Decentralisation and the Poor

Dr Aaron Schneider[*]

Institute of Development Studies, Research Fellow, University of Sussex, Brighton, BN1

9RE, England

21 June 2002

Abstract

I study patterns of decentralisation and pro-poor policy outputs in 67 countries in 1996. The wide variety of indicators of decentralisation clustered around fiscal, administrative, and political dimensions, and these dimensions had independent relationships with social policy. Consistent with much of the decentralisation literature, administratively decentralised countries showed greater attention to social spending. There were two surprises. First, fiscal decentralisation showed no relationship to social policy, and second, politically decentralised countries spent less on social policy. In particular, the negative relationship associated with political decentralisation suggests a need to look deeper into the impact of political decentralisation on the ability of the poor to advance demands.

Decentralisation biases political conflict. By redrawing the political-administrative division of the state, decentralisation changes the geographical boundaries of political contestation, alters the relative power of different actors, and changes the groups available for cross-class alliances.[1] The current project seeks systematic cross-national patterns in the ways that shifting resources and power from the centre to the local level affects policy outputs. The project proceeds by examining a specific policy area, pro-poor policy, which is likely to pitch wealthy groups against poor groups. The chief hypothesis is that centralisation provides the poor with certain organisational and material advantages that they either lack at the local level or possess only in scattered jurisdictions. In contrast, the rich do not depend on

[1] Schattschneider made a similar argument in the U.S. case. See Schattschneider (1960). Schattschneider described political institutions as the mobilisation of bias, either organising interests into political institutions or organising them out.

centralisation to advance their preferences, and they can wield influence at both the local and the national level.[2] Of course, rich-poor cleavages do not define all types of political conflict, but when they do, this paper argues that, other things being equal, the amount of decentralisation is a deciding factor in the outcome of struggle.

Though the state has retreated from many areas of economic life, government remains the primary institution capable of protecting the poor. A vast array of studies has attempted to explain why pro-poor effort varies across countries. It is beyond the scope of the current study to examine all the literature, but it is worth noting that valuable advances have been made through studies of welfare states, economic growth and distribution, and interest group politics.[3] Still, we have far too little understanding of the independent impact of differences in the level and kind of decentralisation.[4]

The need to consider multilevel government institutions has increased in recent decades, as many central governments have decentralised functions and resources to lower levels. To test the impact of these changes, the project builds on measures of decentralisation that make conceptual and empirical distinctions between three dimensions of decentralisation: fiscal, administrative, and political.[5] Fiscal decentralisation refers to how much of the money collected and spent by government goes through non-central government entities. Administrative decentralisation refers to how much autonomy non-central government entities have relative to central control. Finally, political decentralisation refers to the degree to which non-central government entities satisfy the political functions of governance, such

---

[2] A theoretical argument along these lines is made by Slater, in a critique of decentralisation during the 1980s (Slater, 1990).

[3] An excellent example of the literature comparing welfare states can be found in Esping-Anderson (1991). An example of studies of the impact of rates and kinds of growth on distribution can be found in White (2001). Finally, the classic statement on the role and importance of interest groups can be found in Dahl (1961).

[4] There have been studies of the impact of decentralisation on related areas, however. For example, Bendor and Mookherjee (1997) examine the impact on the ability to organise collective action, Baun and Grote (2000) examine the impact on poverty, and Brandt and Zhu (2000) examine the impact on redistribution in China.

[5] This distinction is not new; the World Bank makes exactly this division of the decentralisation concept on its webpage: http://www1.worldbank.org/publicsector/decentralisation/. For a statistical verification and

as representation. The dimensions are related to each other, but the current analysis suggests that the independent impact of each dimension can be estimated and evaluated. The policy implications of calculating the impact of each dimension will be lessons for an optimal amount of decentralisation along each dimension.

To develop this argument, the paper examines data from 1996 for 67 countries (see Appendix One). A factor analytic exercise confirmed the conceptual validity and improved the accuracy of measures of three dimensions of decentralisation (Schneider, 2002). Here, the project applies regression techniques to these indicators to test the impact of decentralisation on pro-poor policies. By distinguishing between fiscal, administrative, and political decentralisation, the paper draws out the independent, and, at times opposite, impact of each dimension of decentralisation. The paper's major contribution is to suggest that decentralisation of administrative autonomy can have efficiency benefits, but that centralisation of political functions is required if the poor are to benefit in particular. This highlights the link between political decentralisation and the organisational weapons of those who favour redistribution.

Future work will apply case study and comparative methods to focus more directly on the causal mechanism that links the political power of the poor to the level of government at which they must direct their attention.[6] In addition, future projects will examine the way in which decentralisation along one dimension can be compensated by centralisation along another.

Decentralisation in Vogue

---

measurement of these three dimensions, see Schneider (2002). The individual country measures can be found in Appendix One.

[6] Though the planning for this project remains at its beginning stages, a few research projects appear promising. One is to examine the political strategies and effectiveness of the poor in countries that are either very centralised (for example, Chile) or very decentralised (Brazil). Another strategy would be to examine political strategies and effectiveness in a single country going through significant change from centralisation to

The current fondness for decentralisation began during the 1980s and represented a striking reversal from advice that dominated earlier ideas of development.[7] In the 1950s and 1960s, military coups and regime breakdowns occurred across Latin America and instability followed decolonisation in much of Africa. Observers understood these circumstances as evidence that escalating demands and mass mobilisation had outstripped the capacity of state institutions (Huntington, 1968). Centralised decision-making was seen as a way to rationalise scarce resources and depoliticise the masses; by contrast, decentralisation was viewed as likely to heighten political, racial, ethnic, and religious cleavages.

During the 1980s, the tide began to turn and pressure to decentralise began to rise. Stagnant economies and inefficient central bureaucracies led researchers to reconsider centralisation as a solution to the problems of developing countries, and multilateral institutions began to include decentralisation components in many of their programs.[8] Additionally, freer trade, international treaties, and loan conditions led central governments to choose, or be forced, to abdicate their traditional roles, and left functions to non-central government entities.[9] There were domestic pressures for decentralisation also, as local politicians and civil society actors sought to capture power from central governments, and national leaders sought to purchase support from local allies or meet demands for democratisation.[10] As we enter the next decade, zeal for decentralisation has become more tempered, though a positive hue continues to tint most evaluations:

---

decentralisation. India's shift towards greater resources and responsibility at the local level might be a useful example.

[7] The current enthusiasm for decentralisation may be new, but it is not novel. The prior apex of enthusiasm for decentralisation was as a strategy to prolong colonial rule in much of Africa (Samoff, 1990: 513).

[8] For an example of the zenith of decentralisation enthusiasm, see Campbell (1997). Between 1993 and 1997, fully twelve percent of all completed World Bank projects had a decentralisation component (Litvack, 1998: 1).

[9] See Snyder (1999) for an example of how Mexican state governments stepped in to provide regulatory frameworks where the central government abdicated its role in coffee production.

[10] For an example of how decentralisation was used by the military regime in Brazil to legitimise its rule, see Sola (1991) and Samuels (2000).

An overall conclusion of the paper is that decentralised fiscal structures are more suitable in the institutional environment of developing countries, especially so if careful attention is paid to the design of institutions vital for the success of decentralisation policies such as the rule of law, conflict resolution and coordination, charter of rights, effective limitations on the authority of governments beyond their designated spheres of influence, accountability and institutional capacity for evaluation at all levels.

(Shah and Huther, 1998: 1).

The fervour that surrounded decentralisation both encouraged and reflected processes that were already under way on the ground. Developed countries had already become increasingly decentralised by the 1970s; and over the 1980s, developing countries began to narrow the gap. In the developed world, sub-national revenues as a percentage of total revenues stood at 23.3 percent of total revenues in the 1970s and 23.9 percent in the 1990s. In the developing world, the sub-national percentage of total revenues rose from 11.6 percent to 13.2 percent. Including all countries, including those in transition, the average sub-national percentage of total revenues rose from 16.1 percent in the 1970s to 18.3 percent in the 1990s.[11]

As governments shifted resources downward, they also created new administrative apparatuses to implement programs and make decisions at the local level. In developing countries, 63 of 73 countries surveyed had governmental institutions that administered sub-national jurisdictions (World Bank, 2000: 109).

Many of these jurisdictions also provided the ground for political representation, holding elections and organising civil society associations at the sub-national level. For example, in 1999, 94 of 127 countries (74%) elected at least one sub-national tier of government (World Bank, 2000: 216-217).

---

[11] Data from World Bank Decentralisation statistics webpage, as cited in bibliography.

In short, sub-national governments are now doing a larger share of the work of government in both developed and developing countries. As more and more countries move away from centralised government institutions, the concept of decentralisation is studied in new contexts. Still, though many of these countries share characteristics of decentralisation, there are stark differences in the kind and degree of decentralisation that has occurred. Categorising and measuring these differences is no easy task.

Conceptual Frameworks for Decentralisation

One way to understand differences in the kind and degree of decentralisation is in terms of the use to which the categories are to be put.[12] Some of the most successful conceptualisations and categorisations in the literature have concentrated on decentralisation in terms of decentralisation *to*. They define and distinguish dimensions of decentralisation in terms of who receives the power and resources that are being decentralised. Thus, democratic devolution identifies the category of cases in which decentralisation occurs to elected local authorities (Manor and Crook, 1998). Privatisation defines the category of cases in which decentralisation occurs to organisations outside the government sector (Rondinelli, 1989). The non-governmental sector has been further disaggregated into private sector organisations that are for-profit versus non-governmental, voluntary associations (Leonard, 1982). Each of these distinctions, and others, has been useful for understanding causes and effects of decentralising *to* one kind of unit or another. For example, what is the impact of decentralising to an elected local government or to a private sector, for-profit organisation? Conceptualisations that apply these categories offer a useful beginning. But what about

---

[12] Leonard suggests that researchers choose a conceptual framework only after deciding the causal relationships they intend to test. "The variety of forms of decentralisation threatens to become unmanageable if we try to be comprehensive. To impose a limit one must specify the purpose for which the typology is being created and elaborate only those dimensions that are useful to it" (Leonard, 1982: 28-29).

answering the more fundamental question asked in this project. Does decentralisation help the poor or are they better served by centralisation?

In the following paragraphs, care will be taken to conceptualise and define decentralisation in ways that produce categories useful for this basic question. The project chooses to concentrate on decentralisation *from*. Each dimension of decentralisation is conceptualised in terms of the degree to which power and resources are ceded or taken away from central governments. This will allow us to measure and evaluate the impact of decentralisation as compared to centralisation. Here, the varied recipients of decentralisation are left ambiguous, and the conceptualisation focuses on the one thing all forms of decentralisation share: regardless of the recipient, decentralisation involves shifting power and resources away from the central government.

This approach builds on applications of the decentralisation concept in theories of fiscal federalism, public administration, and political science. Briefly, fiscal federalism theories view decentralisation in terms of the welfare effects of giving resources to one level of government or another. Fiscal decentralisation indicates a greater proportion of government resources at levels other than the central government (Oates, 1972: 17; 1999).[13] Administrative arguments focus on the administrative effects of granting local jurisdictions autonomy from central control. This autonomy refers to general policymaking authority and personnel control, as well as control over what is done with public finances (Rondinelli, 1984).[14] Finally, political arguments focus on the effects of conducting political activities such as participation, organisation, elections, and representation at the local level as opposed to the national level. Decentralised political systems are those in which political actors and

---

[13] Theories of fiscal federalism begin from the assumption that fiscal interventions are necessary in the very specific cases in which government intervention improves on market operation. For example, normal market operations can produce instability (as in cases of financial panic), can misallocate resources (as in cases of monopoly or oligopoly), and can poorly distribute resources. For more detail, Stiglitz (1989: 9-89) provides an excellent discussion.

issues are significant at the local level and at least partially independent from those at the national level (Fox and Aranda, 1996).

In short, decentralised systems are those in which a greater proportion of the functions related to each of the dimensions are performed at the local level. To measure case scores on each dimension and calculate their impacts, we apply measures derived from seven indicators of decentralisation.

Fiscal Decentralisation

Fiscal federalism theories dealing with decentralisation focus on the location of resources. These theories seek to maximise social welfare, which is portrayed as a combination of economic stability, allocative efficiency, and distributive equity. The precise combination and importance attached to each goal will depend on the context, but the challenge is to locate resources at the level of government that optimises these fiscal categories of social welfare (Musgrave, 1958: 132-33, 175-178).

Expenditures and revenues form the two main components of fiscal activity.[15] These two elements are central to any system of public finance, and they summarise the total amount of money that governments put into or take out of an economy as well as where governments put the money and where they take it from. The current study hypothesises that the best indicator for the level of fiscal centralisation or decentralisation is the share of subnational expenditures and revenues.

---

[14] Thus, a system can be fiscally decentralised without administrative decentralisation if the use of local funds is set at the central level.

[15] Others have focused on different aspects of fiscal decentralisation. Some choose to focus on the relationship between expenditures and allocated revenues ('vertical imbalance') to get a sense for the fiscal pressure that is being put on lower (or upper) levels of government. Some pay attention to the nature of inter-governmental transfers to understand the impact on lower government behaviour (Nice, 1987; Ahmad, 1997). The current application is focused on the authority relations between levels of government, in which the nature of resource transfers is an indicator of administrative decentralisation.

The choice of focusing on fiscal instruments rather than regulatory or financial policies is partly methodological and partly substantive. Governments influence the amount of wealth in society and its distribution through various instruments, though fiscal instruments are the easiest to measure with cross-national statistics. Regulatory instruments are built into the formal and informal institutions that govern civil society and private sector behaviour; thus, they are extremely complex and context specific. Financial instruments are similarly difficult to measure with statistics, and their impact on distribution is not so direct as fiscal policy. Fiscal policy offers the most accessible window into levels of fiscal decentralisation, and regulatory or financial mechanisms will have to be taken up in closer country studies.

Despite being easier to measure, fiscal instruments still present some methodological difficulties. Though the IMF attempts to standardise its definition of decentralisation, it is extremely difficult to attain accurate measurement using self-reported national statistics.[16] What is measured as a local expenditure or revenue in one context may be scored as a nationally controlled resource in another.

Nevertheless, there are several advantages to a focus on revenues and expenditures. First, revenues and expenditures offer the best measures available without detailed study of each and every country. Second, errors are not likely to be correlated with other variables of interest thus they introduce no bias into estimation. Finally, by using both expenditures and revenues, we tap into the main aspects implied by the concept of fiscal decentralisation. The key attribute that defines fiscal decentralisation is the fiscal impact of sub-national governments relative to the overall impact of government. Expenditures focus on the amount of government activity that sub-national governments undertake, and revenues focus on the quantity of resources that pass through them.

---

[16] See Government Finance Statistics Handbook (2000) for a description of the statistical details. Also, see Byskov (2001) for a discussion of the reliability and validity of the data.

Expenditures are all cash outlays made by a given level of government. They can be examined as a whole, over time, in terms of revenues, as a percentage of GDP, in distinct subsections, in subsections as a percentage of some other variable, in constant values, in current values, or as done here, as a percentage of all government outlays. Each treatment cuts a slightly different perspective on spending policy, but sub-national expenditures as a percentage of total expenditures is the most appropriate to gauge decentralisation.[17] A larger proportion of the expenditures spent by lower level governments indicates decentralised fiscal expenditures.

The revenue side of fiscal decentralisation is composed of all cash inflows to sub-national governments, including taxes, loans, and grants. As in the case of expenditures, these can be examined in a number of ways and with respect to other variables, and each treatment offers a different view of revenue policy. Similar to the choice for expenditures, the indicator chosen is sub-national revenue as a percentage of total government revenue, which focuses on the fiscal revenues in the hands of sub-national governments as opposed to those revenues in the hands of the centre.[18] A larger proportion of revenues passing through sub-national governments indicates decentralised fiscal revenues.

Administrative Decentralisation

---

[17] There are some drawbacks to expenditures as a percentage of total expenditures, as they miss those expenditures that do not appear as cash outlays, such as credit guarantees, nor does this measurement distinguish among expenditures mandated by the central government as opposed to those that are decided wholly locally. Still, sub-national expenditures as a percentage of total expenditure focuses on the fiscal power exercised by lower governments as opposed to that exercised by central governments. Altering the indicators did not adjust the results of factor analysis. For example, measuring sub-national expenditures and revenues as a percentage of GDP also load heavily on a single dimension, though these indicators relate more to the impact of local governments on the economy.

[18] There are some drawbacks to this specification, which does not distinguish for example between revenues over which lower levels of government have total control, such as block grants, and revenues that are tied to central government priorities, such as ear-marked transfers. This distinction will be taken into account below, however, in measuring the degree of administrative autonomy exercised by sub-national governments.

Public administration theories dealing with decentralisation broadly focus on the location of administrative authority. These theories seek modern bureaucracies which are perceived as efficient, capable, and rational (Weber 1968, esp. 926-939 and 956-989). There is significant debate about whether these goals operate in tandem or if there are trade-offs, and the combination will probably depend on individual cases. The challenge of administration is to locate authority at the level of government that will promote modern administration.

Administrative decentralisation has received significant attention in previous literature. This literature has categorised administrative decentralisation in terms of break-points along a continuum from less to more local autonomy. The three most commonly used break-points are labelled deconcentration, delegation, and devolution (see Rondinelli, 1990).[19] Deconcentration involves the least amount of autonomy, delegation slightly more, and devolution the most.

Deconcentration refers to a central government that disperses responsibility for a policy to its field offices. This transfer changes the spatial and geographical distribution of authority, but does not significantly change the autonomy of the entity that receives the authority. Under deconcentration arrangements, the central government retains authority over the field office, and exercises that authority through the hierarchical channels of the central government bureaucracy. Deconcentration allows only moderately more autonomy than centralised systems.

By contrast, delegation transfers policy responsibility to local governments or semiautonomous organisations that are not controlled by the central government but remain accountable to it.[20] The main difference between deconcentration and delegation is that the

---

[19] It should be noted that some applications of the categories differentiate a syndrome of characteristics. These applications mark the distinctions across categories in terms of a host of factors, and not simply in terms of different levels of autonomy. Also, some form of privatisation is often included as another category (Rondinelli, 1990).

[20] Both delegation and deconcentration open the potential for a principal-agent problem, created by the self-interested behaviour of the entity that receives the decentralised power and resources. Of course, in the case of

central government must exercise its control through the contractual relation that enforces accountability on the part of local government. This represents a slightly higher level of administrative autonomy for local entities than under deconcentration.

Finally, under devolution, the central government allows quasi-autonomous local units of government to exercise power and control over the policy responsibility being transferred.[21] Compared to the other two types of administrative decentralisation, devolution provides the greatest degree of autonomy to the local unit. The local unit is only accountable to the central government in so far as the central government can impose its will by threatening to withhold resources or responsibility that the local unit needs.

The dimension that discriminates among these categories of administrative decentralisation is the autonomy granted by the central government to the entity that receives power and resources. Deconcentration involves a bureaucratic, hierarchical relationship; delegation involves a contractual relationship; and devolution involves an arm's length relationship.[22] The differences in kind among hierarchy, contract, or arm's length relationships are a syndrome of factors. The best way to summarise that syndrome is in paying attention to the degree of autonomy granted by the central government. Such a simplification perhaps misses some of the conceptual richness of the different relationships, but is sufficient if the underlying concern is to distinguish between systems with more or less

---

deconcentration, the agent may be easier to control, as it is simply the field office of a central government hierarchy. Delegation introduces increased possibility of divergence between interests of the central government principal and the local government/semiautonomous agent.

[21] Arguments about democratic decentralisation tend to include accountability to the local population as part of its argument. "Whilst increased participation had a positive impact on the performance of decentralised institutions, adequate resources for councils were also essential, and - as we shall see - the social and political contexts within which decentralisation was undertaken also influenced outcomes. But the most critical determinant was the existence of a combination of all these factors with effective mechanisms of institutional and popular accountability. It is those mechanisms which provided - and are likely to provide more generally - the crucial link between enhanced participation and enhanced institutional performance." (Crook and Manor, 1998: 21).

[22] It should be noted that all three types of administrative decentralisation can be analysed using economic theories of principal-agent, moral hazard, and adverse selection techniques. Under all arrangements besides centralisation, central governments have imperfect information about non-central units and the capacity or effort they will dedicate to assigned tasks. In terms of achieving administrative goals, this imperfect information is

administrative decentralisation. The categories, quite simply, represent break-points along a continuum from more administratively decentralised to less administratively decentralised systems.[23]

One way to measure levels of local administrative autonomy is in the control exercised over local revenue. This is different from the total amount of resources, which is more a measure of wealth than a measure of control. As mentioned before, sub-national revenues are a combination of taxes, transfers, grants and loans. Taxes offer the greatest degree of autonomy, grants and loans offer somewhat less, and discretionary transfers probably offer the least. Transfers, even supposedly automatic ones, can be withheld, and grants and loans generally arrive with conditions or with expenditures earmarked.[24] Two measures are hypothesised for administrative decentralisation. The first measure is percentage of total grants and revenues accounted for by taxes. The second measure is the percentage of total grants and revenues not accounted for by transfers. The hypothesis here is that a larger proportion of revenues raised through taxation and less obtained through transfers indicates greater local administrative autonomy. [25]

---

what makes central governments nervous about ceding autonomy – they do not know for sure what the outcome will be.

[23] Simplifying the syndrome of characteristics into the single dimension of autonomy becomes more complicated when we consider other aspects of decentralisation at the same time. For example, the level of autonomy becomes unclear when we compare a local government with significant resources (fiscal decentralisation) and deconcentrated authority (administrative centralisation) to a local authority with few resources (fiscal centralisation) but devolved authority (administrative decentralisation). Correct measurement of autonomy requires taking into account the interrelationship of the dimensions.

[24] The kind of revenue is at best only a rough indicator of the amount of administrative control. Grants and loans can arrive either with conditions or without them. Though unconditional loans or grants (block grants) suggest local control, the fact that the centre can withhold them implies some limitation of local autonomy. Own-taxes are probably the most controllable form of local revenue, though even in these revenues, the centre can exert some authority by earmarking tax streams to certain expenditures.

[25] It might even be argued that this measure picks up some of the differences in kind implied by deconcentration, delegation, and devolution. Under deconcentration, local resources show up simply within the central bureaucracy; there are likely to be few, if any, local taxes; and the score on this measure will be a low one. Under delegation, there is likely to be a low level of local taxation, and a high level of resource transfer that are likely to come with strings attached, such as matching grants, ear-marked grants or discretionary grants. The use of these types of transfers is easily controlled by the central government, even when they delegate some autonomy over implementation to lower levels of government. In the case of devolution, those transfers that occur are more likely to be in the form of block grants or revenue-sharing, which indicate that local levels have significant autonomy. These types of grants limit the capacity of the central government to intervene in what lower levels of government do. A greater proportion of revenues, however, is likely to come from taxation,

Political Decentralisation

Political science theories dealing with decentralisation focus on the location of mobilisation, organisation, articulation, participation, contestation, and aggregation of interests. All political systems must resolve the challenges of institutionalising these processes, and the way in which this occurs will depend on individual contexts. The challenge of decentralisation is to resolve these political functions at the level of government that allows the greatest degree of institutionalisation. Two key political functions measured here involve representation and checks on the central government.

In elections, the electorate votes, the votes are aggregated, and candidates take power. Elections at the local level indicate that some portion of representative activity is being undertaken at the local level and force parties to organise for local contests. Candidates must compete and make appeals in local jurisdictions, and citizens participate at the local level. Citizens may organise and participate through non-electoral channels, but these are harder to characterise, and probably do not have as direct an impact on representation. Of course, simply holding elections does not automatically mean that national forces do not overwhelm local ones, but local elections at least increase the likelihood that some political functions will be decentralised.[26] The existence of elections at the municipal level or the state/provincial level is hypothesised here as an indicator of political decentralisation.

A second set of political functions is related to checking the power of central government. Legislative oversight, independent judiciaries, and organised interests act to restrain central governments. More relevant to the issue of decentralisation, national territories can be

---

which grants the most autonomy (Nice, 1987; Winkler, 1994). In the future, case studies will be used to draw out some of the distinctions among types of transfers.

[26] Literature on federalism has paid particular attention to the way decentralisation interacts with partisan politics and elections (Grodzins, 1960).

fragmented into regional jurisdictions in which local authorities have capacity to check the power of the central government.[27] Perhaps the greatest local check on central power occurs in polities in which geographic portions of the nation have autonomous, legal jurisdiction designated in the constitution. For the central government to exercise authority in these regions, it must negotiate and bargain first with local authorities. The existence of constitutionally designated, autonomous regions is hypothesised here as an additional indicator of political decentralisation.

Though there are other political functions, the electoral component and the check on central government power are the most valid indicators of political decentralisation as they tap into fundamental aspects of political authority. Elections address the issue of representation, which is the way interests gain possession of legislative and executive power. Regional autonomy addresses the existence of local checks on central government political authority. Table One displays the concepts, measures and sources used for the different dimensions of decentralisation.

—*Insert Table One 'DecentralisationIndicators and Dimensions' Here*—

Using the Indicators to Obtain Accurate Measures

For the concept of decentralisation, factor analysis generates more accurate scores of the three dimensions than other techniques. Measuring decentralisation dimensions is complicated by the fact that core attributes are difficult to measure, and any metric for one dimension is likely to simultaneously pick up elements of the others. In part, this is because there are causal relationships among the dimensions (political decentralisation may contribute to fiscal decentralisation etc.) but also because any quantitative measure is likely to be

---

[27] The literature on 'market-preserving federalism' has emphasised the importance of decentralisation to limiting government size (Weingast, 1995; Qian, 1997). Oates, by contrast, makes the argument that

somewhat imprecise. No single indicator can capture the decentralisation concept fully, and no simple combination of indicators, such as an average or sum, could capture the multidimensionality of the concept. To avoid the mistakes that might arise from simply averaging or adding the indicators, factor analytic techniques calculated the unique and interrelated characteristics of the different dimensions of decentralisation and confirmed that three dimensions underlay the indicators.[28] Next, the technique used correlations among the variables to measure the underlying dimensions in each case. Thus, factor analysis both confirmed that there were three dimensions to the decentralisation concept (fiscal, administrative, and political) and quantified the amount that each case had decentralised along each dimension.

The factor analysis was carried out for 67 countries in which the seven indicators of decentralisation were available in and around 1996.[29] The analysis confirmed that three dimensions underlay the indicators, and confirmed that fiscal indicators clustered together, administrative indicators clustered together, and political indicators clustered together. Based on this clustering, the analysis used the portion of each indicator that related to an underlying dimension to generate a score on that dimension in each case. Appendix Two describes the factor analytic process for generating scores. To make the scores more intelligible, they were normalised to a zero-one scale, and can be read in terms of decentralisation units. Thus, the United States scored .84 fiscal decentralisation units, .41 administrative decentralisation units, and .60 political decentralisation units. The scores for the cases are included in Appendix One.

---

decentralisation may not counteract tendencies of central governments to expand (Oates, 1985).

[28] For a more thorough discussion of factor analytic techniques, see Kim and Mueller (1978); Long (1983); and Bollen (1989). For an application, see Brady (1990).

[29] Where data from 1996 was not available, but data from some years between 1994 and 1998 were available, the data was interpolated. As most of the indicators are variables that change incrementally over time, if at all (expenditures, revenues, etc.) this practice was not likely to change the results. The findings were robust

What is the Impact of Decentralisation?

The current analysis applies these measures of decentralisation to estimate and evaluate the impact of decentralisation on the poor. Though there are economic reasons to suspect that decentralisation lowers redistribution, this project highlights the impact that decentralisation has on political conflict. The project hypothesises that centralisation allows the poor to concentrate their organisational resources; allows them to exert more political influence; and thus, allows them to impose greater redistribution. This suggests that the impact of decentralisation on the poor will partly be a question of their ability to organise politically. Where decentralisation includes political decentralisation, it weakens the political resources of the poor, and there is likely to be less redistribution.[30] Before focusing more directly on this hypothesis, it makes sense to locate it within the wider literature on decentralisation and the poor.

Fiscal Federalism Approaches to Redistribution

The main hypotheses from fiscal federalist theory that bear on the current project relate decentralisation to equity. Governments play a role in equity by using fiscal policy to influence the distribution of wealth among members of society, categories of the population, and regions of a country. Redistribution can occur through a number of taxation and expenditure instruments, and the current project focuses on government efforts at pro-poor

---

to using data from a single year data alone (1995, 1996, 1997, or 1998), but pooling the data into a single year increased the number of cases available for the causal analysis conducted in the next section.

[30] As Congressman Barney Frank observed, "99.9 percent of Congress clearly prefer that the issue be decided at that level of government which will decide the issue the way they like" (Rosen 1997: 484).

policy, in which government provides resources and services of particular interest to the poor.[31]

Fiscal federal theory argues that such equity policies are unlikely to be successful if pursued by local governments. Local governments must compete to attract investment, which is their key contribution to creating wealth, providing jobs, and generating a tax base. Decentralisation heightens competition for investment, and forces local governments to pursue policies that favour the rich, who are unlikely to live or invest in jurisdictions that threaten too many pro-poor policies. To prevent capital flight, local governments cut progressive taxes and spending, which critics have labelled a 'race-to-the-bottom' (Musgrave, 1958, 1997; Inman and Rubinfeld, 1997).

In addition, fiscal federalists argue that decentralisation harms interregional equity because jurisdictions are 'stingy'; rich regions are unlikely to shift resources to poor regions or address needs in poor regions (Buchanan and Wagner, 1977; Oates, 1972; Prud'homme, 1995). In contrast, when resources are centralised, central governments can use fiscal transfers to equalise resources across regions or to address specific regional needs.[32]

Both the race to the bottom and the regional stinginess arguments suggest that fiscal decentralisation harms the poor, but there are those who disagree. They argue that, in the context of increased liberalisation and globalisation, national governments are just as likely to race-to-the-bottom as a result of competition with other nations. The causal connection may not be between decentralisation and a race-to-the-bottom, but between capital mobility and a race-to-the-bottom (Swank, 1992; Wallerstein, 1997). Further, governments rich regions may view it as beneficial to pass resources to a poor region; for example, it may wish to end the

---

[31] The term 'redistribution' will be used for shifting resources from the rich to the poor. Though examples of regressive redistribution (from the poor to the rich) exist, these are not the focus of the current study.
[32] There are some that argue that by enhancing efficiency or increasing competition, decentralisation can potentially bring services to the poor that were previously under-provided by the central government (Litvack, 2000: 8). Pauly (1973) argues that decentralising resources to local governments can help the poor if voters are

spill-over effects of poverty in neighbouring regions, such as migration or environmental degradation. In addition, centralisation only encourages pro-poor regional transfers if poor regions can exert pressure at the central level. In the end, the impact of fiscal decentralisation remains an open question that the current analysis will evaluate.

Administrative Approaches to Redistribution

Administrative approaches to decentralisation direct their attention to the ways in which decentralisation influences administrative performance in meeting the needs of the poor. Even more than the rich, the poor depend on public services to cover their basic needs. As a result, inadequate government performance hurts the poor if it denies them services they would otherwise receive.

Some focus on the contribution of decentralisation to administrative efficiency. Decentralisation gives local units the flexibility to experiment and innovate, and allows them to imitate successful examples from other regions. At the same time, jurisdictions must compete to retain citizens and attract a tax base. Those jurisdictions that have a more efficient administration will be able to provide more services for lower taxes and will win competition with other jurisdictions (Rondinelli, et al 1984; Tendler, 1997; Wildavsky, 1984; Buchanan and Tullock, 1962; Dye, 1966; Toqueville, 1969).[33] This can have an impact on the poor if more efficiency frees resources for redistribution or provides more of the services that are important to the poor (Litvack, 2000: 8).

Other administrative theorists focus on the advantages of decentralisation for the use of information to advance monitoring and enforcement in accountability. By keeping

---

more favourable to redistribution in their own jurisdiction than they would be to redistribution to the poor elsewhere.

bureaucracy small and limited to local jurisdictions, decentralisation counters the tendency of large organisations to become rigid and unresponsive.[34] This argument suggests that small size and limited geographical scope improve information flows and allow citizens to monitor the state and the state to monitor citizen needs. In addition, smaller size may increase agility when changes have to be made, making it easier for citizens to hold government accountable (Dye, 1966; Toqueville, 1969; Huther and Shah, 1998; Fisman and Gatti, 2000).[35] Decentralisation is likely to be of particular benefit to the poor in circumstances in which centralisation had contributed to non-transparent and inflexible policies that systematically excluded the demands of the poor.

Of course, these beneficial effects of administrative decentralisation only hold if local administrations have the transparency and capacity to respond to the poor. First, monitoring and enforcement may be less forthcoming at the local level than at the national level.[36] Legislatures, judiciaries, civil society organisations, and the press act as monitoring mechanisms to deliver information to citizens, but these institutions may actually be inhibited at the local level by their smaller scale (not to mention the fact that they are usually much more recent at the local level than their national counterparts). In addition, small scale and distance from central authority allows clientelism and private power to survive in local contexts, where they can block pro-poor initiatives (Bardhan and Mookherjee, 2000: 2-7).[37] Even if local systems of monitoring and enforcement function well, an effective public sector response requires resources and professionalism, which are unlikely to exist in uniform

---

[33] Many models of administrative competition rest on the model of a 'market' in which jurisdictions compete to keep their citizens, who use voice and exit to discipline local government. Tiebout (1956) applied this model for individual citizens; Oates and Schwab (1991) do the same for firms.

[34] Michels (1966) described this process of bureaucratic rigidification as the 'iron law of oligarchy'.

[35] Crook and Manor (1998: Chapter 6) conclude that accountability is the crucial variable that influences the performance of democratic decentralisation.

[36] Hausmann and Stein (1995) discuss these potential problems in the context of agency and collective action problems. Agency problems occur any time a principal attempts to contract an agent to carry out a task in which monitoring effort and judging ability involves some transaction cost. Collective action problems arise any time members of a group have incentives to free-ride on the efforts of others within the group.

quantities across a territory, and are often concentrated in higher status and higher paying central bureaucracies (Prud'homme 1995: 201-203). Finally, decentralisation disconnects local welfare from national welfare in ways that encourage lower levels to shirk difficult tasks and push these tasks to their neighbours or to the national level (Petrei, 1998; Shah, 1991; Hommes, 1995). If these problems exist, they may undercut any advantages that the poor receive from the impact of decentralisation on administrative efficiency and accountability (Bird and Vaillancourt, 1998).

The administrative advantage or disadvantage of decentralisation depends critically on the capacity of local institutions, which must monitor, enforce, and implement administration in ways that help the poor. The current analysis will test the argument and counter-arguments about the link between administrative decentralisation and the poor.

Political Approaches to Redistribution

Many political theories evaluate responsiveness to the poor by examining the impact of decentralisation on representation and policymaking. Systems of representation are the institutions that link citizens to the state and map their interests into state policies. Some systems of representation operate through civil society institutions, such as NGOs, social movements, or interest organisations. Other systems of representation, such as political parties, aim to bring interests directly into positions of official political power. All systems of representation are bounded by the institutions of the state itself, which set the rules for representation and thus, shape what interests get represented and how. Under decentralised systems of representation, citizens direct their demands through local organisations and institutions, and representatives orient their appeals to local constituencies.

---

[37] O'Donnell (1992) describes these local, authoritarian patches in Latin America as 'brown areas' within new democracies.

Decentralisation allows different interests to attain representation across a territory and thus provides representation to a more diverse array of interests than would otherwise occur. Centralised systems of representation are likely to exclude the interests of minorities unless affirmative mechanisms are in place for ensuring minority representation.[38]

For the current research question, political decentralisation only matters if it affects the representation of the poor. Advocates of decentralised representation offer several justifications. First, they argue that in traditionally centralised, exclusionary regimes, decentralisation can break links between national governments and non-poor interests, and give the poor an opportunity to influence policy (Morris and Lowder, 1992: 4-7). Second, by creating smaller and more numerous institutions of representation, decentralisation increases opportunities for participation, which advocates believe increases the ability of the poor to exercise their citizenship and gain representation (Narayan, Chambers, Shah, and Petesch, 2000; Crook and Manor, 1998).[39] Third, some argue that the poor tend to be concentrated in a given polity, thus decentralisation creates jurisdictions in which the median voter is poor (Gandmont, 1978). Finally, there are those who argue that decentralisation provides multiple training grounds for democracy, altering the culture of a polity, incorporating previously excluded groups, and raising citizen consciousness of the plight of poor compatriots (Toqueville, 1969).

By contrast, there are those who argue that decentralised systems actually do a worse job of representing the poor than centralised ones. In decentralised cases, national representative institutions are often simply the sum of locally oriented ones, and no mechanism links national institutions directly to citizens (Grodzins, 1960). If only regional or local issues get politicised, the poor may find it difficult to focus attention on problems that are supra-

---

[38] See Grodzins (1960: 974-978) for the U.S. case.
[39] There are some who argue that participation is only possible on a small scale, and therefore at the local level (Pateman, 1970: 109; Dahl, 1970: 132; and Mansbridge, 1980: 293; Olson, 1965: 33-36).

regional, such as pro-poor policy. [40]

The current project hypothesises that political decentralisation decreases representation of the interests of the poor.[41] Groups opposed to redistribution, the rich, are few in numbers, but they can use their wealth to purchase influence in government or to threaten government revenues by slowing economic production.[42] Political decentralisation does not change the tools available to the rich, nor does it change their effectiveness; decentralisation simply forces the rich to apply their political leverage to lower levels of government. The key is that decentralisation implies deconcentrating government, while capital remains concentrated.[43] These weapons of the wealthy are likely to be equally, if not more, effective at local as well as central levels of government.[44]

In contrast, political decentralisation weakens the influence of poor groups. The poor are not without economic leverage of their own, but the impact of their wealth depends on levels of centralisation. By definition, the poor do not hold enough wealth to purchase much influence, though they at least purchase some influence when they aggregate their wealth in a single organisation at the national level (McConnell, 1970). Likewise, their threats to slow economic production are only credible if they are united across companies and across jurisdictions, where withholding their labour cannot be easily side-stepped by shifting

---

[40] A similar different application has been made to the case of environmental interests. Environmental activists seek protection from pollution, which necessarily involves externalities and spill-overs from one jurisdiction to another. If environmentalists win many local struggles but have no representation at the national level, spill-overs from a single polluter in a single jurisdiction can overturn the impact of environmental victories in many local jurisdictions (Ames, 1995; Ames and Keck, 1998).

[41] A similar argument is made by von Braun and Grote, 2002; Crook and Sverisson, 2001; Swank, 2002; and Smith, 1985.

[42] Some argue, in fact, that the market automatically organises the interests of the rich. See Block, 1977; Lindblom, 1977; Przeworski and Wallerstein, 1988; Wallerstein, 1989.

[43] Some argue that decentralisation increases the strength of capital with respect to the state, as local governments must compete against each other, as well as against foreign competitors. Others argue that in the current context, national governments are equally as weak. The debate on the 'structural dependence of the state' has aroused significant research, see Swank (1992: 32-54); Quinn and Shapiro (1991: 851-874); Williams and Collins (1997: 208-244), though none of it suggests that national governments are *less* able to discipline capital than local governments.

[44] Some might even argue that the effectiveness of weapons of the rich is even higher at the local level. Coordination and collective action problems that exist at the national level may be absent at the local level, where structures of production and class interest are more homogenous.

production.[45] In some contexts, peak level unions pool material resources and coordinate national strikes to pressure for pro-poor policy (Wallerstein, 1997; Swenson, 1991).[46]

The most important effect of decentralisation, however, is its detrimental impact on the ability of the poor to organise politically. Organisation is the main weapon of the poor, as it allows them to utilise the one resource they have in abundant quantities, their numbers. Organisation is no easy task, however; it requires leadership, discipline and mobilisation, and these resources are often in short supply. Decentralisation spreads these scarce organisational resources, and forces the poor to organise in multiple jurisdictions for multiple contests. Further, organisational resources that exist in one jurisdiction are not easily transferred or leveraged to another.[47] The key for the poor is an institutional structure that can overcome resource and collective action constraints to press demands (Hicks and Swank, 1992). National parties or other such organisations can concentrate and redirect resources, but political decentralisation forces the poor to organise in multiple jurisdictions for multiple contests, electoral and otherwise, and spreads thin their organisational resources (Garrett 1995: 657-687). Though the poor may find the leaders to discipline and mobilise them in some cities or regions, they are unlikely to be able to replicate this success in all jurisdictions.

The impact of political decentralisation depends critically on the ability of the poor to counter the tendency to fragment and divide. The current analysis will test the arguments that political decentralisation helps the poor against the notion that it weakens their ability to promote pro-poor policy.

Measuring Pro-Poor Policy

---

[45] Wallerstein shows that centralised and cohesive labour unions are more effective in promoting wage gains and redistributing wealth than decentralised ones (1997).

[46] Of course, while the economic impact of the poor may be greater at the national level than at the local level, the economic tools available to the poor are still probably less politically significant than those available to the rich.

The central objective of this project is to test the impact of decentralisation on policies affecting the poor.[48] Though it is also important to look at the condition of the poor, there are two reasons to focus attention on pro-poor policy effort. First, the project limits its ambitions to a partial explanation for poverty, and does not attempt to account for all of the other variables that are likely to play a role in determining the condition of the poor. The look at policy outputs focuses on the marginal impact of decentralisation and is more likely to pick up the ways in which policy changes reflect the impact of decentralisation. Second, policy outputs direct attention to the main causal mechanism that would link decentralisation to the condition of the poor, which is level of pro-poor policy effort.

Social Policy

One way that the impact of decentralisation on the poor can be measured is in terms of the policy steps taken by government. Policy steps can be expenditure policies, revenue policies, and regulatory policies, and each kind of policy can pro-poor or anti-poor. In general, policies that offer services used by the poor, redistribute wealth, or improve the treatment of poor within society are pro-poor.

Here, the project uses the proportion of expenditures directed towards social policy as an indicator of pro-poor policies. Social policy expenditures are a particularly good measure of

---

[47] Olson (1965) emphasizes the difficulty of overcoming collective action constraints. To do so once, in a single, national organisation is difficult, to do so many times in multiple jurisdictions is even harder.

[48] There are a number of competing measures of impact on the poor, and each one tells a slightly different story. The two broadest categories of impact are outputs and outcomes. Outputs are the policy actions of government, which can be divided into expenditure, revenue, and regulatory policies. Each of these policy areas can be examined for the degree to which they are pro-poor. The outcome category examines the condition of the poor, which can be measured in absolute terms, relative terms, in probabilistic terms, or in terms of social exclusion. Each of these categories can be further divided into unidimensional and multidimensional measures, in which multidimensional measures pay attention to multiple aspects of poverty. Here, the focus will be on outputs, which are more closely linked to the decentralisation hypotheses, though perhaps do not translate directly into the welfare of the poor.

pro-poor policy effort as they incite vehement distributive conflict, and require an active effort on the part of government to transfer resources to the poor. In addition, social policies come together as a meaningful configuration of government actions that other studies have examined to understand the nature of state-society relations in terms of a social contract between citizens and government.[49]

To measure pro-poor policy, data is taken from the IMF Government Finance Statistics. The data from multiple levels of government categorise expenditures according to expenditures on health, education, social security and welfare, and housing and community amenities. The total social policy effort is the sum of social spending at all levels of government divided by the total amount of resources spent.[50]

Research Design

The relationship between decentralisation and pro-poor policies is complicated, and any single method of analysis is unlikely to uncover all of the interrelated factors that influence social policy. The current project takes a first cut at the topic by analysing statistical indicators of decentralisation and pro-poor policy in a large number of cases. Statistical analysis has the advantage of looking at a large population and testing a number of hypotheses for statistical significance. Cross-national comparison offers the advantage of testing hypotheses in widely different contexts that are nonetheless comparable examples of more and less decentralised countries.

---

[49] Many of these studies have focused almost exclusively on developed countries. Examples include Esping-Anderson (1990); Cameron (1978)

[50] The findings were robust to using other denominators, such as total revenues or current revenues. Also, the findings were robust to using the individual spending items alone as the numerator. An alternative approach might have measured pro-poor policy in terms of progressive taxation. Though revenues from different bases are available in IMF statistics, complicated incidence analysis would have to be undertaken to obtain meaningful indicators of progressiveness of taxation systems.

The broader literature on the determinants of social policy offers a large number of hypotheses in addition to decentralisation. An effort was made to include a number of these rival explanations while maintaining the principal objective, which was to test the marginal impact of decentralisation on pro-poor policy.[51]

The first rival hypothesis that was likely to influence social outputs was simply the level of development. Though it is an imprecise concept, the level of development reflects in one way or another 1) the amount of resources available to distribute, 2) the organisation of social interests, and 3) the capacity of the state. Each of these variables could potentially influence social outputs. To control for the impact of development, the model includes the log of GDP per capita in 1995 US$.[52]

A second rival hypothesis involved globalisation. Globalisation certainly puts pressure on social policy. For some, this pressure militates for a decrease in social spending as countries must shrink the size of the state and lower labour costs. For others, globalisation forces the state to increase social spending to compensate or insure those dislocated by international competition.[53] To control for levels of globalisation, the model included an indicator of trade openness. Trade openness was calculated according to exports and imports as a proportion of GDP.[54]

A third rival hypothesis involves the recipients of social policy. The proportion of resources that are dedicated to social policy and the amount of redistribution that occurs are likely to depend on the demographic and political weight of key recipients of social spending. One group that clearly depends on and benefits from social policy is the elderly. To control

---

[51] A review of literature on the determinants of social policy and outcomes can be found in Swank (1992) and Garrett and Lange (1996).

[52] Calculating the log transformation of GDP per capita resolves the problem of the abnormal distribution of cases, with most cases clustered at high incomes or low incomes, and few in the middle.

[53] For examples of those who argue that globalisation weakens state capacity to promote pro-poor social policy, see Huber and Stephens (1992) and Evans (1997). For examples of those who argue that globalisation actually has the opposite impact, see Rodrik and Fernandez (1991) or Rodrik (1996).

[54] Data from the 2000 Human Development Report.

for the weight of the social policy beneficiaries, the analysis includes a measure of the proportion of the population aged 65 and over.

Finally, the model also acknowledges the possibility that the dimensions of decentralisation interact. Fiscal decentralisation may combine with administrative decentralisation and/or political decentralisation to create changes in pro-poor policy beyond the impact of any single dimension alone.

The analysis also incorporates the theoretical possibility that many of the hypotheses depend on a regime variable that intervenes between decentralisation and redistribution outputs and outcomes. Especially those hypotheses revolving around political decentralisation seem to operate most powerfully in democratic political systems, in which citizens have more freedom to organise and governments are more likely to answer to citizens. To control for this potential confounding variable, the final application removes countries that are not democratic from the sample. Democracies were defined as those countries that the Polity IV dataset scored more democratic than authoritarian.[55]

The analysis was conducted in a series of models that test the different permutations of variables. The first model examines the impact of the variables that went into the factor analysis, to see how well they alone explain redistribution outputs and outcomes. The second model examines the impact of factor score dimensions of decentralisation. This gives an idea of the degree of improvement provided by measurement through factor analysis. The third model examines the impact of the decentralisation dimensions after including the control variables for globalisation, social policy recipients, and level of development. The fifth model applies the full analysis to democratic countries alone, and the sixth model adds the interaction term. The control for level of development is included in all models. The

---

[55] The Polity IV dataset scored countries on a continuous scale from democratic to authoritarian in terms of regulation, competitiveness, and openness of executive recruitment, constraints on executives, institutions of participation, and extent of non-elite participation. For more detail, see http://www.bsos.umd.edu/cidcm/inscr/polity/#data.

dependent variable is the amount of pro-poor policy effort, measured as social policy

expenditures as a proportion of total expenditures.[56]

Results. The results of regression analysis demonstrate that dimensions of

decentralisation have independent, and at times, opposite effects on pro-poor policy. The

impact of political decentralisation was consistently in the direction of less pro-poor policy.

Administrative decentralisation at times had positive effects, and fiscal decentralisation did

not appear statistically significant in any analysis.

Table Two displays the results from the different models for redistributive outputs. If we

compare the adjusted r-squared and standard error of the estimate from model one and model

two, it appears that factor analysis offers a better measure of the concepts used in causal

analysis than simply using the indicators alone.[57]

Looking at models two through six, political decentralisation was negatively related to

pro-poor policy and was statistically significant. Also, administrative decentralisation was

positively related to redistribution and statistically significant, except in the final model,

where it was significant only at the .109 level.

Models that included the control variables did not change the significance of the primary

hypotheses, but did improve predictive accuracy, as shown in the adjusted R-squared and the

standard error of the estimate. The interaction term was not significant in any model, nor was

the impact of globalisation. The weight of social policy constituents and the level of

development were significant in all models, and had the predicted impact of increasing

redistribution.

---

[56] The equation for pro-poor policies was $Y_k = ?_j a_j F_{jk} + a(F_{jk}*F_{jk}) + ?_j bD_k + u_k$, in which 'Y' is the pro-poor policy effort, 'F' is the factor score, and 'D' are control variables. The subscript 'k' indicates the case, and the subscript 'j' indicates the factor.

[57] Comparing adjusted R^2 and standard error of the estimate statistics offers an imprecise comparison of models, but does give an idea of the relative explanatory power of each. The more important result of comparing the models is to note the consistency in the statistical significance and direction of correlation of the variables.

The similarity of the final model to the penultimate model suggest that analysing democratic countries alone did not change most of the conclusions about the impact of different kinds of decentralisation.

—Insert Table Two 'Decentralisation and Redistributive Outputs' about here—

A graphical representation in Figure One brings together the measurement model from the factor analysis with the linear regression results from this section. Squares indicate that variables were observable, and ovals, like the decentralisation dimensions, show that concepts had to be derived from other indicators. The left side of the figure shows a measurement model in which the three abstract dimensions of decentralisation in ovals at the centre are connected by arrows to the seven measurable variables in squares to the left. Above the decentralisation ovals are squares representing the control variables in the regression analysis. Arrows connect the control variables and the decentralisation ovals to the dependent variable on the right, pro-poor policy outputs. The arrows indicate the causal relationship between each explanatory variable and pro-poor policy.

—Insert Figure One 'Linear-Structural Model of Pro-Poor Outputs' about here—

Implications. The main concern of this exercise was to understand the impact of decentralisation on pro-poor policy. The focus on decentralisation was of key policy importance because we would like to be able to offer policy advice to promote pro-poor policy. Decentralisation offers a unique opportunity, as other determinants of social policy are more difficult to adjust. One of these determinants, level of development, had a positive relationship to social policy effort, but it is probably tautological and at least unlikely to think that countries can simply trigger development to promote social policy efforts. A second rival explanation, globalisation, was found to have no relationship to social policy. The third rival explanation, social policy beneficiaries, was also positively related to social policy effort, but

again, it is not immediately obvious what policy changes would be involved with expanding the size of beneficiary interest groups.

The dimensions of decentralisation, however, are attributes that governments can potentially alter with less difficulty. Though the dimensions may be fundamentally related, they did not combine in a systematic way to influence pro-poor policies. This suggests that centralisation along one dimension might be combined with decentralisation along another dimension to fine-tune the conditions for expanding pro-poor effort.

The regressions confirmed a negative impact of political decentralisation and a positive impact of administrative decentralisation. There did not appear to be any significant impact of fiscal decentralisation. The positive impact of administrative decentralisation is consistent with the argument that administrative decentralisation enhances the efficiency and information available to government administration, thus expanding the resources available and accountability of services to the poor. By contrast, the negative relationship between political decentralisation and pro-poor policy suggests that decentralisation lowers the political resources available to the poor and strengthens the political influence of elites who block pro-poor efforts.

With no interaction effects, the fact that the administrative and political decentralisation dimensions have opposite relationships to pro-poor policy, suggests that decentralisation along one dimension can be combined with centralisation along another. The ideal combination to achieve the most pro-poor policy would be more political centralisation and more administrative decentralisation.

Policy advisors seeking to promote pro-poor policy might encourage governments to strengthen the institutions that centralise political functions and decentralise administration. For example, they might encourage national political parties, unions, and interest groups, and adjust electoral institutions to favour issues and contests with national scope. At the same

time, they might encourage local autonomy to decide on policy packages, collect information, and implement pro-poor efforts. This combination is no doubt difficult, but the current analysis suggests that it would be the most effective way to promote pro-poor policy.

References

Ahmad, Ehtisham. 1997. Financing Decentralized Expenditures - An International Comparison of Grants. Cheltenham, UK: Edward Elgar Publishers.

Ames, Barry. 1995. Electoral Rules, Constituency Pressures, and Pork Barrel: Bases of Voting in the Brazilian Legislature. Journal of Politics.

Ames, Barry, Keck, Margaret E. 1998. The Politics of Sustainable Development: Environmental Policy Making in Four Brazilian States. Journal of Interamerican Studies and World Affairs 39 (4):1-41.

Bardhan, Pranab, Mookherjee, Dilip. 2000. Relative Capture of Local and Central Governments: An Essay in the Political Economy of Decentralization. Unpublished.

Bendor, Jonathan, Mookherjee, Dilip. 1987. Institutional Structure and the Logic of Ongoing Collective Action. American Political Science Review March (81: 1):129-154.

Berger, Suzanne. 1983. Organizing Interests. New York: Cambridge University Press.

Bird, R.M. 1993. Threading the Fiscal Labyrinth: Some Issues in Fiscal Decentralization. National Tax Journal 46 (June).

Bird, Richard M. 1999. Rethinking Subnational Taxes: A New Look at Tax Assignment. Washington, D.C.: IMF.

Bird, Richard M., Vaillancourt, François. 1998. Fiscal Decentralization in Developing Countries: An Overview. In Fiscal Decentralization in Developing Countries, edited by R. M. Bird, F. Vaillancourt and eds. Cambridge: Cambridge University Press.

Brandt, Loren, Zhu, Ziaodong. 2000. Redistribution in a Decentralized Economy: Growth and Inflation in China under Reform. Journal of Political Economy 108 (2):422-439.

Braun, Joachim von, Grote, Ulrike. 2000. Does Decentralization Serve the Poor. Washington, D.C.: IMF.

Buchanan, James, Tullock, Gordon. 1962. The Calculus of Consent. Ann Arbor: University

of Michigan Press.

Buchanan, James, Wagner, R. 1977. Democracy in Deficit. New York: Academic Press.

Campbell, Tim. 1997. Innovations and Risk-Taking: The Engine of Reform in Local
Government in Latin America and the Caribbean. Washington, D.C.: World Bank.

Cheema, G. Shabbir, Rondinelli, Dennis A. 1983. Implementing Decentralization Policies:
An Introduction. In Decentralization and Development: Policy Implementation in
Developing Countries, edited by Cheema, G.S. and Rondinelli, D.A. Beverly Hills: Sage
Publications.

Crook, Richard C., Manor, James. 1998. Democracy and Decentralization in South Asia and
West Africa: Participation, Accountability, and Performance. Cambridge: Cambridge
University Press.

Dahl, Robert A. 1961. Who Governs? New Haven: Yale University Press.

Dahl, Robert A. 1970. After the Revolution: Authority in a Good Society. New Haven: Yale
University Press.

Dye, T.R. 1966. Politics, Economics, and the Public: Policy Outcomes in the American
States. Chicago: Rand McNally.

Fisman, Raymond, Gatti, Roberta. 2000. Decentralization and Corruption: Evidence Across
Countries. IBRD. Policy Research Working Papers 2290.

Fox, Jonathan, Aranda, Josefina. 1996. Decentralization and Rural Development in Mexico.
San Diego: Center for U.S.-Mexican Studies, at the University of California, San Diego.

Gandmont, Jean-Michel. 1978. Intermediate Preferences and the Majority Rule.
Econometrica 46 (II):317-330.

Garrett, Geoffrey. 1995. Capital Mobility, Trade, and the Domestic Politics of Economic
Policy. In International Organization.

Grodzins, Morton. 1960. American Political Parties and the American Political System.

Western Political Quarterly XIII (4):974-998.

Hausmann, Ricardo, Stein, Ernesto, Inter-American Development Bank Office of the Chief
Economist. 1995. Searching for the Right Budgetary Institutions for a Volatile Region.
Paper read at Securing Stability and Growth in Latin America: Policy Issues and
Prospects for Shock-Prone Economies, 1995, at Paris.

Hicks, Alexander M., Swank, Duane H. 1992. Politics, Institutions, and Welfare Spending in
Industrialized Democracies, 1960-82. American Political Science Review 86 (3):658-666.

Hommes, Rudolf. 1995. Conflicts and Dilemmas of Decentralization, May 1-2, 1995.

Huntington, Samuel P. 1968. Political Order in Changing Societies. New Haven: Yale
University Press.

IMF. 2000. Government Finance Statistics. Washington, D.C.: IMF.

Inman, Robert P., Rubinfeld, Daniel L. 1997. Rethinking Federalism. Journal of Economic
Perspectives 11 (4):43-64.

Kim, Jae-On, and Mueller, Charles W. 1978. Introduction to Factor Analysis: What it is and
How To Do It. Vol. 13, Quantitative Applications in the Social Sciences. Beverly Hills:
Sage Publications.

Leonard, David K., and ed. 1982. Institutions of Rural Development for the Poor:
Decentralization and Organizational Linkages, Research Series (University of California
at Berkeley). Berkeley: Institute for International Studies.

Lijphart, Arend. 1994. Electoral Systems and Party Systems: A Study of Twenty-Seven
Democracies, 1945-1990. New York: Oxford University Press.

Linz, Juan J., Stepan, Alfred. 2000. Inequality Inducing and Inequality Reducing Federalism:
With Special Reference to the 'Classic Outlier' - The U.S.A. Quebec City: International
Political Science Association.

Litvack, Jennie, Ahmad, Junaid, Bird, Richard. 2000. Rethinking Decentralization at the

World Bank. Washington, D.C.: The World Bank.

Manor, James. 1999. The Political Economy of Democratic Decentralization. Washington, D.C.: World Bank Group.

Mansbridge, Jane. 1980. Beyond Adversary Democracy. Chicago: University of Chicago Press.

McConnell, Grant. 1970. Private Power and American Democracy. New York: Vintage Books.

McDonald, Roderick P. 1985. Factor Analysis and Related Methods. Hillsdale: Lawrence Erlbaum Associates.

Michels, Roberto. 1966. Political Parties. New York: Free Press.

Morris, Arthur, Lowder, Stella. 1992. Decentralization in Latin America. New York: Praeger.

Musgrave, Richard A. 1958. Multi-Level Finance, edited by R. A. Musgrave. New York: McGraw-Hill.

Musgrave, Richard A. 1997. Devolution, Grants, and Fiscal Competition. Journal of Economic Perspectives 11 (4):65-72.

Narayan, Deepa, Chambers, Robert, Shah, Meera K.. 2000. Crying out for Change. Washington, D.C.: World Bank.

Narayan, Deepa, Chambers, Robert, Shah, Meera K.. 2000. Crying out for Change. Washington, D.C.: World Bank.

Nice, David C. 1987. Federalism: The Politics of Intergovernmental Relations. New York: St. Martin's Press.

Oates, Wallace. 1972. Fiscal Federalism. New York: Harcourt Brace Jovanovich.

Oates, Wallace. 1977. The Political Economy of Fiscal Federalism. Lexington: Lexington Books.

Oates, Wallace, Schwab, Robert. 1991. The Allocative and Distributional Implications of

Local Fiscal Competition. In Kenyon D., Kincaid, J. and eds, Competition Among States and Local Governments: Efficiency and Equity in American Federalism,. Washington, D.C.: Urban Institute Press.

O'Donnell, Guillermo. 1993. Delegative Democracy? Journal of Democracy 5 (1) 55-69.

Olson, Mancur. 1965. The Logic of Collective Action. Cambridge, MA: Harvard University Press.

Pateman, Carole. 1970. Participation and Democratic Theory. Cambridge: Cambridge University Press.

Pauly, Mark V. 1973. Income Redistribution as a Local Public Good. Journal of Public Economics 2:35-58.

Petrei, Humberto. 1998. Budget and Control: Reforming the Public Sector in Latin America. Translated by R. E. Petrei and Collaborator. Washington, D.C.: Inter-American Development Bank.

Prud'homme, Rémy. 1995. The Dangers of Decentralization. World Bank Research Observer 10 (2):201-220.

Quinn, Dennis P., Shapiro, Robert Y. 1991. Business Political Power: The Case of Taxation. In American Political Science Review.

Rondinelli, Dennis A. 1990. Decentralization, Territorial Power, and the State: A Critical Response. Development and Change 21 (3):491-500.

Rosen, Harvey S. 1997. Public Finance. Fifth ed. San Francisco: Irwin McGraw-Hill.

Samoff, Joel. 1990. Decentralization: The Politics of Interventionism. Development and Change 21 (3):513-530.

Samuels, David J. 2000. The Gubernatorial Coattails Effect: Federalism and Congressional Elections in Brazil. Journal of Politics 62 (1):240-253.

Schattschneider, E.E. 1960. The Semisovereign People: A Realist's View of Democracy in

America. 1st ed. New York: Rinehart and Wilson.

Schmitter, Philippe C. 1971. Interest Conflict and Political Change in Brazil. Stanford: Stanford University Press.

Schmitter, Philippe C. 1974. Still the Century of Corporatism? Review of Politics 36 (1 (January)):85-131.

Schmitter, Philippe C. 1977. Modes of Interest Intermediation and Models of Societal Change in Western Europe. Comparative Political Studies 10:7-38.

Shah, Anwar, Huther, Jeff. 1998. Applying a Simple Measure of Good Governance to the Debate on Fiscal Decentralization. Washington, D.C.: The World Bank.

Shah, Anwar, Huther, Jeff. 1998. Applying a Simple Measure of Good Governance to the Debate on Fiscal Decentralization. Washington, D.C.: The World Bank.

Slater, David. 1990. Debating Decentralization: A Reply to Rondinelli. Development and change 21 (3):501-512.

Slater, David. 1990. Debating Decentralization: A Reply to Rondinelli. Development and change 21 (3):501-512.

Snyder, Richard. 1999. Scaling Down: The Subnational Comparative Method.

Sola, Lourdes. 1991. Heterodox Shock in Brazil- Tecnicos, Politicians and Democracy. Journal of Latin American Studies V (23):163-195.

Stiglitz, Joseph, Heertje, Arnold. 1989. The Economic Role of the State. Oxford: Blackwell.

Swank, Duane. 1992. Politics and the Structural Dependence of the State in Democratic Capitalist Nations. In American Political Science Review.

Swenson, Peter. 1991. Bringing Capital Back in, or Social Democracy Reconsidered: Employer Power, Cross-Class Alliances, and Centralization of Industrial Relations in Denmark and Sweden. World Politics July (43):513-544.

Tendler, Judith. 1997. Good Government in the Tropics. Baltimore: Johns Hopkins

University Press.

Tiebout, Charles. 1956. The Pure Theory of Local Expenditure. Journal of Political Economy 64:416-24.

Toqueville, Alexis de. 1969. Democracy in America. Translated by J. P. Mayer and ed. New York: Harper Perennial.

Wallerstein, Michael. 1997. Wage-Setting Institutions and Pay Inequality in Advanced Industrial Societies. American Journal of Political Science 43 (3):649-680.

White, Howard. 2001. Pro-poor growth in a globalized economy. Journal of International Development 13 (5): 549-569.

Wildavsky, Aaron. 1984. The Politics of the Budgetary Process. Fourth ed. Boston: Little, Brown and Co.

Williams, John T., Collins, Brian K. 1997. The Political Economy of Corporate Taxation. In American Journal of Political Science.

Appendix 1. Factor Analysis[58]

The model proposed here conceptualises decentralisation as three distinct but interrelated dimensions that can be measured using the seven indicators described above. Factor analytic techniques applied to the indicators can calculate the unique and interrelated characteristics of the different dimensions of decentralisation and test whether the model is accurate. This technique of proposing and testing a measurement model using factor analysis is known as confirmatory factor analysis, and it rests on the intuition that underlying concepts, such as the dimensions of decentralisation, are difficult to measure, but they are manifest in empirically observed indicators.[59]

The specific hypotheses to be tested are 1) that decentralisation consists of three abstract dimensions; and 2) each of the seven indicators is closely related to one of the three dimensions. To test the first hypothesis, confirmatory factor analysis separates the unique characteristics of each indicator from the characteristics shared with other indicators. If the most statistically accurate grouping of shared characteristics divides the indicators into three clusters, the analysis confirms that there are three underlying dimensions, as opposed to two or four (or some other number).[60]

Next, factor analysis uses the correlations among the variables to find the size of the impact of underlying dimensions. The shared characteristics can be divided into the portion explained by each dimension, given as a factor coefficient for each dimension. If the model is

---

[58] A more extended version of this factor analytic exercise can be found in Schneider, 2002.

[59] For a more thorough discussion of factor analytic techniques, see Kim and Mueller (1978); Long (1983); or Bollen (1989). For an application, see Brady (1990).

[60] Confirmatory factor analysis tests the marginal increase in variance explained by adding another dimension against the variance explained by randomly organising the data. The statistic used to show the relative amount of variance explained by the dimensions is called the eigenvalue, and eigenvalues below one suggest that there is little marginal increase from adding more dimensions (Kim and Mueller, 1978: 32-37). An additional method of confirming the number of dimensions is graphical, in which the eigenvalues of each added dimension are graphed, called a scree plot. When the graph begins to flatten, i.e. adding dimensions is explaining little more of the data, then there is little marginal benefit to adding dimensions. It is possible to use exploratory factor analysis to discover how many dimensions exist, and simply add dimensions until the eigenvalue drops below one or the scree plot flattens. Here there are strong hypotheses that three dimensions should exist, so confirmatory factor analysis is used.

correct, the largest factor coefficients should relate indicators to the dimension they are hypothesised to measure. For example, the largest factor coefficient on sub-national percentage of expenditures should be the coefficient related to the fiscal decentralisation dimension. These steps confirm the measurement model. They also produce improved and more precise measures of the concepts.

This is possible because the analysis generates factor coefficients relating each indicator to all the dimensions. Partly, this is because the measures are imprecise, and they will pick up some of the impact of other dimensions. In addition, the coefficients reflect the fact that the dimensions are related. For example, politically decentralised systems might find local political weight used to allocate more resources to lower levels of government. As a result, part of the sub-national revenues indicator should not be attributed to fiscal decentralisation but reflects characteristics derived from the political decentralisation dimension.

Factor analysis uses this information to improve measurement in ways that simple aggregation or indexes cannot. Factor analysis separates the impact of each dimension and calculates its size in the factor coefficients. This allows us to use only the information from each indicator that is relevant to a single dimension and ultimately obtain better measures of the dimensions.

A second output of the analysis is an accurate measurement of each dimension in each case. The factor coefficient measures the intensity of the relationship between each variable and each dimension and can be multiplied by each case score on each variable. The sum of the coefficients times the case scores gives a factor score for each case on each dimension. In other words, we can produce a measure of fiscal decentralisation, administrative decentralisation, and political decentralisation in each case. In fact, this measure is superior to

other methods of measurement that do not take as many indicators into account and/or that do not attempt to separate the unique and shared characteristics of each indicator.[61]

Cases and Data

The current project applied confirmatory factor analysis to decentralisation data collected from 108 countries in 1996. The data included fiscal indicators from IMF Government Finance Statistics, obtained from the World Bank website on decentralisation, and filled in missing values with data from the 2001 IMF hardcopy publication where available. Other data were collected in the Database of Political Indicators collected by researchers at the World Bank and the Government of Switzerland. Missing political data was obtained from country constitutions, Library of Congress Country Facts, and the CIA Factbook.[62]

In cases in which there was no fiscal data available from 1996 but data from other years in the 1990s were available, linear trends obtained through regression analysis of available data filled the 1996 data. As most fiscal indicators are variables that change incrementally over time, if at all (expenditures, revenues, etc.) this practice was not likely to change the results. The findings were robust to using data from a single year data alone (1995, 1996, 1997), but pooling the data into a single year increased the number of cases available.

Special care was also taken with relation to indicators that were related to variables that might confound the analysis, such as the type of regime. This was particularly the case for the political decentralisation indicators that focused on elections and electoral rules. Some non-democracies held elections and data was therefore available on the political decentralisation

---

[61] The equation for each observed variable is given by: $X_i = \sum_{ji} b_{ij} F_j + d_i U_i$
The observed variable is 'X'; 'F' is a common factor shared by two or more variables; and 'U' is a factor unique to a given variable. The correlation between the observed variable and the shared factor is 'b', and 'd' is the correlation between the unique factor and the observed variable. The subscript $_i$ indicates the observed variable and the subscript $_j$ indicates the common factor.

[62] Websites listed in the bibliography.

indicators. Nevertheless, some might argue that the representation that occurs in non-democracies, however decentralised, is substantively different than that occurring in democracies. A local election in which the national government is authoritarian or in which only one party competes can hardly be called competitive, and probably does a poor job of decentralising political functions.[63] To address this issue, the analysis was conducted after removing non-democracies. No significant changes in results occurred.[64]

Factor Analysis

Confirmatory factor analysis was used to test the hypothesis that three dimensions of decentralisation (fiscal, administrative, and political) that underlay measurable indicators. The seven indicators were: 1) sub-national expenditures as a percentage of expenditures; 2) sub-national revenues as a percentage of total revenue items; 3) the relative importance of tax as a percentage of sub-national revenues; 4) the relative importance of transfers as a percentage of sub-national revenues; 5) the existence of municipal elections; 6) the existence of state or provincial elections; and 7) the existence of autonomous regions. The hypothesis was that the first two indicators mostly measured fiscal decentralisation; the third and fourth indicators measured administrative decentralisation; and the last three indicators measured political decentralisation.[65]

The number of cases with data available on all indicators was 68. Among these cases, the mean percentage of expenditures as a percentage of total expenditures was 22.27 and the

---

[63] On the other hand, local elections and representative processes can be a key factor in politically decentralising an authoritarian regime. For example, in Brazil, local elections forced military leaders to consider local and regional pressures, even though the national executive was controlled through undemocratic means. See Hagopian (1996).

[64] The results were robust to excluding non-democracies. Using an indicator of democracy from the Polity IV database, eleven non-democratic cases were excluded from the analysis. Confirmatory factor analysis results on the democratic cases alone produced few differences from the analysis of all cases together. Three dimensions underlay the data, and factor coefficients and factor scores changed only slightly.

[65] The importance of transfers was reversed to keep the signs positive.

mean percentage of revenues was 17.24. The mean percentage of subnational revenues from taxes was 44.65 and the mean percentage from transfers was 34.60. 58 of the cases had no autonomous regions, 12 had no municipal elections, and 26 had no state elections.

Principle factor analysis of the data confirmed the assertion that three dimensions most appropriately organised the data. The eigenvalue for the third dimension was 1.001 with a cumulative percent of variance explained of 76.57% (see Table Three).[66]

—Insert Table Three 'Eigenvalues' Here—

Next, the covariances among the variables were used to measure the relationship between variables and underlying dimensions.[67] As expected, sub-national expenditures as a percentage of total expenditures and sub-national revenues as a percentage of total revenues were highly correlated with each other and with what was labelled the 'fiscal decentralisation' dimension. The factor coefficient of sub-national expenditures as a percentage of total revenues was .957 and the coefficient of sub-national revenues as a percentage of total revenues was .933.

Also as expected, the relative importance of tax and transfer revenues as a percentage of sub-national revenues were most highly correlated with each other and with what was labelled the 'administrative decentralisation' dimension. The factor coefficient of tax revenues as a percentage of local revenues was .885 and the coefficient of non-transfer income as a percentage of local revenues was .852.

Finally, municipal elections, state elections, and regional autonomy were most closely related to each other and to the third dimension, which has been labelled 'political decentralisation'. The factor coefficient of municipal elections was .466, the factor coefficient

---

[66] The scree plot did not show a significant change in the amount of variance explained by each dimension. Each added dimension appeared to explain about as much as the next, though the eigenvalues did drop far below one after the third dimension.

[67] The solution was rotated to obtain orthogonal factors using a varimax rotation technique.

of state elections was .834, and the factor coefficient of regional autonomy was .655 (see Table Four).

—Insert Table Four 'Fiscal, Representation, and Administrative Decentralisation' Here—

Factor analysis also allows us to determine the degree to which the dimensions are related to one another. Given the nature of the decentralisation concept, in which one kind of decentralisation is expected to influence other kinds, correlation among the dimensions was expected. Nevertheless, the factor analysis showed that the correlation between the dimensions was relatively small. Only in the case of the correlation between fiscal decentralisation and political decentralisation was the component correlation coefficient larger than .10. Every one unit increase in fiscal decentralisation correlated with a .13 increase in political decentralisation. The correlations between the other dimensions did not exceed .05. Though this result was somewhat surprising, it supported the assumption that the dimensions could be analysed as though they were orthogonal.

Finally, the factor coefficients for each variable were used to obtain a score for each case along each dimension. For each case, the factor scores are the sum of the products of the factor coefficients and the indicator scores. To make them easier to interpret, the factor scores were normalised to a zero to one scale, and can be read in terms of decentralisation units. Thus, Albania has a score of .35 fiscal decentralisation units, 0 administrative decentralisation units, and .42 political decentralisation units. Appendix One displays the factor score on each dimension for the different countries in the study. The average amount of fiscal decentralisation, on a zero to one scale, was .43. The average amount of administrative decentralisation was .46, and the average amount of political decentralisation was .45.[68] These factor scores were used as the measures for fiscal, administrative, and political

---

[68] The factor scores are not completely straightforward to interpret, but they do provide an interval measure of the dimensions. The difference between a country that scores .1 and another that scores .2 is the same magnitude as the difference between countries that score .6 and .7. On the other hand, zero indicates that a

decentralisation in the causal analysis of pro-poor policy. The scores for each country are listed in Table Five for those who would like to reproduce this analysis or examine other hypotheses.

—Insert Table Five 'Factor Scores from Confirmatory Factory Analysis etc.' about here—

---

country was simply the least decentralised among the sample; zero does not mean that local jurisdictions had no resources, autonomy, or political functions.

Table 1. Decentralisation Indicators and Dimensions

Dimension	Indicator	Source
Fiscal Decentralisation	1. Sub-national Expenditures as Percent of Total Expenditures	Decentralisation Statistics. World Bank Website.
Fiscal Decentralisation	2. Sub-national Revenues as Percent of Total Revenues	Decentralisation Statistics. World Bank Website.
Administrative Decentralisation	3. Taxation as a Percentage of sub-national revenues.	IMF. Government Finance Statistics.
Administrative Decentralisation	4. Non-Transfer Income as a Percentage of sub-national revenues.	IMF. Government Finance Statistics.
Political Decentralisation	5. Municipal Elections	Database on Political Institutions. Library of Congress Country Facts. CIA World Factbook.
Political Decentralisation	6. State Elections	Database on Political Institutions. Library of Congress Country Facts. CIA World Factbook.
Political Decentralisation	7. Regional Autonomy	Database on Political Institutions. Library of Congress Country Facts. CIA World Factbook.

Table 2. Decentralisation and Redistributive Outputs

	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	-7.508E-02	-9.883E-02	2.196E-02	1.657E-02	.115
Variable 1	4.408E-04				
Variable 2	1.574E-03				
Variable 3	1.667E-03				
Variable 4	5.577E-04				
Variable 5	-9.687E-03				
Variable 6	-2.871E-02				
Variable 7	-3.161E-02				
Fiscal Decentralisation		-8.971E-02	-.110	9.695E-02	-.151
Administrative Decentralisation		.295***	.206**	.213**	.167
Political Decentralisation		-.197**	-.188**	-.178*	-.237*
Development	.152***	.175***	.110***	.109***	8.937E-02**
Globalisation			2.463E-04	2.316E-04	2.749E-04
Social Policy Beneficiaries			1.318E-02***	1.326E-02**	1.334E-02**
Decentralisation Interaction				-5.669E-02	.264
Adjusted R^2	.363	.448	.515	.504	.408
Standard Error of the Estimate	.12661	.11789	.11052	.11166	.11797

One star indicates statistically significant at .10 level, two stars at .05 level, and three stars at .01.

Figure 1.

Linear–Structural Model of Pro-Poor Outputs

Interest Group

Globalisation

Development

Interaction

Fiscal Decentralisation

Administrative Decentralisation

Political Decentralisation

PRO-POOR POLICY

Subnational Revenues

Subnational Expenditure

Subnational Tax Autonomy

Subnational Transfer Autonomy

Municipal Elections

State Elections

Autonomous Regions

b_{11}
b_{21}
b_{31}
b_{41}
b_{51}
b_{12}
b_{22}
b_{32}
b_{42}
b_{52}
b_{13}
b_{23}
b_{33}
b_{43}
b_{53}
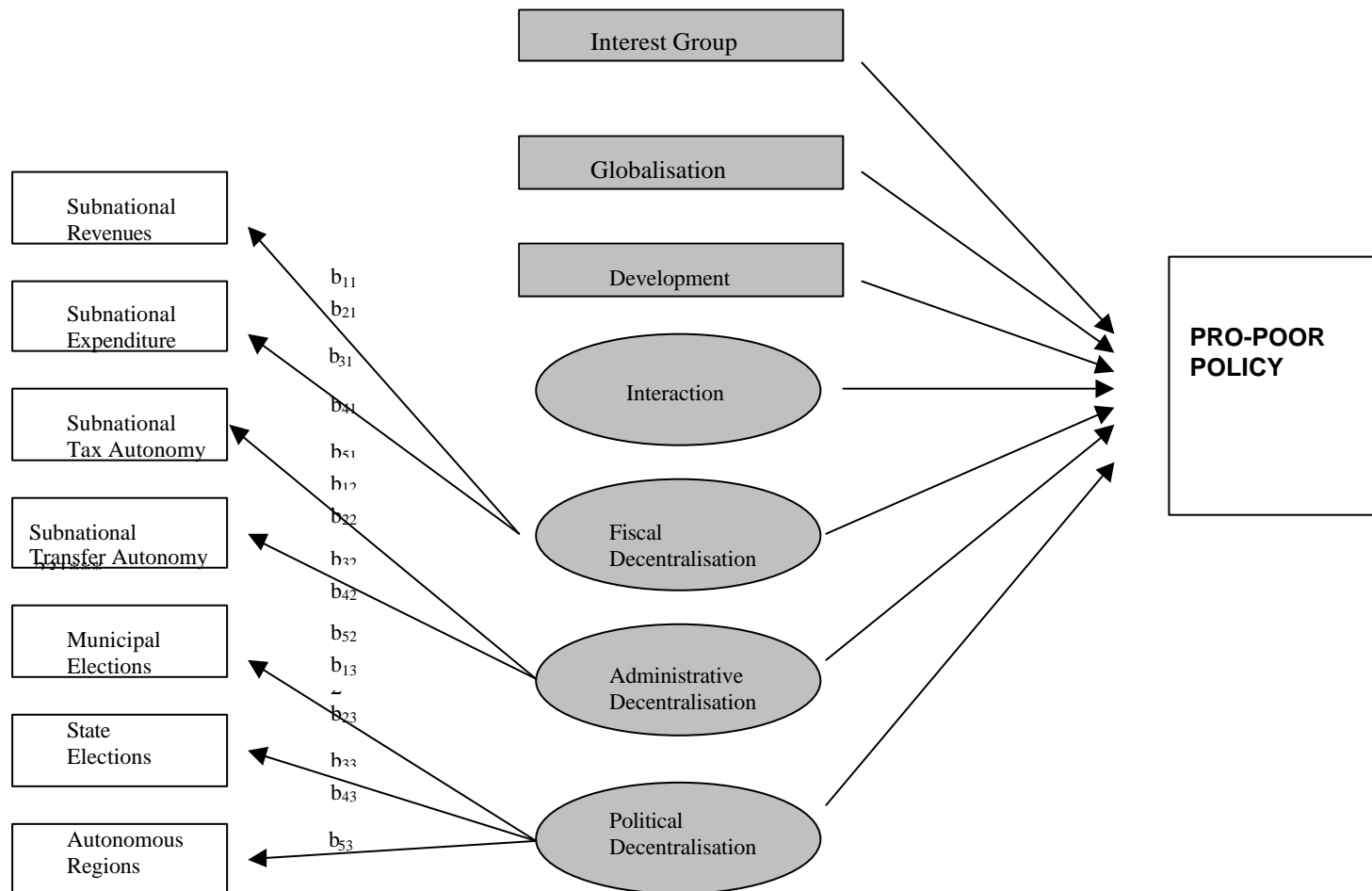
Table 3. Eigenvalues

Total Variance Explained

Component	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.983	39.660	39.660	1.961	39.227	39.227
2	1.207	24.138	63.797	1.130	22.608	61.835
3	1.006	20.116	83.914	1.104	22.079	83.914

Extraction Method: Principal Component Analysis.

Table 4. Fiscal, Representation, and Administrative Decentralisation

Coefficient	Observed Variable	Factor	Factor Coefficient
b_{11}	Subnational Expenditure Percent	Fiscal Decentralisation	.981
b_{21}	Subnational Revenue Percent	Fiscal Decentralisation	.971
b_{31}	Subnational Tax/Transfer	Fiscal Decentralisation	-3.74E-02
b_{41}	Mean District Magnitude	Fiscal Decentralisation	.217
b_{51}	Proportional Representation	Fiscal Decentralisation	-8.70E-02
b_{12}	Subnational Expenditure Percent	Decentralised Administration	5.904E-02
b_{22}	Subnational Revenue Percent	Decentralised Administration	-2.77E-02
b_{32}	Subnational Tax/Transfer	Decentralised Administration	-3.37E-02
b_{42}	Mean District Magnitude	Decentralised Administration	.887
b_{52}	Proportional Representation	Decentralised Administration	.582
b_{13}	Subnational Expenditure Percent	Decentralised Representation	-8.04E-02
b_{23}	Subnational Revenue Percent	Decentralised Representation	.108
b_{33}	Subnational Tax/Transfer	Decentralised Representation	.932
b_{43}	Mean District Magnitude	Decentralised Representation	-.126
b_{53}	Proportional Representation	Decentralised Representation	.448

Table 5. Factor Scores from Confirmatory Factor Analysis – Countries and Decentralisation Dimensions

Country	Fiscal Decentralisation	Administrative Decentralisation	Political Decentralisation
Albania	0.35	0.00	0.42
Argentina	0.77	0.60	0.61
Australia	0.76	0.33	0.44
Austria	0.63	0.45	0.46
Azerbaijan	0.36	0.77	0.39
Belarus	0.56	0.54	0.08
Belgium	0.34	0.31	0.52
Bolivia	0.47	0.35	0.45
Botswana	0.19	0.13	0.45
Brazil	0.69	0.40	0.63
Bulgaria	0.35	0.48	0.69
Canada	1.00	0.50	0.57
Chile	0.24	0.73	0.30
Croatia	0.36	0.60	0.20
Czech Rep.	0.46	0.41	0.38
Denmark	0.75	0.38	0.62
Dom. Rep.	0.10	0.50	0.48
Estonia	0.40	0.60	0.28
Fiji	0.19	0.63	0.12
Finland	0.62	0.50	0.23
France	0.37	0.47	0.57
FRG/German	0.73	0.47	0.62
Georgia	0.33	0.80	0.39
Guatemala	0.28	0.05	0.14
Hungary	0.37	0.28	0.46
Iceland	0.47	0.61	0.54
India	0.76	0.40	0.33
Indonesia	0.27	0.22	0.31
Ireland	0.43	0.05	0.69
Israel	0.34	0.35	0.40
Italy	0.25	0.45	1.00
Kazakhstan	0.56	0.66	0.36
Kenya	0.19	0.56	0.11
Kyrgyzstan	0.51	0.44	0.18
Latvia	0.47	0.60	0.26
Lithuania	0.53	0.59	0.37
Luxembourg	0.32	0.41	0.29
Malaysia	0.41	0.32	0.19
Mauritius	0.16	0.30	0.51
Mexico	0.54	0.48	0.65
Moldova	0.45	0.86	0.55
Mongolia	0.61	0.40	0.36
Neth. Antil	0.92	0.78	0.00

Netherland	0.44	0.15	0.39
Nicaragua	0.05	0.96	0.78
Norway	0.54	0.42	0.54
Panama	0.00	1.00	0.90
Paraguay	0.14	0.63	0.30
Peru	0.37	0.10	0.41
Philippine	0.25	0.33	0.71
Poland	0.42	0.40	0.38
Portugal	0.27	0.44	0.29
PRC	0.82	0.65	0.60
Romania	0.27	0.52	0.48
Russia	0.75	0.62	0.61
S. Africa	0.56	0.04	0.67
Senegal	0.36	0.45	0.22
Slovakia	0.28	0.55	0.68
Slovenia	0.28	0.59	0.29
Spain	0.38	0.49	0.98
Sweden	0.63	0.66	0.35
Switzerland	0.85	0.45	0.59
Tajikistan	0.45	0.73	0.67
Thailand	0.21	0.55	0.48
Trinidad-T	0.18	0.02	0.52
UK	0.41	0.12	0.69
USA	0.84	0.41	0.60
Zimbabwe	0.32	0.41	0.09