Industry Share of Induced Fixed Capital Investments within Total Induced Fixed Capital Investments	23,4	21	34,6	9	14	20,4

Source: State Planning Organization

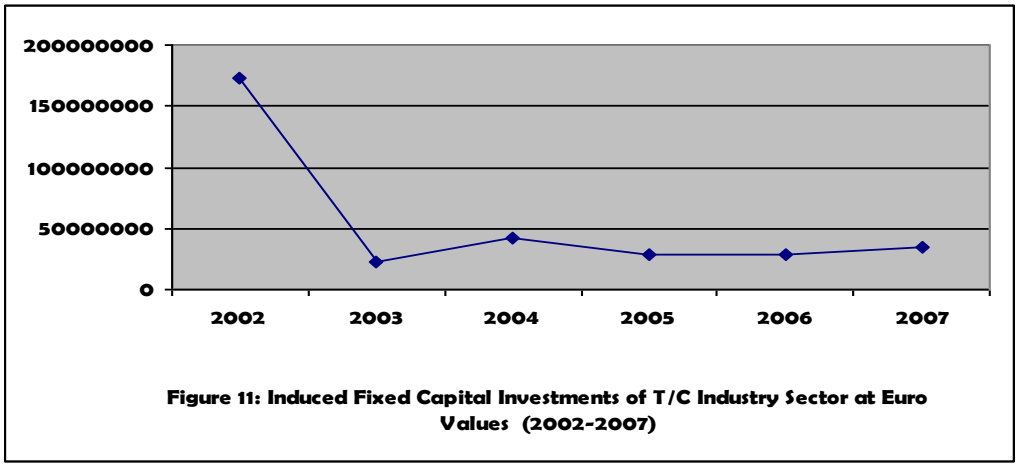


Figure 11: Induced Fixed Capital Investments of T/C Industry Sector at Euro Values (2002-2007)

Source: State Planning Organization

2.2. EXPORT CAPACITY OF INDUSTRY SECTOR

Industry sector of TRNC has high potential of export capacity as shown in Table 11. Export of industrial products increased from 27.7 million Euros in 2002 to 32.6 million Euros

in 2007. Industry share of total exports for all years between 2002 and 2007 became greater than 50 %.

Table 11: Exports of Industrial Products (2002-2007)

	2002	**2003**	**2004**	**2005**	**2006**	**2007**
Export of industrial products (Million US $)	26,1	29,2	39,4	41,1	39,1	44,9
Export of industrial products (Million Euro)	27,7	25,7	31,8	33,2	31,2	32,6
Industry share of total exports (%)	**57,5**	**57,6**	**63,6**	**60,4**	**57,4**	**53,6**

Source: State Planning Organization

Considering the green line trade regulation exports of industrial products also played the major role. As per the Green Line Regulation (EC 866/2004), goods may be introduced to the South Cyprus over the Green Line on the condition that; **(1) they are wholly obtained in North Cyprus (like earth, stone, mineral products, vegetables etc.) or, (2) they have gone their last, substantial, economically justified processing or working in an undertaking equipped for that purpose in North Cyprus.** The products that are not allowed to be traded within the context of the Green Line Regulation are; live animal and animal products (except fresh fish); Pistachios and hazelnuts originating in or consigned from Turkey, and the products containing these; and Plants for planting. Because of this regulation aimed at motivating domestic production, majority of exports to South Cyprus comprised industrial products.

It should be pointed out that economic importance of Green Line exports substantially increased in last years as seen Figure 12. The ratio of Green Line exports to total exports increased from 2 % in 2005 to 16 % in 2008 and then decreased to 14 % in 2009.

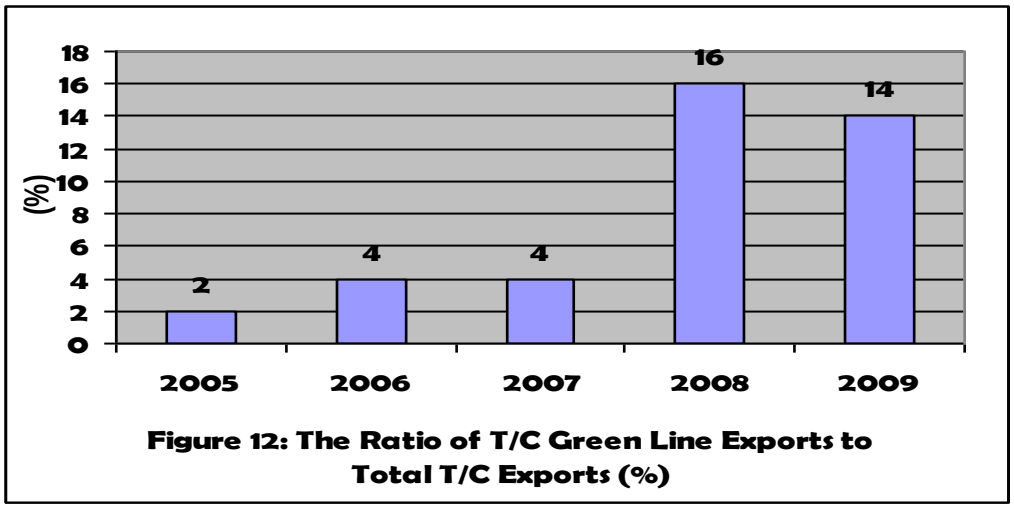


Figure 12: The Ratio of T/C Green Line Exports to Total T/C Exports (%)

Source: (Süreç 2009)

2.3. PROBLEMS

It should be noted that the problems of industry sector can not be isolated from the problems of small and medium sized enterprises (SMEs) since the majority of companies in this sector are SMEs (SPO 2007, p. 82) In addition to this, the problems of industry sector are closely related to competiveness of private sector against imported goods. In this regard, problems of TC industry sector can be categorized into two broad categories. These are unfavorable investment climate and obstacles behind the competitiveness of private sector.

2.3.1. Unfavorable Investment Climate

The investment climate in the northern part of Cyprus is primarily marked by considerable economic and political uncertainty, trade restrictions to Turkish Cypriot goods in global markets, heavy public sector influence on economic activity and uncertain property rights (World Bank 2006a, pp. 44-47).

- **Economic and political uncertainty** in the northern part of Cyprus is high. Macroeconomic instability (resulting from the close linkage with the Turkey's economy) has served to increase investor uncertainty and caused lenders to factor in higher risk premiums in interest rates and to reduce loan maturities. Thus, investment will tend to gravitate towards those activities where there is a quick payoff (e.g., construction, casinos, and restaurants) rather than in such activities as agriculture or industrial production).

- **Travel and trade restrictions** in the EU limit opportunities for exporters and tourism operators in the northern parts of Cyprus. The isolation from world markets except Turkey has caused substantial trade restrictions. The ratio of imports to exports is roughly 18:1 in 2007.

- **Uncertain Property Rights;** According to estimates, about 85% of the privately owned land in the northern part of Cyprus is of Greek Cypriot ownership. Hence, banks are reluctant to accept such properties as collateral and in such cases would either reject a loan request or reduce the term and the amount of the loan (http://ec.europa.eu/enlargement/pdf/turkish_cypriot_community/1_2_cmc_lefte_pf_en.pdf)

- **Expansion of public employment** and the high growth of public sector wages have led to the development of distortions in the labor market. One of the main consequences of high wages and benefits and overstaffing in public agencies and enterprises is that the public sector has become a magnet for young jobseekers. Many of the country's most educated and talented young people are attracted to public employment rather than becoming entrepreneurs or managers in the private sector. Even though the regulatory change regarding the public sector wages and job security in 2009 aimed at reducing the attractiveness of public sector employment, it seems to be unsuccessful especially due to job security and other benefits prevailing in public sector.

- **The involvement of the public sector in the productive sectors** has created a host of problems unfavorably impacting the investment climate. Public enterprises are present in many areas, for example they include marketing boards in agriculture (fruits and vegetables, dairy, other agricultural products), alcohol producing, tobacco processing, carob processing,

olive oil processing, milk processing, flour production, slaughter houses, media, a shipping agency, petroleum processing, air transport, banking, and importing. There are two important negative consequences for the private sector from the existence of the large public enterprise sector. First, and perhaps least appreciated, is the fact that public enterprises curtail business opportunities for the private sector. I. Second, the inefficiency of public enterprises hinders competitiveness of the private sector and impedes its ability to develop.

- **Inadequate quality of infrastructure.** Private business activity in the northern part of Cyprus is hampered by inadequate development of infrastructure services. Infrastructure costs are higher (although utility rates are not full cost recovery rates) and quality of services lower than competitors, especially in the areas of water and electricity.

- **Small domestic market**: Despite that there are no reliable statistics concerning the total population of the TC community SPO stated that total population is 279,064 for 2008. The GDP of 2009 is reported to be around €2,400min. Together with this GDP figure the contribution of the shadow economy to GDP estimated to be 40% should also be taken account so as to assess the scale of domestic market(http://ec.europa.eu/enlargement /pdf/turkish_cypriot _community/ 1_2_cmc_lefte_pf_en.pdf.)

- **Limited bankability;** Private enterprises are mostly characterized by weak governance (no proper accounting, no acceptable audited accounts, inadequate technical and commercial management capabilities) and inefficient technology. As a result commercial banks of TRNC face difficulty in assessing the creditworthiness of private companies and therefore resort to collateral based lending with fairly short-term maturities. In addition, the predominantly weak capital base of private enterprises represents a significant debt leverage constraint.

2.3.2. Obstacles Behind The Competitiveness Of Private Sector

Northern part of Cyprus has a serious competitive disadvantage particularly in manufacturing because of low productivity. The basic reasons of this productivity gap are as follows (World Bank 2006b, p. 104):

- The home market is small and trade restrictions and difficulties with Green Line trade that hamper exports constrain access to global markets. As a result, firms have small-scale plants and operate these plants at relatively low levels of capacity utilization.

- Machinery in use in many companies is older than competitors and new investment and technical upgrading are low.

- Transportation costs are relatively high, because of (i) the need to transship through Turkey due to trade restrictions, (ii) small-volume imports and exports cost more to transport, and (iii) relatively less efficient internal transport. This increases the costs of key intermediate inputs and exporting. Port handling and other trade support services are also relatively less efficient and higher cost in the northern part of Cyprus than in competitor countries.

- Infrastructure costs are higher (although utility rates are not full cost recovery rates) and quality of services lower than competitors, especially in the areas of water

and electricity. The cost of electricity is about two times higher than Turkey and Southern Part of Cyprus.

- IT use is extremely low compared to competitors and the larger companies that do use computers make limited use of IT potential to manage production, inventories, and finance. Quality standards are relatively low and few firms have quality certifications (ISO 9000, HACCP).

- Food processing is the largest sub-sector in manufacturing; hence it is very important in determining average manufacturing productivity. One of the reasons why some processors have low productivity is because of low upstream productivity in agriculture and in public marketing enterprises. The productivity of farms in the northern part of Cyprus is low compared with the southern part of Cyprus and recent EU entrants. Moreover, public marketing boards that stand in between farmers and processors have low efficiency and do not operate with the modern technologies required to provide high quality inputs to processors.

3. SWOT ANALYSIS

In order to develop a pro-active strategy for the industry sector of TRNC, SWOT analysis as detailed in Table 12 is conducted.

Table 12: SWOT Analysis of Industry Sector in TRNC

STRENGTHS	**OPPORTUNITIES**
• High level of technological affinity and low prices for telecommunications • Universal secondary enrollment and high levels of tertiary enrollment • Very good availability of tertiary graduates and a large student population • Easy to hire and fire; high unemployment rate	• The ability to import low-cost Turkish Labor and raw materials • Small and high-growth economy • Climate and Geographic Location of the Country • Closeness to Turkey • Good infrastructure, convenient airports (ECN and LCA), frequent flight departures per capita, good availability of hotel rooms • Low prices for property (residential, commercial and industrial – renting and purchasing) • No visa requirements (YAGA 2008b, p.13) • Availability of universities having faculties related to industry and trade • Possibility of settling Cyprus Problem (free and direct trade besides direct access to international financial markets will be possible) • Possibility of becoming full member of EU and making use of funds and other

	facilities
WEAKNESSES • Low labor productivity • Uncertainty at the costs of producing and supplying services • Institutional obstacles, difficulties; insufficient institutionalization of the agencies • Lack of physical plan and sectoral master plan • Bureaucratic difficulties: obstacle to get necessary licences for investment and lack of coordination between decision making authorities related with Investment (YAGA 2008a, p. 2) • Lack of Sufficient Electricity Production Capacity • Absence of professional know-how especially in fields of marketing, financial analysis, cost accounting, customer satisfaction and training of salesperson (CTCI 2009, p. 27) • Low internet bandwidth per capital and low internet penetration rates • Very hard to secure credit • Insufficient equity of SMEs that makes financing more difficult (Akbay 2009, p.18) • Lack of qualified personnel • Problems in obtaining raw materials • Low inventory turnover rate • Idle capacity increasing cost of production • Lack of competitive quality, price and cost • Unable to benefit from the EU resources • Lack of modern equipment, machinery and adequate technologies (Şafaklı and Güryay 2004) • Unawareness of Basel II Accord in	**THREATS** • Economic and Political Uncertainty • Trade and Travel Isolation • Existence of tariffs and excise taxes protecting domestic production and thus reducing incentives to upgrade production technologies • Small domestic market • Uncertain property rights • Lack of international legitimacy; lack of a stable, international recognition and prescribed economic system • No coordination at the macro economic management and unclear economic targets. • Lack of legal infrastructure that zooms out the investors • Lack of economic policy and management based on comparative advantage • Dependence of aid from Republic of Turkey and inefficient usage of these Resources (YAGA 2008a, p.2) • No continuity of the State Policies • Influence of Politics (populist policies, public administration, anomy, uninstitutionalized) • Limited bankability • Inefficient and unproductive public sector • Excess budget deficits and dependence on Turkish economy for aid and trade • Problems arising from the use of Turkish Lira as currency (Süreç 2009) • Weak legislative framework for an efficient market economy • Spiral of inflation, interest rate and exchange rate negative affecting foreign

Banking necessitating the professional institutionalization of SMEs (Şafaklı 2008)	trade • Ineffective fiscal policy (Besim *et al*. 2009, pp.50-54) • Insufficient energy sources and higher energy costs relative to other countries • Inefficient transportation and communication facilities increasing the input costs of industry sector • Infrastructure problems particularly related to industrial zones (SPO 2009b, pp. 81-83)

4. CONSIDERATION OF ECONOMIC CRISIS

The economy of TRNC including industry sector is directly exposed to economic and financial crises in Turkey due to the fact that trade isolation, access to international markets via Turkey and the usage of TL as legal tender (dollarization) make TRNC economy highly vulnerable to Turkey's economy. Therefore, except some years growth rates of two countries are highly correlated. Especially, economic and financial crises such as 1994 and 2001 crises of Turkey directly affected TRNC as shown in Figure 13. However, growth rates of industry sector usually became the lower than the growth rates of whole economy as a whole. Especially when the period between 2002 and 2008 is considered, except 2006 reflecting the positive political climate at Cyprus and the expansion of liquidity around the world forwarded some funds to the Northern Cyprus growth rates of industry sector were lower than the growth rates of entire economy. This case is the result of rational economic behavior. Industry sector largely being capital intensive is more correlated with investment climate and competiveness than other sectors.

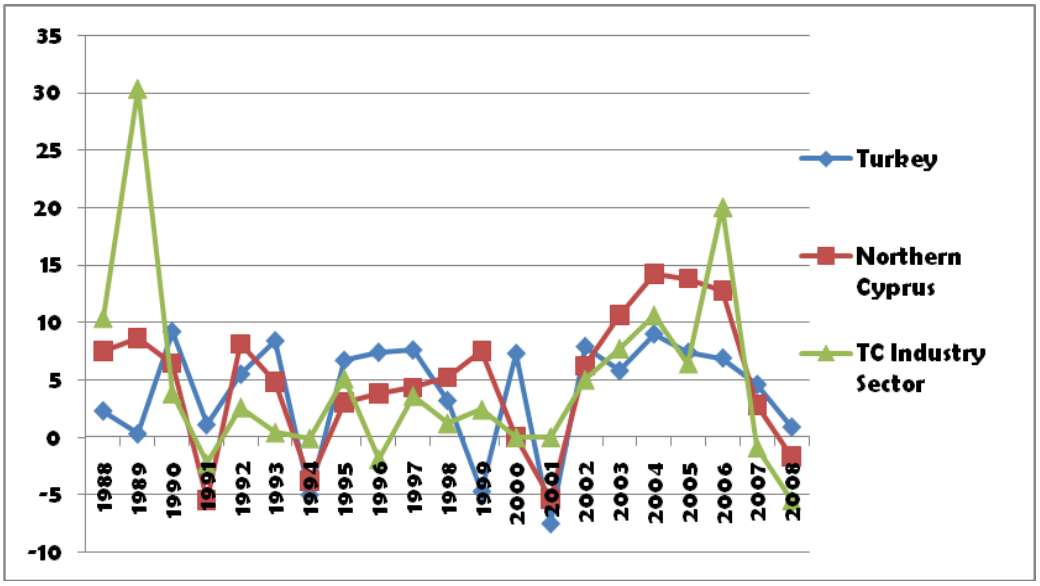


Figure 13: Real Growth Rates of Turkey, Northern Cyprus and TC Industry Sector (1998-2008)
Source: State Planning Organization

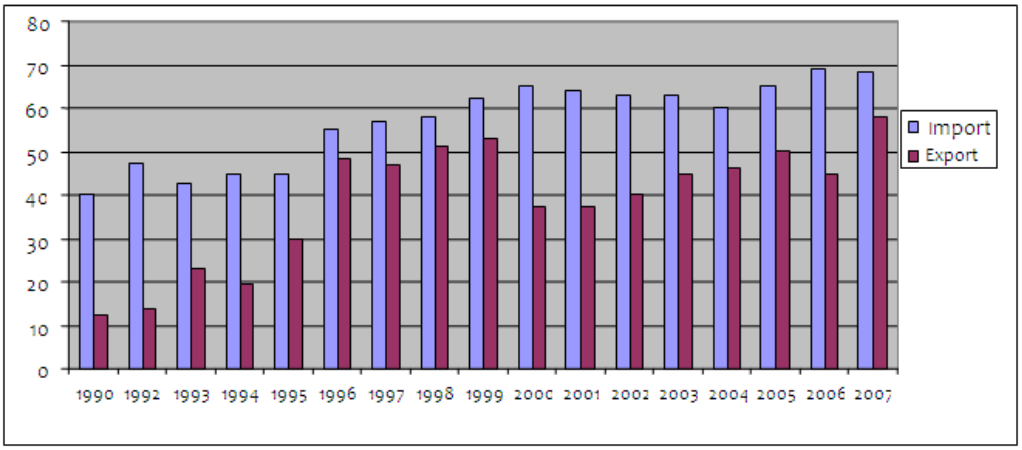
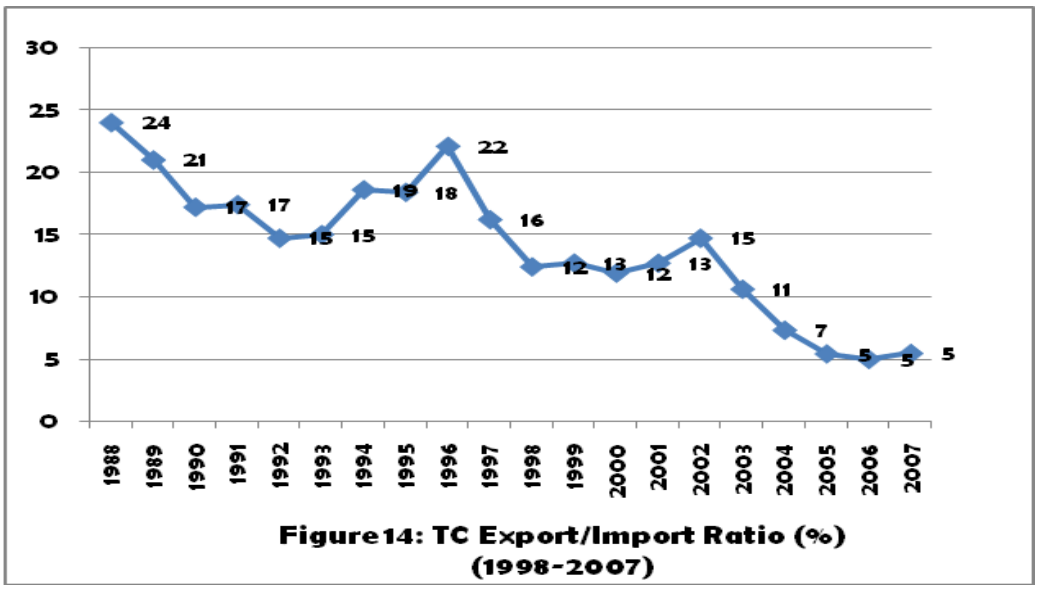


Figure 15: The Share of Turkey within TC Trade (1990-2007) (%)
Source: State Planning Organization

In addition to being negatively affected by unfavorable investment climate and obstacles behind the competitiveness of industry sector cited above real exchange rate movements of TL also influence the export potential of industry sector. Particularly after 2002 international competiveness of Turkey and thus TRNC decreased due to real exchange rate. This caused deterioration to trade balance and reduced export/import ratio of TRNC from 15 percent in 2002 to 5 percent in 2007 as indicated in Figure 14.



Source: State Planning Organization

Parallel to the deterioration of trade balance and decreased international competitiveness dependence of TRNC economy to Turkish economy in terms of both exports and imports increased as seen in Figure 15. By all means this is also the result of trade isolation.

As mentioned above especially after 2002 real exchange rate of TL directly created negative impact on Turkey an hence TRNC economy because the relative value of TL against foreign currencies increased owing to the fact that depreciation rate of TL became substantially lower than the inflation rate as shown in Figure16.

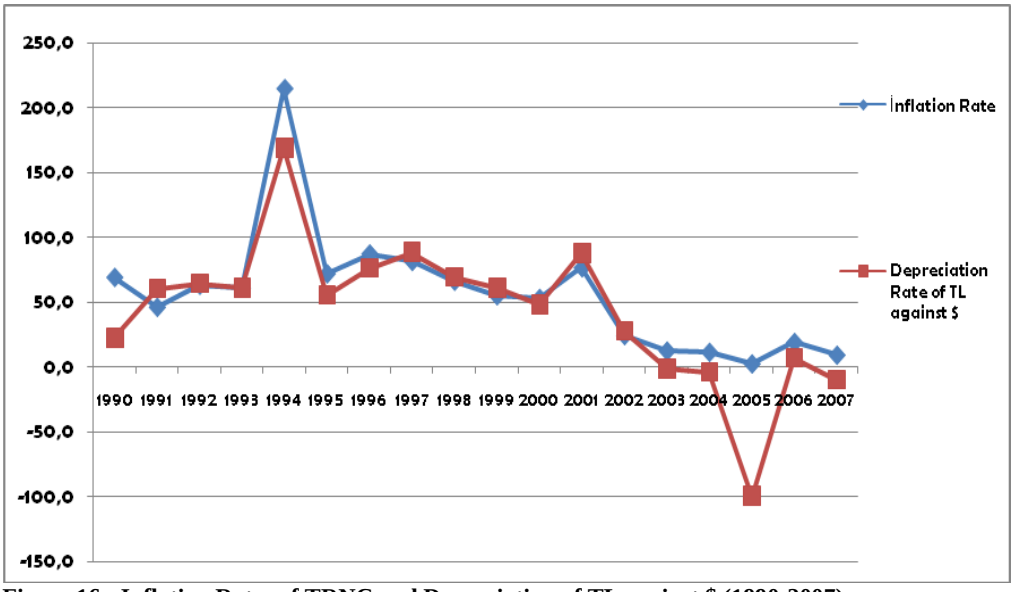


Figure 16: Inflation Rates of TRNC and Depreciation of TL against $ (1990-2007)
Source: State Planning Organization

CONCLUSIONS

When the relevant period between 2002 and 2008 is considered, gross value and productivity of industry sector at real prices increased till 2006 and decreased afterwards.

On the subject of the financial aspects of industry sector fixed capital investments of industry sector at Euro values continuously increased whereas Euro value of bank loans to industry sector continuously decreased till 2007 and increased in 2007. Furthermore, as can be seen illogical industry share of fixed capital investments increased from 10.9 % in 2002 to 16 % in 2007 while the industry share of bank loans decreased from 1.2 % in 2002 to 0.3 % in 2007. Parallel to this, the ratio of bank loans to fixed capital investments for industry sector declined from 30.7 % in 2002 to 4% in 2007. Concerning the induced fixed capital investments it can be argued that there is no stable or structured sectoral investment policy.

Current cooperation between Greek Cypriot and Turkish Cypriot businesses is very limited especially because of physiological biases, bureaucratic obstacles, current regulations, nationalistic views and negative attitudes of state authorities.

TRN economy is largely dependent on the Turkish economy owing to dollarization, access to international markets via Turkey and dependence on Turkish economy for aid and trade. However, TRNC industry sector generally being capital intensive and serving small domestic market due to trade isolations suffers from economics of scale. Therefore, TRNC industry sector is more negatively affected from unfavorable investment climate and competitive drawbacks than the entire economy.

RECOMMENDATIONS

In the light of SWOT analysis the following structural and sectoral measures should be taken for the sustainable development of industry sector:

- Input costs affecting the competitiveness of the industrial sector should be reduced in a planned way. Namely, (1) motivating the expectations towards the solution of Cyprus problem and peace, reducing bureaucracy, setting up a optimal legal system to protect the rights of foreign investors and leasing the property originally owned by Greek Cypriots rather than deeding and similar measures aiming at improving investment climate will eventually reduce credit risk and hence cost of finance; (2) in addition to seeking alternative energy sources Electrical institution or authority must be restructured or privatized for achieving efficiency and productivity and hence for lowering energy costs.

- Macro and sectoral infrastructure problems such as transportation, communication and energy should be resolved.

- Public sector needs to be reformed for efficiency and more productive services. Such that promotion and demotion of public servants should be merit based in an accountable and transparent structure. Public employment should be based on rules and laws so as to prevent nepotistic and populist attempts of politicians. Similarly, it should be legally possible to internally transfer public employees rather than employing new officers.

- Production and investment incentive policies should be restructured according to comparative advantage.

- Legal restrictions should be brought to budget deficits and Turkey aids in order to eliminate moral hazard and maintain budget discipline. Furthermore, Turkey aids should be overseen to make sure that there are optimally and rationally allocated.

- Inefficient and unproductive public institutions and enterprises should be privatized or given to autonomous structure with the condition of being efficient and not wasting of public resources.

- National physical and sectoral plans should be immediately prepared and implemented.

- Legislative framework should be established for an efficient market economy.

- European Union harmonization efforts should be accelerated in a systematic way.

- Small business administration as in the United States of America should be established to guide and fund SMEs in TRNC.

- Institutionalization of SMEs which is also essential for the new banking environment should be targeted with the active involvement of Chamber of Industry and Chamber of Artisans and Craftsmen

- Equipment, machinery and adequate technologies should be modernized to achieve competitive efficiency.

- Industrial enterprises should be provided with professional know-how especially in the fields of marketing, financial analysis, cost accounting, customer satisfaction and training of salesperson

- Skilled personnel needed in the industry sector should be educated and trained consistent with the targets planned and implemented in cooperation with relevant and competent professional chambers and government.

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