Sources of Investment and Economic Growth Rate in Non-Core Countries

Philip O. Sijuwade
School of Urban and Public Affairs, University of Texas, Arlington, Texas

Abstract: Firebaugh's refutation of Bornschier and Chase-Dunn much publicized contention that foreign investment inhibits economic growth focuses on two major points; foreign investment has a positive effect on economic growth, this positive effect is exceeded only by domestic investment and adding new data on the state coercive capacity, this study notes the following: Firebaugh's claim that foreign investment has beneficial growth effect is sustained. His argument that domestic investment has a greater effect on economic growth than foreign investment is confirmed only when levels of state coercive capacity are not controlled for. For those at the low and middle levels of state capacity, the positive effect of foreign investment on economic growth is at least as strong as the positive effect of domestic investment on economic growth. In other words, highly coercive states are likely to favor domestic capital much more than foreign capital. This favoritism declines at low and middle levels of the state coercive capacity. The implications of these findings for elite legitimacy and development are outlined.

Key words: Economic growth, investment, non-core countries, capacity, peripheral, development, Texas

INTRODUCTION

Bornschier and Chase-Dunn (1985)'s study on the debilitating growth effect of foreign investment in countries located in the periphery and semi-periphery of the world system has generated considerable subsequent research. Only a few scholars however, have questioned the reliability of that research (Firebaugh,1992; Firebaugh and Beck, 1994). Firebaugh (1992) finds that foreign investment has a positive effect on economic growth and that effect of foreign investment on growth is exceeded only by the effect of domestic investment on growth. In order to test Firebaugh (1992)'s path-breaking research, we would examine two key questions in this study; do positive growth effects of foreign and domestic investment require support from the state elite? does the effect of domestic investment on economic growth exceed that of the foreign investment regardless of the level of the state coercive capacity?

The controversy: The effect of the source of capital investment on economic growth in the periphery and semi-periphery has long been an important area of inquiry in sociology (Bornschier and Chase-Dunn, 1985; Boswell and Dixon, 1990; Wimberley, 1990; Firebaugh, 1992; Firebaugh and Beck, 1994; Dixon and Boswell, 1996). Two clear but contradictory arguments emerge from not so recent sociological research on the growth effects of various capital investments. On the one hand, world system/dependency oriented scholars claim that foreign investment, particularly the stock of foreign investment,

deters economic growth is positive and contributes to misery, exploitation and conflict (Bornschier and Chase-Dunn, 1985; Boswell and Dixon, 1990; London, 1988; Wimberley, 1990; Wimberley and Bello, 1992). On the other hand, Firebaugh (1992) finds that the effect of foreign investment on economic growth is positive. In a frontal assault on world system/dependency-oriented research in sociology, Firebaugh (1992) claims that the putative negative effect of investment dependence is an artifact. Nevertheless, he agrees with the world systems/dependency scholars that domestic investment tends to be better than its foreign counterpart (Firebaugh, 1992). Although, Firebaugh (1992)'s argument is closer to the predictions of conventional development economics, it still adheres to the long-standing concern in sociology with the source of capital investment and its implication for economic growth.

If domestic investment capital indeed contributes to more positive economic growth than foreign investment capital, does that mean domestic investors make wiser decisions have an edge over the know-how necessary to do business in a developing country or do they benefit from labor-repressive activities by the state more readily than foreign investors?

In conventional economic literature, models designed to explain economic growth in developing societies usually do not distinguish between the sources of investment capital (Harrod, 1939; Domar, 1946). The basic premise of these models is that all else constant, the greater the amount of investment capital, the greater is the

amount of growth in the economy. Later economists have examined the growth effects of different types of investments (Haln, 1965; Robinson, 2002). For example, Haln (1965) has demonstrated that different types of capital investment necessarily have different types of effects on the overall growth rate of the economy. Hence for economists, the issue has been the nature or type of investment not the origin or source of that investment. In other words, there is no necessary reason to believe that all else constant, the same amount of domestic and foreign investment will generate differential growth rates in the economy.

The conventional economists' argument that capital is capital and should contribute to positive economic growth, regardless of its origin is based on a fundamental assumption about the state. This assumption concerns the institutional neutrality on the part of the state (Robinson, 2002; Phelps, 2000). The neutrality could be ensured among others through unbiased monetary, fiscal and public investment policies.

However, it is hard to imagine a neutral state in the countries of the periphery and semi-periphery, especially if the state is engaged in a process of rapid structural/ industrial transformation. By manipulating fiscal and monetary policies and actively investing in critical sector of the economy, the state engages in a process of favoring certain groups at the expense of others. In addition, the state may engage in labor-repressive activities in order to promote capital accumulation and in turn, high economic growth (Duvall and Freeman, 2001; Bagchi, 1984). Depending on the nature of class alliance in an economy or lack of it, the potential benefits of the state capacities to undertake the above activities are divided unequally among the foreign and domestic investors. Put differently, the effects of foreign and domestic investment on economic growth may depend on the state capacity to undertake certain critical activities, be it in terms of state investment in infrastructure or state initiatives to repress labor and other popular sector groups. The failure to control for state capacity could mean that estimates of the effect of investment (foreign and domestic) on economic growth are biased.

Why is it necessary to control for state coercive capacity? Sociological research on the state has proliferated in the past 35 years. Some of these studies have attempted to operationalize important aspects of the state. State-centered studies often have subscribed neither to modernization theory nor to dependency/world system theory; the previously dominant approaches in the sociology of development. Although, state-centered studies by no means replaced the earlier two approaches,

they have opened new vistas for researchers to engage in state-based and in many cases, ambitious model-building. Of all the state-related indicators, coercive capacity seems the most important. Any other area of state activity is either directly or indirectly sustained by some amount of actual or perceived coercive capacity on the part of the state. Even at times of state inclination to privatize part of the public sector and liberalize the political system (as is evident in many countries of Latin America and Asia today), the notion of coercive capacity is fundamental. In this study, we use state coercive capacity as a proxy for all other state capacities. State coercive capacity refers to the state's potential to play the role of ultimate arbiter in the area of social conflict management. In many countries of the world, especially the ones located in the periphery and semi-periphery states have deterred and/or managed societal conflicts in order to ensure high rates of economic growth (Duvall and Freeman, 2001; Bradshaw, 1985; Pattnayak and Arvanites, 2002).

Citing the importance of the state, Stepan (1978) notes that any given state possesses a set of core administrative, legal, extractive and coercive organizations that attempt; not only to structure relationships between civil society and public authority but also within civil society as well. In the classical Weberian approach, the state must constitute a bureaucratic apparatus with sufficient corporate groups (Weber, 1968). In essence, both these assumptions are based on the existence of some amount of state coercive capacity. Coercive capacity enables a state to effectively counter a conflict of interest with dominant social groups. Its existence can also facilitate a convergence of interests with powerful groups such as foreign and domestic investors in the economy. Evans well-known dependent-development thesis gives credibility to the convergence of interest argument. Evans has proposed that as industrialization takes hold, a triple alliance of foreign capital, domestic capital and the state may form in countries undergoing industrial/structural transformation. Foreign investors are expected to supply the capital and technology required for promoting economic growth and domestic investors are expected to make the subsidiary investment critical for both the forward and backward linkages in the economy while the state is expected to protect these investments by enacting such measures as tariffs and import restrictions.

Since, the most common interest of the three participants in the alliance is rapid accumulation, it would be necessary to exclude and repress the urban popular sector (including organized labor). Under such a scenario, the state would gain in upper hand because it possesses the monopoly over repressive instruments. Its coercive

capacity in particular would be critical in ensuring success of the alliance. In many countries of the periphery, domestic capital is relatively weak and foreign investors win a larger share of state protection at the expense of domestic capital. In such cases, researchers expect the effect of foreign investment on economic growth to be stronger than that of domestic investment. Yet in other cases, domestic investors benefit more than their foreign counterparts so in these countries, the positive effect of domestic investment on economic growth is likely to be stronger than the effect of foreign investment.

Examples from East Asia, Latin America and Africa, demonstrate the point that state coercive capacity has really been at work, although at previously unquantified proportions. The overall effectiveness of the alliance would depend on the relative strength of the three components. More specifically because there is a wide fluctuation in the relative strength of foreign investment and domestic investment in the alliance, it would be unrealistic to expect a truly neutral state, acting in an impartial manner, trying its best to spread the costs and benefits of its protection equally across the foreign and domestic investors.

Accordingly, the effects of foreign and domestic investments on economic growth are expected to vary, contrary to the conventional economic hypothesis. These effects are also likely to vary across specific levels of the state coercive capacity. State elites promoting nationalist economic policies may favor domestic investors over foreign investors while distributing the subsidies and other benefits.

Of course, nationalist symbolism has a clear political goal to increase legitimacy on behalf of the regime. Based on the experiences of Brazil, China and Iran, it is possible to argue that highly coercive states promote a strong national identity, frequently situate themselves in an anti-foreign stance and are more likely to be biased toward domestic investors, even though they might still need to maintain some access to the capital, technology and markets controlled by foreign capital. This particular bias is less likely at lower levels of the state coercive capacity.

Hypotheses: In light of the recent controversy in sociology over the growth effects of foreign and domestic capital investments in countries located in the periphery and semi-periphery, this study hypothesizes the following: First, the effect of domestic investment on economic growth tends to be greatest in states with high levels of coercive capacity. Second, the relative effects of domestic and foreign investment on economic growth will depend on the level of the state coercive capacity.

MATERIALS AND METHODS

The data used for this study are for 1985-1997 and are taken from the world system sources. The additions have been the data on domestic investment stock and the data on state coercive capacity. This study uses the following variables; the average annual real growth rate of GNP per capital in percentage units, percent growth estimates for foreign investment and percent growth estimates for domestic investment. Researchers use the control variables used by both Bornschier and Chase-Dunn (1985) and Firebaugh (1992).

In addition, researcher uses a state coercive capacity indicator measured as the number of armed personnel per 1000 working population in 1985. The data are from The World Handbook for political and social indicators, 111 1948-1992 (Taylor and Jodice, 1985). This study uses the following variables; the average annual real growth rate of GNP per capita in percentage units, percent growth estimates for foreign investment and percent growth estimates for domestic investment.

Researcher uses control variables used by both Bornschier and Chase-Dunn (1985) and Firebaugh (1992). These are logged GNP per capita, logged GNP per capita squared, logged energy consumption per capita and the size of the export divided by the GDP. In addition, researcher use a state coercive capacity indicator measured as the number of armed personnel per 1,000 working population. The importance of a suitable indicator to measure state capacity cannot be overstated. For example, though state extractive capacity (which refers to the revenue generating capacity) has been widely used in cross-national research and development, it may not be a very appropriate indicator because most members of the working class are not in the top taxable category. Keeping that in mind, state coercive capacity is argued to be a better indicator of state capacity.

The operationalization of the state coercive capacity has presented problems to social scientists in the past. However, the military and/or security strength of the state has long been interpreted by modernization and institutionalist scholars as indicators of the state's coercive capacity. According to modernization theorists, high military expenditure is necessary in order to maintain a standing army and other security personnel. This is especially, the case during the immediate aftermath of political independence or a similarly intense transitional phase when order is necessary to facilitate growth in the economy. Also, since the army is generally one of the most involved parties in the transition to a post-colonial political system, military expenditure is normally a big part of the new central government's budget. Although, the

initial goal of the military is to maintain order and to build infrastructure that civilian might use, military expenditures are often used for repressive purposes. As the pace of industrialization intensifies, more members of the lower classes including the working class become politically mobilized.

Under such a scenario which Huntington (2008) calls mass praetorianism, the military begins to act as a conservative agent of the existing order. The state elites recruit more members in the army, build new arms manufacturing facilities and construct related infrastructure in order to preempt any threats to the existing order from outside and inside. Institutionalists have also conceived military related activities as indicators of state capacity or strength. There has been plenty of research to that effect (Warren, 1973). A strong or more capable state provides national economic security and is the most important source of investment capital. A strong state is necessary to enforce institutional control over the domestic economy. A state that possesses a strong military provides a solid backing to the economic and political positions of the state elite. Any challenge to state authority whether it emerges in the form of labor insurrection or external aggression is normally dealt with severely.

Institutionalist scholars also argue that states with stronger militaries are better able to pursue and implement economic policies than weak states. In brief, considerable military strength is required to give a state greater ability to accumulate and control investment capital. Indicators of the government's military expenditure as a percentage of GNP may not capture the actual coercive capacity of the state.

During 1965-1987 which was an important part of the cold war era, many nations in the periphery and semi-periphery received tremendous amounts of military assistance from either the NATO or the now defunct Warsaw pact countries. This assistance would not show up in any government expenditure figures. Therefore in order to capture this important dimension of the state, its coercive capacity is operationalized through the following indicator:

Total number of armed personnel per 1,000 working population: Although, it has not been widely used in previous cross-national studies of 3rd world modernization and development, it is highly conceivable that this indicator testifies to the degree of coercive control, states possess over their respective populations. A high level of coercive control increases the probability that societal conflict, in particular industrial conflict will be minimized or deterred (Pattnayak and Arvanites, 2002).

RESULTS AND DISCUSSION

Findings for the model without state coercive capacity (Table 1) are highly compatible with Firebaugh (1992) re-analysis of the Bornschier and Chase-Dunn data. Researchers follow Firebaugh's percent change model and examined the effect of percent change in both foreign and domestic investment on economic growth. Confirming Firebaugh (1992)'s findings, Eq. 1 shows that domestic investment has a greater positive effect on economic growth than does foreign investment. The adjusted R^2 is 50, quite compatible with 0.46 reported by Firebaugh. The direction of the effects is the same here as in Firebaugh's analysis. Note that researcher have 72 countries because of the listwise deletion technique used during the regression analysis. So, the sample has 4 fewer nations than Firebaugh (1992)'s and 16 fewer than Bornschier and Chase-Dunn (1985)'s. Considerable attention has been paid to the non-linear effect of initial level of development on economic growth (middle income nations tend to grow the fastest). Yet here, the variables logged GNP per capita 1985 and logged GNP per capita 1985 squared are so highly and positively correlated (0.99) that it makes no sense to include both in the same equation. Thus, Eq. 2 is estimated without logged GNP per capita 1985 squared. The adjusted R^2 improves from 0.50-0.51. Since none of the three control variables; market demand, exports and 1985 GNP per capita (logged) showed statistically significant effect in Eq. 2, they were excluded from Eq. 3. Only foreign and domestic investments were included in Eq. 3.

The effect of domestic investment, corroborating Firebaugh is positive, statistically significant and much stronger than the positive effect of foreign investment on economic growth. The previous equations were estimated

Table 1: Regression of economic growth rate on measures of foreign investment, domestic investment and selected controls with and without the measure of state coercive capacity[*]

Ratios	(1)	(2)	(3)	(4)
Foreign investment rate	0.28**	0.28**	0.30**	0.23**
	(2.82)	(2.85)	(2.92)	(2.28)
Domestic investment rate	0.41**	0.41**	0.47**	0.39**
	(4.14)	(4.21)	(4.52)	(4.00)
Control variables				
Market demand	0.18	0.18	-	-
	(1.47)	(1.47)		
Exports	-0.07	-0.06	-	-
	(-0.72)	(-0.70)		
1985 GNP per capita log	0.59	0.17	-	-
	(0.29)	(1.45)		
1985 GNP per capita log squared	-0.42	-	-	-
	(-0.21)	-		
State coercive capacity	-	-	-	0.31**
				(3.39)
Adjusted R^2	0.50	0.51	0.43	0.50

[*]Reported coefficients are standardized betas; t-values are in the parentheses; **p<0.01 (two-tailed), N = 72

without controlling for the state coercive capacity. Depending on the nature of class alliance or even lack of it, both foreign and domestic investors are likely to reap differential benefits from the state. In Eq. 4, state coercive capacity is included in the analysis along with foreign and domestic investment. Note the strong mediating effect of state coercive capacity on the relationship between foreign investment and economic growth as well as the relationship between domestic investment and economic growth as well as the relationship domestic investment and economic growth is reduced to 0.23 from 0.30.

The estimated effect of domestic investment on economic growth declines to 0.39 from 0.47. Both declines are statistically significant. The net effect of state coercive capacity on economic growth is 0.31, statistically significant at 0.01 level, Eq. 4 confirms that some of the effects of foreign and domestic investment on economic growth are spurious. However, there is no doubt that both foreign and domestic investment can have some net positive effect on economic growth, even after controlling for the state coercive capacity. Thus far, the findings in this study support Firebaugh (1992)'s analysis and fail to support Bornschier and Chase-Dunn (1985)'s analysis of the growth effects of foreign and domestic investment. Although, state coercive capacity mediates to a certain extent in the relationship between both the investment indicators and economic growth, this mediation is not likely to occur at all levels with the same intensity. As stated before, it is plausible that the effects would vary substantially by high, low and middle levels. In order to test the effect of level of state coercive capacity, researchers followed two procedures; 1st, we controlled the countries the countries located at high levels of state coercive capacity by dividing the sample into two groups and 2nd, we created appropriate dummy variables and state coercive capacity. In order to accomplish the 1st procedure of physical control, we excluded the 24 countries (the top one-third of the 72 nations) having the highest levels of state coercive capacity. Table 2 examines the remaining 48 countries in the sample, located at low and middle levels of state coercive capacity.

From equations in Table 2, it is clear that Firebaugh's earlier finding that domestic investment has greater effect on growth than does foreign investment no longer holds. From Eq. 1-4 (with and without appropriate controls), the standardized slope of domestic investment on economic growth is consistently smaller than that of foreign investment. A similar trend is observed when we analyzed the 24 countries with the lowest levels of state coercive capacity (Table 3). The positive effect of foreign investment on growth consistently exceeds that of

Table 2: Regression of economic growth rate on measures of foreign investment and domestic investment at low and middle levels (combined) of state coercive capacity[*]

Ratios	(1)	(2)	(3)	(4)
Foreign investment rate	0.30*	0.29*	0.33*	0.33*
	(2.23)	(2.19)	(2.50)	(2.49)
Domestic investment rate	0.24[a]	0.24[a]	0.28*	0.31*
	(1.79)	(1.77)	(2.14)	(2.31)
Control variables				
Market demand	0.27	0.27	-	-
	(1.60)	(1.63)		
Exports	-0.05	-0.07	-	-
	(-0.35)	(-0.55)		
GNP per capita log	-2.09	0.07	0.21	-
	(-0.75)	(0.41)	(1.64)	
GNP per capita log squared	2.16	-	-	-
	(0.77)			
Adjusted R^2	0.30	0.31	0.27	0.25

[*]Reported coefficients are standardized betas; t-values are in the parentheses; [a]p<0.05 (one-tailed); *p<0.01(one-tailed); N = 48

Table 3: Regression of economic growth rate on measures of foreign investment, domestic investment and levels of state coercive capacity[*]

Ratios	(1)	(2)	(3)
Foreign investment rate	0.23**	0.25*	0.23*
	(2.28)	(2.63)	(2.44)
Domestic investment rate	0.39**	0.43**	0.60**
	(4.00)	(4.48)	(4.98)
State coercive capacity	0.31**	0.14	0.09
	(3.39)	(1.22)	(0.76)
Low and middle coercive capacity	-	0.26**	-
		(-2.55)	
Domestic investment rate x low and middle coercive capacity	-	-	0.33**
			(-2.74)
Adjusted R^2	0.50	0.54	0.55

[*]Reported coefficients are standardized betas; t-values are in the parentheses; *p<0.05 (two-tailed); **p<0.01 (two-tailed); N = 72

domestic investment on growth. The results of Table 2 suggest that the effect of domestic investment on economic growth tends to be greatest in states with high levels of state coercive capacity, consistent with hypothesis 1. In addition, Table 2 as well as Table 3 confirm the 2nd hypothesis that the relative effects of foreign and domestic investment on economic growth depend on the level of the state coercive capacity. This has important theoretical implications.

What happens to domestic investment at high levels of state coercive capacity? The answer potentially lies in the alliance between the state elite and domestic capacity which is more likely and stronger at high levels of the state coercive capacity. In order to demonstrate that such an alliance exists, an interaction has to be established. In order to test the interaction effect of domestic investment and state coercive capacity, we created a dummy variable. The 48 countries located in the bottom two-third on the coercive capacity indicator were coded 1. The rest were coded 0. For the interaction term, we multiplied domestic investment with that dummy. Table 4 shows results for equations with and without the interaction terms. To facilitate comparison, Eq. 1 in Table 4 repeats the results in column 4 in Table 1. Equation 2 includes the dummy for

Table 4: Regression of economic growth rate on measures of foreign investment, domestic investment at low levels of state coercive capacity[*]

Characteristics	(1)	(2)	(3)	(4)
Foreign investment rate	0.35	0.41[a]	0.36[a]	0.35[a]
	(1.61)	(1.90)	(1.78)	(1.73)
Domestic investment rate	0.32	0.21	0.32	0.28
	(1.25)	(0.85)	(1.57)	(1.37)
Control variables				
Market demand	0.23	0.28	-	-
	(0.78)	(0.92)		
Exports	0.12	0.02	-	-
	(0.47)	(0.07)		
GNP per capita log	-6.25	-3.80	-0.21	-
	(-1.35)	(-1.33)	(-1.11)	
GNP per capita log	5.83			
	(1.27)			
Adjusted R^2	0.19	0.17	0.21	0.20

[*]Reported coefficients are standardized betas; t-values are in the parentheses; [a]$p < 0.05$ (two-tailed)

level of state coercive capacity. The net effect of the dummy is negative and statistically significant at 0.01 level since states with the highest levels of coercive capacity are coded 0. This implies that states at low and middle levels are more likely to experience less positive economic growth.

Note that the continuous measure of state coercive capacity becomes statistically non-significant when the dummy variable is added (Eq. 2). Since, the dummy effect actually measures the intercept differences, it seems the slope of positive effect starts at different points on the vertical axis, depending on the level of the state coercive capacity. Such an apparent structural shift is also confirmed when the sample is split at the median value obtained for the state coercive capacity indicator and the appropriate dummy effect is examined as well as when the sample is split into three equal levels of high, middle, low and the appropriate dummies created. Researchers now need to account for the fact that states with low or medium coercive capacity grow more slowly. One possibility is that the rates of return for investment are lower in weaker states but which rates of return, the rates for foreign investment or the rates for domestic investment? For reasons outlined before, researcher hypothesized that the rates of return are lower for domestic (not foreign) investment in weaker states. We use interaction terms, domestic investment rate times weak state (coded 1 for states in the bottom two-third on coercive capacity) to test that hypothesis. If the hypothesis is correct, the interaction term should have a negative coefficient, since a negative coefficient here means that economic returns to domestic investment are lower in weaker states than in stronger states. Equation 3 in Table 4 includes the interaction term between domestic investment and low and middle state coercive capacity. The coefficient is statistically significant and negative as expected. We made similar attempts to examine the possibility of interaction between foreign investment and levels of the state coercive capacity.

None of the interaction terms involving foreign investment and state coercive capacity registered statistically significant effects and are therefore not presented. Equation 3 of Table 4 also addresses the second hypothesis that for weaker states the positive effects of foreign investment on economic growth equal or exceed those of domestic investment. Observe that the estimated effect (standardized slope) of domestic investment is 0.60 for strong state but only 0.27 (0.60-0.33: Eq. 3, Table 4) for weaker states. The estimated effect for foreign investment is 0.23. Thus for states classified as low or in the middle on coercive capacity, there is no practical difference in the effects of foreign and domestic investment. In short, the 2nd hypothesis that the relative effects of domestic and foreign investment on economic growth depends on the level of state coercive capacity is supported. In the process, Firebaugh's contention that the positive effect of foreign investment on economic growth is exceeded by the positive effect of domestic investment on economic growth is further specified. At lower and middle levels of the state coercive capacity the effects of domestic and foreign investment on economic growth are about the same.

CONCLUSION

These findings can be summarized as follows: Firebaugh (1992)'s finding that foreign investment has beneficial growth effect is sustained. However, Firebaugh's claim that the positive effect of domestic investment on economic growth consistently exceeds that of foreign investment may have to be further specified. At low and middle levels of state coercive capacity, contrary to Firebaugh's contention, the effect of foreign investment on economic growth is at least as positive as the effect of domestic investment on economic growth. There are theoretical grounds for this. Researchers expect variation in the impact of domestic investment on economic growth to depend on the level of state coercive capacity with countries at high coercive capacity levels more likely to reap the most beneficial effects of domestic investment on economic growth from domestic investment. In a response to Firebaugh (1992)'s study, Dixon and Boswell (1996) attempts a theoretical distinction between foreign investment and foreign penetration. These two researchers insist that Firebaugh's central findings can coexist with the earlier capital dependency research that focuses on the long-term negative effects of foreign capital penetration of the host-country's society. However, this response does not examine the mediating effects of the state on the relationship between foreign and domestic investments and economic growth, hence it does not have much

bearing on this study. The findings in this study have important implications for research on elite legitimacy and development. Highly coercive states are more likely to favor domestic capital over foreign capital. These states are expected to accord greater support to domestic capital in the form of protection and subsidies so that more economic growth is realized. A greater positive effect of domestic investment on economic growth is likely to accord the state elite more legitimacy to rule. It is also less likely to spur resistance movements sustained by popular support at the grassroots level. Indicators of state coercive capacity then must constitute an integral part of future research on elite legitimacy and cross-national development.

The 72 peripheral and semi-peripheral countries included in the analysis are: Dominican Republic, Jamaica, Trinidad and Tobago, Mexico, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Colombia, Venezuela, Panama, Ecuador, Peru, Brazil, Bolivia, Paraguay, Chile, Argentina, Uruguay, Ireland, Spain, Portugal, Italy, Greece, Mali, Senegal, Mauritania, Niger, Ivory Coast, Guinea, Upper Volta, Liberia, Sierra Leone, Ghana, Togo, Cameroon, Nigeria, Central African Republic, Chad, Zaire, Uganda, Kenya, Tanzania, Burundi, Rwanda, Somalia, Ethiopia, Zambia, Malawi, South Africa, Madagascar, Morocco, Algeria, Tunisia, Sudan, Iran, Turkey, Iraq, Egypt, Afghanistan, Taiwan, South Korea, Japan, India, Pakistan, Mianmar, Sri Lanka, Thailand, Malaysia, Philippines and Indonesia. There are 24 states at high levels of state coercive capacity: Paraguay, Spain, Portugal, Greece, Iran, Turkey, Iraq, Taiwan, South Korea, Mianmar, Egypt, Tunisia, Algeria, Italy, Ireland, Uruguay, Argentina, Chile, Bolivia, Peru, Nicaragua, Dominican Republic, Afghanistan and Thailand. The 24 states at low levels of state coercive capacity: Jamaica, Trinidad and Tobago, Costa Rica, Mali, Senegal, Mauritania, Nigeria, Central African Republic, Chad, Uganda, Kenya, Tanzania, Burundi, Rwanda, Zambia, Malawi, Madagascar and Sri Lanka. The remaining 24 states are at middle levels of coercive capacity.

REFERENCES

Bagchi, A., 1984. The terror and squalor of East Asian capitalism. Econ. Political Weekly, 7: 21-22.

Bornschier, V. and C. Chase-Dunn, 1985. Transnational Corporations and Underdevelopment. Praeger, New York.

Boswell, T. and W. Dixon, 1990. Development and rebellion: A cross-National Analysis. Am. Sociol. Rev., 55: 540-559.

Bradshaw, Y.W., 1985. Dependent development in Black Africa. A Cross-National study. Am. Sociol. Rev., 50: 195-207.

Dixon, W.J. and T. Boswell, 1996. Dependency, disarticulation and denominator effects: Another look at Foreign Capital Penetration. Am. J. Sociol., 102: 543-562.

Domar, E.D., 1946. Capital expansion, rate of growth and employment. Econometrica, 14: 137-147.

Duvall, R. and J. Freeman, 2001. The State and dependent Capitalism. Int. Stud. Quart., 25: 99-118.

Firebaugh, G. and F.D. Beck, 1994. Does economic growth benefit the masses in the third world. Am. Sociol. Rev., 59: 631-653.

Firebaugh, G., 1992. Growth effects of foreign and domestic investment. Am. J. Sociol., 98: 105-130.

Haln, F.H., 1965. On Two-sector growth models. Rev. Econ. Stud., 32: 339-346.

Harrod, R.F., 1939. An essay in dynamic theory. Econ. J., 49: 14-33.

Huntington, S.P., 2008. Political Order in Changing Societies. Yale University Press, New Haven.

London, B., 1988. Dependence, distorted development and fertility trends in Non-core nations: A structural analysis of Cross-national data. Am. Sociol. Rev., 53: 606-618.

Pattnayak, S.R. and T.M. Arvanites, 2002. Structural Determinants of State Involvement in International Terrorism. In: Essential Readings on Political Terrorism: Analyses of Problems and Prospects for the 21st Century, Kushner, H.W. (Ed.). Gordian Knot Books, New York, pp: 185-202.

Phelps, E., 2000. Growth an Government Intervention. In: Growth Economics, Sen, A. (Ed.). Penguin Books, Baltimore, New York, pp: 496-533.

Robinson, J., 2002. Essays in the Theory of Economics. McMillan, New York.

Stepan, A.C., 1978. State and Society: Peru in Comparative Perspective. Princeton University Press, New Jersey.

Taylor, C.L. and D.A. Jodice, 1985. World Handbook of Political and Social Indicators III, 1948-1982. 2nd Edn., Inter-university Consortium for Political and Social Research, Ann Arbor, MI.

Warren, B., 1973. Imperialism and capitalist industrialization. New Left Rev., 81: 3-46.

Weber, M., 1968. Economy and Society: An Outline of Interpretive Sociology. Westminster Press, New York.

Wimberley, D.W. and R. Bello, 1992. Effects of foreign investment, exports and economic growth on third world food consumption. Social Forces, 70: 895-921.

Wimberley, D.W., 1990. Investment dependent and alternative explanations of third world mortality: A Cross-national study. Am. Sociol. Rev., 55: 75-91.