

Politics and Economic Growth

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Introduction

The growing interest in the interaction between politics and economics as manifested in the emergence of the public choice approach to the understanding of political institutions and political behaviour is reflected in the search for determinants of economic growth and its consequences for the decline or progress of nations (Mueller 1983). It is argued that the traditional economic models of economic growth need to be supplemented or replaced by new ones that take into account the impact of political phenomena on the overall rate of change in the economy. According to one line of argument, the institutional fabric of the political system reduces the level of affluence as a function of the amount of institutional sclerosis (Olson 1982), whereas another line of argument claims that the framing and conduct of an industrial policy are of crucial importance for the possibility of a rapid process of economic growth (Zysman 1983). It is an open question whether the addition of political variables really means anything to the understanding of the economic development of nations (Adelman & Morris 1967). Below we test various kinds of models of economic growth - economic, social and political - in order to create a firm ground for a discussion of the thesis that politics matter in relation to economic growth (Lange & Garret 1985).

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introduced. Modernization is the reverse of institutional sclerosis, and the amount of institutional sclerosis affects the rate of economic growth in rich countries negatively. How valid is this new political theory of economic growth? Does it account for economic growth in Third World countries as well (Bairoch 1975; Reynolds 1985)? And what is the mechanism that relates modernization to economic growth? Once we begin to move towards a political economy of economic growth we need to integrate political variables with economic and social conditions that have an impact on economic growth. What is the place of political variables in an integrated model of economic growth?

Economic Growth and Public Choice

There exist several models of economic growth in economic theory that predict economic change on the basis of economic variables: the savings and investment function, labour supply, technological change, and trade or exports (Hahn & Matthews 1964; Kuznets 1971; Thirlwall 1983). These models have been broadened in theories in developmental economics by the addition of social variables like industry, education, or institutional variables (Hall 1983). It is far from clear which variables are to be given major explanatory weights as there is no agreement in the fields of economic growth theory or development economics about which factors are crucial in processes of economic progress (Myrdal 1968). According to one theme, the standard macro models have limited applicability to the explanation of Third World development (Todaro 1977).

Public choice theory bypasses the controversy between various economic models of growth by claiming that politics matter. Economic growth is part of a more general development phenomenon that is strategically influenced by political institutions and political behaviour. According to public choice theory, economic growth may be regarded as a public good characterized by a fundamental free rider problem. Since it benefits all indiscriminantly but requires that each and everyone contributes, there is no individual incentive to supply the good. The stronger the distributional coalitions in a society, the less the efforts to sustain a high level of economic growth, since it is in nobody's interest to supply the good for every group if the others are free riders. It pays more to increase the share of the income going to the group than to make a sacrifice for the increase in overall income. If, on the other hand, there is a strong consensus that economic growth is to be pursued because it is more to the advantage of everyone once all agree, then there will be a policy of state sponsored growth that could be of decisive importance for the economic development of the country.

The question whether politics matter for the development of a nation may

be approached in a broad way as the search for the economic, social, and political sources of economic development. Taking an inductive approach, a number of variables may be related to indicators on economic development. Theoretical guidance is to be found in the basic economic models of economic growth as well as in the public choice approach to the political sources of economic development (Buchanan et al. 1980; Little 1982; Gersovitz et al. 1982).

Data and Indicators

The test of models of economic growth is based on data for roughly 60 nations during the period of 1960-1980. The selection of the countries is based on the idea that processes of economic development occur in both rich and poor countries but that the mechanisms that explain these processes may differ. The set of rich countries includes the OECD-nations and the set of poor nations covers some 40 Third World countries.

It could be argued that one should use overall GDP and not the GNP per capita measure when one studies economic development, because a strong increase in the population reduces the growth rates when economic development is measured by the per capita indicator. However, there is a considerable co-variation between the two measures ($r = .81$). See Fig. 1.

Among the independent variables we make a distinction between economic variables, social variables, and political variables. The selection of the economic variables is based on the basic theories of economic development. Economic growth according to the production function model is the result of changes in capital formation, labour input and a residual consisting of productivity changes. Looking at economic growth from a wider perspective other factors will be considered: social variables measuring industry structure, population changes, and educational opportunities. It may be predicted that the rate of change in agricultural employment is related to economic growth, as an increase in industrial employment would be conducive to economic growth in the Third World. Whether a decrease in industrial employment characterizes the process of economic development in the rich countries is an open question. Population growth could be assumed to drive down economic growth, whereas education would have the opposite effect. There is disagreement whether the impact of inequality in the distribution of incomes is positive or negative.

Political variables may be assumed to have an impact on economic growth directly or indirectly in terms of their effects on economic variables. A government dominated by left-wing ministers may be assumed to be in favour of public policies that are more oriented towards the distribution of incomes than towards the growth in affluence. It is interesting to inquire into whether

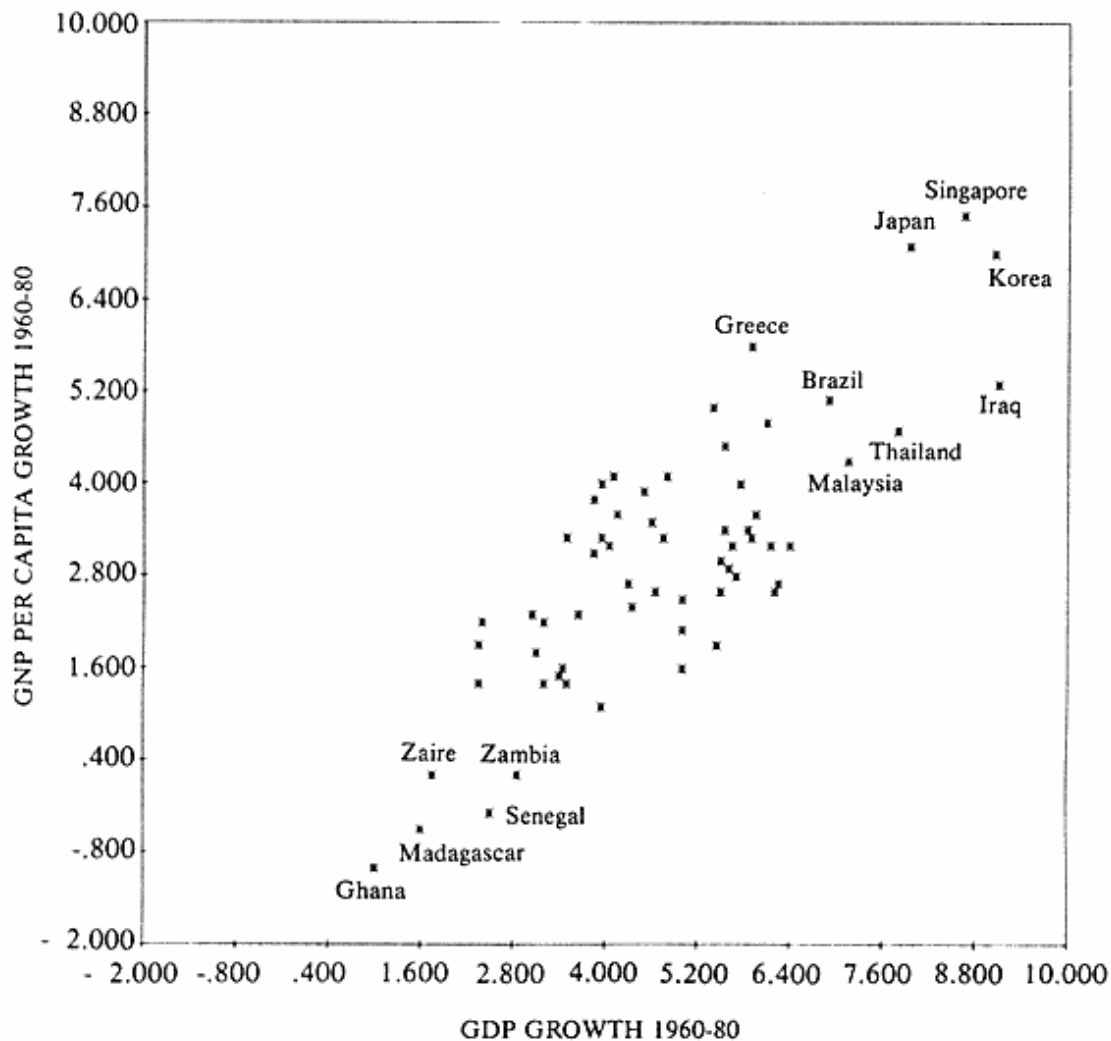


Fig. 1 Measures of Economic Growth 1960-80.

democracies or authoritarian regimes accomplish more or less with regard to economic growth. And we include a variable for the extent of institutional sclerosis or modernization following the hypothesis that the younger a nation is the more it supports economic growth (Choi 1983). The number of variables employed and their indicators appear from the Appendix. One may question the use of a cross-sectional approach to the analysis of economic growth, as a longitudinal perspective may be an alternative. However, if cross-sectional models are estimated on the basis of data consisting of average values for long-term periods, then the overall stability in the empirical information makes a cross-sectional approach more attractive (Jackman 1985).

Table 1. Percentage Increase in GNP per Capita 1960-1980.

Rapid increase:	from 7.5%	Slow increase:	from 3.1%
	to 3.2%		to -1.0%
Singapore	7.5	Ireland	3.1
Japan	7.1	Colombia	3.0
South Korea	7.0	Malawi	2.9
Greece	5.8	Pakistan	2.8
Jordan	5.7	Philippines	2.8
Iraq	5.3	Kenya	2.7
Brazil	5.1	Australia	2.7
Portugal	5.0	Mexico	2.6
Tunisia	4.8	Venezuela	2.6
Thailand	4.7	Cameroon	2.6
Ecuador	4.5	Morocco	2.5
Spain	4.5	Sri Lanka	2.4
Malaysia	4.3	United States	2.3
Austria	4.1	Sweden	2.3
Nigeria	4.1	United Kingdom	2.2
Finland	4.0	Argentina	2.2
Indonesia	4.0	Bolivia	2.1
France	3.9	Tanzania	1.9
Belgium	3.8	Switzerland	1.9
Italy	3.6	New Zealand	1.8
Turkey	3.6	Chile	1.6
Norway	3.5	El Salvador	1.6
Dominican Rep	3.4	Liberia	1.5
Egypt	3.4	India	1.4
Canada	3.3	Uruguay	1.4
Panama	3.3	Ethiopia	1.4
Germany FR	3.3	Peru	1.1
Denmark	3.3	Zambia	0.2
Costa Rica	3.2	Zaire	0.2
Paraguay	3.2	Senegal	-0.3
Netherlands	3.2	Madagascar	-0.5
Algeria	3.2	Ghana	-1.0

Nature of Economic Growth

We face considerable variation in the growth rates among the countries in our data set. Some nations have experienced a high level of average growth, whereas other are characterized by a low level of economic development. Generally, the growth rates were higher in the sixties than in the seventies. It should also be pointed out that there is considerable variation around the average values for each country. One needs to make a distinction between short-term growth theory and long-term growth theory. Economic growth is to a considerable extent a function of a particular year which means that average growth rates are only part of the story. However, there tends to be a consistent pattern when average growth rates are inquired into. Table 1 presents the overall picture.

A General Model of Economic Growth

It is necessary to make a distinction between causes and concomitant properties when talking about economic growth. Processes of economic expansion have a number of implications for social systems, some of which are tied up with the process of economic change itself. It is difficult to separate these factors that go together with economic growth from factors that may be said to constitute causes of economic expansion. Rapid rates of economic growth tend to covary with major changes in the economic system and with a transformation of the social structure; they also display some implications for the political system. But the fact that economic growth tends to covary with a large number of other variables is of little relevance for the problem of causation. Only theoretical arguments can guide the search for predictors of economic growth.

Economic growth is assumed to be a function of the traditional economic variables: investments, labour supply, and trade - their levels and rates of change. Secondly, social factors may have an impact on economic growth, either directly or in terms of their impact on the economic variables. Thirdly, a set of political variables could be related to economic growth by means of their impact on the basic conditions for economic activity. Thus, we arrive at the following general model:

$$(1) \text{ EG} = f(\text{EV}, \text{SV}, \text{PV})$$

where EG is economic growth, EV stands for economic variables, SV for social variables, and PV for political variables. We now proceed to test various models consisting of these variables.

Economic Variables

Several economic models are plausible. What does a certain level of economic development mean for the growth rates over a decade or two (Horvat 1974)? Is it the case that level of affluence in 1960 has any implications for the growth rates during the 1960s and 1970s? It could be argued that only the rich countries can afford a high level of investments which would guarantee high rates of economic development. On the other hand there is the counterargument that rich countries display a mature economy with low rates of economic growth, whereas it is in the interest of the developing nations to mobilize resources for a high level of investments. Fig. 2 shows the relationship between level of affluence in 1960 and average growth rates between 1960-1980.

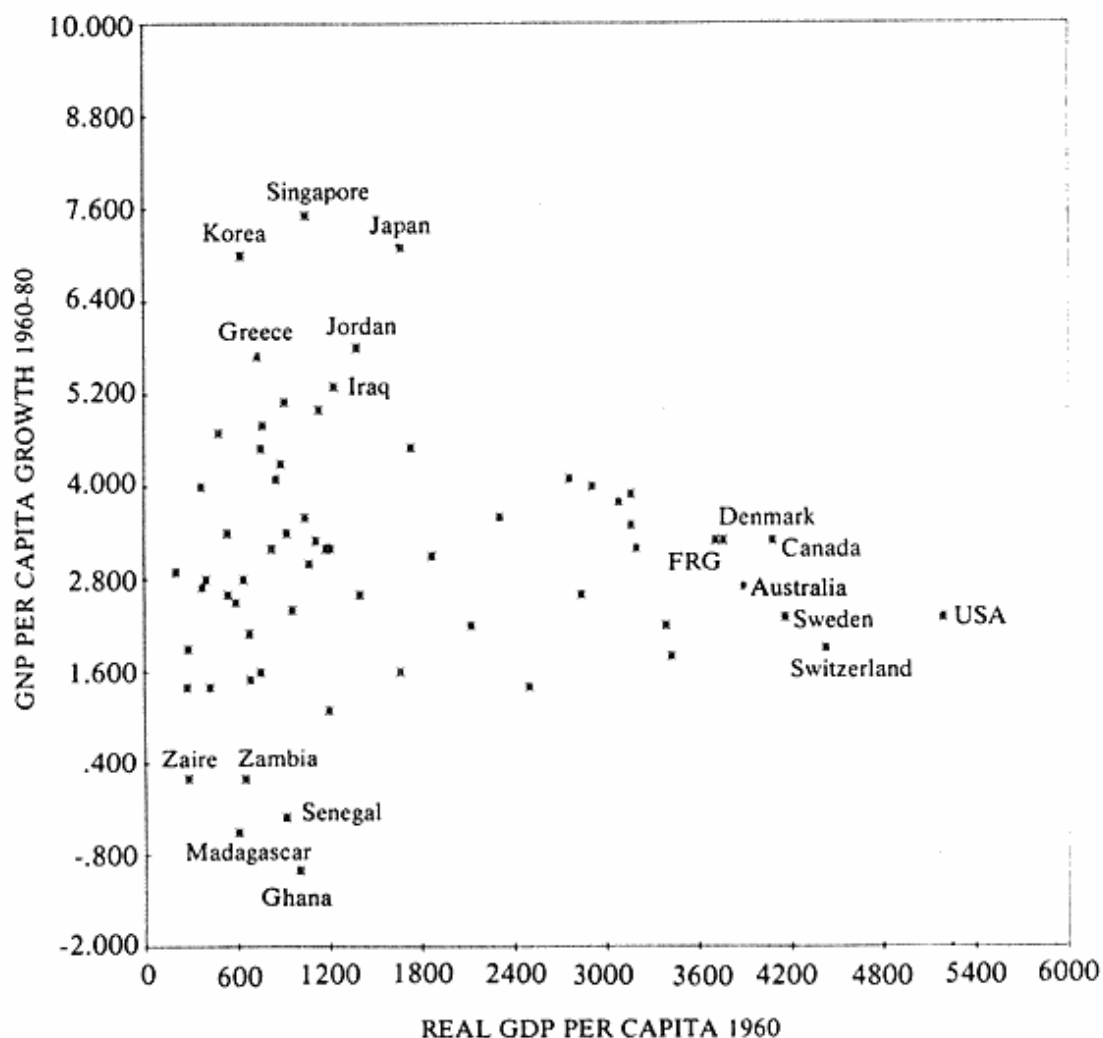


Fig. 2. Economic Level 1960 and Growth 1960-80

It is not the case that level of affluence determines the growth potentially or the actual growth rates. We find considerable variation in growth rates among countries with a rather similar level of economic affluence, and it is certainly not the case that rich countries tend to have higher growth rates than poor countries. One may predict from looking at Fig. 2 that the classification of rich and poor countries in 1960 is bound to change after a few decades due to differential growth rates. Table 2 reports on the test of models relating growth rates to various indicators on *levels* of economic activity, proportion of investments to GDP, percentage of work force, and proportion of exports to GDP.

The emphasis in economic theory on a high level of investments as a condition for economic growth is amply supported in the model estimation.

Table 2. Regression Analysis: Economic Growth and Levels of Economic Activity.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
GDIInv	.16	.48	.52	4.03	.14	.38	.46	2.05	.18	.55	.46	2.75
Lab force	.02	.07	.14	.61	.01	.01	-.17	.05	-.02	-.04	.09	-.19
Export	.01	.09	.23	.73	.02	.21	.36	1.26	-.04	-.42	-.31	-2.12
Constant	-1.92			-.90	-.80			-.15	1.31			.24
R2	.28				.25				.38			
R2A	.24				.19				.27			
N	61				40				21			

However, there is not much support for the other economic variables often adduced as crucial for economic expansion: level of labour force activity and level of exports. It seems as if a high level of exports is not a necessary condition for economic growth, because some rich countries do not achieve high levels of economic growth although they have large exports. The fundamental place of a high level of investments is the same in rich as in Third World countries.

On the other hand we may look into the impact of the rate of change in a number of variables on economic growth. Here it is crucial to look at how increases in investments, labour force changes, and exports relate to economic growth. Table 3 has the findings of the test of such models.

Rapid increases in investments characterize countries with rapid economic growth, particularly in the Third World. The finding may be interpreted as indicating that economic growth processes are combined with heavy increases in the level of investments. Increases in the volume of exports also characterize processes of economic growth. Investment - level of and change in investments - is the key variable included in a pure economic model that according to the empirical evidence is of great importance.

Table 3. Regression Analysis: Economic Growth and Economic Change.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
GDIInv	.26	.63	.66	6.37	.27	.68	.84	6.68	.34	.59	.65	3.64
Lab force	-.45	-.25	-.03	-2.69	.35	.12	.41	1.38	-.48	-.26	-.15	-1.69
Export	.14	.37	.65	4.17	.08	.22	.62	2.24	.20	.39	.66	2.47
Constant	1.50			4.30	-.35			-.62	1.10			1.68
R2	.67				.76				.68			
R2A	.65				.74				.62			
N	61				40				21			

Table 4. Regression Analysis: Economic Growth and Social Structure.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
Secondary education	.01	.17	.37	.69	.02	.17	.39	.75	.02	.30	-.00	.94
Higher education	-.00	-.18	.22	-.97	-.00	-.05	.24	-.27	-.00	-.31	-.22	-1.07
Agricultural change	.03	.42	.44	2.07	.04	.42	.43	2.29	-.02	-.20	-.17	-.72
Constant	1.80			4.73	1.25			2.37	3.96			2.61
R2	.21				.26				.10			
R2A	.17				.20				.00			
N	61				40				21			

The crucial importance of capital growth for economic development in the Third World appears in the data. An increase in the number of people employed has a positive impact on economic growth in Third World countries. In rich countries economic growth leads to a reduction in the labour force. The importance of capital investments for economic growth, in particular in Third World countries, makes it crucial to look at the social and political sources of capital expenditures.

Social Variables

Social factors may be relevant to the country variation in economic growth as different social milieus or contexts may have different implication for basic parameters that determine economic growth, e.g., capital investment, labour input, and technology. Thus, a transfer of parts of the work force from agriculture to industry could raise productivity considerably, and higher levels of educational attainment may result in economic growth because it increases the quality of labour. What is the macro importance of these factors in our set of data? Table 4 present the data.

Changes in agricultural employment have an impact on economic growth in the Third World nations. It is not the case that a reduction in industrial employment in rich countries leads to higher rates of economic growth. The level of education appears to be of limited importance contrary to the human capital hypothesis. There is little indication of any general relationship between population growth and economic growth. The overall correlation between GDP growth and population growth tends to be positive whereas the correlation between growth in GNP per capita and population growth tends to be negative, although these correlations are weak.

Table 5A. Regression Analysis: Economic Growth and Political Factors.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
Institut. sclerosis	.01	.12	.11	.82	.01	.08	.07	.51	-.06	-.68	-.70	-3.68
Democracy	-.00	-.02	.04	-.16	-.01	-.08	-.06	-.47	-.00	-.04	-.33	-.19
Constant	2.79			4.63	2.82			3.37	7.08			7.28
R2	.01				.01				.49			
R2A	.00				.00				.43			
N	61				40				21			

Political Variables

It has been debated whether democracy affects economic growth positively or negatively (Weede 1983, 1984). This is a version of the theme of the strong state. An authoritarian regime would promote economic growth due to its capacity to mobilize resources for investments. A similar line of argument has suggested a political hypothesis to the effect that left-wing governments promote economic growth (Whitely 1983). Political factors may effect economic growth by means of two mechanisms. On the one hand, specific policies conducted by governments for different periods of time are often conducive to a higher or lower rate of economic growth. On the other hand the general political climate may be relevant for the economic factors that condition economic development. Tables 5A & B indicate that political factors are relevant in the OECD nations.

Institutional sclerosis is clearly a factor to be considered. The younger a nation the more rapid its rate of growth – institutional sclerosis as a negative determinant of economic growth according to one interpretation. There is little or no support for the other political hypotheses. The nature of the

Table 5B. Regression Analysis: Economic Growth and Political Factors.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
Socialist government	-.41	-.22	-.07	-1.38	-.35	-.14	-.12	-.85	-.03	-.02	-.39	-.08
Public expenditure	.03	.25	.12	1.58	.02	.11	.07	.65	-.06	-.49	-.50	-1.56
Constant	2.41			4.34	2.39			2.82	6.06			5.00
R2	.05				.02				.25			
R2A	.01				.00				.17			
N	61				40				21			

Table 6A. Regression Analysis: Investment Growth and Political Factors.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
Institut. sclerosis	-.03	-.20	-.29	-1.38	.00	.01	-.01	.04	-.09	-.65	-.69	-3.45
Democracy	-.03	-.18	-.28	-1.26	-.02	-.10	-.10	-.62	-.01	-.09	-.37	-.49
Constant	9.06			6.65	7.95			3.82	10.47			6.11
R2	.11				.01				.48			
R2A	.08				.00				.42			
N	61				40				21			

regime – democratic or authoritarian – does not matter, and there is no indication of any link between socialist strength and high levels of economic growth.

It is interesting to look more closely at the impact of public sector expansion on economic growth. The process of public sector growth has been pronounced in both rich and poor countries during the period studied. Tables 6A and B report some findings.

The hypothesis that one political factor is related to economic growth is confirmed when the investment function is regressed on the political factors. The causal pattern is the same with regard to the variation in investments as with the variation in economic growth. Institutional sclerosis makes a difference for economic growth in rich countries.

Mixed Models

The model tests reported so far show that some economic, social, and political variables are relevant to the explanation of economic growth. Could

Table 6B. Regression Analysis: Investment Growth and Political Factors.

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
Socialist government	-1.22	-.28	-.35	-1.82	-1.55	-.25	-.23	-1.53	-.09	-.04	-.49	-.15
Public expenditure	-.04	-.13	-.29	-.83	.05	.10	.03	.59	-.12	-.58	-.63	-2.11
Constant	8.26			6.54	6.71			3.24	9.51			4.98
R2	.13				.06				.39			
R2A	.10				.01				.33			
N	61				40				21			

Table 7A. Regression Analysis: Economic Growth: Mixed Model

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
GDIInv level	.12	.36	.52	2.60	.11	.29	.46	1.71	.06	.20	.46	1.17
Prim & second education	.02	.29	.37	1.44	.03	.25	.39	1.36	.03	.41	-.00	2.13
Agricultural change	.02	.25	.44	1.18	.03	.25	.50	1.29	-.02	-.20	-.20	-1.08
Institut. sclerosis	-.03	-.40	.11	-2.45	-.02	-.21	.07	-1.35	-.06	-.75	-.70	-4.04
Constant	.16			.18	-.33			-.28	4.61			2.77
R2	.36				.35				.65			
R2A	.32				.27				.56			
N	61				40				21			

it be the case that some of these factors cancel each other out? Perhaps the relationship between institutional sclerosis and economic growth is spurious, to be explained in terms of other factors?

There can be no doubt about the importance of general social changes in the employment structure for economic development, but we note that the connection between institutional sclerosis and economic growth is not reducible to other factors, cf. Tables 7A & B. In the set of rich countries the variation in institutional sclerosis appears to be the best predictor of the variation in economic growth.

Table 7B. Regression Analysis: Economic Growth: Mixed Model

Predictors	Total				Third World				OECD			
	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat	Coeff	Beta	r	t-stat
GDIInv change	.29	.70	.66	9.61	.31	.77	.84	9.63	.15	.26	.65	1.21
Secondary education	.02	.27	.37	2.06	-.00	-.02	.39	-.17	.03	.40	-.00	2.06
Agricultural change	.03	.42	.44	3.41	.03	.34	.50	3.55	-.01	-.07	-.17	-.36
Institut. sclerosis	-.01	-.17	.11	-1.57	-.01	-.06	.07	-.66	-.05	-.67	-.70	-3.03
Constant	-.10			-.30	-.06			-.19	4.50			2.63
R2	.73				.81				.65			
R2A	.71				.78				.57			
N	61				40				21			

Conclusion

The argument that institutional sclerosis makes a difference for the average country growth rates in the economy meant an important contribution to the growing interest in the interaction between politics and economics. It carried the argument that political structure and economic system are interrelated further by adding a dynamic dimension; politics matter also for rate of change in the economy. There are a number of hypotheses that claim that political variables have an impact on average economic development. Testing these hypotheses with regard to both rich and poor countries results in a note of warning. Only one political factor – institutional sclerosis – appears to be of importance in the explanation of economic growth. And the effect is particularly strong in rich countries. The basic role of investments is strongly underlined in the findings reported on here (Sommers & Suits 1971).

Economic growth is not determined by the level of affluence or the overall social structure. Economic growth is not predetermined by forces that cannot be influenced by political action. In the Third World, economic growth is closely tied up with the overall investment behaviour which may be affected by government. In the rich countries, economic growth is related to institutional sclerosis which also is affected by politics and policies. A deeper understanding of the impact of politics on economic growth would take us into an analysis of how and why nations differ in terms of crucial choices about the allocation of resources between the present and the future as well as about the status and power of distributional coalitions.

APPENDIX: Variables, Indicators and Sources

Variables and indicators	Sources
Economic growth: GNP/capita growth 1960–80	World Bank, 1982
Economic growth: GDP growth 1960–80	World Bank, 1982
Economic level: Real GDP/capita 1960	Summers & Heston, 1984
GDIInv. level: Gross Domestic Investment % of GDP 1960, 1965, 1970, 1977, 1980	World Bank, 1982 World Bank, 1980
GDIInv. change: Growth in Gross Domestic Investment 1960–80	World Bank, 1982
Labour force level: male labour force participation rate 1960, 1980	World Bank, 1982
Labour force change: growth in labour force 1960–1980	World Bank, 1982
Export level: export in % of GDP 1960, 1980	World Bank, 1982
Export change: growth in export 1960–1980	World Bank, 1982
Secondary education: secondary school enrolment 1960, 1980	World Bank, 1984
Higher education: higher education enrolment 1975	Taylor, 1981
Agricultural change: change in agricultural employment 1960–1980	World Bank, 1984
Institutional sclerosis	Choi, 1983 Taylor & Hudson, 1972
Democracy circa 1965	Bollen, 1980
Socialist government: post world war two	Schmidt, 1983 Delury, 1983
Public sector expenditure in % of GDP circa 1977	IMF, 1982

REFERENCES

- Adelman, I. & Morris, C.T. 1967. *Society, Politics and Economic Development*. Baltimore: Johns Hopkins U.P.
- Bairoch, P. 1975. *The Economic Development of the Third World since 1900*. Berkeley: University of California Press.
- Bollen, K.A. 1980. 'Issues in the Comparative Measurement of Political Democracy', *American Sociological Review* 45, 370-390.
- Buchanan, J.M. et al. eds, 1980. *Toward a Theory of the Rent-Seeking Society*. College Station: Texas A & M U.P.
- Choi, K. 1983. 'A Statistical Test of Olson's Model' in Mueller, D.C. ed., 57-78.
- Delury, G.E. ed, 1983. *World Encyclopedia of Political Systems*. Harlow: Longman.
- Gersovitz, M., F. et al. eds, 1982. *The Theory and Experience of Economic Development: Essays in Honor of Sir W. Arthur Lewis*. London: Allen & Unwin.
- Hahn, F.H. & Matthews, R.C.O. 1964. 'The Theory of Economic Growth: A Survey', *The Economic Journal* 74, 779-902.
- Hall, P. 1983. *Growth and Development: An Economic Analysis*. Oxford, Martin Robertson and Company.
- Horvat, B. 1974. 'The Relation between Rate of Growth and Level of Development', *Journal of Development Studies* 10, 382-394.
- IMF, 1982 *Government Finance Statistics Yearbook*. Washington D.C.: IMF.
- Jackman, R.W. 1985. 'Cross-National Statistical Research and the Study of Comparative Politics', *American Journal of Political Science* 29, 161-182.
- Kuznets, S. 1971. *Economic Growth of Nations: Total Output and Production Structure*. Cambridge, Mass.: The Belknap Press of Harvard U.P.
- Lange, P. & Garrett, G. 1985. 'The Politics of Growth: Strategic Interaction and Economic Performance in the Advanced Industrial Democracies, 1974-1980', *Journal of Politics* 47, 729-827.
- Little, I.M. 1982. *Economic Development: Theory, Policy, and International Relations*. New York: Basic Books.
- Mueller, D.C. ed, 1983. *The Political Economy of Growth*. New Haven: Yale U.P.
- Myrdal, G. 1968. *An Asian Drama*. I-III. New York: Pantheon Books.
- Olson, M. 1982. *The Rise and Decline of Nations*. New Haven: Yale U.P.
- Reynolds, Lloyd, G. 1985. *Economic Growth in the Third World, 1850-1980*. New Haven: Yale University Press.
- Schmidt, M. ed, 1983. *Westliche Industrie-Gesellschaften: Wirtschaft - Gesellschaft - Politik*. München: Piper.
- Sommers, P.M. & Suits D.B. 1971. 'A Cross-Section Model of Economic Growth', *The Review of Economics and Statistics* 53, 121-128.
- Summers, R. & Heston, A. 1984. 'Improved International Comparisons of Real Product and its Composition, 1950-80', *The Review of Income and Wealth* 30, 207-262.
- Taylor, C.L. 1981. *Codebook to World Handbook of Political and Social Indicators: Volume I: Aggregate Data*. 3rd ed. West Berlin: IIVG.
- Taylor, C.L. & Hudson, M. 1972. *World Handbook of Political and Social Indicators*. 2nd ed. New Haven: Yale U.P.
- Thirlwall, A.P. 1983. *Growth and Development: With Special Reference to Developing Economies*. London: Macmillan.
- Todaro, M.P. 1977. *Economic Development in the Third World*. New York: Longman.
- Weede, E. 1983. 'The Impact of Democracy on Economic Growth: Some Evidence from Cross-National Analysis', *Kyklos* 36, 21-39.
- Weede, E. 1984. 'Political Democracy, State Strength and Economic Growth in LDCs: A Cross-National Analysis', *Review of International Studies* 10, 297-312.
- Whiteley, P. 1982. 'The Political Economy of Economic Growth', *European Journal of Political Research* 11, 197-213.
- World Bank, 1980. *World Tables*. 2nd ed. Baltimore: Johns Hopkins U.P.

World Bank, 1982. *World Development Report 1982*. New York: Oxford U.P.
World Bank, 1984. *World Tables*. 3rd ed. Baltimore: Johns Hopkins U.P.
Zysman, J. 1983. *Governments, Markets and Finance*. Ithaca: Cornell U.P.