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Trade Strategy and the Dependency Hypothesis: A Comparison of Policy, Foreign Investment, and Economic Growth in Latin America and East Asia*

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Introduction

The role of state policy in the industrialization of Third World nations has become the subject of increasing interest in recent years. In the past, the debate over economic development has either focused on the traditional modernization approach¹ or the dependency theory of underdevelopment.² Dependency theorists base their model of development on the belief that foreign investment from core countries is harmful to developing nations' long-term economic growth. Economic relationships between the core and the periphery are structurally detrimental for the latter because of the inherent dynamics of international capitalism. Yet, despite the claims of dependency theory, the recent experience of the East Asian newly industrialized countries suggests a wider range of development possibilities which include government policies specifically designed to attract foreign investment. These countries appear to have structured their domestic economies in order to mitigate the pernicious effects of dependent relationships with core countries. This raises new questions about the development process and the role of policy and foreign investment in the economic transactions between core and peripheral countries.

Dependency theory, a neo-Marxist predecessor of world-systems research, claims that First World nations become wealthy by extracting surplus labor and resources from the Third World. Capitalism perpetuates a global division of labor which causes the distortion of developing countries' domestic economies, declining growth, and increased income inequality.³ Those countries on the periphery cannot become fully modernized as long as they remain in the capitalist world

system. To get out of this economically debilitating relationship, Third World nations must develop independent of foreign capital and goods. Applied specifically to Latin America by the dependency theorists, this theory became an ideology and the basis for official policy in the 1970s and was predicated on import substitution and a hostile attitude toward foreign investment. Import-substituting industrialization attempts to generate wealth through the domestic production of goods that were previously imported from the international market. It is accomplished through tariffs and other barriers which make foreign goods less competitive with local manufacturing. This type of protectionist strategy can produce economic growth for a finite period of time but is not a permanent development solution because it causes higher prices and the market for consumer and industrial goods eventually becomes saturated. These inwardly oriented policies appear to have had a harmful effect on Latin American economies, particularly those in the Southern Cone, which have done poorly in the last decade.⁴ Not all Latin American countries have had the same economic experience. Brazil had moderately open policies toward foreign investment for many decades, large amounts of foreign investment, and until recently sustained real economic growth.⁵ However, these policies generally represent an exception to those of the region.

In contrast to most of Latin America, the East Asian countries have sustained economic growth despite dependency on core countries.⁶ Countries such as Taiwan and Korea used import substitution strategies in the 1950s and deliberately shifted to export-led growth in the early 1960s. Hong Kong and Singapore, as entrepot economies, have long been outward oriented with brief periods of import-substituting industrialization.⁷ One aspect of these policies was to deliberately attract foreign investment into the domestic economy. This entailed foreign capital inflows through tax exemptions and investment guarantee treaties. These policies are concomitant with economic growth in East Asia during the 1970s and 1980s.

The basic contention of this article is that dependency theory cannot explain the experience of the Pacific Rim nations and therefore is not a general explanation for Third World economic development. Although it may be appropriate as a partial explanation of Latin America's economic underdevelopment, it is unable to describe the full variety of economic relationships that exists between core and peripheral countries. These interactions produce differing outcomes depending on nations' policies, endowment of natural resources, proximity to other countries, and unique historical heritage. The dependency approach to development may be applicable to specific regions of the world at certain historical periods, but its ability to generalize to other cases is limited.⁸

Background and Theoretical Propositions

One of the central propositions of the dependency hypothesis is that international capitalism underdevelops Third World nations. If surplus wealth is taken from the Third World by multinational corporations, the economic performance of developing countries suffers to the benefit of foreign capital. The profits that accrue from use of indigenous labor and resources are not reinvested in the host country, and this stifles development. This flow of wealth could be measured by the multinationals' net profits overseas. Developing countries gradually lose control of their domestic economy or suffer distorted development. If the dependency theory is valid, one would expect that rates of economic growth are slower the higher the level of foreign capital penetration into the domestic economy (fig. 1).

The dependency school arose as a response to the traditional theories about modernization that were popularized by Rostow and others in the 1950s. In the modernization theory, all countries go through a similar set of economic stages of growth which eventually culminate in a fully industrialized society. Capitalistic development is presented as an entirely beneficial economic process that propels industrialization and the transformation of Third World nations into modern societies. In addition to Rostow, members of the Chicago school, such as Milton Friedman, claimed that free trade was the key to economic growth and that autonomous development was detrimental to it. Both positions had adherents in Latin America who tried to implement these beliefs through policy. Developed within the United Nations Economic Commission for Latin America, the dependency approach claimed that underdevelopment was a condition imposed and fostered by the capitalist system. Modernization would never happen in some regions because their underdevelopment furthered the interests of foreign capital.

Though countries attempting to develop autonomously often employ import substitution or protectionism, the latter policies do not necessarily imply hostility toward foreign capital. Protectionist legislation, used by some nations to shelter domestic production from foreign competition, can be a separate issue from policies concerning foreign investment, ownership, and operations of multinational firms. How-

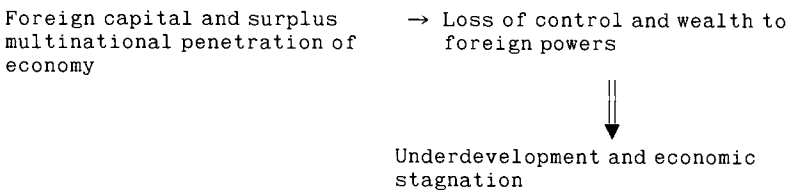


FIG. 1.—The dependency hypothesis

ever where autonomous development is favored, protectionism is also likely to find support because restrictions on imports and foreign ownership concomitantly reduce dependency on the international economy. In the countries studied here protectionism and import substitution are part and parcel of a strategy based on the ideal of economic autonomy.

Another set of explanations of underdevelopment was created by Immanuel Wallerstein, who argued that capitalism created a world system that was globally stratified into a core, a semi-periphery, and a periphery.⁹ This relationship was shaped by economic and technological imperatives which allowed Europe to turn premodern indigenous societies into colonies that provided them with labor and resources and new markets. The global system of stratification served to increase the wealth of the core countries that actively sought to keep the periphery underdeveloped in order to exploit it better. Therefore, the peripheral nations were kept in an economically backward state so that the industrialized nations could accumulate wealth.

The Wallerstein world system built on the work of dependency school theorists and shared many of the same essential principles. Capitalist development via foreign capital only benefits the First World nations and serves to underdevelop the Third World. The dependency school believed that the only way to industrialize in a way that benefited Third World nations was to remove foreign capital and goods from their economies through import substitution and protectionist measures. These policies, coupled with nationalist sentiments, particularly in Latin America, became an ideology in which foreign capital was portrayed as being intrinsically harmful while domestic industry and capital were inherently beneficial to the country.

Wallerstein's model presents economic development in a mechanistically deterministic manner where every nation's future is shaped solely by its historical position in the world system. Strategies for growth and national policy have no impact on development because the world system as a whole determines a country's destiny. Ostensibly, there is no way out of the world system short of becoming economically autonomous from it. The model also oversimplifies the characterization of the economic actors. Multinational corporations, for example, are seen as entities representing the core's interests whose motivations and actions stem entirely from their position in the world system. This is theoretically problematic because it implies that foreign investment has a different economic effect depending on which country it comes from. Is all foreign investment necessarily detrimental to the peripheral country or only when it comes from the core? The theoretical mechanisms by which foreign investment and dependency are expected to interact are unclear.

H. B. Chenery and P. Eckstein present an alternative develop-

ment model based on data from Latin America.¹⁰ In this model, foreign investment is conducive to domestic development by providing needed capital that the domestic economy is unable to produce. In the long term, inflows of capital reduce external resource costs by helping to promote exports and import substitution. Foreign investment may compensate for a low rate of savings or a gap between the value of exports and imports. In this manner, foreign investment temporarily fills these potential gaps in savings and trade and is positively related to economic growth. Inflows of foreign capital foster economic development and may eventually reduce dependency.

Asian Development and Dependency Theory

In contrast to Latin America, some of the East Asian nations have experienced economic growth in the context of dependent development. This has been accomplished through consciously formulated state policies. During the 1950s and early 1960s some of the East Asian nations developed with import substitution and protectionism. The economies of such nations as Korea and Taiwan were inward oriented in the same way that many Latin American nations are today. However, policies were later initiated to attract foreign investment, and this has produced flexible, dynamic economies with high rates of growth. The essential questions here are: To what extent have their improved economic conditions been the result of these policies? What is the appropriate role of the state in regulating economic activity? If these policies can be shown to be responsible for faster economic growth, could they be duplicated in newly industrialized countries in other regions of the world?

The Asian policies of export-led growth of the 1960s and 1970s were based on a strategy which was responsive to changes in the world economy and included attempts to attract foreign investment. Taiwan, Hong Kong, and Singapore all have relatively small domestic markets and resource bases. Given the exhaustion of import substitution by the 1960s, export-led growth became a necessity.¹¹ The second set of would-be newly industrialized countries (NICs), Malaysia, Indonesia, Thailand, and the Philippines, can still count on internal growth because of larger domestic markets and natural resource bases available to them. Therefore, an export-led strategy that includes agrarian reform and production of industrial and consumer goods is not necessarily desirable or plausible in countries where the domestic economy still offers a basis for growth. Some of the Asian countries have used varying degrees of protectionism in order to assist newly formed industries in computers and automobiles, for example, as in the case of South Korea. Therefore, an outward-oriented strategy may contain import-substituting measures such as import controls.¹² The basic principle of an outward-oriented strategy is that the aggregate effect of all policies

should be to neither discriminate in favor of exports nor bias against import substitution.¹³ In South Korea, protection of domestic manufacturing is balanced by export incentives. Inward-oriented countries, such as Chile from 1963 to 1973, have direct controls, quotas, and licensing schemes on the export sector in addition to incentives for domestic protection.

In some outward-oriented economies openness to foreign capital is decreasing as the prosperity of the country increases. This suggests foreign multinationals might have only a temporary place in export-led growth. Both South Korea and Taiwan have relied on martial law to maintain order over populations that want economic and political reforms; it should not be assumed that liberal trade policies are necessarily consistent with democratic practices or open regimes, at least not initially. Export-based policies seem to fit into an overall process of development, which at different times includes both outward- and inward-oriented economies.

The experience of the Asian NICs directly challenges many of the tenets of the world-system approach and the dependent development school. R. E. Barrett and M. K. Whyte argue that Taiwan meets all the criteria of dependent development and yet has not displayed any of the expected signs of economic consequences.¹⁴ Taiwan was a Japanese colony from 1895 to 1945 and therefore had its economic infrastructure established from without. It received aid from the United States in the 1950s and foreign investment in the 1960s.¹⁵ Accordingly, Taiwan should have exhibited disadvantageous economic aspects of dependency by the 1980s, yet this has not occurred. Therefore, the dependency theory does not have universal applicability. Others have argued that Taiwan's particular historical experience as a Japanese colony and recipient of U.S. aid produced a unique infrastructure favorable to economic growth.¹⁶

Any comparison of Latin America and East Asia must recognize the historical differences that make cross-national analysis difficult. The colonial experiences of these areas differ greatly and might make dependency theory more applicable to Latin America. For instance, though Taiwan and Korea were Japanese colonies they never experienced the large-scale migrations of settlers as did Latin America. Furthermore, the colonial economy of Latin America was clearly established as a permanent social structure designed to send raw materials back to Europe. While some of the Asian countries, such as Indonesia and Malaysia, were colonized, there was no permanent settlement of these countries by Europeans. Yet, in the East Asian countries the small farmer became an established element of the social structure and economy. These variations in national development necessitate new interpretations of the dependency theory.

Although the theory implicitly recognizes that policy does play a

role in economic development, the full ramifications are never developed. Policy is intrinsically linked with the state, and a theory that attempts to explain variations in development must deal with this relationship. If the state can establish import-substituting strategies can it also successfully encourage export-oriented industries as a basis for growth? Developing nations may be able to alter the perceptions of investors in such a way as to attract an inflow of foreign capital. Also, foreign investment might have different economic effects depending on existing state policies. Therefore, official policies could affect how foreign investment interacts with the domestic economy.

Countries that have outward-oriented policies are expected to attract more foreign investment, while the opposite would be true of autonomously developing nations. This is because those outward-oriented countries produce for both domestic and foreign markets. One relevant criticism of the Asian development model is that its economic policies could be a function of its linkages with the First World. F. C. Deyo suggests that aid and loans from the United States in the 1950s to South Korea and Taiwan could have had institutional consequences that affect current economic policy.¹⁷ Similarly, Hong Kong's liberal trade regulations are a function of its status as a colony of Great Britain. S. Haggard and T. Chang point to unique conditions fostering East Asian development, specifically relations with Japan and the United States, which would be unlikely to exist elsewhere.¹⁸

Empirical Studies

Dependency theory has been the subject of many empirical studies in recent years, particularly concerning the effects of foreign investment on economic growth and income inequality. These studies can generally be divided into two groups: those that look either at accumulated foreign investment (stocks) or at current investment (flows), and some that analyze both.¹⁹ V. Bornschier and C. Chase-Dunn argue that foreign investment has a short-term positive effect on economic growth and a long-term negative effect. C. Stoneman was one of the first to test for these effects and found they were supported by data from a world sample taken in the 1950s and 1960s. In Stoneman's study, stocks and flows are basically found to have equal but opposite effects, which is consistent with the theory. Other comparable studies have been done using larger samples and other measures of dependency.²⁰ In general, the results of these efforts show that flows of foreign investment do indeed have a short-term positive effect on economic growth.

P. Evans and M. Timberlake focus on the role of foreign investment and technology in creating pernicious changes in the structure of the labor force.²¹ Specifically, they argue that dependency creates growth in the tertiary labor market and the bulk of these new jobs are unskilled and low paying. This uneven growth of the labor market is

harmful in the long run and evolves solely to meet the needs of foreign capital.

M. B. Dolan and B. W. Tomlin weight foreign investment by the square root of energy consumption times the population of the country for the same reasons.²² A common way to standardize foreign investment is to divide by the gross domestic product (GDP), as is done in this study. This method for standardization is justified because it controls for the economic output of the countries in the sample through the original process of selection: only middle-income nations have been selected.

J. D. Sachs argues that regulation of multinationals is a self-fulfilling prophecy for Third World states.²³ This notion is supported by V. Bornschier and C. Chase-Dunn, who argue that regulation of multinationals is empirically linked with declining growth rates.²⁴ Paradoxically, countries that impose few regulations provide no incentives for unfair trade practices and so establish a more straightforward investment climate. It appears then that perceptions of economic interactions between investors and host countries can have significant outcomes for development.

R. W. Jackman points to the internal theoretical contradictions within dependency theory and concludes that foreign investment has a positive effect on wealthier Third World countries and no effect on the poorer ones.²⁵ Furthermore, Jackman is able to show that the effect of foreign investment on economic growth is spurious when crude birth rates are included in the equation. Countries with high fertility experience slower growth per capita GNP regardless of their level of dependency.

The relationship between population growth and economic development is complex. A steady-state economy with a constant rate of consumption and savings that experiences rapid population growth will suffer lower levels of per capita consumption. However, there is also some evidence that population growth may be a catalyst for economic growth. Such factors as the size of labor force, economies of scale, and population-induced innovation all relate positively to economic growth.²⁶ Nevertheless such variables as age-sex structure, migration, and institutional effects create additional interactions such that the effect of population growth on economic growth varies according to the conditions in each country.

A Policy-Development Model

In the following sections I present a model of the way in which national trade strategy, foreign investment, and economic growth might interact. I am specifically interested in testing the proposition that semiperipheral states can make a difference in their economic conditions through consciously formulated policy. In Latin America, a policy of

Latin America

Inward-oriented policy → Import substitution closed to foreign investment → Slow growth

East Asia

Outward-oriented policy → Favorable to export-led growth conducive to foreign investment → Rapid growth

FIG. 2.—The policy-development model applied to Latin America and East Asia.

autonomous development leads to an inward-oriented economy based on import substitution, while the outward-looking Asian countries seek economic interaction with the international economy, which leads to growth (fig. 2).

Figure 2 presents a simplified hypothetical model that could generally describe Latin American and East Asian development. Here, policy is expected to attract or repel direct foreign investment. Two dichotomous types of policy are defined: import substitution and export-led growth. These policies are official policy and determine the investment climate for foreign capital. Foreign investment affects economic growth by stimulating the domestic economy and creating new industries. Growth is expected to be slower where there is little foreign investment.

In addition, the current level of development, as measured by the population growth rate, is included in the regressions to determine its effect on flows of foreign investment (see table 2). With the exception of the oil-based Middle Eastern countries, the population growth rate tends to be inversely related to per capita income.²⁷ Therefore, the population growth rate can be used as a proxy for the level of development. The expected direction of this relationship is uncertain because less developed nations with high rates of population growth may be as favorable to foreign investment as countries with more stable demographic characteristics.

Geographical regions could have unexplained effects on foreign investment—for instance, on the cultural perceptions of investors—and so are included in the regressions as well. Also, other factors, not measured here, might affect where multinationals locate their operations. These include the strength of unions, labor costs, the size of the domestic market, and other economic aspects. The region variables account for factors not specifically tested here. It also can be interpreted in a broader sense to include differential historical development such as length and type of colonialization.

Political instability is included as theoretical antithesis to state

policy. While favorable policy encourages foreign investment, state instability, as measured by unfriendly government takeovers, is expected to have a negative effect. Dependency theory has defined global relationships between the First World and the Third World in exclusively economic terms. However, dependency may also have political effects independent of the economic ones. Does dependency affect the stability of the state? If it can be shown that states can effectively mediate the effects of dependency through policy, then the theoretical tenets of the dependency hypothesis are weakened.²⁸ This model attempts to determine the relationship between political instability, defined as irregular transfers of power, and foreign investment.

The second part of this model investigates the causes of variation in economic growth (per capita gross national product growth rate, 1973–82). The same independent variables as above are tested, although their theoretical meanings change slightly in this context. In addition, per capita GNP in 1973 (GNPPC73) is added to regressions (6) and (8) in table 2 as a measure of the initial level of per capita wealth and acts as a control on the dependent variable. Also, the population growth rate is measured from 1965 to 1973 in order to provide a time lag with the average annual per capita GNP growth rate. The most relevant independent variable here is foreign investment. The effect of flows of foreign investment on economic growth is predicted to have a short-term positive effect. Most dependency theorists agree with this finding; however, here the length of the lag is slightly longer than short-term. The effect should still be slightly positive if the dependency theorists are correct. One problem is the disagreement over what constitutes a short-term or long-term lag. M. B. Dolan and B. W. Tomlin suggest that 3–6 years is long-term, while P. McGowan and D. Smith consider 8 years to be short-term.²⁹ Regressions (5)–(8) in table 2 in this article use an overall lag of 12 years which, judging by the length of time used in most dependency studies, can be considered medium-term. V. Bornschier and C. Chase-Dunn and J. L. Ray and T. Webster argue that dependency as measured by flows of foreign investment correlates positively with per capita economic growth.³⁰

In addition to foreign investment, the population growth rate is added to the equation as a control variable to test for a negative relationship with economic growth in a similar way to Jackman. Though Jackman used crude birth rates, the relationship here is expected to be the same. Also, political instability is expected to have negative consequences on the economy and is included as another intervening variable. Here again, it is possible that the actions of the state supersede the effects of foreign investment and dependency relationships. Long-term economic growth is, in fact, highly dependent on state intervention and the efficacy of the political system.

State policy can have an effect on economic growth independent of foreign investment through the organization of the economy and general economic policy. Three categories of policy need to be examined: inward oriented, neutral, and outward oriented. These categories define the orientation of the country toward the international economy and they might also indirectly affect economic growth independent of foreign investment.

Methods

The analysis attempts to break the model down into two relationships. The first regression in table 2 tries to ascertain the effect of government policy on flows of direct foreign investment which is measured and summed from 1970 to 1973 and standardized on the summed GDP for the same period. In some countries, foreign investment tends to fluctuate greatly from year to year. For this reason the foreign investment variable is averaged over 4 years in order to increase the reliability of the measure. The specific time period 1970–73 is chosen because it allows for a lag with the period of per capita economic growth, 1973–84. This takes into account the multiplier effect of investment that manifests itself in the economy later on. This measure of foreign investment does not include loans or other public aid flows, and the data were collected from a sample of 41 lower- and upper-middle-income East Asian, Latin American, Central American, Caribbean, and African countries.³¹

The point here is to see whether outward-oriented policies attract more foreign capital than their inward-looking, protectionist counterparts. Policy is measured by whether the economy is based on outward- or inward-oriented strategy. One dummy indicates an outward orientation and the other a protectionist, inward orientation. Countries that are neutral, meaning with no specific trade orientation, or that have mixed policies are in the omitted category.³² Nations with a more moderate policy, such as Brazil and Thailand, are also in the omitted category. Only those countries that have extremely outward- or inward-oriented policies were coded. This coding scheme, therefore, is designed to test only policy that is clearly representative of one approach or the other.

The first set of regressions, (1), (2), (3), and (4) in table 2, with foreign investment as the dependent variable, uses policy measured from 1963 to 1973. Hong Kong, the Republic of Korea, Singapore, and Taiwan are coded as strongly outward-oriented (OUTWARD73); Argentina, Chile, Dominican Republic, Peru, Turkey, Uruguay, and Zambia as strongly inward-oriented (INWARD73).

In addition, two other measures, the average annual population growth rate for 1960–70 (POPGR70) and the number of irregular execu-

tive transfers (COUPS) between 1963 and 1973, are included in order to help explain regional effects. Population growth rate is included to determine if Jackman's results are replicated in regard to population growth's negative effect on per capita GNP growth. In the first four regression equations the population growth rate, 1960–70, is used as a control variable by being regarded as a crude measure of the level of development. The measure of irregular executive transfers is used to determine if political instability has an effect on foreign investment.³³

Two region dummy variables are used to determine if foreign investment and economic growth are contingent upon unexplained factors associated with different geographical areas of the world. Asia and Latin America each have an associated dummy and the other regions such as the Caribbean, Central America, and Africa are coded with zeros in order to place them in the "OTHER" category. These nations are all middle income, and the smaller sample represents a core set of Asian and Latin American countries for comparison. The region categories are regressed on the dependent variables separately and together with the full equations in order to see whether region has an unexplained effect on foreign investment and economic growth. This is consistent with V. Bornschier and C. Chase-Dunn's findings that regions could have effects independent of other variables.³⁴ Overall, it is known that Asia and Latin America differ structurally, geographically, and culturally as well as in terms of policy, and the region variables are supposed to account for these variations.

The second test regresses economic growth, which is measured using the average annual growth rate of per capita GNP during 1973–82 (GNPPC), on foreign investment from 1970 to 1973 (FORINV). The measure of foreign investment is standardized on GDP in the same way as above. This adjusts the foreign investment to the size of each country's economy. The ratio of foreign investment to GDP is multiplied by 1,000 in order to move the decimal place of the coefficients for easier analysis of the regressions. The point here is to see if the lagged effect of foreign investment on per capita GNP growth is positive. Dependency theory explicitly states that foreign investment, including loans and officially sponsored aid programs, while initially stimulating to the domestic economy, produces negative effects on per capita GNP growth only in the long run. Economic growth is regressed on policy in order to determine if the latter has an indirect effect apart from foreign investment. The policy was coded for 1973–85, which corresponds to the years in which economic growth was measured. In this test Hong Kong, the Republic of Korea, Singapore, and Taiwan are strongly outward-oriented (OUTWARD85); strongly inward-oriented (INWARD85) nations are Argentina, Bolivia, the Dominican Republic, Nigeria, Peru, and Zambia.

Additionally, per capita GNP in 1973 (GNPPC73) is included as a

control for the initial levels of economic development. The population growth rate for 1965–73 (POPGR73) is used to test if economic growth is related to population growth. Middle-income countries with higher rates of population growth might be expected to sustain slower economic growth in the short run. Also, the measure of political instability for 1963–73 (COUPS) is included to test for its effect on economic growth.

The regression analyses are divided into two samples: one includes the larger world sample and the other consists of only Asian and Latin American countries. The point of this study is to compare Asia and Latin America; however, the world sample is included as well in order to determine if the same relationships between variables apply in other regions. Questions regarding the role of policy have focused mainly on Asia and Latin America because of the apparent contrasts between them. However, the role of foreign investment in economic growth, as well as population growth and political instability, is relevant in all countries, which justifies a world sample.

The regression analyses themselves are done using weighted least squares procedures. Because the residuals for foreign investment and gross domestic product are dependent on the size of the country, the variances of the error terms are unequal due to heteroskedasticity.³⁵ Each case is weighted by the inverse of the difference between the predicted value in ordinary least squares (Appendix B) and the observed value. This has the effect of reducing the weight of those cases that have the greatest error terms. Another problem with the distribution of foreign investment is that it is positively skewed as a result of the relatively small inflows to Latin America compared to Asia; weighting serves to correct this problem as well. The OLS and GLS regressions are both included for comparison. The *t*-tests are performed with only one tail because the expected direction of the beta coefficients is in one direction. Where $p < .1$, the test is considered significant.

The point of this analysis is, first, to determine whether nations' policies affect the amount of foreign investment they receive. This is useful in understanding the extent to which internal political and economic processes and structural arrangements affect external phenomena such as decisions made by multinational firms. Are developing nations vulnerable to the effects of foreign capital, or do their own decisions have an impact on the activities of multinationals? Second, does foreign investment have uniform and predictable effects on developing economies as dependency theorists claim? Many other variables, such as the initial level of modernization or the culture of the region, may have an important impact on how an economy develops. If policy has a significant impact, then it shows that underdevelopment is not solely due to interference by outside economic powers. Rather, it

could be produced by the interaction between policies and investment, both foreign and domestic.

Results

Table 1 shows the means and variances of the variables in total sample and for each region. The table shows that the Asian countries receive more than 26 times the amount of foreign investment, relative to the size of their economies, as do the Latin American countries. It also appears that the mean level of foreign investment in Latin America is far lower than that of the total sample. The mean per capita GNP growth rate is more than twice as high in Asia as in Latin America and nearly four times that of the 21 middle-income countries in the "other" region category. The average annual population growth rate, 1965-73, for Asia and Latin America is slightly higher than the total sample. Latin America has had more political instability than Asia as measured by the number of coups d'état between 1963 and 1973. The regressions in table 2 are arranged with foreign investment and per capita GNP growth as dependent variables. The eight regression equations are designed to test, first, the hypothesis that the effects of policy, political instability, and the level of development are in fact the explanation for different levels of foreign investment. Second, that policy, political instability, foreign investment, and population growth explain per capita GNP growth.

In the first regression, the region variables for both Asia and Latin America are highly significant with opposite signs. This shows that Asian countries inherently attract more foreign investment than Latin American countries. The omitted category contains those middle-income countries in the Caribbean, Central America, and Africa. In the second regression, the magnitude and significance of the Asia region dummy disappears while the Latin region dummy coefficient decreases slightly and becomes less statistically significant. This shows that some of the region effects on foreign investment are partly a result of other variables, particularly outward-oriented trade policy. The level of development, as measured inversely by the population growth rate, has a negative effect on foreign investment but is not significant. Political instability has a negative effect on the dependent variable but is only marginally significant ($p < .13$).

In regression (3), the smaller Asia/Latin America sample, region again has a large, significant effect on foreign investment. The omitted category is Latin America, and the Asia coefficient shows a strong positive effect. When the other variables are included in the full regression (4), the effect of the region dummy variable decreases and is no longer statistically significant. As in regression (2), outward-oriented policy has a large significant, positive effect. Inward-oriented policy has a smaller negative effect on foreign investment but is not signifi-

TABLE 1
MEANS AND VARIANCES

	<i>N</i>	Means	SD
Total sample:			
Foreign investment	41	13.47	24.99
Per capita GNP	41	2.12	2.55
POPGR73	41	2.34	.86
COUPS	41	.44	.81
Asia:			
Foreign investment	9	24.76	24.10
Per capita GNP	9	4.30	2.29
POPGR73	9	2.40	.41
COUPS	9	.00	.00
Latin America:			
Foreign investment	11	.93	8.59
Per capita GNP	11	2.15	2.34
POPGR73	11	2.45	.85
COUPS	11	1.00	1.10
Other:			
Foreign investment	21	15.19	28.86
Per capita GNP	21	1.17	2.26
POPGR73	21	2.25	1.01
COUPS	21	.33	.66

cant. This supports that part of the policy-development model trying to explain differential levels of foreign investment in Asia and Latin America and indicates that protectionism and import substitution might be inimical to foreign capital. Also, political instability has a positive but marginally significant effect ($p < .13$). Overall, these four regressions show that policy affects foreign investment and that political instability may also have effects.

The next set of regressions looks for effects of the independent variables on economic growth. In the world sample, regression (5), the Asian region, has a significant, positive effect; however, Latin America also has a less significant, smaller, positive effect with respect to the omitted region. This means that middle-income countries in Asia and Latin America enjoy higher rates of economic growth than those in the other areas of the world. The effect of Asia on economic growth decreases in the full regression (6), while Latin America increases slightly and becomes more significant, which indicates unexplained region effects on economic growth. Outward-oriented policy, however, has a significant, positive effect on economic growth, while the inward-oriented policy dummy has an equally large negative effect. Given the range of the dependent variable, per capita GNP growth rate, the effects of policy here can be considered large. Therefore, Latin American countries do not necessarily experience slower economic growth per se—the Latin region coefficient is positive—but

PER CAPITA GNP GROWTH

	Total Sample				Asia/Latin			
	(5)		(6)		(7)		(8)	
	β	SE(β)	β	SE(β)	β	SE(β)	β	SE(β)
ASIA	3.102	.475**	1.741	.455**	1.930	.576**	1.137	.894
LATIN	1.171	.490*	1.874	.388**	...	...	...	...
OTHER	...	...	...	...	...	...	...	...
OUTWARD85	...	...	2.480	.840**	...	...	1.789	.898*
INWARD85	...	...	-2.321	.553**	...	...	-3.249	.598**
NEUTRAL85	...	...	...	...	...	...	...	...
FORINV	...	...	.007	.012	...	...	...	...
GNPPC73	...	...	-.000	.000	...	...	-.008	.017
POPGR73	...	...	-.588	.280*	...	...	.001	.001*
COUPS	...	...	-.505	.273*	...	...	-.097	.661
CONSTANT	1.279	.253**	3.079	.875**	2.450	.427**	-.061	.563
Adjusted R ²	.5252**			.7129**		.3503*	1.838	2.435
			N = 41				N = 20	

* $p < .10$; one-tailed significance test.

** $p < .02$; one-tailed significance test.

those attempting autonomous development do. This is clear evidence that economic performance is partially contingent on official policy. The population growth rate has a smaller, significant negative effect on economic growth. Political instability also has a small, significant negative effect. This indicates that factors independent of official policy, region, or position in the world system are important—and this lends some support to the theory presented in this article. Most important, foreign investment has no effect on medium-term economic growth, which is inconsistent with the conclusions derived from both the policy model and the dependency hypothesis. Here, policy, region, demographic, and, possibly, political factors are more important than economic dependency.

The smaller Asia/Latin sample, regressions (7) and (8), shows different results with respect to region. The effect of Asia is significant in the restricted regression and smaller and insignificant when added to the full regression. The policy variables for the outward-oriented, and especially for the inward-oriented, economies have large, statistically significant effects in regression (8). The control variable, per capita GNP 1973, is also significant but the beta coefficient is very small. When per capita GNP 1973 is removed from the regression, the statistical significance of outward-oriented policies increases. Therefore, some of the apparent effects of outward-oriented policy on economic growth might in fact be due to a greater initial amount of per capita wealth in these East Asian countries in 1973 compared to the others. The effects of region in the restricted regression (7) appear to be caused by economic policy and the initial level of development. The population growth rate and political instability are negatively correlated with economic growth in regression (8) but are very small and statistically insignificant. Overall, these results imply that economic growth in Asia and Latin America is a function of policy rather than foreign investment.

The above results are not consistent with predictions of the dependency theory and lend some support for the policy-development model specified in this article. Outward-oriented economies, while more dependent on foreign capital, have faster economic growth than both the neutral and inward-oriented, less dependent nations. Most important, however, and contrary to earlier studies, foreign investment has no appreciable effect on economic growth using a lag of approximately 1 decade. That political instability and the population growth rate may have a negative effect on both foreign investment and economic growth reveals another aspect of the development process that should be examined.

It is apparent that official policy has an effect on economic growth which is not related to foreign investment and cannot be totally explained by the variables used in this regression analysis. The exact

mechanisms by which policy affects economic growth is likely to be related to other macroeconomic factors that link domestic and international markets such as exchange rates, price controls, and fiscal incentives.³⁶

Another result of this regression analysis is that region, in the world sample as a whole, has an independent, unexplained effect on economic growth and possibly on foreign investment. Specifically, the Latin American countries attract a significantly lower level of foreign investment than those in other regions. This regional difference is partly explained by policy and political instability, as shown by regression (2), but cannot be fully explained solely with the variables used here. Asian and Latin American regions also experience greater economic growth relative to middle-income countries in other parts of the world (regression [6]). V. Bornschieer and C. Chase-Dunn attribute these regional differences to prior levels of development, outliers, market size, or spuriousness.³⁷ Throughout dependency research, region has been an important unexplained variable and the results of the previous tests show that regional effects are only partly explained by political and demographic factors.³⁸

Conclusion

In this study I have attempted to test two opposing models of development in order to determine their usefulness in evaluating the recent experience of developing nations. I have shown that the inflow of foreign capital is affected by many factors, including regional effects, economic policy, and possibly political instability, which previously have been assigned a secondary role in dependency research. Other variables, which were not tested here, such as the quality of the labor force, labor costs, union organization, the size of the domestic market, and consumer purchasing power, could also affect where foreign capital is invested. Most important, official economic policies within Asia and Latin America were shown to be highly relevant factors in the explanation of foreign investment and economic growth.

Medium-term economic growth appears to have little to do with foreign investment and is most strongly correlated with regions and economic policies and to a lesser extent with demographic variables and political instability. Among other things, this suggests that states play a significant role in the development process. Unstable governments are as detrimental to growth as coherently formulated policies are beneficial.

The role of the state in the regulation of the economic environment is likely to be a variable rather than a constant. For instance, in the 1980s the economic policies of the Asian countries have converged with those of Latin America to the point where they are now very similar. South Korea and Brazil are now considered to have equally

stringent regulations on foreign investment.³⁹ Therefore, the exact nature of the relationship between policies and foreign capital is a complex one and not easily reduced to one theory or model. Specifically, although it can be shown that the outward-oriented countries have faster growth rates, this does not mean that all countries could easily adopt these strategies.⁴⁰

From this research, however, both the large and small samples demonstrate that the best predictors of foreign investment are region and policy. Outward-oriented economies encourage foreign investment while inward-looking policies may have the opposite effect. Second, economic growth is clearly related to region, policy, population growth rate, and political instability in the world sample, and to policy in the smaller sample. The effect of official policy on economic growth is considered indirect because the nature of the interaction remains theoretically unspecified once flows of foreign investment are removed as an intervening variable. Therefore, the policy-development model presented in this article can be substantiated but not wholly confirmed with the methods and variables used here; state policies affect economic growth but not via foreign investment.

Empirically, this study does not find support for the dependency theory. Foreign investment does not have an effect on middle-term growth in middle-income countries within the time frame used here. Nonetheless, some disproof for the theory is found in the fact that East Asia currently has faster growth rates than less dependent areas despite large inflows of foreign capital. Therefore, dependency theory appears underdeveloped specifically with respect to the role of the state in shaping the economic conditions of developing nations. If policy can be used to foster autonomous development, then the prospect that the state can deliberately encourage other types of development deserves further investigation.

Appendix A
List of Lower- and Upper-Middle-Income Countries⁴¹

<i>Asia</i>	<i>Latin America</i>	<i>Other</i>
Hong Kong	Argentina	Algeria
Indonesia	Bolivia	Cameroon
Korea	Brazil	Costa Rica
Malaysia	Chile	Dominican Republic
Papua New Guinea ⁴²	Colombia	El Salvador
Philippines	Ecuador	Guatemala
Taiwan	Mexico	Greece
Thailand	Paraguay	Honduras
Singapore	Peru	Israel
	Venezuela	Jamaica
	Uruguay	Mauritania
		Mauritius
		Morocco
		Panama
		Portugal
		South Africa
		Trinidad/Tobago
		Tunisia
		Turkey
		Zambia

Appendix B
Ordinary Least Squares

TABLE B1
DETERMINANTS OF FOREIGN INVESTMENT, 1970-73 AND PER CAPITA GNP GROWTH, 1973-82

	FOREIGN INVESTMENT							
	Total Sample				Asia/Latin			
	(1)	(2)		(3)	(4)		(4)	
β	SE(β)	β	SE(β)	β	SE(β)	β	SE(β)	SE(β)
ASIA	9.572	9.596	-.147	12.107	23.832	7.712**	9.017	13.612
LATIN	-14.259	8.965	-7.549	10.058	.....	.....	.....	.....
OTHER	.....	.....	.....	.....	.....	.....	.....	.....
OUTWARD73	.....	.....	12.200	16.018	.....	.....	12.091	12.326
INWARD73	.....	.....	-17.716	11.799	.....	.....	-9.148	16.984
NEUTRAL73	.....	.....	.....	.....	.....	.....	.....	.....
POPR70	.....	.....	-8.556	6.286	.....	.....	-9.640	11.179
COUPS	.....	.....	-6.864	6.111	.....	.....	-6.738	7.613
CONSTANT	15.62	5.256**	42.211	18.456*	.931	5.214	35.974	38.581
Adjusted R^2	.0712*		.0887		.3066**			.2236
								N = 20
								N = 41

PER CAPITA GNP GROWTH

	Total Sample			Asia/Latin				
	(5)	(6)	(7)	(8)	(8)	(8)		
β	SE(β)	β	SE(β)	β	SE(β)	SE(β)		
ASIA	3.129	.911**	1.585	1.056	2.1455	1.041*	.326	1.475
LATIN	.983	.851	1.987	.849*	...	...	...	...
OTHER	...	...	...	...	...	...	...	...
OUTWARD85	...	...	2.547	1.423*	...	...	2.051	1.443
INWARD85	...	...	-2.364	.975**	...	...	-3.402	1.439*
NEUTRAL85	...	...	...	...	...	...	...	...
FORINV	...	...	-.007	.016	...	...	-.022	.030
GNPPC73	...	...	-.000	.001	...	...	.001	.001
POPGR73	...	...	-.717	.501	...	...	-.143	1.062
COUPS	...	...	-.676	.552	...	...	-.425	.926
CONSTANT	1.171	.490*	3.565	1.567*	2.1545	.6984**	3.252	3.636
Adjusted R^2	.1968**	.3515**			.1459*			.3881*
			$N = 41$				$N = 20$	

* $p < .10$; one-tailed significance test.

** $p < .02$; one-tailed significance test.

Appendix C**Description of Variables Used in the Analysis**

Dependent variable: Foreign investment flows, 1970–73, standardized on gross domestic product

Source: *International Financial Statistics* (International Monetary Fund)

<i>Independent Variables</i>	<i>Description</i>	<i>Source</i>
ASIA, LATIN, and OTHER	Region dummies	By region
OUTWARD73, INWARD73, and NEUTRAL73	Trade policy dummies, 1963–73	<i>World Development Report</i> (1987)
POPGR70	Average annual population growth rate, 1960–70	<i>World Bank Atlas</i> (1972)
COUPS	Irregular executive transfers, 1963–73	<i>World Handbook of Political and Social Indicators</i> (1983)

Dependent variable: Average annual per capita economic growth, 1973–82

Source: *World Development Report* (1983)

<i>Independent Variables</i>	<i>Description</i>	<i>Source</i>
ASIA, LATIN, and OTHER	Region dummies	By region
OUTWARD85, INWARD85, and NEUTRAL85	Trade policy dummies, 1973–85	<i>World Development Report</i> (1987)
FORINV	Foreign investment, 1970–73 (standardized on GDP)	<i>International Financial Statistics</i> (1976–85)
GNPPC73	Per capita GNP, 1973	<i>World Bank Atlas</i> (1974)
POPGR73	Average annual population growth rate, 1965–73	<i>World Development Report</i> (1987)
COUPS	Irregular executive transfers, 1963–73	<i>World Handbook of Political and Social Indicators</i> (1983)

Notes

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sary data. For Hong Kong, Argentina, and Uruguay, estimates were made where data are missing. Also see the Organization for Economic Cooperation and Development's *Geographical Distribution of Financial Flows to Developing Countries* (Paris, 1983); United Nations, *National Legislation and Regulations Relating to Transnational Corporations* (New York: United Nations Center on Transnational Corporations, 1978, 1980, 1986), vols. 2, 3, 4; United Nations, *Salient Features and Trends in Foreign Direct Investment* (New York: United Nations Center on Transnational Corporations, 1983); Council for Economic Planning and Development, *Taiwan Statistical Data Book* (Taipei, 1983).

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42. According to the *World Development Report 1990*, Papua New Guinea is considered an Asian country; see statistical appendix tables A 11 and A 12.