SOSYAL BİLİMLER Yıl : 2008 Cilt : 6 Sayı :1 Celal Bayar Üniversitesi S.B.E. MANİSA

The Effects of The Changes in Reel Exchange Rate on Export and Import: Analysıs of Agrıcultural Sector

Prof.Dr. Bedriye TUNÇSİPER
Balıkesir Üniversitesi, İ.İ.B.F., İktisat Bölümü
Araş. Gör. Dilek SÜREKÇİ
Balıkesir Üniversitesi, Bandırma İ.İ.B.F., İktisat Bölümü
Araş. Gör. Özlem KIZILGÖL
Balıkesir Üniversitesi, Bandırma İ.İ.B.F., Ekonometri Bölümü

ABSTRACT

The aim of this paper is to investigate whether there is a relationship between agricultural exports, import and reel exchange rate and if there is a relationship to investigate the direction of this relation. For this purpose, monthly data for reel effective exchange rate index, export and import price index of agricultural sector is used over the period from 1994:1 to 2007:11. The causality relationship is investigated by Vector Error Correction Model that is proposed by Granger (1988) and Hsiao's Granger Causality Test that is proposed by Hsiao (1981). According to the empirical results, there is a cointegration relationship between reel effective exchange rate and agricultural export but not a cointegration relationship reel effective exchange rate and agricultural import. Moreover, empirical results show that, differ from causal relationships variables.

Key Words: Agricultural Exports, Agricultural Import, Reel Exchange Rate, Cointegration, Causality Relationship

Reel Döviz Kuru Değişimlerinin İhracat Ve İthalat Üzerindeki Etkisi: Tarım Sektörü Analizi

ÖZET

Çalışmanın amacı Türkiye'de tarım ürünleri ihracatı ve ithalatı ile reel döviz kuru arasında ilişkili olup olmadığını ve bir ilişki varsa bu ilişkinin yönünü incelemektir. Bu amaçla, 1994:1-2007:11 dönemine ait aylık, reel efektif döviz kuru endeksi ve tarım sektörüne ilişkin ihracat fiyat endeksi ile ithalat fiyat endeksi verileri alınmışır. Nedensellik ilişkileri, Granger (1988) tarafından önerilen VECM (Vector Error Correction Model) kullanılarak ve Hsiao (1981) tarafından önerilen Hsiao Granger Nedensellik testi kullanılarak araştırılmıştır. Elde edilen sonuçlara göre, reel döviz kuru ile ihracat arasında eşbütünleşme varken, reel döviz kuru ile ithalat arasında eşbütünleşme olmadığı tespit edilmiştir. Bununla birlikte, nedensellik testlerinin sonuçlarına göre nedensellik ilişkileri farklılaşmaktadır.

Anahtar Kelimeler: Tarımsal İhracat, Tarımsal İthalat, Reel Döviz Kuru, Eşbütünleşme, Nedensellik İlişkileri

I. INTRODUCTION

Although agricultural sector is the most protected and most supported sector in developped countries because of its important role in economic and

social development, it is hold over by developping countries which gives more importance to industralization.

In recent years, agricultural production has decreased also in Turkey and the difference between the import and export of agricultural products has increased in negative direction and Turkey has become an agriculture importer country. It is clear that the increase in the foreign trade deficit of agriculture will affect both the sector and whole economy because the sector is a very strategic sector that supplies nutrient demand, is important for industralization, provide wide employment opportunities and has function of providing foreign exchange. In this context, the aim of this paper is to investigate the effects of exchange rate movements on agricultural export and import.

Although there are several studies that examines the relation between exchange rate and foreign trade prices, there is not consensus on the direction of the relationship. Çekerol and Gürbüz (2003) investigated the cointegration relation between reel efective exchange rate movements, agriculture and forestry, mining and quarrying and export and import price index of manifacturing industry products and display the possible interaction by Vector Autoregression (VAR) analysis for the period between 1995:1-2003:3. The empirical results indicate no causal relation between reel exchange rate and sectoral export and import prices.

Kasman (2003), examined the effect of the exchange rate volatility on export by using monthly data for 1982 – 2002 period. Export model is estimated both sector specific and in the aggregate by the help of cointegration and error correction techniques. The short run effect of the exchange rate volatility on export is possitive in most sectors but in the long run this effect is not strong. On the other hand, results indicate that effect of the exchange rate volatility on aggregate export is negative both in short run and long run.

Gül and Ekinci (2006), investigated the interaction between reel exchange rate and export and import by employing Granger cauality test. They found cointegration and causality relationship between the variables. The causality relationship is unidirectional from reel exchange rate to export and import.

Susanti (2001), explored the effect of reel exchange rate on export of agricultural products and aggregate agricultural export for Indonesia over the period of 1971:1-1998:4. As a result, it is found that changes in exchange rate has significant negative effect on expor of agricultural products and total agricultural export. Zengin (2001), tried to identify the causal relationship between reel exchange rate movements and sectoral foreign trade price index. The relationship between reel exchange rate index, agriculture and forestry, mining and quarrying and export and import price index of manifacturing industry products is identified by VAR analysis with data from 1993:1 to 2000:8. It is found that there is partial reflections in only exporter sectors by using impulse response and variance decomposition analysis. Moreover it is

identified that this relationship is provided through the channel of agricultural and forestry products and reflected to the import sector because of its causal relationship with import of manufacturing industry products.

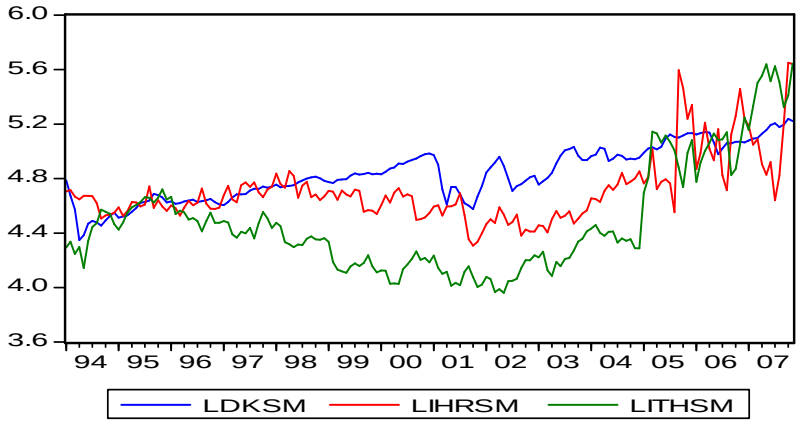
Hepaktan (2007), analysed foreign trade from the income perspective in line with the changes in the import and export structure of Turkey in the period of 1982-2005. Within the frame of this analysis, terms of trade which depends on commodity exchange is compared, income effect of foreign trade is calculated with Nicholson method and it is found that Turkey satisfied positive income effect from foreign trade in this period.

When the literature is examined, no relation can be found between reel exchange rate movements and the terms of trade in general or only a few studies deal with a relationship. But it doesn't mean there would not be a this kind of relation between reel effective exchange rate and sectoral export and import price index (agriculture and forestry, mining and quarrying and export and import price index of manifacturing industry products). For this reason, this study is important for the purposes of discovering the invisible interactions in the sectoral base (for agricultural sector).

Other parts of the paper is organized as follows: section 2 give information about data, methodology and empirical results are given in section 3. Conclusions are summarized in the last section.

II. DATA SET

The data set that is used in the analysis is obtained from Turkish Statistical Institute and Electronical Data Delivery System of the Central Bank of the Republic of Turkey (CBRT). The data set namely reel effective exchange rate index, export price index and import price index for agricultural sector is monthly and covers the period of 1994:1-2007:11. The base year for reel effective exchange rate index is 1995. Export and import price index of agricultural commodity is calculated by considering the 1995 base year. Time series analysis are made after the series are seasonally adjusted and transformed into natural logarithms. LDKSM, LIHRSM and LITHSM denotes respectively seasonally adjusted and logged values of reel effective exchange rate index, export price index for agricultural sector and import price index for agricultural sector. A graph of these indexes for the defined period is represented below.



Graph 1: The series of LDKSM, LIHRSM and LITHSM

III. TIME SERIES ANALYSIS

The first step for the time series analysis is to investigate the stationarity properties of the variables with unit root tests. The presence of unit root in the time series indicates that the series are nonstationary. Order of integration for the variables is determined by unit root tests. If the series are integrated of the same order, the possibility of cointegration is considered. It is tested whether there is a long run relationship between variables by employing cointegration tests. If there is a cointegration relationship between variables, the existence of causality is investigated by causality tests.

A. Unit Root Tests

The stationarity of the studied series should be investigated in the first step because the regression analysis made with nonstationary series causes non realistic, high test statistics and spurious regression. The widespread tests used in stationary analysis are the Augmented Dickey Fuller (ADF) and Phillips Peron (PP) unit root tests. ADF and PP tests are sensitive to the lag length selection so for being able to eliminate this deficiency, Kwiatkovski-Phillips-Schmidt-Shin (KPSS) unit root test is applied additionally. Each series are regressed on their own lagged values and lagged differences in ADF unit root test which is developed by Dickey-Fuller (1981). The optimal lag length is selected by Akaike Criterion (AIC). The lag length which minimizes the absolute value of AIC is selected as optimal lag length. The null hypothesis in ADF test is the series in levels have unit root or in other words the series are nonstationary. PP test, which is deveeloped by Phillips-Peron (1988), is proposed to identify the existence of high level correlation in a time series. In order to identify any correlation in the error term, this test applies a nonparametric correction to the t statistics which belongs to the coefficient of the lagged value of the variable. The lag length that minimizes the AIC is

selected in PP test. Hypothesises are in line with ADF test. Sometimes conflicting results may be obtained from these tests. For this reason, the additional application of KPSS test provides more reliable results. In contrary to ADF, PP tests, existence of stationarity is tested in null hypothesis.

If there is a common stochastic trend between reel effective exchange rate index, export price index for agricultural sector and import price index for agricultural sector; the presence of cointegration between variables may be discussed (Kasman, 2006: 93). Before the identification of cointegration relation, unit root tests are applied for determining whether the series are stationary and for the determination of the order of integration. The results are represented in Table 1. The lag length is selected by AIC in ADF test. In PP and KPSS unit root test, the lag length is taken for Barlett Kernel within the direction of Newey-West proposal.

Table 1: The Results of Unit Root Test

		ADF	PP	KPSS
Variables	Level/ First Difference	Constant (MacKinnon 5%critical value) [Lag Length]	Constant (MacKinnon 5%critical value) [Lag Length]	Constant (MacKinnon 5%critical value) [Lag Length]
LDKSM	Level	-0.566 (-2.880) [12]	-1.021 (-2.879) [5]	1.420 (0.463) [10]
	First Difference	-6.057 (-2.880) [11]	-8.732 (-2.879) [13]	0.104 (0.463) [6]
LIHRSM	Level	0.297 (-2.880) [13]	-2.377 (-2.879) [6]	0.714 (0.463) [9]
	First Difference	-3.444 (-2.880) [13]	-18.497 (-2.879) [20]	0.412 (0.463) [23]
LITHSM	Level	1.743 (-2.880) [7]	-0.013 (-2.879) [2]	0.608 (0.463) [10]
	First Difference	-3.075 (-2.880) [11]	-12.387 (-2.879) [2]	0.307 (0.463) [2]

Note: Unit root tests with trend are also made. Only unit root tests without trend are represented in the table because of their similar results.

According to the test results in Table 1, the variables have unit root. In other words, all the series are not stationary in levels. Unit root tests are applied to the first differnces of the series and it is seen in Table 1 that the series are

stationary in their first differences. In this way, it is concluded from all unit root tests that the series are integrated of order one I(1).

B. Cointegration Test

In order to test the cointegration relationship, unit root test is applied to the error term series that are obtained from the regression. Cointegration is an analysis that is developed to investigate the relationship between nonstationary time series. This test consider the time series that are not stationary but of which linear combination is stationary. If the series has a long run relationship, thus the series are cointegrated, long run elasticities can be predicted from cointegration regression (Nisancı, 2005: 22). The long run relationship between the variables can be determined by Johansen Cointegration Test (1988). This method helps to estimate the cointegration parameters and to identify the number of cointegrating vectors by using maximum eigenvalue procedure. The lag length is selected with VAR (Vector Autoregressive) model in the cointegration analysis. In VAR procedure, each variable is modeled as a function of lagged values of all endogenous variables.

After all series are identified to be integrated of order one, VAR model is costructed and optimal lag length is selected as 3.

Table 2: Chooising Lag Length Criterias

Lag length	LogL	LR	FPE	AIC	SC	HQ
0	74.06437	NA	0.001385	-0.906470	-0.867867	-0.890794
1	393.9665	627.7325	2.60e-05	-4.880082	-4.764274	-4.833054
2	406.4359	24.15444	2.34e-05	-4.986615	-4.793602*	-4.908234
3	413.2707	13.06789*****	2.26e-05*****	-5.022273*****	-4.752055	-4.912540*****
4	416.4710	6.038321	2.28e-05	-5.012214	-4.664791	-4.871129
5	419.1634	5.012297	2.32e-05	-4.995767	-4.571138	-4.823329
6	423.9943	8.871761	2.30e-05	-5.006218	-4.504384	-4.802428
7	424.5346	0.978683	2.40e-05	-4.962699	-4.383661	-4.727558
8	425.5814	1.869754	2.49e-05	-4.925552	-4.269309	-4.659059

* Indicates lag order selected by criterian

LR: sequential modified test statistics (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterian

SC: Schwarz information criterian

HQ: Hannan-Quinn information criterian

The results of the Johansen Cointegration Test that is used in cointegration analyses are represented in Table 3. According to the Table 3, there is a long run equilibrium relationship between reel effective exchange rate and agricultural export. But not cointegration between reel effective exchange rate and agricultural import.

Table 3: Johansen Cointegration Tests

Cointegration between reel effective exchange rate and agricultural export							
Trace Test				Maximum Eigenvalue Yest			
H_0	H_1	Test Statistics	5% criticalvalue	H_0	H_1	Test Statistics	5% criticalvalue
r=0	$r \geq 1$	15.735*	15.495	**r=0**	$r = 1$	14.667*	14.265
$r \leq 1$	$r \geq 2$	1.068	3.841	$r \leq 1$	$r = 2$	1.068	3.841
Cointegration between reel effective exchange rate and agricultural import							
H_0	H_1	Test Statistics	5% criticalvalue	H_0	H_1	Test Statistics	5% criticalvalue
r=0	$r \geq 1$	6.125	15.495	**r=0**	$r = 1$	6.122	14.265
$r \leq 1$	$r \geq 2$	0.003	3.841	$r \leq 1$	$r = 2$	0.003	3.841

*indicates that null hypothesis is rejected at 5% significance level.

Models and parameter estimations that are obtained from cointegration relation is summarized in Table 4. In order to see the effect of reel effective exchange rate on aggricultual export, normalized equations are constructed. The parameter estimations in these equations express the long run elasticities. The reel exchange rate elasticity of export is positive. 1% increase in reel exchange rate leads to a 0,878% increase in agricultural export.

Tablo 4: The Estimation of Cointegration Relationship

Normalized Cointegrating Vectors for LDKSM
LDKSM= 0.878 LİHRSM
(0.214)
[4.103]

Note: The values in paranthesis are the standart errors.

C. Causality Tests

The test of causality relationship is important for the identification of whether which variable would be endogenous and which variable would be exogenous in the construction of the model. In other words which variable causes the other and cause-result relationship is put forth by causality tests. If cointegration relation is detected in time series analysis, there must been at least unidirectional causality between variables. But standart causality tests of Granger and Sims may give unreliable results because they don't include error correction term and they are very sensitive to lag length. For that reason, this tests should be applied if the variables are not cointegrated.

The causality relationship between the variables is investigated by using Vector Error Correction Model (VECM) which is proposed by Granger (1988) and by using Hsiao Granger Causality Test which is proposed by Hsiao (1981). The model for VECM is represented, sample for agrucultural export, below:

$$\Delta \text{ LİHRSM}_t = \beta_0 + \sum_{i=1}^{n} \beta_{1i} \Delta \text{ LİHRSM}_{t-i} + \sum_{i=0}^{n} \beta_{2i} \Delta \text{ LDKSM}_{t-i} + \beta_3 \text{EC}_{t-n} + \varepsilon_i \quad (1)$$

In the model; n denotes the lag length, EC_{t-n} denotes error correction term, β_3, denotes long run relation, β_1 and β_2 , denotes short run relations. Thus, the coefficients of independent variables in VECM demonstrates the short run causal effects and the coefficients of error correction term demonstrates the long run causal effects. VECM for other variables can be constructed as in equation 1. The existence of causal relation between the variables can be tested with VECM in two ways: We look for the statistical significance of the coefficients or for the statistical significance of the error correction term (Kasman, 2006: 96). If one of these conditions is statistically significance, this indicates the presence of causality.

Table 5: Granger(1988) Causality Test

	Independent Variable		
Dependent Variable	Δ LİHRSM	Δ LDKSM	EC_{t-1}
Δ LİHRSM	-	[5.642]*	(3.378)*
Δ LDKSM	[5.774]*	-	(-1.495)

*indicates that null hypothesis is rejected at 5% significance level (.) show that t-statistics, [.] show that F-statistics. t-table value: 1.980, F-table value: 2.075

Table 5 represents the t and F statistics of the coefficients in the equations that are constructed as VECM. Lag length is selected as 3 with the AIC. Table 5 indicates that the coefficients of the export and reel exchange rate variables are statistically significant at 5% significance level. There is bidirectional causality from reel exchange rate to export and from export to reel exchange rate. Error correction term is found to be significant in the first equations. This means there is causality running from reel exchange rate to export. The causality test that is developed by Hsio, is constructed by considering Granger (1969) causality test and FPE (Final Prediction Error) criteria of Akaike together. In the first step, the dependent variable (Y) is regressed on its own lagged values. The FPE criteria, which is found by using this equation, is represented below:

$$FPE(m,0) = \left(\frac{T+m+1}{T-m-1} \right) \left(\frac{ESS(m,0)}{T} \right)$$

In the second step, independent variable (X) is added to this equation and with the help of this equation the other FPE criteria is calculated.

$$FPE(m,n) = \left(\frac{T+m+n+1}{T-m-n-1} \right) \left(\frac{ESS(m,n)}{T} \right)$$

T denotes the observation number, m and n denotes the maximum lag length, ESS denotes sum squares of errors. The optimal lag length that minimizes the FPE for both criteria is selected. The result of this test depends on the comparision of two FPE. If FPE(m,n)<FPE(m,0), it is concluded that there is causality running from independent variable to dependent variable. In the opposite condition there is no causality between the two variables. In the other steps of the test, X variable is taken as dependent variable and this procedure is repeated.

Table 6: Hsiao Granger (1981) Causality Test

Dependent Variable	Independent Variable	FPE(m,0)	FPE(m,n)	Direction of Causality
LİHRSM	**LDKSM**	**0.01887(1,0)**	**0.01794(1,1)**	**LDKSM ⇒ LİHRSM**
LDKSM	**LİHRSM**	**0.00147(3,0)**	**0.00150(3,1)**	**LİHRSM ⇏ LDKSM**

If Table 6 is examined, it is observed that there is causality from reel exchange rate to export, but not found that a between causality from export to reel exchange rate.

IV. CONCLUSION

This study examines the relationship between reel exchange rate and agricultural export and import by using monthly data for reel effective exchange rate index, export price index and import price index of agricultural sector over the period of 1994:1 to 2007:11. The cointegration relationship between the variables is analysed with Trace Test and Maximum Eigenvalue Test statistics of Johansen cointegration test.

This tests indicate the existence of a long run equilibrium relationship between reel exchange rate and agricultural export, but not cointegration between reel effective exchange rate and import of agricultural commodity.

VECM and Hsiao Granger causality tests are applied in the identification of the causality relation. These two tests provide similar results for the direction of the causality relationships. It is found that there is bidirectional causality from reel exchange rate to agricultural export while causality is observed from agricultural export to reel exchange rate and from reel exchange rate to agricultural exports. According to the VECM, it is concluded that there is a long run relationship between reel exchange rate and agricultural export and while there is short run relationship from agricultural export to reel exchange rate. Subject to these results, it is seen that the changes in reel exchange rate is effective on agricultural export. The bidirectional causality between agricultural export and reel exchange rate emphasizes the importance of followed exchange rate policies in Turkey. Exchange rate

policies that aims to increase the agricultural export and it is clear that the increase in the foreign trade deficit.

KAYNAKÇA

ÇEKEROL, Kamil and GÜRBÜZ, Hüseyin (2003), "Reel Döviz Kuru Değişimleri İle Sektörel Dış Ticaret Fiyatları Arasındaki Uzun Dönem İlişki", ODTÜ Ekonomi Kongresi, 6-9 Eylül 2003, Ankara.

DICKEY, David A. and FULLER, Wayde A. (1981), "Likelihood Ratio Statistics for Autoregressive Time Series with A Unit Root", Econometrica, 49 (4), s. 1057-1072.

GRANGER, C.W.J. (1988), "Some Recent Developments in a Concept of Causality", Journal of Econometrics, 39, s. 199-211.

EKREM, Gül and EKİNCİ, Aykut (2006), "Türkiye'de Reel Döviz Kuru İle İhracat ve İthalat Arasındaki Nedensellik İlişkisi", Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, 16, s. 165-190.

CHENG, Hsiao (1981), "Autoregressive Modelling and Money-Income Causality Detection", Journal of Monetary Economics, 7 (1), s.85-106.

HEPAKTAN, Erdem (2007), "Türkiye'nin Dış Ticaretinin Gelir Yönlü Analizi", Uluslararası Ekonomi ve Dış Ticaret Politikaları, 1(2), s.79-112. http://www.dtm.gov.tr/dtmadmin/upload/EAD/KonjokturIzlemeDb/Erdem_Hepaktan.pdf, Erişim tarihi: 12.07.2008.

KASMAN, Saadet (2006), "Hisse Senetlerinin Fiyatları ve Makroekonomik Değişkenler Arasında Bir İlişki Var mı?", İktisat, İşletme ve Finans Dergisi, 238, s. 88-99.

KASMAN Adnan (2003), "Türkiye'de Reel Döviz Kuru Oynaklığı ve Bunun İhracat Üzerine Etkisi: Sektörel Bir Analiz", Uludağ Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, XXII (2), s.169-186.

NİŞANCI, Murat (2005), "Eşbütünleşme Tekniği İle Türkiye'de Yakıt Talebinin Analizi", Atatürk Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 19 (2), s. 19-30.

PHILLIPS Peter C. B. and PERON Pierre (1988), "Testing for a Unit Root in Time Series Regression", Biometrika, 75 (2), s. 335-346.

ZENGİN, Ahmet (2001), "Reel Döviz Kuru Hareketleri ve Sektörel Dış Ticaret Fiyatları (Yansıma Üzerine VAR Analizi)", Dış Ticaret Dergisi, 6 (21), s. 107-124.

www.tuik.gov.tr

www.tcmb.gov.tr

SOSYAL BİLİMLER Yıl : 2008 Cilt : 6 Sayı :1 Celal Bayar Üniversitesi S.B.E. MANİSA

Ergen Sağlığı Yönetimi: Ulusların Gelecekleri İle İlgili Umutlarının Anahtarı

Dr. Levent B. Kıdak
İşletme ve Tıp Doktoru, İzmir Eğitim ve Araştırma Hastanesi,
Başhekim Yardımcısı

ÖZET

Ergenlik dönemi; fiziksel, ruhsal, biyolojik ve sosyal yönden hızlı büyüme, gelişme ve olgunlaşma süreçleriyle çocukluktan yetişkinliğe geçiş dönemidir. Diğer taraftan ergenlik dönemi, yeniliğe ve değişime açık olma özellikleriyle de bir fırsat dönemi olarak değerlendirilebilir. Tüm dünyada olduğu gibi ülkemizde de ergenlerle ilişkili temel sorunlar arasında; önlenebilir sağlık problemlerinin yüksek oranda olması gelmektedir. Bu derlemenin amacı, ergenlik döneminin önemi, özellikleri ve olası sağlık problemlerini ele alarak ergenlik dönemi sorunlarını değerlendirmek, sağlık yönetimi bilimsel bakış açısının dikkatini ergen sağlığı alanına çekebilmek ve ülke düzeyinde oluşturulabilecek ergen sağlığı hizmetleri yönetimine ilişkin yapılacak çalışmalara ışık tutabilmektir.

Anahtar Kelimeler: *Ergenlik, ergen sağlığı, sağlık yönetimi.*

Adolescence Health Management: The Key Of Hopes Of The Nations Future

ABSTRACT

Adolescence is a period of transition from childhood to adulthood which is characterized as rapid physical, psychological, biological and social development and maturation. Nonetheless adolelescence period is open to novelty and variations therefore can be considered as opportunity. As in all over the world, in our country the high prevalence of preventable health issues are the main troubles among the health problems related to the adolescents. The objective of this review paper is to consider the significance, charecteristic features and probable health problems of adolescence period. I aimed to attract attention of scientific view of health management to adolescence health issues thus contribute affords to constitute a health care management of adolescence health at the scale of country.

Key Words: *Adolescence, adolescence health, health management*

1. GİRİŞ

Ergenlik, büyüme anlamına gelmekte, çocukluktan erişkinliğe geçiş anlamında kullanılmaktadır. Ergenlik dönemi ise; bir orkestra gibi karmaşık görünen ama düzenli yönetilen fiziksel, ruhsal, biyolojik ve sosyal yönden hızlı büyüme, gelişme ve olgunlaşma süreçleriyle çocukluktan yetişkinliğe geçiş dönemidir. Ergenlik (adolesans) ortalama 11-21 yaşları arasındaki genç nüfusu içerir (Özcebe, 2002, 374; SB, 2004, 105).