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Explaining Investment and Intermediate Goods Imports and Estimating Elasticities in Turkey

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Abstract: Turkey has been highly dependable on foreign production goods for Its domestic production since 1980. This necessitates estimation of income, relative import price, exchange rate and term of trade elasticities of investment and intermediate goods import demand to manage trade deficit. Assuming theoretical causalities, this study shows that investment and intermediate goods imports can be explained by gross national product, relative import price, foreign exchange rate, terms of trade, relative import price adjusted and foreign terms of trade adjusted real foreign exchange rate for the period of 1982-2004. The income, relative import price and foreign exchange rate elasticities of investment good import are found less elastic than the related elasticities of intermediate good import. Investment and intermediate good imports increase as export increases. The positively estimated import price relative to domestic wholesale price effect implies the Veblen effect on the real import and complementary goods relationship between domestic and imported production goods.

Keywords: production good, import, modeling, elasticity, Turkey

JEL Classification: C2, F14, O14

Introduction

The explanation of Turkey's import demand for investment, intermediate and total production good and the estimation of relative price, foreign exchange rate, terms of trade and income elasticities of these goods are important for Turkish economy for the period of 1982-2004; the export oriented industrialization and neo-liberal trade period for maintaining semi-industrial development and managing large trade deficit. The export oriented industrialization strategy has directed Turkey towards producing goods for international demand since 1980s. The producers have looked for high quality and cheaper inputs to sustain their competitiveness at international market for the years, which has increased Turkey's intermediate and investment goods imports

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for the years. Firms may have better access to imported inputs and new technology and increase their productivity growth through the efficient use of technology under freer trade.

Seyidođlu (2001, p.600) emphasizes the impossibility of development of developing countries without facing international trade. Tuncer (2003, pp.1-3) outlined the evidence that the imported investment good increases labor productivity and contributes domestic value added in Turkey. He emphasized increasing importance of technology or information transferring to developing countries from developed countries for growth. It is the evidence that information spreads out by investment and intermediate goods trading. The variety of intermediate goods brings about the most appropriate input choice for final good production for the firms at lower cost compared to the fewer availability of intermediate goods. According to Tuncer (2003, p.5) Turkey's technology transferring exists through investment and intermediate goods trading and the substitubility of investment good is lower than intermediate good. This yields lower price elasticity of imported investment goods compared to intermediate goods. In addition, the higher import share of intermediate good compared to investment good brings about higher intermediate good income and price elasticities than investment good's elasticities.

The export-oriented industrialization development have required reductions in import restrictions and increased intermediate and investment good imports and has pushed firms to be more dependable on foreign inputs as these goods have been supplied cheaper by foreigners than they have been supplied domestically under the lack of innovations; production of new and more productive processed goods in Turkey for the years. Today the import share of production goods amounts to 90 % of which 71 % is the intermediate good. The imported inputs provide more than 60 % of Turkish exports, and the export contributes to Turkey's economic growth. For the importance of the issue, one has to consider how the foreign exchange rate, relative import price, terms of trade and income are effective on import demand of Turkey which has been facing large trade deficits for the years.

According to Statistical Indicators of the Turkish Statistical Institution (2005, http://www.tuik.gov.tr), the ratio of imported production goods to the gross national product increased by 17.4 % of which 12.4 % was the contribution of intermediate good between 1980-2004. At the same time nominal value of Turkish Lira was devaluated but revaluated in real terms on the average and domestic TOT increased about 13.5 points during the period. These developments led increases import spending on investment and intermediate goods in addition to the lack of R&D, technological and new input innovations in Turkey.

Section 2 presents a literature review on the importance of topic and the import related variables. Section 3 presents the methodology, data sources and definitions and functional relationships of variables, and section 4 shows the results. Section 5

discusses the developments in related parameters after 2004, which is not included in the sample. Finally section 6 presents the main conclusions.

Literature Review

The increasing technological and human capital gap between developed and less developed countries has brought about higher investment and intermediate goods imports by less developed countries from developed ones under global trade. This trade benefits less developed countries through technology diffusion in growing faster. Grossman and Helpman (1990, p.517) consider the spillover effects of scientific and technological knowledge on foreign trade and economic growth. The authors also mentioned the importance of trade in technological advance for developed countries. Hatemi-J and Irandoust (2001, pp.149-152) point out that productivity leads to greater exports by pointing out technological differences as being an important motivating factor for trade in developed countries. This implies higher investment and intermediate good imports from developed countries by developing countries including Turkey under insufficient technological advances in connection to Tuncer's statement. According to Gürak (2006), the most of the developing countries import technology and human capital-intensive goods from developed countries under global competition. Aklan (1997) points out the importance of technology transferring to increase qualities of products and reduce production cost in competing at domestic and outside markets and its impossibility without importing high level technology under the lowest level of R&D expenditures of Turkey among the OECD countries after 1980.

Feenstra and Markusen (1994, pp.429-433) point out that marginal productivity and accumulation of capital increase at a greater range of inputs. Funke and Ruhwedel (2001, p.240) found a significantly positive relationship between the index of relative product variety for import and export across countries and relative per capita income levels in a study for the United States and eighteen OECD countries. Increases in the variety of inputs increases firms' productivity and economic growth in less developed countries, which is possible via freer trade unless a less developed country does not develop new inputs satisfactorily obtaining new technology.

Stern (1991, p. 129-131) states that different governmental policies and competition stimulate growth. Theoretically, the openness to international trade promotes rapid technological absorption from developed countries. Weinhold and Rauch (1997, p.15) found the evidence of openness accelerating industrial output growth. Edwards (1993, p.1389) surveyed literature of economic growth and concludes that freer trade leads a country to a higher equilibrium economic growth through increasing variety of inputs, lowering input costs and relaxing obstructions

compared to the autarky. Guisan and Exposito (2004, p.7) found that the increase of imports of many complementary goods and services increases domestic production, which implies the importance of import-led impact on the supply side on the productions in developing countries. Akçay and Demirhan (2005) found the openness leading to economic growth for the Turkish economy in the study covering the period of 1950-2000. Based on their acceptance of 'the openness-led economic growth' hypothesis we shall expect close relationship between export and production goods import. Guisan (2005) found that imports have a significant and positive effect on industrial growth and a positive indirect effect on non-industrial growth in the economies of Turkey and Mexico.

Based on the annual data for 1951–99, Hoekman and Togan (2005, p.29) found that the inflation rate negatively, on the other hand, trade liberalization and budget surplus positively affect the Total Factor Productivity in Turkey. Demir et al. (2005, p.185) states that Turkish export development basis on the investment and intermediate goods imports and so economic growth depends on the availability of imported production goods. The authors found Granger causation from income towards trade volume in short run.

Yamak and Korkmaz (2005, p.34) found the output elasticity of real intermediate import goods (0.29) higher than real investment import goods' output elasticity (0.16) for the quarterly sample period of 1995:1 - 2004:4. They found the real effective foreign exchange rate elasticity of real intermediate import goods (0.14) less elastic than real investment goods' real effective foreign exchange rate elasticity (0.56). They also found a causation from real effective exchange rate towards trade balance, and so indirect causality towards real imported investment and intermediate import goods from real effective exchange rate. Tarý and Kumcu (2005) argue that overvalued domestic currency causes higher import and lowers export in Turkey.

Data, Variables and Functional Relationship

There is no specific model computed. There will be various models which will be showing the effects of various variables either separately or together on investment, intermediate and total production goods imports. We depend on the theoretical statements to specify functional forms. The real import demand for investment, intermediate and production goods are assumed to be functions of real national income, import prices relative to domestic wholesale prices, real foreign exchange rate, domestic terms of trade, relative price adjusted real foreign exchange rate, foreign terms of trade adjusted real and nominal foreign exchange rates, real export excluded real gross national income and real export. Moreover; the lagged real income is considered in some models.

A lower foreign terms of trade makes foreign good cheaper relative to export goods. Therefore, a negative relationship is expected between foreign TOT and import, or a positive relation between TOT and imports.

One can show functional relations as

$$IMPORTS = f\{LPMTWPI, LRGNP, LREXC, LREXCPMWP, LTOT, LREXCTOT, LRGNPEXP, LREXP\}$$

and D1994 and D2001 for Turkish economic crises, and theoretically expected sign effects for import models as

$$\frac{\partial M}{\partial LPMTWPI} < 0, \frac{\partial M}{\partial LRGNP} > 0, \frac{\partial M}{\partial LREXC} < 0$$

$$\frac{\partial M}{\partial LREXCPMWP} < 0, \frac{\partial M}{\partial LTOT} > 0, \frac{\partial M}{\partial LREXCTOT} < 0$$

$$\frac{\partial M}{\partial LRGNPEXP} > 0, \frac{\partial M}{\partial LREXP} > 0.$$

Where the variables are described as follows:

LRKM = Natural logarithmical values of real investment good import expenditures, based on The World Trade Organization (WTO) BEC (Broad Economic Classification) definition in USD (United States Dollar).

LRING = Natural logarithmical values of real intermediate good import expenditures based on The WTO BEC in USD.

LRKMINT = Natural logarithmical values of real investment and intermediate goods import expenditures based on The WTO BEC in USD.

LRGNP = Natural logarithmical values of real gross national income in USD.

LPMTWPI = Ln (PM/TWPI), natural logarithmical values of import unit price index over Turkish wholesale price index (import prices relative to domestic wholesale prices).

LREXC = Natural logarithmical values of real USD in terms of Turkish Liras; (EXC/ (domestic wholesale price index/Industrial countries wholesale price index)).

LREXCPMWP = Ln (REXC/ (PM/TWPI)); natural logarithmic values of relative price adjusted real foreign exchange rate.

LTOT = Ln ((PX/PM) 100), Turkey's terms of trade.

LREXCTOT = Ln(REXC/(PM/PX)); Ln(REXC x TOT); foreign terms of trade adjusted real foreign exchange rate, measures iterative effect of real foreign exchange rate and TOT on imports.

LNEXCTOT = Ln (EXC/ (PM/PX)); Ln (EXC x TOT); foreign terms of trade adjusted nominal foreign exchange rate.

LREXP = Natural logarithmical values of real export in USD.

LRGNPEXP =Ln (RGNP-REXPORT); real export excluded gross national product in USD.

Import data are obtained from Foreign Trade Statistics, Undersecretariat of The Prime Ministry for Foreign Trade (2005, www.dtm.gov.tr). Foreign exchange rate, gross national product, trade price indices and GDP deflator are obtained from Statistical Indicators 1923-2004 (Turkish Statistical Institution, 2005, www.tuik.gov.tr).

Estimated Models and Elasticities

Values of imported production goods, income and export are adjusted by domestic wholesale price indexes. The nominal foreign exchange rate is used only in models of 18, 19, and 20. In the following estimated models '*' represents 5-10%, '**' represents 1-5%, and '***' represents 0-1% significances levels.

Relative Price, Real Income, Real Foreign Exchange Rate, and Relative Price Adjusted Real Foreign Exchange Elasticities

Table 1 shows us the estimated elasticites of real income, relative import price, real foreign exchange rate and relative import price adjusted real foreign exchange rates for imported investment, intermediate and production goods import demands.

These statistics indicate that real devaluation of domestic currency reduces both types of production goods imports as expected. The intermediate good import demand is found more sensitive to the foreign exchange rate, to the relative import price, to the relative import price adjusted foreign exchange rate and to the income than investment good import demand in all estimated models as seen in Table 1, except for serially correlated Model 10 where relative import price regressor is found insignificant. Model 5 and 6 indicated autocorrelation problem. However, autocorrelation problem does not cause biased estimates but yields inefficient test statistics. Production goods import increases as relative import price increases; investment good import increases by 0.32, intermediate good import increases by 0.41 percentage, and production good import increases by 0.29 percentage as a result of a percentage increase in relative import price. All means that a one percentage increase in real income, relative import price, and a percentage decrease in real exchange rate or in relative import price adjusted real exchange rate increases the imports of these goods less than a percentage. Having positive relative import price effect implies Veblen effect on imported production goods and the complementary

goods effect between domestic and imported production goods. It is found that the 2001 financial and economic crisis reduced investment good import, the 1994 crisis reduced intermediate good import significantly, and in these years domestic currency is devalued about 100% nominally.

Table 1: Estimates of models and relative price, real income, real foreign exchange rate, and relative price adjusted real foreign exchange elasticities

variable	lrkm 1	lring 2	lrkmint 3	lrkm 4	lring 5	lrkmint 6	lrkm 7	lring 8	lrkmint 9	lrkm 10
constant	1.78 1.79	4.05 1.23***	2.77 1.09**	2.09 2.58	4.26 2.77	4.38 2.46*	4.61 2. 45*	9.07 1.91***	5.6 1.83***	-4.94 2.87***
lrgnpt		0.45 .11***	0.58 .1***					0.31 .11***	0.5 .11***	1.11 .15***
lrgnpt-1	0.50 .15***			0.85 .02***	0.89 .02***	0.89 .02***	0.46 .14***			
lpmtwpi t	0.32 .13**	0.41 .09***	0.29 .08***							0.2 .13
lrexc t				-0.66 .37*	-.84 .39**	-.81 .35**				
lrexcpmwp t							-0.35 .12***	-0.52 .09***	-0.35 .09***	
d2001	-.64 .22***			-0.46 .26*						
d1994					-.69 .27**	-.65 .24**				
R^2	.994	.9985	.9988	.9933	. 9923	.9938	.9926	.9988	.9989	9967
adj R^2	.993	.9983	.9987	.9922	. 9911	.9928	.9918	.9987	.9988	9964
f ratio***	1044	6578	8322	937	814	1011	1339	8337	8949	3028
DW	1.985	1.29	1.422	1.653	0.597	0.697	1.563	1.428	1.341	.687
lower, upper	(2.34, 2..922)**	(.938, 1.291)***	(.938, 1.291)***	(.858, 1.407)***	(.858, 1.407)***	(.858, 1.407)***	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***
decision	no -	no +	no +	no +	+auto	+auto	no +	no +	no +	+auto

Real Income, TOT, Foreign TOT Adjusted Real and Nominal Foreign Exchange Rates Elasticities

The models in Table 2 show us TOT and foreign TOT adjusted exchange rate elasticities of investment, intermediate and production goods imports. A percentage improvement in domestic TOT improves investment good import by 0.83

percentage, intermediate good import by 1.34 percentage and production goods import by 0.9 percentage. Improvement in TOT increases both types of production good imports. A percentage real (nominal) devaluation of domestic currency relative to foreign TOT reduces investment goods import by 0.73 (0.32) percentage, intermediate good import by 1.47 (0.54) percentage and production goods import by 1.32 (0.35) percentage as seen in models through 11-13.

Table 2: Estimates of models, real income, TOT, Foreign TOT adjusted real and nominal foreign exchange elasticities

variable	lrkm 11	lring 12	lrkmint 13	lrkm 14	lring 15	lrkmint 16	lrkm 17	lring 18	lrkmint 19
constant	-6.14 2.14***	4.79 1.68***	3.11 1.47**	5.9 4.46	15.4 4.47***	14 4.2***	5.31 2.87*	11.59 2.55***	7.35 2.45***
lrgnpt	0.89 .01***	0.92 .01***	0.91 .01***					0.32 .12***	0.53 .11***
lrgnpt -1				0.86 .02***	0.87 .02***	0.87 .02***	0.51 .13***		
ltott	0.83 .46***	1.34 .37***	0.9 .32***						
lrexctott				-0.73 .38*	-1.47 .39***	-1.32 .36***			
lnexctott							-0.32 .12***	-0.54 .11***	-0.35 .10***
d2001							-0.57 .22**		
R^2	.9968	.9982	.9986	. 9911	.9918	.9927	.9944	.9987	.9988
adj R^2	.9965	.9980	.9985	. 9901	.991	.992	.9935	.9986	.9987
f ratio	3153	5586	7192	1113	1215	1362	1119	7664	8147
DW	.767	1.191	1.225	1.713	.968	1.164	1.858	1.527	1.333
lower, upper	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***	(.938, 1.291)***		(.938, 1.291)***	(.938, 1.291)***
decision	+ autoco	inconclusi	inconclusive	no+	inconclusi	inconclusive	no +	no+	no+

Improvement in foreign TOT adjusted real and nominal exchange rate decreases all types of production good import as seen in models through 14-19. Foreign exchange rate effect dominates TOT effect in sign in the foreign TOT adjusted real and nominal foreign exchange rate. Income elasticities are estimated between 0.86 and 0.92 in models through 11-16. Model 11 indicated autocorrelation problem. Therefore Model 17 is estimated for investment good import where lagged income elasticity of investment good import is estimated as 0.51. Again all the elasticities of

investment good import are found lower than the elasticities of intermediate good import in the estimated models in Table 2.

Real Income, Real Export Excluded Real Income, Real Export, Real Exchange Rate, and Relative Price Adjusted Real Exchange Rate Elasticities

Table 3 shows separated effect of export excluded domestic income and export to define contribution of export to income elasticity with real exchange rate or with relative import price adjusted real exchange rate on the imported production goods. Export increases contribute to domestically created income elasticity on each type of production good import, which contributes more to income elasticity of intermediate good than it contributes to income elasticity of investment good as seen in models of 20 and 21, and models of 26 and 27. The export elasticity is found higher than export excluded income elasticity of intermediate good import, but it is found vice versa for investment good import as seen in models of 26 and 27 and as in other models through 20-28. Models 20 indicates autocorrelation problem but model 29 does not indicate autocorrelation problem where export elasticity is found higher than lagged income elasticity of investment good import. Model 23 indicated extreme multicollinearity between export and export excluded income as a result of variance inflation factor test and so insignificant coefficient not to evaluate but it is shown in Table 3 to keep association in the variables along estimated models, which are used in intermediate good and production goods import models. And the export coefficient is found insignificant in Model 26.

Model 1,4,5,6,7,14,15,16, 17 and 29 show us backward dependency on imported input use on income, which all are significant.

In the models above, the imported input goods are assumed to be endogenous variables and other variables are assumed to be exogenous based on the economic theory. All estimated models show quite high determination ratios. However, some models indicated autocorrelation problem and these models are not excluded not to miss the effects of exogenous variables and parallelism in variables from models to models.

All meaningful model indicated positive income, export, TOT and relative import price elasticities, negative real exchange rate and relative import price adjusted real exchange rate elasticities. The 1994 and 2001 economic crises are found negatively effective on intermediate goods imports.

Table 3: Estimates of models with real income, real export excluded real income, real export, real exchange arte, relative price adjusted real exchange rate elasticities

variable	lrkm 20	lring 21	lrkmint 22	lrkm 23	lring 24	lrkmint 25	lrkm 26	lring 27	lrkmint 28	lrkm 29
constant	-2.04 .18***	-0.4 .01	-0.22 1.08**	-3.72 1.89**	1.9 4.91***	1.25 .83***	-10.56 3.22***	5 1.64***	2.48 1.65	-1.81 .28**
lrgnpt -1										0.37 .14***
lrgnpexpt	0.84 .15***	0.26 .08***	0.38 .07***	0.9 .16***	0.18 .09**	0.33 .07**	1.03 .15***	0.14 .08*	0.32 .08***	
lrexpt	0.03 .17	0.74 .09***	0.59 .08***	-0.02 .17	0.081 .09***	0.64 .08***	0.41 .21	0.5 .10***	0.47 .10***	0.55 .16***
lrexc t				0.23 .26	-0.32 .13**	-0.2 .11*				
lrexcpmw pt							0.45 .17***	-0.28 .09***	-0.14 .09	
R^2	.9966	.9991	.9993	. 9967	.9993	.9994	.9975	.9994	.9994	.9935
adj R^2	.9962	.9990	.9992	. 9962	.9992	.9993	.9971	.9993	.9993	.9928
f ratio	2897	10722	14392	1912	9098	10636	2513	10699	10417	1519
DW	.838	1.836	2.133	.999	2.014	2.103	1.029	2.611	2.373	1.947
lower, upper	(.938, 1.291)***	(.938, 1.291)***	(2.457, 2..832)**	(.858, 1.407)***	(2.593, 3.142)***	(2.593, 3.142)***	(.858, 1.407)***	(2.593, 3.142)***	(2.593, 3.142)***	(2.457, 2..832)**
decision	+ autoco	no+	no -	inconcl	no -	no -	inconclu	inconcl	no -	no -

The Period of 2004-2008

Hoekman and Togan (2005, pp.5-7) point out that increases in public sector deficit and nominal exchange rate increases the rate of inflation in Turkey, in addition to the obvious effects of the aggregate demand and supply on inflation as a source of instability in Total Factor Productivity. This evidence forces Turkey to control inflation rate through developing new strategies over these parameters including exchange rate policy under the requirement of the EU membership. To reduce inflation level to the EU criterions domestic currency has been kept overvalued by encouraging foreign investment inflows with new laws and policies even a fully floating exchange rate regime has been followed recently. Real exchange rate level has been under unity to consider overvalued domestic currency since 2001. However, Güneş (2008) considers the world price increases of petroleum and natural gas and other properties for the high Turkish Current Account Deficit in recent years, rather

than overvalued domestic currency. Both overvalued domestic currency and increases in the world property prices caused larger trade deficits by increasing production good imports for production and increases import shares of intermediate goods in the unit export of Turkey since 2004, as seen in Table 4. The import share of intermediate good increased 7.1 point, and the export/production good ratio decreased 1.9 points from 2004 to 2007 as seen in the corresponding rows in the last column in Table 4.

Table 4: Production Goods Import Developments Between 2004-2008

Type of Good	2004	2005	2006	2007	January 2008	2004-2007 (%)
Investment (%)	17.8	17.4	16.7	15.9	13.4	-4.4
Intermediate (%)	69.3	70.1	71.4	73.69	76.4	7.1
Production/Import (%)	87.1	87.5	88.1	89.59	89.8	2.7
Total Import (USD in Millions)	97540	116774	139576	170048	16306	74.3
Total Export(USD in Millions)	63167	73476	85535	107184	10596	69.7
Export/Production (%)	74.3	71.9	69.6	71.1	72.4	-1.9
Official reserves Account (USD in Millions)	-4342	-23200	-10625	-12015	-674	177
$/YTL	1.4292	1.3447	1.438	1.308	1.194	-16.4
WPI (%)	13.8	2.7	11.6	5.9	8.2	-5.6
Deflator (%)	9.5	5.3	11.7	5.4		-4.1
strightShort term Credit Interest Rate	28.5	20.5	22.1	21.1		-7.4
Growth rate	9.9	7.6	6.0	4.5		-5.4
Net Foreign Investment (USD in Million)	2885	10029	19918	21864	881	758

Source: Udersecretariat of The Prime Ministry for Foreign Trade(Access Date:3/31/2008). Foreign Investmen:ThePrime Ministry Udersecretariat of Treausry (Access Date:3/31/2008). Note: Net Foreign Investment amounted USD 1752 million in 2003.

The nominal value of American Dollar decreased by 16.4% which is more than the decrease in inflation rate, but this means more valuable real domestic currency in compare to nominal value as Turkey faces relatively higher domestic inflation rate compared to Turkey's main trade partners. The main source of overvaluation of domestic currency come from market forces under freely floating exchange rate regime. The relatively high domestic interest rates compare to the EU and developed countries and so the large increases in net foreign investment inflows have increased

the supply of foreign currency brought about overvalued domestic currency to increase production good import expenses between 2004-2007.

Conclusion

The endogeneity and exogeneity of variables are defined based on the theoretical causalities. The real import demand for the investment, intermediate and total of production goods can be explained by the real income, relative import price, real foreign exchange rate, terms of trade, relative import price and foreign terms of trade adjusted real foreign exchange rate, foreign TOT adjusted nominal foreign exchange rate and export around 99%. On the average, relative import price, real exchange rate, relative price and foreign TOT adjusted real foreign exchange rate and foreign TOT adjusted nominal foreign exchange rate elasticities of imported intermediate goods are found higher than imported investment goods' corresponding elasticities. The positive relative import price elasticity implies Veblen effect on the imported investment and intermediate goods and a complementary relation between domestically produced goods. The income elasticity of imported intermediate good is found higher than imported investment good. Export elastcicity of intermediate good is found higher than export elasticity of investment good but export excluded income elasticity of investment good is found higher than intermediate good's export excluded income elasticity. The estimated significant models indicated inelastic price and income elasticiticies. This means that a percentage increase in income or in relative import price increases imported investment and intermediate good import less than a unit percentage on the average.

Overall, increasing substitution of domestic goods for imported investment and especially intermediate goods does not only larges trade deficit but also harms domestic industries of Turkey. It is recommended that Turkey must improve Its reputation by technological innovations and alternatively find domestic energy sources to overcome the trade deficit and restrictions on semi-industrial development especially arising from increasing demand for intermediate good imports especially basis on the reasons mentioned in the section of introduction and literature of the article.

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