



A LITERATURE REVIEW ON THE RELATIONSHIP OF EXPORT AND ECONOMIC GROWTH*

ABSTRACT

In this study, the development of the relationship between exports and economic growth in the literature is presented. The study highlights that many empirical studies focus on testing the role of exports in promoting economic growth or examining the direction of causality between these two variables. Although the positive effect of exports on growth is known, there are some methodological differences regarding the results obtained from these empirical studies. A general observation from these studies is that the literature produces different results and there is no consensus on the existence and direction of the causality between exports and economic growth. The reason for this fundamental difference stems from the difference in econometric methods used and the selected countries or country groups.

Keywords: Export, Economic Growth, Literature

İHRACAT VE EKONOMİK BÜYÜME İLİŞKİSİ ÜZERİNE BİR LİTERATÜR TARAMASI

ÖZET

Bu çalışmada, ihracat ile ekonomik büyüme arasındaki ilişkinin literatürdeki gelişimi sunulmaktadır. Çalışma, pekçok ampirik çalışmanın, ekonomik büyümeyi teşvik etmede ihracatın rolünü test etmeye veya bu iki değişken arasındaki nedenselliğin yönünü incelemeye odaklandığını vurgulamaktadır. İhracatın büyüme üzerindeki olumlu etkisi bilinmesine rağmen, bu ampirik çalışmalardan elde edilen sonuçlarla ilgili bazı metodolojik farklılıklar bulunmaktadır. Bu çalışmalardan genel bir gözlem, literatürün farklı sonuçlar ürettiği ve ihracat ile ekonomik büyüme arasındaki nedenselliğin varlığı ve yönü konusunda bir fikir birliğinin olmamasıdır. Bu temel farklılığın nedeni kullanılan ekonometrik yöntemlerin ve seçilen ülkelerin yada ülke gruplarının farklılığından kaynaklanmaktadır.

Anahtar Kelimeler: İhracat, Ekonomik Büyüme ve Literatür

1. INTRODUCTION

Empirical relations between export and economic growth emerge as a well-studied topic in economic literature. Different studies have focused on different countries, different time frames, representative variables and different econometric methodologies are used to determine the relationship between exports and growth. The use of these different methods and time intervals in different countries leads to different results. These different results may be due to the characteristics of different countries such as different domestic foreign trade policies, different economic backgrounds, different political arrangements, different institutional arrangements and different cultures.

The concepts of export and growth occupy an important place in the economics literature. Whether there is a relationship between these economic concepts, and if so, what direction this relationship is, has been a matter of debate for many years.

The aim of this study is to summarize the literature studies investigating the relationship between exports and economic growth in the period 1970-2012. In this context, selected literature studies are included. The remainder of the article is organized as follows: In Chapter 1, the introduction of the study is stated.

** Bu çalışma, T.C. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü'nde "İhracata Dayalı Sanayileşme Stratejilerinin Büyüme Üzerine Etkisi: Türkiye Üzerine Ampirik Bir Uygulama" adlı yüksek lisans tezinden türetilmiştir.

Chapter 2 examines both country-specific and multi-country literature on exports and economic growth. The conclusion is given in Chapter 3.

2. LITERATURE RESEARCH ON EXPORT AND ECONOMIC GROWTH

The relationship between exports and economic growth is that exports may affect growth, growth may affect exports, or both economic growth and exports may affect each other.

2.1. Country-Specific Studies on Export-Economic Growth

In this section, studies investigating the relationship between economic growth and exports are analyzed in a single country dimension. According to the studies discussed, it is seen that sometimes exports affect economic growth, sometimes economic growth affects exports, there are studies that find mutual relations and there are studies that are not related.

Kunst and Marin (1989) argued that economic growth drives exports in their studies for Austria.

Bahmani- Oskooee and Domaç (1995), have been discussed in their study covering the period 1923-1990 in Turkey. They used the cointegration and error correction method. They find that exports and growth mutually effect each other.

Henriques and Sadorsky (1996) found that economic growth drives exports in their studies covering Canada.

Saraçoğlu (1997), has addressed in his study covering the years 1923-1995 in Turkey. Found that an increase in exports would be achieved with the export-based growth policy.

Thornton (1997) discussed in his study covering the years 1850-1913 in Italy, Denmark, Germany, Norway, Sweden and England. Used the ADF unit root test in this study and found that export growth for Denmark, Germany and England did not support economic growth as a result of this study.

Yiğidim and Köse (1997), have dealt in their study covering the years 1980 -1996 in Turkey and found that there was a unilateral relationship for export to growth.

Özmen and Furtun (1998), have been discussed in their study covering the period 1970-1995 in Turkey. In their studies, used the Johansen cointegration method. As a result, they found that the increase in exports supported economic growth.

Shan and Sun (1998b) discussed in their study covering the period 1978-1996 for China. In this study, using the ADF unit root test and Granger causality test. As a result of the study, it found that the increase in exports did not support economic growth.

Özmen, Özer & Türkyılmaz (1999), 1987 (January) -1997 (June) covering the period of their study urged Turkey were discussed. In their studies, they used the Granger causality test. They argued that the direction of causation was a unilateral relationship from exports to growth.

Panas and Vamvokuas (2002), examined in their study of Greece, found that there is a long-term relationship from output growth to exports.

Şimşek (2003), has examined in his work covering the period 1960-2002 for Turkey. Used the co-integration method in this study. As a result of this study, found that the increase in exports led to economic growth.

Demirhan (2005) in his study, for Turkey to the causal relationship between exports and economic growth, were examined in 1987: 01-2004: 03 period with reference. As a result of the cointegration test, it was concluded that there is a long-term relationship between variables. Finding cointegration between variables required the use of an error correction model to determine the direction of causality. As a result of the test, it has been determined that there is no causality from export to growth, and causality from import to growth. In this period of export-led growth strategy in Turkey in this context, it is understood to be valid. In the study, it has been determined that the direction of the causality relationship between exports and growth is from growth to exports. In this sense, the one-way relationship was found between exports and growth in the period studied in Turkey.

Erdoğan (2006), has examined in his work covering the period 1923-2004 Turkey. In his study, cointegration and causality test was applied according to the results of these tests and have found that a long-term relationship between the two variables in Turkey.

Kösekahyaoglu and Şentürk (2006), have been discussed in Turkey and seven Developing Countries. In these studies, they applied the Granger causality test. In their studies, put forward the conclusion that the export-based growth hypothesis should generally be supported, as there is a causal relationship from exports to national income.

Özer and Erdoğan (2006), have been discussed in their study covering the years 1978-2006 in Turkey. In their studies, applied the Granger causality test. Found that in this study the results of the current export-led growth hypothesis in Turkey.

Yapraklı (2007), examined the causality between exports and economic growth in Turkey. For this purpose, the relations between exports and economic growth by total and main sectors (agriculture, mining and industry) for the period of 1970-2005 were analyzed econometrically using cointegration and error correction-developed Granger causality test techniques. Analysis of the results reveals that total economic growth from exports and toward positive industry and found unidirectional causality in Turkey. So, the result of error correction augmented Granger causality tests indicate that supported the hypothesis in terms of total export oriented growth and industrial exports in Turkey.

Taban and Aktar (2008), has examined in their study covering of 1980: 1-2007:2 period in Turkey. Applied Granger and Johansen cointegration tests. They determined that there is a long and short run bidirectional causality relationship between export and economic growth.

Şimşek and Kadılar (2010), have dealt with their study of Turkey in the 1960-2004 period. They used the cointegration and error correction method. This study suggests that the long period of growth in exports on the one hand and human capital accumulation in Turkey have found that long-term economic growth effects.

Takım (2010), has examined in his study covering the years 1975-2008 in Turkey. In his study, he applied the Granger causality test. As a result of the study, found that the increase in exports did not support growth.

Mangır (2012), in his study, examined in the 2002-2011 period for Turkey. Johansen and Juselies applied the cointegration method and the Granger causality test. Found a relationship between exports and growth in the long run.

In this section, in country specific studies, the studies examining the relationship between economic growth and export author, time frame, country, methodology and results are shown in Table 1.

Table 1. Summary of empirical studies on the export-growth axis for country-specific studies

Authors	Period	Country	Methodology	Relationship
Kunst and Marin (1989)		Austria		Economic growth drives exports
Bahmani- Oskooee and Domaç (1995)	1923-1990	Turkey	Cointegration Error Correction Method	Exports and economic growth mutually effect
Henriques and Sadorsky (1996)		Canada		Economic growth drives exports
Özmen and Furtun (1997)	1970-1995	Turkey	Johansen cointegration test	Increase in exports supported economic growth
Saraçoğlu (1997)	1923-1995	Turkey		Increase in exports would be achieved with the export-based growth policy
Thornton (1997)	1850-1913	Italy Denmark Germany Norway Sweden England	ADF unit root test	Export growth for Denmark, Germany and England did not support economic growth

Table 1. Summary of empirical studies on the export-growth axis for country-specific studies (*Cont.*)

Authors	Period	Country	Methodology	Relationship
Yiğidim and Köse (1997)	1980-1996	Turkey		Unilateral relationship for export to growth
Shan and Sun (1998a)	1978-1996	Hong-Kong Korea Taiwan	ADF unit root test Granger Causality test	Export growth for Taiwan alone supported growth.
Shan and Sun (1998b)	1978-1996	Çin	ADF unit root test Granger causality test	Increase in exports did not support economic growth.
Özmen et al (1999)	1987 (January) - 1997 (June)	Turkey	Granger causality test	Unilateral relationship from exports to growth.
Panas and Vamvokuas (2002)		Greece		Long-term relationship from output growth to exports.
Şimşek (2003)	1960-2002	Turkey	Cointegration method	Increase in exports led to economic growth.
Demirhan (2005)	1987:01-2004:03	Turkey	Cointegration test	long-term relationship between export and economic growth
Erdoğan (2006)	1923-2004	Turkey	Cointegration test Causality test	long-term relationship between export and economic growth
Kösekahyaoglu and Şentürk (2006)		Turkey Seven Developing Countries	Granger causality test	there is a causal relationship from exports to national income.
Özer and Erdoğan (2006)	1978-2006	Turkey	Granger causality test	The current export-led growth hypothesis in Turkey.
Yapraklı (2007)	1970-2005	Turkey	Cointegration test error correction-developed Granger causality test	Total economic growth from exports and toward positive industry and found unidirectional causality in Turkey.
Taban and Aktar (2008)	1980: 1-2007:2	Turkey	Granger causality test Johansen cointegration tests	a long and short run bidirectional causality relationship between export and economic growth.
Şimşek and Kadılar (2010)	1960-2004	Turkey	cointegration and error correction method	growth in exports on the one hand and human capital accumulation in Turkey, have found that long-term economic growth effects.
Takım (2010)	1975-2008	Turkey	Granger causality test	found that the increase in exports did not support growth.
Mangır (2012)	2002-2011	Turkey	Cointegration method and Granger causality test	a relationship between exports and growth in the long run.

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2.2. Multi-Country Studies on Export-Economic Growth

In this section, studies examining the relationship between economic growth and exports are analyzed in multiple country dimensions.

Kravis (1970) used rank correlation method in his study covering thirty-seven countries in the period 1835-1966 and found that the increase in exports supported economic growth.

Michaely (1977) covers his study covering forty-one underdeveloped countries, covering the period 1950-1973. Used rank correlation in his study and found that the increase in exports supported economic growth.

Balassa (1978a) conducted a two-term study covering the years 1960-1966 and 1966-1973. This study covers eleven semi-industrialized countries. He used rank correlation and least squares method. Found that the increase in exports supports economic growth

Balassa (1978b), studied eleven developing countries (Argentina, Brazil, Chile, Colombia, Mexico, Israel, Yugoslavia, India, Korea, Singapore and Taiwan) in a two-term study covering 1960-1966 and 1966-1973. Used the correlation and least squares method. He found that the increase in exports supported economic growth.

Heller and Porter (1978) discussed forty-one underdeveloped countries in their study between 1950-1978. In this method, which used rank correlation, he found that the increase in exports affects economic growth at a low rate.

Krueger (1978), in 1954-1971 period of Brazil, Chile, Colombia, Ghana, India, Israel, South Korea, the Philippines and Turkey found at the least squares methods used and support the economic growth of export growth.

Tyler (1981), in his study covering fifty-five middle-income developing countries in the period 1960-1977, found that the increase in exports supported economic growth.

Feder (1983), used the least squares method in his study covering thirty-two countries during the 1964-1970 period and found that the increase in exports supported economic growth.

Kavoussi (1984), studied seventy-three low and middle-income developing countries in his study covering the period 1960-1978. He used rank correlation and least squares method in this study. He found that the increase in exports supported economic growth.

Jung and Marshall (1985) studied thirty-seven developing countries in their study covering the years 1950-1981 and used the least squares method and Granger causality analysis. He found that export growth for Indonesia, Egypt, Costa Rica and Ecuador only supported economic growth.

Balassa (1985) handled forty-three semi-industrialized countries in his study covering the period 1973-1979 and used the least squares method. As a result of this study, it found that the increase in exports supported economic growth.

Ram (1987) studied eighty-eight countries in his study covering the period 1960-1982, used the least squares method and found that export growth for thirty-nine countries supported economic growth.

Sheehey (1990), studied thirty-six countries in his study covering the period 1960-1970 and used the least squares method. As a result of this study, it found that the increase in exports supported economic growth.

Afxentiou and Serletis (1991) handled sixteen industrialized countries in their studies covering the period 1950-1985 and used the Philips-Perron Unit Root test. As a result of this study, they could not find a systematic relationship for fourteen countries.

Dollar (1992) has examined for ninety-two countries in his study covering the years 1976-1985. He used the least squares method in this study and found that the increase in exports supported economic growth as a result of the study.

Greenaway and Sapsford (1994), conducted the study covering the years 1957-1985, 1970-1985 and 1971-1985. In his study, he considered nineteen countries, used the least squares method, and found that the increase in exports lowly supported economic growth.

Hatemi-J and Irandoust (2000), In a study covering the years 1960-1997 in Turkey, Greece, Ireland, Mexico and Portugal have examined. They used the Toda and Yamamoto method. They found a relationship from exports to growth for Ireland and Mexico and from growth to exports for Portugal.

Cuaresma and Wörz (2005) applied the unit root, cointegration test and the error correction model and the causality test in the period covering 1981-1997, covering forty-five industrialized and developing countries. He found that exports will positively affect growth in developed countries and countries producing high-tech products.

In multi-country studies, the studies examining the relationship between economic growth and export author, time frame, country, methodology and results are shown in Table 1.

Table 2. Summary of multi-country empirical studies on export-growth

Authors	Period	Country	Methodology	Relationship
Kravis (1970)	1835-1966	thirty-seven countries	rank correlation	the increase in exports supported economic growth
Michaely (1977)	1950-1973	forty-one underdeveloped countries	rank correlation	increase in exports supported economic growth.
Balassa (1978a)	1960-1966 and 1966-1973	eleven semi-industrialized countries	rank correlation least squares method	increase in exports supports economic growth
Balassa (1978b)	1960-1966 and 1966-1973	Eleven developing countries (Argentina, Brazil, Chile, Colombia, Mexico, Israel, Yugoslavia, India, Korea, Singapore and Taiwan)	Correlation and least squares method	increase in exports supported economic growth.
Heller and Porter (1978)	1950-1978	forty-one underdeveloped countries	rank correlation	increase in exports affects economic growth at a low rate
Krueger (1978)	1954-1971	Brazil, Chile, Colombia, Ghana, India, Israel, South Korea, the Philippines and Turkey	least squares methods	support the economic growth of export growth
Tyler (1981)	1960-1977	fifty-five middle-income developing countries		increase in exports supported economic growth
Feder (1983)	1964-1970	thirty-two countries	least squares method	increase in exports supported economic growth
Kavoussi (1984)	1960-1978	seventy-three low and middle-income developing countries	rank correlation least squares method	increase in exports supported economic growth
Jung and Marshall (1985)	1950-1981	thirty-seven developing countries	least squares method and Granger causality analysis	export growth for Indonesia, Egypt, Costa Rica and Ecuador only supported economic growth
Balassa (1985)	1973-1979	forty-three semi-industrialized countries	least squares method	increase in exports supported economic growth
Ram (1987)	1960-1982	eighty-eight countries	least squares method	export growth for thirty-nine countries supported economic growth
Sheehey (1990)	1960-1970	thirty-six countries	least squares method	increase in exports supported economic growth
Afxentiou and Serletis (1991)	1950-1985	sixteen industrialized countries	Philips-Perron Unit Root test	they could not find a systematic relationship for fourteen countries
Dollar (1992)	1976-1985	ninety-two countries	least squares method	increase in exports supported economic growth as a result of the study
Greenaway and Sapsford (1994)	1957-1985, 1970-1985 and 1971-1985	nineteen countries	least squares method	increase in exports lowly supported economic growth
Hatemi-J and Irandoust (2000)	1960-1997	Turkey, Greece, Ireland, Mexico and Portugal	Toda and Yamamoto method	relationship from exports to growth for Ireland and Mexico and from growth to exports for Portugal
Cuaresma and Wörz (2005)	1981-1997	forty-five industrialized and developing countries	unit root, cointegration test and the error correction model and the causality test	exports will positively affect growth in developed countries and countries producing high-tech products

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3. CONCLUSION

The aim of this study is to examine the literature that deals with the empirical relationship between exports and economic growth. There are many studies in the literature that examine the relationship between exports and economic growth. Some of these studies are summarized in this study. There is no consensus on the results obtained in the literature. In other words, while some studies find a relationship between exports / economic growth, economic growth / exports, some studies do not find a relationship between exports and economic growth. Relationships in some studies also find a bidirectional relationship between variables.

In line with these explanations, studies that will investigate the relationship between exports and economic growth should focus more on new approaches, perspectives and uses. Instead of using the usual methods, multivariate models should conduct studies based on a set of common variables for different countries and using different time intervals to obtain more reliable and better results, investigating the relationship between exports and economic growth.

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