THE EFFECTS ON ECONOMIC GROWTH OF THE ORIENTATION OF THE TRADE AND PAYMENTS REGIMES OF LESS DEVELOPED COUNTRIES

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(ABSTRACT)

Economists have debated whether an inward oriented economy (one which is protected from competition of world prices) or an outward oriented economy (which has equivalent incentives for imports or domestic production) would better promote economic development. Previous studies in this area by Bela Belassa and Anne Krueger have been inconclusive. This study examines the hypothesis that an outward oriented trade and payments regime would enhance economic growth in less developed countries. The tests of the data presented in this paper indicate that an outward oriented trade and payments regime is positively correlated with higher economic growth.

A description of the theory, the methods used, and the results is included.

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Chapter I

Background and Statement of Hypothesis

Economists have debated the role of the foreign trade and payments regime in promoting economic development in Less Developed Countries (LDC's) from the very start of the study of economies. The issue goes back to the mercantilist versus free trade debates and centers on whether economies develop better if protected from the world market or if forced to compete with world prices.[1]

Most LDC's in the post World War II era opted for protected economies, what we will call the inward-oriented approach to economic development. Argentinian economist Raul Prebisch developed an economic rationale for this approach, arguing that domestic markets could mature only under a protective barrier and that even exports should be taxed as a way of recapturing wealth being transferred to developed economies due to declining prices of primary commodities.[2]

A few economies faced by sluggish economic growth opted for an export led growth strategy, in part based on free trade theory. The remarkable economic growth of those countries which adopted (the "outward-oriented" growth strategy) led other countries to also liberalize their trade and payments regimes.

In principle, given the length of experience with both kinds of policies, we should be able to judge empirically which approach has worked better. So far, only two studies have examined the issue, albeit inconclusively. Anne O. Krueger analyzed whether there was any relationship between the relative openness or restrictiveness of the regime and economic growth, but was not able to determine any statistically significant relationship. [3] A second study by Bela Belassa developed a classification scheme of inward and outward oriented economies to study stabilization policies. As an aside to the study, Belassa noted that countries with an outward oriented trade and payments regime had higher growth rates based on simple averages, but he did not study whether the difference had any statistical significance.[4]

The purpose of this paper is to follow up the Krueger and Belassa studies and to analyze whether the trade and payments regime does affect economic growth. Specifically, I hypothesize that countries with outward-oriented development strategies will have higher economic growth than those with inward-oriented regimes.

Chapter II

Review of the Literature and Theory

As mentioned above, the two schools of economic development theory have split over the role of foreign trade (which transmits world prices) in the economy of the developing country. This chapter will analyze both schools of thought, review empirical studies and argue the outward-oriented school provides a more satisfactory model for analyzing economies based on theoretical grounds.

Before proceeding further, we should define the difference between inward-oriented and outward-oriented economies. Bela Belassa defines an outward-oriented economy as "not favoring exports over imports, (but) rather the provision of similar incentives to production for domestic and export markets."[5] In simplest terms, markets will determine the most efficient outcome, and trade allows countries to reach higher levels of economic

well being than in the absence of trade. By contrast, the inward-oriented economy is one which favors domestic production over imports. Certain authors would also extend that definition to favoring domestic production over exports.

The Inward-Oriented Economy

The theory behind the inward-oriented economic development approach stems in its simplest form from the infant industry case of trade theory. That case allows that, while generally there are gains from free trade,

> "a protective tariff may help such an industry to get off the ground and achieve levels of production at which the industry can be competitive in the world market. As soon as the competitive level can be achieved, the tariff can be removed..."[6]

The inward-oriented school extends this argument from an industry to an infant economy. The argument goes that small developing economies could not take advantage of the economies of scale open to developed nations. This size problem leads to two problems: first, development of domestic industries is thwarted since imports from developed countries can undercut the more expensive locally manufactured products. Secondly, LDC export

industries, that compete directly with developed country products, also are undercut by more efficient developed country products. The LDC's can only compete in those areas where there is no competition from developed country products, such as tropical products, minerals, or other raw materials. LDC's are by extension limited to exports of goods with little or no value added content. The policy conclusion from the above analysis is that the only way to insure greater added-value in LDC's is to limit imports and thereby encourage domestic production. "The terms of trade may deteriorate to such an extent that the country is worse off as a result of increased economic growth. This however can be avoided by the imposition of an appropriate tariff."[7]

Prebisch Theories

Argentinian economist Raul Prebisch has been the leading exponent of protection in LDC's as a way to increase economic growth. He based his analysis on observations of Argentinian growth in the 1930's, when the country isolated itself from the ravages of the world-wide depression by limiting external trade.

In a now-famous 1959 article, Prebisch expanded on the infant economy argument by adding income elasticities. He posited a "center" (i.e. the developed countries) and the "periphery" (the LDC's). The income elasticities for imports in LDC's are higher than the elasticity for primary commodities that LDC's exports. Thus, LDC's will be unable to finance at a fast enough rate the goods that they need to develop. Prebisch notes that:

> It is a well-established fact that the income elasticity of demand for imports of Latin American primary commodities by the centers is generally lower than the income elasticity of demand for Latin American imports of industrial products from these centers. This difference is frequently accentuated by measures to protect primary commodities in the centers, whereas, ... it is reduced by protection in peripheral countries, provided this is established within certain limits.[8]

The difference between the elasticities also adversely affects the employment picture. The developed world has a greater labor content in its exports while LDC's are in involved with primary commodity production that does not depend heavily on skilled labor content. As technology develops and labor content is reduced, LDC's have a "surplus" of unskilled labor. Prebisch asserts that:

> ...the periphery transfers to the outer world a greater part of the fruits of increased productivity than if the market forces had been contained at a certain point ... Income elasticity is generally low and so is price elasticity (in the LDC). Consequently, only a part - and not a very large one - of the surplus manpower can be employed in exports at given prices, and beyond that limit prices decline.[9]

As a result, in the open economy prices of exports decline, in effect transferring wealth to the developed countries.

In addition to the disparity in demand elasticities, the center and periphery are distinguished by differing levels of technological development. Thus improvements in productivity in developed economies are reflected in higher wages, whereas in LDC's with a lower technological base, increases in productivity are transferred through falling export prices to the developed countries. "The combination of disparities in income elasticities and in technological densities put the periphery in a weaker position vis-a-vis the center, as regards terms of trade."[10]

Prebisch's solution to the problem is for the LDC government to intervene in the market place.

> What is highly relevant is that the cost of spontaneous industrialization - by the unrestricted play of market force through exchange depreciation - is a transfer abroad of part of the increment in real income derived from the employment of surplus manpower, and that this transfer could be reduced or avoided by protection, subsidies, an export tax, or other forms of interference.[11]

Thus, import substitution policies not only allow industries to develop, but the policies prevent the transfer of wealth to developed countries.

Critique of the Inward-oriented School

The theory supporting the inward-oriented school of development is based on a special case, where the economy has not reached a sufficient size to take advantage of economies of scale. That argument presupposes that all parts of the economy have diseconomies of scale. If it were the case that some sectors were able to compete (say on the basis of lower labor costs,factor prices, specific factor inputs or locational advantages) then that sector would have less reason to produce for the world economy if it were protected by tariffs or other measures. That sector would collect an economic rent, but since its prices would be above world prices, it could not export. "The infant industry doctrine...(has been) evoked in support of indiscriminate protection that had no temporary aspect to it." [12] Thus, there would be no way to tell

if protection were still needed. Secondly, if the competitive sector were dependent on an imported input or a domestically produced input that received protection, the export industry would be disadvantaged by having to pay higher prices for inputs that competitors in the world market.

The Prebisch argument is based on an even more restricted case. Elasticities measure point relationships and can change dramatically as you move along the demand curve. Thus, we would not necessarily expect the elasticity to remain constant over time. It is difficult to base a theory on the basis of a single relationship. Indeed Prebisch gives us no theoretical reason why the elasticities in the "center" and "periphery" should remain as they are or as he describes them.

Prebisch's elasticities are also based on economy wide relationships. Again there could be sectors where the income elasticity of demand in lower in the periphery than in the center. Thus, Prebisch would have to demonstrate that his argument applied to all sectors of the economy which he does not do. As with the general infant economy argument, if one competitive sector (where there was an advantage in elasticities over the center) bought from a

protected sector, the purchasing sector would be disadvantaged.

The testable hypothesis of the inward-oriented development school would be that protection increases economic growth compared to those countries which have outward-oriented economies. Because of the temporal nature of the Prebisch analysis, it does not yield itself to overall generalization. One would have to demonstrate that for all periods of time, the income elasticities were higher in the center for LDC exports than the opposite case.

Outward-Oriented Development School

The outward-oriented school bases its approach upon standard free trade theory, namely that a country reaches a higher-level of welfare by trading at its comparative advantage in the absence of impediments to trade. Similarly, there are allocative efficiencies to letting world markets dictate prices, investments, production, etc. While there may be a place for an infant industry argument, it would be an exceptional case for one industry for one time period. In general, the economy would develop faster with free trade.

The literature in this field starts off by describing and critiquing the typical LDC protected from world markets. The literature then describes the process of moving to an outward-oriented economy and the gains to the economy that move brings. The following review of the theory and literature also follows that outline.

The Typical Protected LDC Economy

The LDC is small and a world price taker. It is frequently dependent on a primary product for most exports and other sectors of the economy are underdeveloped by developed country standards. Financial markets are particularly weak, and government efforts to raise money and regulate money supply are hampered by the lack of a market for securities. "In the typical less developed country, there is no domestic open market in government or private securities that the monetary authority can use..."[13] Some countries also enacted high reserve ratios by the banks and forced banks to hold their reserves in government securities. To make sure that credit goes to the sectors that need it, credit is administratively controlled by allocation systems, high reserve requirements, and usury laws which generally favor(s) import-substituting investments."[14]

The predominant characteristic of the typical inward-oriented LDC economy is that foreign trade and financial markets are tightly controlled. Imports are controlled by high tariffs and more frequently by quotas. The resulting "high protection discriminates against exports through the explicit or implicit taxation of export activities. Explicit taxation may take the form of export taxation while implicit taxation occurs as a result of the effects of protection on the exchange rate."[15] Exports are controlled, frequently in response to the Prebisch argument that restricting exports will prevent wealth being transferred to the developed countries. By limiting imports through quotas, the economy is in effect isolated from prices on the world markets. Since generally costs of domestically produced goods in the typical LDC are higher than imports, the prices of imports under the quota are set by domestic prices. Thus, domestic producers are encouraged to produce products that would not be profitable if world price levels prevailed.

Foreign exchange restrictions also confuse signals. "With quantitative restrictions, the "market is incapable of determining an equilibrium exchange rate. Thus the authorities need to make a rough judgment on the basis of purchasing power parity."[16] Inevitably the government

must step in to allocate scarce exchange, and in doing so uneconomic decisions likely will be made. The frequent result is that periodic foreign exchange crises arise and "economic growth (is) increasingly constrained by the scarcity of foreign exchange..."[17] The rigidities in the economy and the periodic shortages result in sluggish and erratic economic growth.

The Path to the Outward Oriented Economy

Belassa

Most of the economists studying this area have noted that the process involves discrete phases. Bela Belassa notes a three stage process, the first two of which describe the protected economy. Belassa notes the problems associated with the protected economy including the ultimate sluggish and erratic economic growth. As a way out of the economic doldrums caused by policies adopted during the second phase, many developing countries experimented with an outward-oriented policy. The degree of outward orientation, however, varies greatly by country.

Belassa examines the experiences of three sets of countries. Korea, Singapore, and Taiwan in the Far East permitted relatively free international trade allowing

manufacturers to choose between domestic or imported components. By letting the world market set prices, the Far Eastern countries achieved spectacular growth rates in the 1960's and 1970's, in many cases over 10% per year.[18]

In the Latin countries of Argentina, Brazil, Chile (after 1972), and Colombia, the change of policies involved subsidizing certain exports, reducing import protection, adopting crawling exchange rate pegs, and restoring positive real interest rates. These countries encouraged use of local materials but paid subsidies to exporters. These policies realigned incentives and relative comparative advantages as well as producing moderate annual GDP growth over the period of the 1960's and 1970's in the 2-4% range.[19]

Belassa contrasts these two strategies with the experience of those countries which retained phase two import substitution policies (India, Uruguay - before 1975, and Chile - before 1972). This group lost share of world markets, experienced stagnant or declining GDP, and lost ground relative to other LDC's. In some cases exports actually declined.[20]

In a later work, "Structural Adjustment Policies in Developing Economies", Belassa devised a scheme for classifying countries as inward or outward oriented. The scheme covered 23 LDC's which account for over 2/3 of

non-OPEC LDC GDP .[21] (The classification scheme is discussed in further detail in Chapter III) As part of his analysis of adjustment policies, Belassa calculated simple averages of GDP growth rates using simple averages. "In outward-oriented economies GDP growth rates...averaged 7.9% in the 1973 to 1979 period. By contrast...inward-oriented economies averaged 4.8%."[22]

Belassa concludes from his both sets of calculations that countries with outward oriented economies do have higher economic growth, which is in line with theoretical expectations.

Krueger

The other major economist studying the process of movement to the outward oriented economy, Anne Krueger, defined a five phase process but she quickly notes that countries do not automatically progress from Phase I to V, but frequently revert back to more protectionist policies. Her analysis gives a better explanation of how the process of moving toward an outward-oriented economy improves economic growth.

The Five Phases

The first phase is characterized the imposition, or sharp intensification of relatively undifferentiated or across the board import controls, usually undertaken to influence the international balance of payments. These controls are usually accompanied by exchange controls.

Phase II is characterized by increased and more specific restrictions on imports and exports. Frequently accompanying the trade and foreign exchange allocations are decisions on credit to finance international trade. A large bureaucracy usually emerges to administer detailed regulations and licensing procedures. One of their principal tasks is to differentiate among alternative end users of imports, resulting in arbitrary allocation of import, export and credit rights. This process distorts the market with some goods coming in at low prices and others virtually excluded.

Phase III results in a major discrete devaluation usually in response to a foreign exchange crisis. A relaxation of import restraints or a simplification of procedures usually accompanies the devaluation.

Phase IV marks a significant move towards a liberalized trade and payments regime as quantitative restrictions are significantly relaxed or replaced by

tariffs. Access to foreign exchange and credit is similarly expanded. The net effect of this phase is to begin to reduce the disparity between world and domestic prices.

Phase V is characterized by full foreign exchange convertibility and existing tariffs and QR's are not used to affect the BOP situation. This however does not imply a lack of bias against exports, as tariffs still could skew the incentive system.

The Episodic Nature of Liberalization Attempts

Krueger notes the episodic nature of the phases. Countries generally do not progress ever forward from Phases I to V, but rather oscillate back and forth particularly between Phases III and II and Phases IV and III. In part, this changing of direction is due to the political problems associated with implementing a program, particularly if previous programs were unsucessful. She adds however that:

> " these difficulties will be more easily handled if there is political consensus about the desirability of the liberalization, for then opposition will be more muted and less able to reverse the liberalization program before it has a chance to produce longer term results."[23]

Krueger points out that many of the commonly associated side effects of a liberalization program, such as economic slowdown, can be avoided with proper use of the exchange rate. In her analysis, twelve out of thirteen Phase III failures were attributable to setting an unsustainable exchange rate.[24]

Ronald McKinnon (1979) in commenting on Krueger's analysis speculates that "the lapsing into QR regimes in rather uncontrolled ways suggest that economic misdirection may be equally important."[25] McKinnon goes on to cite distortions caused by centralized management over product, labor, and financial markets. These distortions either lead to periodic crises or prevent the domestic market from adjusting appropriately to external shocks.

In "Liberalization Attempts and Consequences." Anne Krueger analyzed the question of whether the particular phase of the trade and payments regime (of her classification scheme) was related to economic growth. In a cross-sectional regression analysis, she ran economic growth against long run economic growth, increased export performance, and a dummy variable to cover the phases. Only the export variable was statistically significant.[26] "While there are numerous microeconomic

changes that accompany devaluation, liberalization, and altered bias, it was not possible to detect significant effects of those changes on growth performance. (However,) "the benefits ... may depend on the long-run direction of the bias in the trade and payments regime and not on the intermediate changes that follow devaluation and liberalization. "[27]

Lacking a large enough data base (since she was only dealing with events up to 1972), Krueger was able to qualitatively examine only two countries, Brazil and South Korea. After analyzing the regimes of those two countries, she concludes that "the export promotion bias of the trade and payments regime accounts for a substantial increment in the growth rate, over and above that explained directly by the growth of exports."[28]

How the Move to an Outward Economy Improves Growth

The central theme in the discussion of stages by Belassa and Krueger is that by opening the domestic market to international price influences, the resulting efficiency gains will lead to higher growth compared with countries that maintain inward-oriented trade and payments regimes. The authors both note the importance of eliminating quantitative restrictions, which can cut off

the domestic economy from world prices. Similarly, lowering tariff rates, especially prohibitive ones, introduces greater competition into the economy. The realignment of exchange rates also can influence the relative prices of domestic and imported goods

Allowing international goods to compete with domestic ones results in better price signals. Entrepreneurs will produce those goods and services in which the country has a comparative advantage and will import those goods which are cheaper. This will allow the country to achieve a greater output and economic growth.

Beyond just permitting international prices to influence domestic ones, the typical liberalization programs suggested by all three authors include the elimination of the government as an allocator of goods, services, foreign exchange and credit. Not only does letting the market make these decisions improve the allocative efficiency, it also allows the economy to adjust to changing conditions much more rapidly. The typical LDC bureaucracy sluggishly makes decisions and there is a built-in pressure to protect existing interests against new trends.

Thus, an outward oriented approach increase economic growth in two ways. First, international competition corrects price signals in the domestic market. The

country is steered in the direction of its comparative advantage, allowing it to produce at a higher level. Secondly, the economy, relieved of the layers of sluggish bureaucracy, can adjust quickly to changing world economic realities. The typical inward oriented LDC economy is slow to adjust and thus its economic growth in times of change is slowed down.

The outward-oriented development approach has a much more satisfactory and widely-applicable basis in theory. The theory does not apply to a special case, but predicts that, in general, an outward oriented economy should have higher economic growth. The preliminary evidence cited by the authors tends to support that prediction.

Chapter III

Tests and Results

Model Used

The issue of this study is whether an outward trade and payments regime orientation increased economic growth. Based on the review of theory and literature, I hypothesize that an outward-oriented trade and payments regime will contribute positively to economic growth. To test the hypothesis, we need to classify countries by grouping and then to inspect whether there is any statistically significant difference between the groups. We should expect *a priori* that an outward-oriented regime should have higher economic growth than the inward-oriented group. By extension we can also test the inward-oriented regime hypothesis. If growth is boosted by protection, there should be a negative correlation between an outward oriented regime and economic growth. An indeterminate result can be interpreted as indicating

that the orientation of the regime does not affect economic growth, or that the model used is not appropriate.

Belassa Classification Scheme

This study will use the classification scheme developed by Belassa (see Table 1 for details). These countries are roughly grouped on the basis of Belassa's definition quoted at the beginning of Chapter II, namely that the outward oriented economies favor neither domestic nor export production. Those favoring domestic production are classified as inward-oriented. An outward-oriented country may still have high tariffs and some quantitative restrictions. Nevertheless, Belassa groups these by overall effect.

This classification scheme applies best to 1982 when Belassa developed the system. Since the literature suggests that the benefits to outward oriented regimes occur over the long run, we will use the period 1970 to 1982 which covers two long run economic cycles and which corresponds to data aggregations done by the World Bank. During that time, several countries in the list changed policy orientations.

Table I
Country Classification

Outward Oriented	Inward Oriented
Chile	Argentina
Korea	Brazil
Singapore	Israel
Taiwan	Mexico
Uruguay	Portugal
Kenya	Turkey
Mauritius	Yugoslavia
Thailand	Egypt
Tunisia	India
	Jamaica
	Morocco
	Peru
	Phillipines
	Tanzania
	Zambia

Source:Bela Belassa "The Problem of Debt in Developing Countries" Unpublished paper prepared for the Conference on "The International Monetary System and Economic Recovery," Turin Italy. March 1984. annex.

--Argentina pursued an outward oriented policy only from 1976 to 1980. Both before and after, the country followed the traditional import substitution approach.

--Brazil had an outward oriented policy (through its export promotion programs) only from 1970 to 1974.

--Chile had an inward oriented strategy under the Allende administration which was in power until 1973. After the coup, outward oriented policies were put into place. In 1983, after the period of the study, it again reverted to protectionist policies.

--Uruguay also experimented with outward oriented development policies after 1975.[28]

We can use both data using the overall classification scheme and data adjusted for policy changes. The adjusted data can strengthen the argument that changing policies also leads to higher growth.

METHODOLOGY

We can test the hypothesis by first doing a simple comparison between the averages for GDP growth for the outward and inward oriented categories. If that result corresponds to theoretical expectations, we can test for statistical significance of the difference by introducing a dummy variable and running a cross-sectional regression analysis. As noted above, we will use World Bank data

covering the period 1970-82 listed in the World Development Report - 1984.

Simple Averages

Using Belassa's unadjusted classification system and including growth rates covering the period 1970 to 1982, countries with outward oriented trade and payments regimes experienced a 6.25% annual increase in GDP growth. Countries which pursued an inward oriented policy had only a 4.23% growth rate. This difference corresponds to theoretical expectations and is similar to Belassa's calculations for the period 1975-79.

Statistical Tests

By using the orientation of an economy as a dummy variable (1 for outward and 0 for inward), we can regress the policy dummy variable against GDP growth in a cross sectional analysis. In effect, this gives an equation that:

$$\%\text{GDP Growth} = \text{Constant} + \beta(\text{Policy Variable})$$

where ß corresponds to the difference between the averages of the two groups. Performing that regression using averages for annual GDP growth from 1970-1982 as above, we get the following results:

Variable	Coefficient	Std. Error	t-Stat
Constant	4.23	0.655	6.46
Policy	2.02	1.111	1.81
	R-Bar Squared	0.0944	

The signs of the coefficient are as expected and the t-statistic is significant at the 95% level. The r-bar Squared is low, although one should not expect high numbers in a cross-sectional analysis.

Adjusting the group for changes in policies during the time period yields the following:

Variable	Coefficient	Std. Error	t-Stat
Constant	4.05	.433	5.94
Policy	2.19	1.010	1.92
	R-Bar Squared	0.1215	

Alternative Explanations

In the basis of theory and review of the literature, we noted that there were feedback effects on economic growth from internal allocative efficiencies. Allocative

efficiencies (i.e. the directing of resources to the optimum end without governmental influence) contribute to a better running economy, letting it take better advantage of shifting trends in the international market.

We can test for the effects of these variables by breaking down the constant into components. A Cobb-Douglas production function can help us break down the effects into capital and labor growth. Again using World Bank data for the period 1970-82 and IMF data for estimates for Chile, Brazil, Argentina, and Brazil during the various phases, using the adjusted classification scheme, and using investment growth as a proxy for capital growth, regression analysis yields the following:

Variable	Coefficient	Std. Error	t-Stat
Capital	4.86	.584	6.1
Labor	1.56	.805	1.7
Policy	1.36	.665	1.84
	R-Bar Squared	.81	

This result is significant at the 90% level and confirms that even with the principal explanatory variable, the conclusions are still significant.

A plot of the residuals (Table 2) indicates that generally those countries which had open policies averaged above expectations and those that had closed policies were less. Egypt stands out among the outlying cases of those closed economies which had growth significantly greater than expected. This is largely due to the fact that the country moved from a non-market economy in the early 1970's, in effect a liberalization of the economy. By comparison with other countries, the Egyptian economy is still inward oriented, but the move to allowing some price signals appeared to have contributed to economic growth.

Looking at the other case, open economies which have had lower that predicted growth, Chile stands out. As noted before, the Chilean economy was weak and was subject to the effect of falling primary product prices for its chief export, copper. Nevertheless, its performance in the open economy period was marginally better than under the inward oriented economy regime.

The analysis of the residuals also supports the thesis that an outward orientation contributes to economic growth.

Table II

Residuals
GDP = Capital + Labor + Policy

Country	Percentage Point Deviation						
	-15	-10	-5	0	+5	+10	+15
India				X			
Tanzania				X			
Kenya				X			
Mauritius					X		
Zambia				X			
Egypt						X	
Thailand					X		
Phillipines					X		
Morocco					X		
Peru				X			
Jamaica		X					
Turkey				X			
Tunisia						X	
Korea						X	
Chile (In)			X				
Chile (Out)			X				
Brazil (Out)						X	
Brazil (In)			X				
Mexico					X		
Portugal				X			
Argentina (Out)					X		
Argentina (In)			X				
Uruguay (In)				X			
Uruguay (Out)						X	
Israel			X				
Singapore					X		
Taiwan						X	

CHAPTER IV

Conclusions

This study examines the hypothesis that an outward oriented trade and payments regime would enhance economic growth in less developed countries studied. The tests of the data presented in this paper indicate that an outward oriented trade and payments regime is positively correlated with higher economic growth. While a correlation exists between GDP growth and trade and payments orientation using Belassa's unadjusted classification scheme, the correlation is enhanced by isolating the population growth effects on GDP from the analysis and by refining the classification scheme to take account of policy changes in the trade and payments regime. There is, of course, always a possibility that the equation may not be properly specified, and, for example, GDP growth might be a proxy for the true explanatory variable. Nevertheless, the present model

does indicate a correlation between GDP growth and the orientation of the trade and payments regime.

This study builds on the general studies of Anne Krueger and Bela Belassa. The Krueger study did not definitively establish a relationship between the orientation of the economy and economic growth, although a qualitative analysis of the data tended to support the conclusion. The present study confirms that relationship. In regard to the Belassa study, this study goes beyond the analysis of simple averages in setting the analysis in a theoretical framework, analyzing the data for statistical significance, examining other interfering variables, and refining the classification system to include those periods where countries reversed policies.

The implication of this result is that if countries keep their economies open, they will experience a greater rate of economic growth. Anne Krueger notes that many countries revert back. One follow-up to this study would be to examine if the timing of a change of policy might influence economic growth.

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