TESTING THE IMPLICATIONS OF THE OLSON HYPOTHESIS

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ABSTRACT

Considerable attention has been paid to the hypothesis, advanced by Olson, that accumulations of interest groups build up over time and retard economic performance. Most previous tests of this hypothesis have been based on comparisons of growth rates. In this paper, it is argued that comparisons of income levels yield a superior test. Strong forms of the Olson hypothesis, in which shocks such as revolution and war yield positive benefits are rejected using this test.

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Testing the Implications of the Olson Hypothesis

Since about 1970, economic performance throughout the industrialized world has been significantly worse than in the earlier post-war period. Also over the post-war period, there have been significant differences in performance between countries, with, for example the US and UK growing relatively slowly and Japan and West Germany growing relatively rapidly. Various models have been advanced to explain these phenomena, but there is obvious interest in a hypothesis that could explain both of them.

Olson (1982, 1988) advances such a hypothesis, based on the notion that accumulations of interest groups build up over time and retard economic performance. Shocks to the social order, such as revolution or defeat in war, may break up these accumulations and therefore promote more rapid growth. In addition to explaining relative economic growth and macro-economic performance in the post-war period, the theory is applied to the larger question of *The Rise and Decline of Nations.*

Most tests of the Olson hypothesis, including those reported by Olson (1982) and those in the volume by Mueller (1983) have involved comparisons of growth rates, particularly between nations that have experienced shocks and those that have not. In this paper, it is argued that these tests have failed to compare the Olson hypothesis with a natural null hypothesis, in which there are no benefits to the dissolution of interest groups. A preferable test of the hypothesis involves comparisons of levels of income and welfare rather than growth rates.

It is also necessary to re-examine the implications of the hypothesis for the policy process. On the face of it, the hypothesis appears to suggest that a determined assault on interest group power is a necessary precondition for a return to dynamic economic growth.

Given the examples of Japan and West Germany, which achieved rapid growth after the devastation associated with World War II, it would seem arguable that such an assault would be beneficial even if the transitional costs were very high. In this paper, it is shown that the strong versions of the Olson hypothesis, suggesting that destructive shocks may have positive net benefits, cannot be sustained by a valid empirical test. It follows that transitional costs must be taken into account in any policy program aimed at reducing the influence of interest groups.

I. OUTLINE OF THE HYPOTHESIS

The central idea in Olson's work is that economic performance is hampered by the activities of interest groups. In itself, this idea is scarcely new - it has been a staple of political rhetoric for millennia. What is novel in Olson's presentation is the derivation of a model of interest group activity based on his (1965) *Logic of Collective Action,* and the use of this model to derive predictions on the comparative impacts of interest group activities across societies and time-periods.

The most important new idea is that, in a stable democratic system, interest groups tend to accumulate over time. The underlying reasoning is that interest groups are costly to organize, but that, once organized, such groups are unlikely to dissolve even if their support base shrinks or their original rationale is lost.

A corollary of this analysis is that shocks to the system, which break up coalitions can have beneficial long-term effects. The crucial positive illustrations are the 'economic miracles' experienced by Japan and the Federal Republic of Germany after World War II. The negative illustrations are the low growth rates experienced by the Anglo-Saxon countries, which have not experienced shocks. The most notable case is the relative economic decline experienced by the United Kingdom, which has gone from being the world's richest and most powerful

nation in the 19th Century to a position in the lower half of the OECD 'league table' of per capita income today.

There is a natural analogy with the debate over the role of depressions in a market economy. The orthodox Keynesian view is that depressions are disastrous events, and that the prime object of economic policy should be to prevent or mitigate them. This view has been contested by a number of writers, most notably Schumpeter (1961). Schumpeter argued that the 'creative destruction' inherent in depressions and crises weeds out inefficient and bureaucratized firms, and paves the way for a new surge of entrepreneurial vigor. A similar view may be found in Marx (1867), although he saw the crisis as part of a dialectical process that is both necessary to the operation of capitalism and destined to lead to its collapse.[1]

The Olson hypothesis may be seen as a translation of Schumpeter's view from the economic to the political sphere, with political shocks taking the place of market fluctuations[2]. In both models, the central notion is that the competitive market economy is the engine of growth. The liberal democratic state is seen as the natural counterpart of the market economy. Both contain the seeds of their own destruction. Schumpeter lays more stress on the realm of ideas. He sees industrial capitalism as calling forth an intellectual class that is naturally inclined to a rationalist, rather than en entrepreneurial ethic, and that is ultimately supportive of socialism.

By contrast, in common with the dominant trends in public choice theory, summarized by Mueller (1979), Olson (1982) pays little attention to the rôle of ideas, and focuses on interest groups (see however, the discussion of this issue in Olson 1989). Olson's model is based on the assumption that groups rationally pursue their own interest through political processes. The pluralistic democratic process rewards well-organized interest groups and

[1] There is a clear contrast with the real business cycle theory in which crises are treated as optimal equilibrating responses to external shocks. There is no room for entrepreneurship in a model of this kind.

[2] Depressions are not agents of creative destruction in Olson's model of the political process. Indeed, Olson (1989) argues that depressions tend to call forth increased activity by narrow distributional coalitions seeking to resist income losses.

results in their proliferation. This retards the competitive engines of growth and leads to increasing political division and, ultimately, an 'ungovernable' society.

A second aspect of Olson's analysis, which has received much less attention than the notion of 'creative destruction' is the idea that interest groups may be benign if they are 'encompassing'. An encompassing interest group is one whose membership is large relative to the economy as a whole, such as a national confederation of unions or employers or a broadly-based political party. Because of their size, these interest groups cannot pursue redistributional policies without regard for the effect on the total size of the cake to be divided. Hence they will have an incentive to seek efficient methods of redistribution and to avoid proposals that greatly reduce aggregate income. The test proposed here may be applied to examine the impact of encompassing interest groups on long-run performance.

On a related theme, Olson argues that 'jurisdictional integration', arising, for example, from the federation of previously independent states, may yield benefits because interest groups operating at the level of the individual states will become less effective and interest groups at the federal level will take time to form. Jurisdictional integration is less costly than the more radical shocks mentioned above, and is therefore more likely to yield positive net benefits.

Like Schumpeter, Olson does not put his reasoning in strictly formal terms. As a result, it is not immediately clear how his hypothesis should be tested. It is necessary, therefore to present Olson's hypothesis in the context of a formal model.

II. THE MODEL

The essence of the Olson hypothesis may be captured in a simple model, based on the notion of potential output. For given endowments, a nation has a maximum potential output that would be realized under an ideal system of social and economic organization. Such a

system would be characterized by the absence of involuntary unemployment of resources or of resource misallocation, arising, for example, from the activities of interest groups.

Let the resource endowment available to a country at time *t*, including natural resources, physical and human capital and the state of technology, be denoted ***E***(*t*). Potential output is denoted

(1) $\mathbf{Y}^*(t) = \varphi(\mathbf{E}(t))$.

Actual output will normally fall short of potential output, and may be denoted

(2) $\mathbf{Y}(t) = \mathbf{Y}^*(t) - \gamma(\mathbf{I}(t), \mathbf{Z}(t))$

where ***I*** is an index of the level of interest group activity, and ***Z*** is a vector of other factors affecting the realization of potential output. The exact definition of ***I*** is a matter of some difficulty, but an attempt is made by Choi (1983) who proposes an index of institutional sclerosis. The value of the vector ***Z*** is normally taken to be determined exogenously. By an appropriate definition of variables, we may assume, without loss of generality, that γ is increasing in ***Z***, so that ***Y*** is decreasing in ***Z***.

Olson (1982, p74) presents a list of hypotheses, several of which may be expressed directly in terms of the model above. These are (with Olson's numbering)

1. There will be no countries that attain symmetrical organization of all groups and thereby attain an optimal outcome through comprehensive bargaining.

That is

(A.1) $\boldsymbol{I}(t) > 0 \qquad \gamma > 0$.

2. Stable societies with unchanged boundaries tend to accumulate more collusion and organizations for collective action over time.

That is, given stability,

(A.2) $\boldsymbol{I}'(t) > 0$

4. On balance, special-interest organizations and collusions reduce efficiency and aggregate income in the societies in which they operate.

That is,

(A.4) $\partial\gamma/\partial \mathbf{I} > 0$

7. Distributional coalitions slow down a societies capacity to adopt new technologies and to re-allocate resources in response to changing conditions, and thereby reduce the rate of economic growth.

The impact of this hypothesis may be captured by assuming that $\boldsymbol{E}(t)$ is endogenous. Further, under stable conditions $\boldsymbol{E}(t)$ is a smooth function of time. The derivative with respect to time may be denoted

(3) $\dot{\boldsymbol{E}} = \dot{\boldsymbol{E}}^*(t) - \psi(\mathbf{I}(t))$

where $\dot{\boldsymbol{E}}^*(t)$ is the rate of growth in the absence of interest growth effects. With this notation, Hypothesis 7 states that

(A.7) $\partial\psi/\partial \boldsymbol{I} > 0$

Thus, interest groups not only reduce actual output below potential output, but lower the growth path of potential output. From (3), we derive the following model of the time path of potential output under stability

(4) $\boldsymbol{E}(t) = \boldsymbol{E}(t_0) \int_{t_0}^{t} \dot{\boldsymbol{E}}^*(t) - \psi(\boldsymbol{I}(\tau))d\tau)$

Actual output may be derived from (2) and (1) as

(5) $\mathbf{Y}(t) = \varphi(\mathbf{E}(t)) - \gamma(\mathbf{I}(t), \mathbf{Z}(t))$

Finally, the objective function a discounted present value

(6) $\boldsymbol{W} = \int_{t_0}^{t} \boldsymbol{Y}(\tau)\, \rho(\tau)\, d\tau$

where $\rho(\tau)$ is a discount function[3].

These results take a particularly simple form when the functions γ and ψ are assumed to be linear in $\boldsymbol{I}(t)$ and $\boldsymbol{I}$ is assumed to be linear in t. These assumptions are implicitly present in the specifications of most of the empirical tests of the hypothesis. The interest group variable $\boldsymbol{I}$ is usually approximated by a proxy linear in time, such as the number of years of stable government. The linear form of the standard regression model implies the linearity of γ and ψ. We will further simplify by assuming that $\dot{\boldsymbol{E}}^*(t)$ is a constant $\dot{\boldsymbol{E}}^*$ and that ϕ is linear in $\boldsymbol{E}$.

Let

$\boldsymbol{I}(t) = \lambda(t - t_0)$

$\psi = 2\alpha\mathbf{I}$

$\gamma = \beta\, \mathbf{I} + \kappa\mathbf{Z}$

This yields a model of the form

(7) $\mathbf{Y}(t) = \mathbf{Y}(t_0) \exp\left(\dot{\boldsymbol{E}}^{*(t-t^0)} - \alpha\lambda\,(t-t_0)^2\right) - \beta\lambda(t-t_0) - \kappa\mathbf{Z}$

that encapsulates the idea that long periods of stability will engender economic sclerosis.

Some of the most striking features of the model arise with the notion of shocks. We will adopt a stylized definition of a shock as a jump discontinuity in the time paths of the model

[3] An objection to this welfare function is that it takes no account of income distribution. Income distribution is generally ignored in the literature on relative economic performance, including that devoted to the Olson hypothesis (see however, Olson 1982 pp172-75). In order to clarify the issues arising from this literature, distributional issues will not be introduced at this point.

variables including the following features

(i) A once-off downwards jump in $\boldsymbol{E}(t)$ corresponding to effects such as destruction of physical plant in wartime or the loss of skills during transitional periods of unemployment arising from a sharp change in economic policy.

(ii) An upwards jump in $\boldsymbol{Z}(t)$ followed by a gradual return to the pre-shock values. This reflects disturbances associated with the shock that reduce output below its potential level.

(iii) A downwards jump in $\boldsymbol{I}(t)$ corresponding to the dissolution of interest groups. This effect is the main one in which we are interested. Under the Olson hypothesis, the downwards jump in $\boldsymbol{I}(t)$ will lead to a reduction in γ, the gap between potential and actual output. It will also lead to an increase in $\dot{\boldsymbol{E}}$, the rate of economic growth, as a result of a decrease in ψ.

The model yields ambiguous predictions for all variables except $\dot{\boldsymbol{E}}$ and $\dot{\boldsymbol{Y}}$. The rate of growth of potential output, $\dot{\boldsymbol{E}}$, rises because of the reduced impact of interest groups. The rate of (measured) economic growth, $\dot{\boldsymbol{Y}}$, is predicted to rise, not only because of the growth in $\dot{\boldsymbol{E}}$ but also because of the return of $\boldsymbol{Z}(t)$ to its pre-shock values. The problem, then, is to distinguish these effects.

It may be useful at this point to reconsider the analogy between the Olson hypothesis on the effects of political shocks and Schumpeter hypothesis on the effects of market shocks. Both Keynesian and Schumpeterian models predict that growth rates will be high in the recovery phase of the business cycle, a prediction that is empirically well-validated. Indeed, both models predict that the growth rate will be higher than that for an economy operating at stable full employment. In the Keynesian model, these high growth rates arise purely because output is returning to its potential level. In the Schumpeterian model, the beneficial effects of creative destruction are felt during this period.

It should be noted that the increased growth associated with the ‘rebound’ effect arising from the return of $\boldsymbol{Z}(t)$ to its pre-shock values is logically distinct from the convergence or

catch-up hypothesis discussed by Olson (1982, p 114). Because of the opportunities for technological borrowing, low-income countries tend, other things being equal, to have higher growth rates than high-income countries (see Baumol 1986 and Baumol and Wolff 1988 and, for a contrary view, de Long 1988). This may be formalized in the current model by suggesting that levels of potential income, $\boldsymbol{E}(t)$, tend to converge over time. Olson suggests that 'the catch-up argument is a particularly congenial partner for the present theory' and observes that problems will arise if the two are not tested jointly. However there is no necessary presumption that countries experiencing rebound from shocks at a given time will have a lower level of income, or, more importantly, a lower level of potential income, than those that have not experienced recent shocks.

III. TESTING THE HYPOTHESIS

The majority of formal and informal tests of the Olson hypothesis have involved comparisons of growth rates, between polities that have experienced recent shocks and those that have not, and have therefore had a long time to build up distributional coalitions. For example, Olson (pp 99-117) reports a regression of growth rates in US states against the length of time since statehood, or in the case of former Confederate states, since 1865. Similarly, the less formal analysis involves a comparisons between the stable English speaking countries and countries, notably West Germany and Japan, which experienced major shocks in World War II. Olson's more recent work involves a time series, rather than a cross-section comparison, between growth rates throughout the developed world in the early (1945-73) and later (1973-present) post-war periods.

It is apparent from the model of Section II, however, that a comparison of growth rates alone does not permit unambiguous acceptance or rejection of the Olson hypothesis. An increase in growth rates following a political shock may arise either because output is returning

to a level closer to potential output, or because the rate of growth of potential output has been stimulated. Most researchers engaged in testing the Olson hypothesis have attempted to take account of this problem, typically by including some form of convergence or 'catch-up' variable in their models. However, this approach raises the difficulty that the phenomenon of convergence itself is not well-understood (see for example, Baumol, DeLong, Dowrick and Nguyen).

The crucial weakness of most tests of the Olson hypothesis so far published is the failure to include an explicit null hypothesis. The implicit null hypothesis in tests such as those of Choi (1983) and Pryor (1983) is that the rate of economic growth should remain unchanged following a shock. However, since neither Olson's model nor its competitors is consistent with this null, this is an inappropriate choice. From the model presented above, it is apparent that the appropriate null hypothesis is that the coefficients α and β should be equal to zero. The problem is to formulate an alternative to test against this null. A number of interpretations of the Olson hypothesis, ordered from weak to super-strong, may be proposed.

IV. THE STRONG VERSION OF THE OLSON HYPOTHESIS

The strong version of the Olson hypothesis states that shocks, such as revolutions and foreign occupation, are actually beneficial, in the sense that the level of per capita income is raised in the long-run. This would appear to be the most natural interpretation of the hypothesis, given the stress placed on the example of the UK as a country which has suffered from excessive stability compared to its Continental European neighbours.

A super-strong version states that shocks are welfare-improving, at least as regards economic welfare. That is, the benefits of higher per capita incomes in later periods offsets the costs of lower income in the periods during which the shock takes place, and also in subsequent periods before the previous growth path has been overtaken. It should be noted

that Olson himself (1982, pp 140-41) explicitly rejects the super-strong version of the hypothesis. Furthermore, the case of France, where per capita income has reached the same general level as that of the developed countries as a group, despite the adverse investment climate generated by an unstable history, is treated as confirming evidence for Olson's general hypothesis (1982, pp 76-77). It would be evidence against the strong and superstrong versions of the hypothesis. A more systematic study of the developed countries permits an outright rejection of the strong and super-strong versions of the hypothesis.

The crucial point about these strong versions of the hypothesis is that they make predictions not merely about growth rates, but about levels of per capita income. Excessive stability should give rise not merely to lower rates of growth, but to a level of per capita income below that of comparable nations that have experienced shocks sufficiently frequently to prevent the accumulation of dense networks of interest groups. The thesis does not specify what the optimum frequency of change should be, though there may be some upper limit.

An important benefit of this form of test is that the confounding effects of convergence and rebound effects are eliminated. The strong version of the hypothesis requires that countries that initially have low-income levels, but have the benefit of shocks, should not merely have higher growth rates than comparable stable countries, but should actually overtake them in per capita income. This effect cannot arise because of convergence or rebound effects.

As Olson notes, the prediction of a crossover in per capita income has been borne out for the UK relative to its European neighbors, and also for Australia and New Zealand[4]. In this case, however, the statistical evidence does not support first impressions. Table 1 gives some measures of the political stability, over the period since 1800, of the OECD countries, along with per capita GDP in 1976 (using the criteria of Summers and Heston 1984, 1988 and Dowrick and Nguyen 1989). Even very small (but consistent) differences in growth rates over

[4] See however, Dowrick and Nguyen (1989) who argue that after correcting for the effects of population growth and various statistical anomalies, Australia's economic performance has been about the average for the OECD nations.

this long period would obliterate any differences in initial prosperity. Hence if one type of political regime is more conducive to growth it should be reflected in differences in absolute living standards.

Two measures of stability are given. The first is the number of major constitutional shifts over the period since 1800. If the strong version of Olson's thesis is correct, a very small number of changes should imply stagnation and comparatively low GDP per capita. Although the average frequency of change would seem to be central to Olson's argument, there is obviously more interest in recent changes. Therefore Table 1 also gives the approximate period since the most recent constitutional change[5]. Countries are ranked by per capita GDP in 1976.

[5] The criteria for a constitutional change (which reflect the author's interpretation of Olson's views) are, admittedly, somewhat arbitrary. However, the division into groups is clear-cut and agrees fairly closely with Choi's index of institutional sclerosis.

Table 1

GDP Per Capita and Constitutional Stability

Country	GDP Per Capita[a]	No of Shocks	Years Since Shock
United States	8709	2[b]	100+
Canada	8037	1	100+
Sweden	7741	1	80
Norway	7668	1	80
Denmark	7524	1	100+
Germany	7437	5+	40
Luxembourg	7270	2	100+
Japan	7019	2	40
Switzerland	6911	1	100+
Australia	6891	2	80
France	6890	5+	30
Finland	6621	3	40
Austria	6545	5+	30
Belgium	6441	1	100+
Netherlands	5864	1	100+
Iceland	5594	2	50
United Kingdom	5390	1[c]	65
New Zealand	5058	1	80
Italy	4818	5+	40
Spain	4457	5+	10
Greece	3981	5+	10
Ireland	3546	1[c]	65
Portugal	3102	5+	10
Turkey	2361	5+	2

a 1976 $US

b Civil War 1861-65 and major westward expansion ending around 1880

c Partition of Ireland 1921

Constitutional shifts are taken to include revolutions, constitutional changes imposed by force (as in the Axis countries after WW2), shifts between dictatorship and democracy, jurisdictional integration through federation and major changes in (metropolitan) territorial coverage. Temporary wartime occupations and the acquisition or loss of colonies are excluded, as are gradual changes such as progressive extension of the franchise. Finally, accession to the EC has not been taken into account.

Although there is plenty of room for adjustment of particular values (for example, there could be different views on the importance for British and Irish politics of the partition of

Ireland), there is no doubt that Table 1 indicates a fairly sharp division between 'stable' and 'unstable' countries. The English speaking countries, the Benelux countries the Scandinavian countries and Switzerland have all been very stable. Italy, France, Germany, Austria, Greece, Spain and Portugal have all been unstable.

The main doubtful cases are Ireland and Japan. Both are viewed as fairly stable on either of the criteria offered here. However Ireland's 19th century history, including the 1840s famine, the emigration of 50 per cent of the population and a series of unsuccessful rebellions may cast doubt on its classification. On the other hand, despite the complete political realignment following Irish independence, many interest groups from the period of British rule, previously Irish branches of UK organizations, continued to operate without much change after independence. As regards Japan, the classification of stability seems justified by the general observation of a highly traditional society where the social impact of industrialisation has been far more limited than in the West. However, since advocates of the Olson thesis (including Olson himself) generally want to use Japan as an example of institutional change leading to rapid growth, this case must be regarded as doubtful. The two cases work in opposite directions, so it does not matter much whether they are both excluded or both included.

The classification offered here coincides fairly closely with the index of institutional sclerosis proposed by Choi (1983) and used in regression comparisons of growth rates. However, Choi excludes Greece, Portugal, Spain and Turkey from the data set on the grounds that they have not enjoyed political stability and freedom of organization, and Iceland and Luxembourg because they are 'relatively small'. (The exclusion of relatively small countries seems to lack any logical basis.)

The claim that Spain and Portugal have lacked political stability compared to, say, West Germany and France, is unjustified, so the exclusion of these countries can only be based on the absence of freedom of organization. This point raises some central issues concerning the

Olson hypothesis, and the public choice framework within which it is set.

Public choice theory typically takes liberal democracy as a given. The central features of liberal democracy, as it relates to the Olson hypothesis, are freedom of organization and the rule of law. Freedom of organization is clearly necessary for the gradual accumulation of interest groups to work in the manner envisaged by Olson. It might seem, therefore, that countries which are not characterized by freedom of organization should perform better than those which are not. Indeed, a characteristic feature of the rhetoric associated with military coups is a promise to govern in the interests of the nation as a whole, rather than of sectional interest.

However, freedom of organization is intimately bound up with the rule of law. If the power of the State can be used to suppress interest groups on an arbitrary basis, the politics of income redistribution are fundamentally changed. Instead of cautiously entrenching privileges for your own interest group, the most profitable path is to harness the power of the State to attack your enemies.

Furthermore, the nature of interest groups is changed. Although the interest groups in Olson's analysis are narrow, they must represent genuine economic interests. This is because redistributive policy is implicitly confined to measures such as tariffs which discriminate between interests but not between individuals. Hence the problem is to organize all members of the interest group so as to avoid the free rider problem. When the rule of law is absent, it is feasible to extract direct benefits for individuals and small groups. The free rider problem disappears when benefits can go to particular individuals. In particular, the natural rent-seeking strategy is the forcible suppression of a rival interest and the redistribution of its wealth to the leaders of the dominant group.

A particularly important implication is that encompassing interest groups are unlikely to emerge in the absence of freedom of organization. These are the only groups that have a

significant interest in impartial general legislation aimed at restricting the damaging activities of narrowly based interests.

These points are illustrated by a country excluded from both data sets. In the late 19th Century, Argentina was one of the world's high income countries. Since then it has declined steadily in relative terms, and income now appears to be declining in absolute terms. This decline may plausibly be attributed to chronic and violent class and sectional conflict which has led to rent seeking on the basis of physical force rather than political interest group activity. Periodic attempts at military government 'in the national interest' have only exacerbated the decline. For a more detailed discussion of Argentina's decline, and a comparison with the less dramatic relative decline suffered by Australia, see Duncan and Fogerty. As is pointed out by DeLong, tests of convergence hypotheses that exclude countries like Argentina are biased in favor of acceptance.

A second difference arises from the fact Choi constructs his raw index of sclerosis using the number of years since 'consolidation of modernizing leadership', derived from Black (1966). In assessing the impact of shocks, however, he counts only shocks occurring after the year of the first constitution. Thus the Austrian defeat in World War I and the Irish War of Independence are both excluded. However, since both these countries receive a very low rank for institutional sclerosis in any case, the bias generated by this inconsistency is not serious.

It is apparent that throughout the post-war period, the most prosperous countries have been characterized by long periods of stability. At no time has there been an unstable country in the top five or more than two in the top ten. Because the differences in per capita GDP between OECD countries are becoming very small, these precise rankings are not of much interest. Nevertheless, this data set does not give much support to the view that stability is uncongenial to long-run prosperity.

This result contrasts sharply with the results of a comparison based on growth rates. The

analysis given here suggests that the higher post-war[6] growth rates of 'unstable' countries represent a combination of catch-up and rebound effects. These benefits have been at most been a partial compensation for the direct costs of instability incurred during the political and economic disturbances prior to 1950.

A more formal analysis of the relationship between stability and long-run welfare may be given using Choi's index of institutional sclerosis. A regression was undertaken of 1976 per capita GDP against Choi's index. The result, reported in Table 2, was a positive but statistically insignificant relationship

Table 2

Relative GDP and institutional Sclerosis

Regression results for 15 developed countries

DF:	R:	R-squared:	Adj. R-squared	Std. Error:
15	.287	.082	.017	10.845

Parameter:	Value:	Std. Err.:	Std. Value:	t-Value:	Probability:
Constant	67.761				
Sclerosis	.201	.18	.287	1.121	.281

Analysis of the residuals revealed that the UK was an outlying and influential observation. The UK has the highest index of institutional sclerosis, but GDP per capita is below average. With the UK excluded, the relationship between 'sclerosis' and welfare, reported in Table 3, is significant and positive.

[6] Or, more precisely, since 1950 when sufficient order for the collection of meaningful economic statistics had been restored. Most comparisons of post-war economic performance, such as those of Choi (1983) use data sets beginning in 1950.

Table 3

Relative GDP and Institutional Sclerosis

Regression results excluding UK

DF:	R:	R-squared:	Adj. R-squared	Std. Error:
14	.582	.339	.288	9.12

Parameter:	Value:	Std. Err.:	Std. Value:	t-Value:	Probability:
Constant	54.112				
Sclerosis	.475	.184	.582	2.582	.0228

The strong version of the Olson hypothesis receives intuitive support from the example of the UK, but is clearly falsified when applied to a data set excluding the UK. It may be worth quoting Olson's remark that "a small number of dramatic illustrations will generate more belief in the theory than is warranted, whereas the statistical evidence will generate less conviction than it should".

The other main data set used by Olson, the states of the US, may also be used to test the strong version of the hypothesis. For the purposes of this test, attention will be confined to those states that had achieved statehood at the time of the Civil War. Rates of economic growth in the old Confederate states have exceeded those in the North in recent years (see Olson 1983 for further discussion). However, the strong versions of the hypothesis make a sharper prediction - that per capita incomes should be higher in the South than in the North.

The results of this test are too clear-cut to require statistical inference. Among the states admitted to the Union before 1861, nine of the ten poorest today are former Confederate states. The only Confederate states outside this group are Virginia, which now contains much of the suburban overspill of Washington DC, and Florida.[7]

[7]For this test to be strictly valid, it is necessary that all of the states should have been comparable prior to the shock. However, the institution of slavery, over which the Civil War was fought, makes the interpretation of concepts of income and wealth very difficult. Once again, the length of time which has passed since the Civil War means that only very large differences in income would invalidate the test, since small consistent differences

V. THE WEAK VERSION OF THE HYPOTHESIS

Thus, the available data yield a clear rejection of the strong versions of the Olson hypothesis. It is necessary to obtain a weaker version of the hypothesis that is still consistent with Olson's postulates. The crucial postulates are that interest groups retard economic efficiency and that they tend to accumulate slowly over time. Hence, if a society could costlessly dissolve its interest groups, it would move to a new, higher growth path.

While this hypothesis is weaker than those considered above, it is still in sharp contrast with the large body of thought that regards political stability as a critical precondition for growth. The hypothesis considered here is that, provided it is not accompanied by the destruction of productive capacity, some degree of instability is beneficial. Thus, the term 'weak version' should be interpreted in relative, not absolute, terms.

The weak version of the Olson hypothesis might be tested by comparing societies with similar initial levels of economic endowments and incomes, some of which are old and equipped with dense coalitions of interest groups and some of which are completely new. The problem is of course, that it is essentially impossible to find a completely new society. The closest approximation would appear to be a colony founded by emigrants from an established society. This pattern of colonization was common in antiquity, and was practised especially by the Greeks. In this case it would be reasonable to suppose that the colony started on an economic level with its parent, but without a well-developed network of interest groups.

In modern times, the dominant pattern of colonization has been the imperialist mode in which a small conquistador élite exploits the labor power and resources of the native population. However, the British also practised the classical mode of colonization. Australia, New Zealand and Canada have all been settled primarily (though by no means exclusively) by British emigrants, with the native populations being wiped out or pushed to the periphery. In addition,

in growth rates would outweigh any moderate difference in initial income levels.

the early settlement of the United States was primarily derived from Britain. As would be predicted by the Olson hypothesis, the children have generally outperformed the parent[8]. Unfortunately this test, like the tests of the strong versions of the hypothesis discussed above, suffers from the problem that its power is derived principally from the poor performance of Britain.

It is, therefore, necessary to turn to alternative tests. Olson (1982, Ch 5) suggests that jurisdictional integration may be a low-cost method by which interest groups may be dissolved or at least rendered impotent. Because jurisdictional integration does not impose substantial transitional costs, relative to wars and revolutions, it is reasonable to consider both time-series comparisons of growth rates for countries before and after jurisdictional integration and cross-section comparisons between countries. Olson cites a number of time-series comparisons in favor of the jurisdictional integration hypothesis, notably the German Zollverein and the European Community. On the other hand, he omits one noteworthy counter-example, the Federation of Australia from six British colonies in 1901. The colonies experienced rapid growth in the 19th Century, giving them (at least by standard measures[9]) the world's highest per capita income at the turn of the century. However, jurisdictional integration was followed by nearly forty years of stagnation, during which a number of countries caught up with and in some cases surpassed Australia in per capita income.

In comparative tests across countries, the relevant issue is the size of the coalitions that must be organized. The Olson hypothesis predicts that the best performance should be observed in those countries where the relevant jurisdiction and hence the corresponding coalition size is large[10]. For countries in a customs union, the relevant jurisdiction is the union. Olson argues

[8]Indeed, a staple of 19th Century Australian nationalist rhetoric was the notion of a new country free from the suffocating burden of entrenched privilege.

[9] Australia's apparent decline in relative per capita income is overstated because of non-enumeration of its Aboriginal population and other statistical problems. See Quiggin (1987).

[10] It should be noted that other hypotheses, such as those based on scale economies and the need for a large

that for countries with a clear commitment to free trade the relevant jurisdiction is the whole world so that coalition formation is essentially impossible. Note, however that this argument only applies to traded goods, a point that Olson regards as particularly relevant in the case of the UK. It is difficult to formulate this hypothesis in a way suitable for an econometric test, notably because of the gradual expansion of the EC. The evidence from the listing in Table 1 is generally favorable, but not overwhelmingly so. The original EC countries are generally middle-ranking. The USA and Canada, which are top-ranked, may perhaps be regarded as a single large jurisdiction for some purposes. The Scandinavian countries have generally been open to world market forces, but their good performance may also be explained in terms of encompassing interest groups (see below). The countries that would be predicted as poor performers are Australia and New Zealand (high rates of tariff protection for manufactures) and possibly Japan (very high overt protection for agriculture, and non-tariff barriers on manufactures and services). Australia is middle-ranking and New Zealand is a poor performer. As in so many comparisons of international performance, the difficult problem of classifying Japan makes a final resolution difficult. Thus the evidence on jurisdictional integration remains suggestive, but not conclusive.

It is also of interest to consider the converse process, namely jurisdictional contraction. A form of jurisdictional contraction that has been experienced by a number of countries in the sample is the loss of empire. Of the bottom 12 countries in Table 1, seven (Turkey, Portugal, Spain, UK, Netherlands, Belgium and Austria) are former imperial powers (I exclude Italy's brief and disastrous grab for empire under Mussolini). Of the top 12, only France (No 11 in this Table) was an established imperial power, though both Germany and Japan tried and failed to establish themselves in this rôle.

Imperial systems seem particularly well-suited to the growth of interest groups in the metropolitan country, since the primary objective of any imperial system is the extraction of

domestic market make similar predictions.

rent, and struggle over shares is to be expected. Under Olson's hypotheses, it seems likely that interest groups engendered by empire will persist even when the empire becomes unprofitable or is lost. The histories of Turkey, Portugal, Spain, the UK and Austria certainly suggest that empire had a rigidifying and ultimately debilitating effect - the issue seems less clear for the Netherlands and Belgium, where the empire seems to have been less important.

One particularly important interest group that is not discussed by Olson is the military. Maintenance of an empire necessitates a professional army, and often engenders or preserves a politically influential military caste. Since military expenditure is unproductive, the economic interests of the military caste are directly at odds with those of the society at large. If a large military establishment outlives the empire it was built to maintain, or the emergency it was created to meet, there is potential for rapid economic decline. There is a large literature on the effects of military spending on economic performance. Though the results are not clear-cut, and many of the tests suffer from the same problems as tests of the Olson hypothesis, the classical view that military spending takes place at the expense of private consumption and investment is supported by a majority of studies, at least for the industrialized countries we are considering here (see Murray Weidenbaum 1990 and the papers cited there). The argument presented here is also consistent with the recent literature on unproductive entrepreneurship (Baumol 1990, Murphy, Shleifer and Vishny 1990). Murphy at al argue that, where large rents accrue to the military, ambitious young people will be diverted from productive entrepreneurial activity into military careers.

The military is not the only interest group that may be nurtured by empire. Other examples include civil service groups, settler groups whose primary attachment remains with the 'mother country' and industries built on low-cost inputs extracted from colonial possessions. In all these cases, the interest group is likely to survive the empire, and also to encourage the prolongation of the imperial enterprise beyond the period when it yields positive net rents to

the imperial power (a pattern most evident in the cases of Portugal and France).

VI. ENCOMPASSING INTEREST GROUPS

Olson's central argument is based on the notion that narrowly based interest groups can afford to disregard the negative social effects of policies that provide them with benefits such as immunity from competition. By contrast, encompassing interest groups are large enough in relation to society as a whole that their members bear a significant portion of any social costs generated by their activities.

If *laissez-faire* were the social optimum, these facts would mean that encompassing interest groups were less harmful than narrowly-based ones, but still harmful. If some redistribution is desirable, however, it is likely that a system with encompassing interest groups may yield a better equity outcome than one with no interest groups at all. Related issues arise if macro-economic stabilization or public good provision is desirable. A strong state organization, responsive to encompassing interest groups, may yield better outcomes than would be obtained in a society with narrowly based, but weak, interest groups and a correspondingly limited state.

Although the notion of encompassing interest groups is less superficially paradoxical than the notion that stability is harmful, it has profound implications for the theory of public choice, much of which is built on a simplistic interpretation of the interest group ideas developed in Olson (1965). The dominant tendency here is to treat narrowly-based interest groups as givens, and to regard politics as a negative-sum game played by these groups.

In relation to tests of the Olson hypothesis, two issues arise. First, do countries with encompassing interest groups outperform those with narrowly-based interest groups? Among the non-English speaking countries, and especially the European countries, the answer is affirmative. The better performers, notably the Scandinavian countries and West Germany,

are characterized by strong central labor organizations and social democratic parties, with a corresponding tendency to the formation of unified employer organizations. The poorer performers are characterized by Communist/Socialist splits in the labor movement, and also by religious cleavages (either Catholic/Protestant, or, in the Catholic countries, clericalist/anti-clericalist). On the other hand, among the English-speaking countries, it is arguable that the US and Ireland have the least encompassing organizations, and Australia and New Zealand the most. The results here are ambiguous, and not particularly favorable to the encompassing interests hypothesis.

The second problem is to produce testable hypotheses, preferably with policy implications, as to the factors that tend to produce encompassing interest groups. The absence of religious divisions has already been mentioned, but this is an exogenous factor for most purposes. Implications for the design of political systems are harder to determine but more interesting. The encompassing interests argument would seem to favor a system of government by stable parliamentary majorities, representing a majority of the electorate. The number of parties should be small. Representation should not be purely geographically based, since localized constituencies more likely to yield narrowly based coalitions and also because single-member electorate systems are more likely to produce governments that lack majority support[11]. The West German 'list' system appears to meet all these requirements, and the Scandinavian countries approximate them fairly closely.

VII. IMPLICATIONS

Although Olson's work may be viewed as a purely positive enquiry, it would be a rare reader who could treat the rise and decline of nations in such a dispassionate light. It is natural to seek ways in which a nation's rise can be encouraged and even more natural to seek to

[11] In both the UK and Australia, the present governments were elected on about 40 per cent of the votes cast.

avoid decline. Olson himself offers only very limited guidance. His suggestions of freer movement of goods and factors of production, are, as he notes, neither novel nor revolutionary. He rejects the view, derived from the strong and super-strong versions of the hypothesis, that instability and revolution are inherently undesirable. These versions of the hypothesis give clear support to a frontal attack on interest group power of the type undertaken by the Thatcher government even if the initial costs are very high. Moreover the strong versions of the hypothesis would justify policies that would be rejected on standard welfare-theoretic grounds; for example, subsidizing the nuclear power industry in order to weaken the position of the National Union of Mineworkers.

It is noteworthy that the errors identified here in relation to tests of the Olson hypothesis have also affected evaluations of the performance of the Thatcher government. Many such evaluations have been based on rates of economic growth at the time in question or over only a few years. As indicated here, the correct test is whether the level of national income is higher than it would have been under alternative policies. Although such counterfactual questions can never be resolved completely, simple extrapolation of the economic growth experienced in the 1970s (or any longer post-war period) yields a higher level of national income for 1990 than was actually realized.

The more sophisticated versions of the Olson hypothesis have more complex policy implications. In particular, it is not clear whether it is preferable to attack interest groups or to seek to incorporate them into the decision process in such a way that they become more encompassing in their orientation. An example of the latter approach is the ‘Accord’ between trade unions and government that has formed a major part of Australian economic policy since 1983.

A *caveat* that applies to all of this analysis is that the rôle of ideas has not been adequately discussed. In most of the public choice literature, it is assumed that individuals

and organized groups know and seek their own interests. Unsatisfactory policy outcomes are explained by deficiencies in political processes. Given the confusion reigning in macro-economic theory, it seems likely that simple mistakes are an equally important source of policy failure. In particular, it will be of little avail to over-ride the selfish objections of interest groups in order to pursue policies that are themselves misguided.

CONCLUDING COMMENTS

Previous tests of the Olson hypothesis have relied on comparisons of growth rates. In this paper, it has been argued that comparisons of per capita income levels are more appropriate. A similar approach may be applicable to other hypotheses concerning economic development.

The statistical tests presented here permit a clear rejection of the strong and superstrong versions of the Olson hypothesis. As has already been noted, these interpretations have been rejected by Olson himself. Nevertheless, they are of some importance because of their policy implications. The results on the weak version of the hypothesis are ambiguous, partly because of the lack of adequate data.

A major problem with the statistical tests reported here, as well as with other tests of the Olson hypothesis, is that they are confined to the basic version of the hypothesis and do not incorporate Olson's ideas on jurisdictional integration and on the differences between narrowly-based and encompassing interest groups. It seems unlikely that any version of the hypothesis that does not incorporate these ideas will be upheld by a valid statistical test. On the other hand, there is as yet no well-specified and testable hypothesis as to why interest groups are narrowly based in some countries and regions and encompassing in others. This must be a central topic for future research in this area.

REFERENCES

BAUMOL, W. (1986). Productivity growth, convergence and welfare: What the long-run data show. *American Economic Review* **76**, 1072-85.

_____ (1990). Entrepreneurship: Productive, unproductive and destructive. *Journal of Political Economy* **98**, 893-921.

_____ and WOLFF, E. (1988). Productivity growth, convergence and welfare: Comment. *American Economic Review* **78**, 1155-59.

BLACK, C. (1966). *The Dynamics Of Modernization: A Study In Comparative History*. New York: Harper & Row.

CHOI, K. (1983). A statistical test of Olson's model. In Mueller D. , *The Political Economy of Growth.* New Haven: Yale University Press.

DELONG, B. (1988). Productivity growth, convergence and welfare: Reply. *American Economic Review* **78**, 1138-54.

DUNCAN, T. and FOGARTY, J. (1984). *Australia and Argentina: On Parallel Paths.* Melbourne: Melbourne University Press.

MARX, K. (1976). *Capital, Vol. 1*. Harmondsworth, Middlesex, (first published 1867): Penguin.

MUELLER, D. (1979). *Public Choice*. Cambridge: Cambridge University Press.

_____ (ed) (1983). *The Political Economy of Growth*. New Haven: Yale University Press.

MURPHY, K., SHLEIFER, A., and VISHNY, R. (1990). The allocation of talent; Implications for growth. Working Paper No. 65.: Center for the Study of the Economy and the State, University of Chicago.

NGUYEN, D.T and DOWRICK, S. (1989). Measurement and international comparison. In Chapman, B. , *Australian Economic Growth: Essays in Honour of Fred H. Gruen*. Melbourne: MacMillan.

OLSON, M. (1965). *The Logic of Collective Action*. Cambridge: Harvard University Press.

OLSON, M. (1982). *The Rise and Decline of Nations*. New Haven: Yale University Press.

_____ (1983). The South will fall again: The South as leader and laggard in economic growth. *Southern Economic Journal* **49**, 917-932.

_____ (1988). The productivity slowdown, the oil shocks and the real cycle. *Journal of Economic Perspectives* **2**, 43-70.

_____ (1989). How ideas affect societies: Is Britain the wave fo the future?. In *Ideas, interests and consequences.* London: Institute for Economic Affairs.

PORTER, M. (1990). *The Competitive Advantage of Nations*. N.Y.: Free Press.

PRYOR, F. (1983). A quasi-test of Olson's hypotheses. In Mueller D. (ed), *The Political Economy of Growth.* New Haven: Yale University Press.

QUIGGIN, J. (1987). White trash of Asia?. *Current Affairs Bulletin* **64**, 18-25.

SCHUMPETER, J. (1961). *The Theory Of Economic Development.* London: Oxford University Press.

SUMMERS, L. and HESTON, A. (1984). Improved international comparison of real product and its composition:1950-1980. *Review of Income and Wealth* **30**, 207-62.

_____ (1988). A new set of international comparisons of real product and price levels:Estimates for 130 countries 1950-1980. *Review of Income and Wealth* **30**, 207-62.

WEIDENBAUM, M. (1990). Defence spending and the American economy: How much change is in the offing?. *Defence Economics* **1**, 177-260.