DO DEMOCRACIES SERVE THE POOR?

The Organizational Foundations of Pro-Poor Policy,
with Evidence from Education Policies in Taiwan, Ghana, and Brazil

Stephen Kosack
Department of Political Science
Yale University

Abstract. – This paper challenges a widely-held assumption that democracies serve the poor. I draw on a half-century or more of education policies in three very different developing countries—Taiwan, Ghana, and Brazil—to show that it is the successful organization of the poor by political entrepreneurs into a countervailing political force, not democratic institutions, that causes pro-poor policymaking. In all three countries, democratization fails to predict pro-poor education policies: more often than not, autocratic governments implement pro-poor education policies, and democratic governments do not. Rather, in every instance, pro-poor policies follow the successful organization of the poor by political entrepreneurs. A government makes pro-poor policy when its power depends on the support of the poor, and democratic institutions are neither necessary nor sufficient to an empowered poor capable of supporting a government. The evidence suggests that the conventional wisdom on democratic institutions is overly optimistic, and that current efforts to encourage democratization should at least be supplemented with efforts to organize the poor into a locus of countervailing political power.

Do democratic institutions serve the poor?

In theory, they should. Through open, competitive elections, democratic institutions theoretically make governments more accountable to poorer citizens, whose votes they need to stay in office. In any country with the standard right-skewed distribution of income, the income of the median voter (Downs 1957) will be less than the mean, and the median voter will therefore favor some measure of redistribution (Meltzer and Richard 1981); to win over that voter, the government should allocate more of its resources to social policies that serve the poor. By contrast, an autocratic ruler is not institutionally accountable to the poor, and might safely ignore them. This conventional wisdom holds that social spending in democracies will be higher than in autocracies, thus raising the quality of life of the poor. A large number of cross-national empirical studies support this hypothesis (e.g., Brown and Hunter 1999, Brown 1999, Frey and Stutzer 2000, Rodrik 1999, Zweifel and Navia 2000, Acemoglu, Robinson, and Johnson 2002, Boix 2003).[1]

In this paper, I examine the genesis of pro-poor policies from an alternative perspective. There is no doubt that democratic institutions create incentives to serve the poor. Yet there are real reasons, both theoretical and empirical, to doubt the salience of these incentives, at least in the developing world. Typically a developing country will have powerful and wealthy elites, with enormous collective-action advantages that place them in a far better position to cause a government trouble than the poor, regardless of institutions. Elites may circumvent, ignore, or even change institutions that do not suit them; a democratic government that wants to stay in power ignores them, and courts the median

[1] For example, Brown and Hunter (1999) find that, in Latin America, democracies spend more than autocracies on social programs, especially in economic crises; Brown (1999) finds that democracies enroll a larger percentage of their school-aged population in primary school than autocracies; Frey and Stutzer (2000) find that the presence of democratic institutions substantially increases individual self-reported well-being; Rodrik (1999) finds that, primarily because of political competition and participation, manufacturing wages are higher in democracies; and Zweifel and Navia (2000) find that democracies have lower infant mortality rates than autocracies at similar levels of development.

voter, at its peril. Indeed, institutions in the developing world are extremely fluid (North 1990). And evidence on policy show it to vary widely among countries classified as "democracies" (Przeworski et al. 2000, Bueno de Mesquita et al. 2003, Keefer 2005, Lee 2005), while at the same time, many autocracies do deliver pro-poor policies. If democratic institutions often fail to serve the poor while autocracies often succeed, it is at the very least questionable whether democratic institutions are either necessary or sufficient to the genesis of policies that serve the poor.
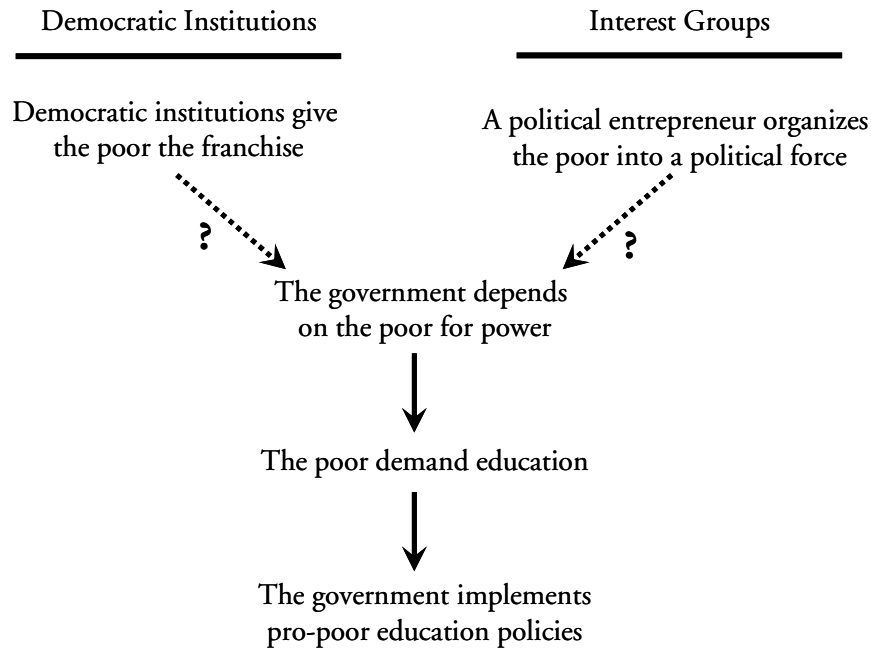
This paper investigates the strength of the causal link between democracy and pro-poor policies by looking specifically at one area of policy, education, commonly thought to be among the most important to the poor. A growing literature has found a positive correlation both between democracy and overall government investments in education (e.g., Brown 1999, Brown and Hunter 1999, Brown 2002, Sylwester 2000, Lake and Baum 2001, Baum and Lake 2003, Stasavage 2005, Ansell 2006) and between democracy and educational investments specifically targeted at the poor, like primary education (e.g., Brown 1995, Brown 2002, Stasavage 2005, Ansell 2005). These studies all use a correlational empirical strategy, and thus have been unable to adjudicate questions of endogeneity and causality. Yet each posits a similar causal relationship between the formal institutions of democracy and education policy: that democratic institutions increase government accountability to the poor, who demand more education.

The alternative I investigate is that a government's accountability to the poor, and therefore its propensity to implement pro-poor policies, is not dependent on whether it is institutionally a democracy. If institutions in the developing world are fluid enough, they become endogenous to the underlying power balances in the society, and it is collective action, not the institutional framework, that distributes political power (Olson 1965). Since

elites face lower collective action costs, they have the advantage in organizing for political

power, and might successfully support or oppose a government regardless of democratic

structures. By contrast, the poor have a difficult time organizing as a political force without

a collective-action subsidy, such as that provided by a political entrepreneur (Noll 1989):

only when a political entrepreneur organizes them will the poor be able to lend support to a

government, and thereby get pro-poor policies. In this alternative model, based on classic

interest-group theory (Olson 1965, Stigler 1971, Becker 1983), the poor are empowered or

disempowered politically via their success at organizing, not by virtue of whether or not they

are the median voter. While to my knowledge no studies have examined the explanatory

power of such models on pro-poor policies like education, models based on interest-group

theory have successfully explained other important areas of policy-making in the developing

world (e.g., Bates 1981 on agricultural policy, Rogowski 1989 on trade policy).

In this paper, I adjudicate the causal link between democracy and education

policymaking by comparing it to this alternative, institution-free model based on interest

groups. Figure 1 illustrates the two causal pathways.

Figure 1 - Two causal pathways leading to pro-poor education policies

Democratic Institutions
—————————

Interest Groups
—————————

Democratic institutions give
the poor the franchise

A political entrepreneur organizes
the poor into a political force

?

?

The government depends
on the poor for power

The poor demand education

The government implements
pro-poor education policies

To compare the performance of the institutional and interest-group models at explaining pro-poor policies, I examine in this paper a half-century or more of education policies in three very different developing countries: Taiwan, Ghana, and Brazil. Each of these countries has been through one or several democratic transitions in the last half-century, and they vary widely in inequality, geography, and culture.[2] If there is indeed a causal path from democracy to education policy, we should see that in these three countries, democratization can explain over-time variation in education policy. We should see that, as a country democratizes, its education policy increasingly meets the demands of the poor.

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[2] According to the regime-type definitions in Przeworski et al. (2000), Taiwan has had one regime transition since 1950, Brazil has had two, and Ghana has had six. Ginis for the 1980s for the three countries are: Taiwan: .3 (Luxembourg Income Study); Ghana: .48 (Ghana Living Standards Surveys (Deininger, Squire, and World Bank 2004)); and Brazil: .58 *(World Development Indicators)*. Per-capita income for the 1980s for the three are: Taiwan: $5,933; Brazil: $3,116; Ghana: $202 (2000 US$, *World Development Indicators)*.

Instead, I find considerable evidence that democratic institutions fail to place the poor in a position in which the government depends on them for power, and therefore delivers pro-poor policies. Rather, pro-poor policies follow the successful organization of the poor by political entrepreneurs. In all three countries I study in this paper, democratization fails to predict pro-poor education policies: more often than not, autocratic governments implement pro-poor education policies, and democratic governments do not. As causes of pro-poor education policy, democratic institutions[3] work best in Brazil, where they can largely explain elitist education policy following the 1964 coup and pro-poor education policy after the return to democracy in the 1980s; but they fail to explain pro-poor policy prior to the coup. In Ghana, two democratic periods—from 1969 to 1971 and from 1979 to 1981—fail entirely to correspond to periods of pro-poor education policy, which occur much earlier while Ghana is an autocracy; another democratic period, starting in 1992, occurs six years after the introduction of pro-poor education, at a time when democratization was not on leaders' minds. And in Taiwan, democratic institutions fail to predict pro-poor education before the 1960s, when Taiwan was an autocracy, and are ten years late in predicting pro-poor education that begin in the 1980s.[4] By contrast, each of these periods of pro-poor policy was preceded by the organization of the poor into a political force by a political entrepreneur.

In all, the evidence strongly suggests that it is ultimately the presence of the poor as an organized, viable locus of political power that establishes the poor as a group on whom the government's power can depend. Only when the poor reach this position will they receive pro-poor policies from the government. Whether they reach it seems dependent on

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[3] I use the dichotomous definition of regime type from Przeworski et al. (2000). At least for the three countries in this paper, Przeworski et al.'s classifications largely agree with the alternate measure in the Polity IV project (Marshall and Jaggers 2000).

[4] For "democracy," I am using the classifications in the Przeworski et al. (2000). For my three countries, their classifications largely agree with the alternate measure in the Polity IV project (Marshall and Jaggers 2000).

whether a political entrepreneur organizes them, and relatively independent of democratic institutions. Democratic institutions clearly have much to recommend them, and they may sometimes contribute indirectly to pro-poor policy: in each of the three countries in this paper, democratic institutions sometimes—though certainly not always—seem to facilitate political entrepreneurship of the poor, and through this channel may contribute to pro-poor policy.[5] In this sense, the evidence in this paper is not wholly inconsistent with existing cross-national work that finds a correlation between democracy and pro-poor policy. But the evidence also suggests that this correlation is spurious, and that democracy is neither necessary nor sufficient to serve the poor.

I present my work in seven parts. In the first I introduce the institutional and interest group models of politics. I then outline demands for education policy by various groups in society, link them to the two models, and derive predictions for how education policy should look under each model. I introduce my tests of these predictions in section three. In section four I describe the three case studies, and the data and analysis used. The case study of Taiwan is in section five, and the case studies of Ghana and Brazil are in section six. While for reasons of space I only present data and analysis on Ghana and Brazil, for Taiwan I also provide a brief discussion of the development of education policy since 1949. This discussion underscores the importance of interest groups and political entrepreneurs to this development. Section seven concludes.

1. Institutional and Interest-Group Models of Politics

The link between democracy and social spending relies on a few key theoretical contentions: governments, both democratic and autocratic, want above all else to stay in

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[5] The relationship between democracy and political entrepreneurship is somewhat outside the scope of this paper, but I speculate on it in the conclusion.

power; and they attempt to stay in power by serving or repressing all those with the capacity to threaten their power (Downs 1957, Mayhew 1974, Bueno de Mesquita et al. 2003). A democratic government is theoretically unlike an autocratic one in deriving its power from the consent of the governed, which they give through their votes. Thus in theory, the democratic franchise gives the poor a say over their government, and, to stay in power, the government should try to court them with its policies.

However, the developing world is rife with examples of democratic governments who use corruption, repression, and manipulation to maintain power with small and wealthy constituencies—e.g., many democracies in Latin American and Africa—and of autocratic governments whose power depends on the support of the poor—e.g., Socialist governments. In fact, there is good reason to think that, at least in developing countries, the power of the poor over the government has more to do with their ability to organize, or be organized, than with formal institutions: if the poor are not an organized force, they are vulnerable to the corruption, vote-buying, empty promises and emotional appeals, and other sorts of electioneering that plague developing democracies, while if the poor are organized a government may not be able to ignore them even if it does not technically need their votes to rule. Of course, it is not easy for the poor to organize: they are scattered and short on time and money, giving them extremely high collective-action costs (Olson 1965), in contrast to developing-country elites, who are wealthier and are likely to be concentrated in urban areas (Bates 1981). The democratic franchise is theoretically one way to lower the poor's collective-action costs—voting is relatively costless—and thereby bring the poor into the political process. Another alternative—the one I examine—is a political entrepreneur (Noll 1989), who can organize the poor on their behalf and thereby subsidize their collective-

action costs, creating out of them a viable political force that can compete with elites for power, and potentially support, or help support, a government.[6]

To see how a political entrepreneur can bring the poor to power, we can define theoretically three types of governments, which differ according to the groups on whom they depend for power—the groups I will designate the *vital constituency.* The first type governs a society with no successful political entrepreneur of the poor. For this type, the vital constituency is the group that has the easiest time organizing: the elites. A successful political entrepreneur can, however, subsidize the poor's collective-action costs to the point where she removes the elites' collective-action advantage, leveling, in a sense, the political playing field. Political entrepreneurs of the poor can take many forms: they can be individual leaders or organizations, like unions or churches.[7] Whatever their form, for our purposes they fall into two types. A political entrepreneur can organize the poor on only their behalf; we can think of Fidel Castro or Mao. This type of entrepreneur is anti-elite. He seeks a government supported by a vital constituency of the poor only. The second type also organizes the poor, but is pro-elite; she seeks a cross-class alliance. She may arise from a split among elites: one faction may wish to challenge another, and organize the poor to increase its relative power. Or she may arise in response to an anti-elite political entrepreneur and the resulting political competition: if elites can compete for the poor, they may defeat the challenge.

Political entrepreneurs are thus an alternative to democratic institutions of conceptualizing the political involvement of the poor. And indeed, if we compare the idea of a political entrepreneur with a democracy's electoral coalition, the two models yield similar

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[6] This type of political entrepreneur Organizing might be easier or more durable under democracy than autocracy. I speculate on this in the conclusion.

[7] In this paper, a "political entrepreneur" organizes the poor to bring them to power politically, not to push for a particular policy. By this definition, Mao is a political entrepreneur; the Gates Foundation is not.

predictions. In a democracy, elites can align with the poor and elect a government whose

vital constituency is a cross-class alliance. Or the poor, who are likely to be more numerous

than the elites, could elect a government that depends only on them, i.e., a vital constituency

of the poor only. On the other hand, in an autocracy—without democratic institutions

empowering the poor—the elites may be able to rule unchallenged. Table 1 shows the

similarity in logic between the two models.

Table 1 – Predicted Vital Constituencies, With Interest Group and Institutional Models

With Interest Groups (Political Entrepreneurs)

Successful Political Entrepreneur		
None	Pro-Elite	Anti-Elite
Elites	Elites and the Poor (Cross-Class Alliance)	Poor

With Institutions

Electoral Coalition		
None (Autocracy)	Elites and Poor	Poor
Elites	Elites and the Poor (Cross-Class Alliance)	Poor

Notes: The boxes describe the vital constituency at any time *t,* as predicted by the institutional and interest-group models of politics. "Political Entrepreneurs" are of the poor only; elites, facing fewer collective action costs, do not need an entrepreneur's collective-action subsidy to organize. At any time $t-1$, entrepreneurs may try to organize the poor. If they are unsuccessful and the poor remain an ignorable political force, the VC at time *t* is the default; if they are successful and pro-elite, the VC at time *t* is a cross-class alliance; if they are successful and anti-elite, the VC at time *t* is the poor.

Yet while the predicted vital constituencies of the two models are similar, the

mechanisms producing those vital constituencies are very different. Judging a country's vital

constituency based on whether it is governed by democratic institutions yields a very

different picture than judging its vital constituency by looking at the success of political

entreprenuers at organizing the poor. Elsewhere[8] I have analyzed political entrepreneurship in Taiwan, Ghana, and Brazil, and determined vital constituencies based on this analysis. Table 2 shows the lack of overlap between the two ways of determining vital constituencies. Measures of democracy commonly used in research on the link between democracy and education policy (Przeworski et al. 2000, Marshall and Jaggers 2000) do not distinguish between electoral coalitions based on whether they are cross-class alliances or of the poor only; therefore the table groups all democratic coalitions together in one category: the key distinction is the presence or absence of democratic institutions.

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[8] In my dissertation I analyze extensively political entrepreneurs and vital constituencies in Taiwan, Ghana, and Brazil. Tables 5-7 in the appendix shows the groups in each vital constituencies in each period, and any political entrepreneurs, for each of the three countries.

Table 2 – Predictions of Vital Constituencies with Interest-Group and Institutional Models

With Interest Groups (Political Entrepreneurs)

Successful Political Entrepreneur		
None	Pro-Elite	Anti-Elite
Taiwan: ~1965 – late-1980s	**Taiwan:** 1949 - ~1965; late-1980s - 2000	**Ghana:** 1979 – 2000
Ghana: 1966 – 1979	**Ghana:** 1951 – 1966	**Brazil:** 1961 - 64
Brazil: 1964 – ~1985	**Brazil:** 1930 - 1961; ~1985 - 2000	

With Institutions

Electoral Coalition	
None (Autocracy)	Elites and Poor or Poor Alone (Democracy)
Taiwan: 1949 – 1996	**Taiwan:** 1996 – 2000
Ghana: 1951 (1957) – 1969 1972 – 1979 1981 – 1992	**Ghana:** 1969 – 1972 1979 – 1981 1992 – 2000
Brazil: 1930 – 1945 1964 – 1985	**Brazil:** 1945 – 1964 1985 – 2000

Notes: See Table 1. Electoral classifications are from Przeworski et al. (2000), except Brazil prior to 1945, for which I use the Polity IV measure of democracy (Marshall and Jaggers 2000).

To test the performance of these two models at explaining pro-poor education policy, I examine, in the remainder of this paper, how well the supply of education policy meets the demand for education policy by the vital constituencies predicted by each model. For example, if a democratic transition precedes the implementation of a pro-poor education policy or occurs within a reasonable time frame of that implementation—roughly four years, or one electoral cycle—I take that as evidence that democracy is a plausible cause of the pro-

poor education policy.[9] If, on the other hand, a democratic transition does not precede the

implementation of a pro-poor education policy, or occur within a reasonable time frame

after that implementation, I take that as evidence that democracy is not a plausible cause of

the pro-poor education policy. I apply similar criteria to the interest-group model, although

in the latter's case it is not plausible that a government would implement a pro-poor policy

in anticipation of a political entrepreneur's successful organization of the poor; I thus do not

consider a pro-poor policy implemented before a political entrepreneur of the poor appears

on the scene to be evidence that the political entrepreneur's organization of the poor caused

the policy change.

2. Education Policy, and Demands for It

To test the performance of these two models, we must first have a model of what

kind of education policy different citizens will demand. By "education policy," I mean the

government's regulatory and resource commitment to educating the population. In this

study, I proxy this commitment with enrollment and spending data, which describe the

population's access to the education system and the resources available for their education.[10]

Members of society demand education on at least two important dimensions:

families demand education for themselves or their children, to increase their future earnings,

and employers demand education for their workers, to give them the human capital needed

in production. Although to judge the performance of the two models we need only consider

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[9] It is after all plausible that, during a transition period, an autocratic government may implement a pro-poor education policy in order to court the poor in preparation for coming elections.

[10] This definition of "education policy" is considerably simplified from the focus of my larger project. In the latter education policy involves a complex government toolkit, with schools, teachers, exams, financial aid, tracking, outsourcing, and other tools all allowing the government to direct educational opportunity to its vital constituency or to otherwise meet their demand for education.

families' demands, when considering actual education policies it is necessary at least to control for employers' demands, which are influential on government policy.

The demands of employers and families are related, since it is employers' demands for labor that gives education value in the wage market. But they are also opposed, since families' income is greatest when they can earn wages as high as possible, while employers' income is greatest when they can pay wages as low as possible. In this section, I first consider families' demands, then employers', and then link these demands to the predictions of the institutional and interest-group models of policy-making. Aside from the consequential addition of employers on a separate dimension,[11] this model of demand for education is highly complementary with the conception of demand on which empirical analyses linking democracy and education policy generally rely (e.g., Brown 2002, Stasavage 2005). In particular, primary education emerges as the most valuable level to the poor.

Dimension One: Families' Demand for Education Policy

If families are income-maximizing, they will want to invest in education to the point where the current value of the future wages they can expect to earn if they have education equals the current cost of the education (Findlay and Kierzkowski 1983, Becker 1964).[12]

There are six aspects to education that allow us to determine the demand for education policy of an income-maximizing family based on their wealth.

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[11] The addition of employers is important on theoretical grounds, but its use in this paper is primarily empirical: without the addition of employer demands, the supply of education in any actual country in which employers demand education will appear out of synch with the demand for education by individuals. Thus a test of which individuals' demands the government is meeting with its supply of education must at least control for the demands of employers.

[12] For many, education may also have consumption value: education can be enriching, and this value generates a willingness in many to pay for it. Yet because education is so expensive, both in direct and in opportunity costs, only a person with access to substantial assets and an abnormally high discount rate on future earnings will have the luxury of not considering education primarily for its investment value. For most, then, education will be firstly an investment, and only secondarily an activity they enjoy. Thus I consider education as an investment in future earnings.

The first is the organization of education into progressive grades and levels, the previous of which is necessary for the student to continue to the next. A student cannot enter secondary school without attending primary school first.

Second, each level is progressively more expensive to produce. Absent a subsidy, it costs more to produce secondary education than primary education of the same quality, and more to produce tertiary education than secondary education of the same quality.

Third, a worker's wages and their level of education are positively correlated (Mincer 1974). That is, with rare exceptions, the job market rewards the educated better than the non-educated. The higher pay reflects the higher ability, and thus the higher productivity, of the educated over the non-educated employee. Thus the higher a student can progress, the more wages await her at graduation.[13]

Fourth, a worker's wages are positively correlated with the quality of her education, which also raises her ability and thereby her productivity. I will make the assumption that more resources mean more quality. This is obviously not always true—resources can be wasted and have diminishing returns to educational quality—but they can help educational quality, and when spent well they almost always spent.[14]

Fifth, a worker's wages are positively correlated with the rarity of her education. The more workers with her education, the less employers will need to pay to hire her.

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[13] The wage gains from education depend on economic development. All else equal, in less-developed economies, there is less demand for highly-trained workers relative to demand in more-developed economies, and higher levels of education will have correspondingly less value (Psacharopoulos 1973, 1981, 1994).

[14] In cross-country regressions of upper-middle and high income countries, higher per-student spending explains about half the variance in test scores (OECD 2003). But there is disagreement on the marginal effects of increases in per-student spending. In the U.S., for example, many scholars find that the link between resources and test scores is weak: test scores have not risen since the 1960s despite average annual increases in per-student spending of more than 3 percent (e.g., Hanushek 2003, Coleman 1966). But test scores are often a poor indicator of educational quality, and there is considerable evidence for a link between educational resources and wages (for a discussion, see Card and Krueger 1996a, 1996b).

Sixth, absent a subsidy from the government or elsewhere, only those with sufficient current assets to afford the price of education will be able to go to school. Education is bad collateral (Friedman 1962);[15] thus even though a person can reasonably expect higher earnings tomorrow if they have education, it is difficult for that person to borrow against those future earnings in order to buy education today.

From these six aspects of education, we can determine a family's demand for education policy based on their wealth.

For a rich family, the ideal education policy is straightforward. Assuming a certain minimum level of development in the economy, the tertiary level is the most valuable and expensive level in the education system[16]; therefore the rich family will be most helped by a policy that concentrates resources on that level—raising its quality and lowering its cost— and which restricts access to that level so that its graduates earn more. As the budget allows, the government may devote some resources to lower levels. But the lower levels cost less to produce, so it will be easier for the rich family to pay for good primary and secondary schooling than good tertiary schooling; the government should therefore invest in these levels only after investing in the higher levels.[17] I label this sort of education policy *Top Down.* It

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[15] If a car buyer defaults on her car loan, she can turn over the car, which the bank can sell to repay the loan. But a bank cannot take a student's education if he defaults on his education loan. The bank can go after his wages or other assets, but this takes time and requires a level of enforcement commitment and capacity that only a few governments—mostly in the developed world—possess. For a discussion, see Wiseman (1987) or Ljungqvist (1993). Education loans are therefore risky for banks, and an interest rate high enough to compensate for that risk is also likely to be higher than a student's return on their education, which is rarely more than 20 percent and is more likely to be in the neighborhood of 10 to 15 percent. These estimates are from World Bank economist George Psacharapoulos, who used to conduct semi-decadal surveys of rates-of-return studies; the most recent of these, from 1994, showed that, on average, across the world, a primary graduate earned about 18 percent more than a person with no education, a secondary graduate earned 13 percent more than a primary graduate, and a graduate of higher education earned 11 percent more than a secondary graduate (Psacharopoulos 1994).

[16] As the economy develops, the relative value of the tertiary level will only increase.

[17] In practice, the investment in lower levels in the rich family's ideal education policy involves providing a pathway for their children through these lower levels and into the universities.

is associated with low enrollments and a high level of per-student government spending at higher levels.

For a poor family, the ideal education policy is less straightforward. Although tertiary is the most valuable level, the only way to get to tertiary is through primary and secondary. As a poor family will not be able to borrow against their expected earnings in order to buy education, it may be difficult for them to afford even a little primary education out of their meager resources, let alone pay for quality schooling through secondary in preparation for the tertiary level. Thus of necessity a poor family's ideal education policy puts resources into the lower levels, increasing their quality, and works up the progression to the limit of the education budget. Although poor families share with rich families a preference for fewer graduates with their skills, in any developing country with the usual right-skewed distribution of income, there will be considerably more poor families than rich families[18]; thus poor families' ideal education policy also entails greater access to education. I label the poor's ideal education policy *Bottom Up*. It is associated with high per-student spending at the primary level, and high enrollments.

Table 3 summarizes families' demands.

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[18] In my broader project I relax this assumption, allowing the government to use its education toolkit (see footnote 10) to direct educational opportunity not only by wealth, but also by geography and ethnicity.

Table 3 - Education-policy demands of a rich and a poor family in a typical developing country

	Family's resources	
	Poor	*Rich*
Education acquired from own resources	Incomplete, poor-quality primary	High-quality primary and secondary, and mediocre tertiary
Most-valuable education policy	**Bottom Up** High per-student spending on primary; High enrollments	**Top Down** High per-student spending on tertiary; Low enrollments

Dimension Two: Employers' Demands for Education Policy

Now let us consider the second dimension: employers' demands. Employers may demand education, to train their workers. To distinguish education with the purpose of serving employers from education with the purpose of serving families, I label the former *Worker Training.* This division is largely theoretical, however: in practice a single education system will often serve the demands both of families and employers.

When will employees demand worker training? Not all employers will need skilled labor: in a very under-developed economy, for example, the need for skilled labor may be minimal. And not all employers of skilled workers will demand that the government train those skilled workers, because employers may have one or both of two better options. First, an employer may be able to import skilled workers from abroad. If a skilled worker trained at another government's expense is earning wages lower than what the employer is willing to pay, that worker may be lured into emigrating. Second, an employer may be able to move production abroad. If another country contains a pocket of skilled workers all available at wages lower than what the employer is currently paying, it may be cheaper simply to move
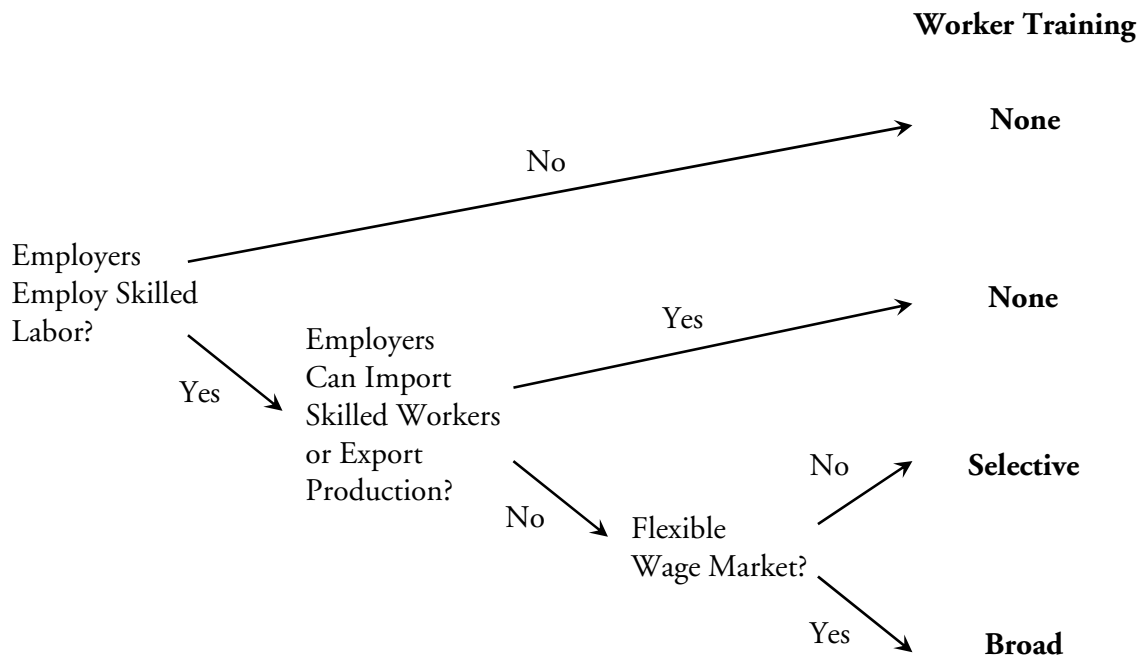
operations there, rather than tempting the workers all to emigrate. Both of these options provide workers available immediately, rather than at the end of a years-long education cycle, and are less draining of government resources.

If, however, employers of skilled labor are not able to import skilled labor or ship production abroad, they may demand worker training from the government. These demands will take one of two forms, depending on the flexibility of the wage market. If the wage market is flexible, then wages are elastic to the supply of labor, and an increase in the supply of skilled labor will lower skilled wages. In a flexible wage market, employers of skilled labor will therefore demand what I will label *Broad Worker Training*. Broad worker training seeks to lower the wages of workers with the skills employers need by educating as many workers as possible in those skills. An education system that fills this demand will put its emphasis on quantity over quality. Resources are finite, and any resources spent on overeducating workers do not help lower the wage rate.

Yet often wage markets are not flexible; particularly when there are unions. If skilled workers are members of unions, they may be able to protect their wages no matter how many of them there are. Thus in inflexible wage markets, employers will demand what I will call *Selective Worker Training*. "Selective" worker training provides employers with targeted assistance for worker training—usually grants or tax breaks—engineered to provide them with enough, and only enough, of the skilled workers they need, with its emphasis on the quality of their skills. The emphasis is on quality over quantity because educating more workers than necessary wastes resources: the wage rate will be unchanged no matter how many workers there are.

Figure 2 summarizes employer demands for worker training.

Figure 2 - Employer Demands for Worker Training

Worker Training

None

No

Employers
Employ Skilled
Labor?

None

Yes

Employers
Can Import
Skilled Workers
or Export
Production?

Yes

No

Selective

No

Flexible
Wage Market?

Yes

Broad

The Education-Policy Demands of Vital Constituencies

Using these two dimensions of demand for education policy, we can now consider
the supply side—how these demands will be realized—and with it, the key question of this
paper: which vital constituency does the government seem to be serving with its education
policies, the one predicted by institutions or the one predicted by interest groups?

Table 4 puts together the two dimensions of demand into a matrix based on the
typology of vital constituencies in Table 1. Table 4 assumes that elites demand education
policy as rich families and the poor demand education policy as poor families, and that any
vital constituency can include employers, with two possible exceptions: boxes 4 and 7, which
are shaded in Table 4. The combination of a vital constituency that contains the poor and a
flexible wage market is highly unlikely, because where the poor are inside the vital

constituency the government is likely to protect their wages—for example, by allowing

unions—thereby preventing a flexible wage market.[19]

Table 4 - Demands for Education Policy by Different Vital Constituencies

Families inside the Vital Constituency

Employers	Elites	Elites and the Poor (Cross-Class Alliance)	Poor
Flexible wage market; employers need skilled workers	1 *Education System* Top-down *Worker Training* Broad	4 *Education System* All Levels *Worker Training* Broad	7 *Education System* Bottom-Up *Worker Training* Broad
Inflexible wage market; employers need skilled workers	2 *Education System* Top-down *Worker Training* Selective	5 *Education System* All Levels *Worker Training* Selective	8 *Education System* Bottom-Up *Worker Training* Selective
Employers do not need skilled workers or are outside the vital constituency	3 *Education System* Top-down *Worker Training* None	6 *Education System* All Levels *Worker Training* None	9 *Education System* Bottom-Up *Worker Training* None

Notes: A "Top-down" education system concentrates its resources at the highest level, and takes on a lower level only insofar as the government has extra resources after making sufficient improvements to the level above it. A "Bottom-Up" education system concentrates its resources on the lowest level, and takes on a higher level only insofar as the government has extra resources after making sufficient improvements to the level below it. "Selective" worker training provides employers with targeted assistance for worker training—usually grants or tax breaks—engineered to provide them with enough, and only enough, of the skilled workers they need. "Broad" worker training uses the education system to lower the wages of workers with the skills the employer needs by educating as many workers as possible in those skills. Shaded areas are unlikely, because in such a broad VC wages will not fall as the number of skilled workers increases. For simplicity, the table assumes all employers are of one type, though a vital constituency can include employers of several types.

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[19] This table is obviously simplistic. A vital constituency may include employers of several types, and the typology of vital constituencies listed does not include the middle class: a vital constituency may, for example, include elites and the middle class, and exclude the poor, or include the middle class and the poor and exclude elites. I leave out these possibilities for simplicity. But predictions for them follow the same logic, combining the predicted demands of individuals and employers in Table 3 and Figure 2. For example: if only some employers employ skilled labor in a flexible wage environment, only those employers would demand broad worker training, while the rest would not have a demand for worker training. Likewise a vital constituency with elites and the middle class would demand both improvements at the primary and secondary levels, and both increased access and improvements to the tertiary level.

In Table 4, the pro-poor education policies are All Levels or Bottom Up; these policies invest in primary education, the level most valuable to the poor. Thus a government that serves the poor should pursue an education policy of the sort in boxes 4 through 9. By contrast, boxes 1 through 3 describe education policies that a government serving the rich should pursue.[20]

3. Testing the Two Models

If democracies serve the poor, then democracies should introduce pro-poor education policies, the sort in boxes 4 through 9 of Table 4. If, on the other hand, political entrepreneurs, not democratic institutions, determine whether the government serves the poor, then governments should introduce pro-poor education policies where political entrepreneurs successfully organize the poor, regardless of democratic institutions. In this section, I will lay out evidence for the latter model, using a half-century or more of data on enrollments and education spending from three very different developing countries: Taiwan, Ghana, and Brazil. In each of these countries, successful organizing of the poor by a political entrepreneur predicts pro-poor education policies. In a few cases, pro-poor education policies also coincide with democratic institutions. But more often democratic institutions are nowhere to be found, and in every case where democracy and pro-poor education do coincide, there is also a successful political entrepreneur of the poor. The evidence suggests

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[20] In my dissertation I go into far greater detail on exactly how the government implements education policies in order to meet the demands of its vital constituency. In brief, the government has a powerful toolkit, consisting of schools, teachers, exams, financial aid, and tracking, and has the option of producing all or any part of the education system indirectly by outsourcing it to the private sector. Yet the government's toolkit is not omnipotent. In particular, the government faces four other limitations: if it is not the first government to build the modern education system, it has to work with the system the previous government gives it; it has a limited and inflexible budget; education is slow and difficult to provide; and it must not discriminate too obviously against those outside the vital constituency, lest it threaten social stability.

that political entrepreneurship of the poor causes pro-poor policies, while democratic institutions are neither necessary nor sufficient for a government that serves the poor.

I present the evidence in three parts. In section four, I briefly introduce the cases and data and describe the analysis. Then in section five, I present evidence and analysis of education policy in Taiwan, and, in section six, evidence from Ghana and Brazil. While for reasons of space I only present data on Ghana and Brazil, I go into greater depth on Taiwan, in order to illustrate more closely the relationship between political entrepreneurship and education policy. I choose to look more closely at Taiwan, rather than the other two cases, for three reasons. First, Taiwan is a difficult case for a political story about education: the country, an archetypical Asian Tiger, is often cited and studied for its success in building an education system based on economic, not political, rationale (e.g., Woo 1991, Li 1981). Second, while data on education in Ghana and Brazil is spotty, Taiwan has excellent, reliable data on its education system and spending going back to the founding of the Republic of China on Taiwan in 1949. Third, Taiwan's education policy goes through only two major shifts, each of which has ample time to take hold, which allows us to see readily the impact of each shift.

4. The Data and Analysis

Ghana, Brazil, and Taiwan have little in common. The three countries together represent nearly the full range of inequality available in the world,[21] are at three different levels of development[22] on three continents, and each has a widely different history and culture. They thus provide both the institutional and interest-group models with a wide

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[21] Taiwan, with a Gini coefficient of less than .3, is one of the most equal countries in the world. Brazil, with a Gini of nearly .6, is one of the least equal. Ghana (Gini of .48) is in between.
[22] Using the World Bank's income categories, Taiwan is a currently a high-income country; Ghana, a low-income country; and Brazil a lower-middle-income country.

range of potential settings in which to demonstrate the strength of their causal logics. The fact that the interest-group model succeeds and the institutional model fails in three such different countries is forceful evidence for the former.

In each country, I begin the analysis with the first government to create a modern education system to serve its domestic vital constituency. For Taiwan and Ghana, this happened at independence: for Taiwan, in 1949, when, after decades of Japanese colonial rule, the Chinese Nationalists (*Kuomintang*, or KMT) formed the government of the Republic of China on Taiwan; for Ghana, in 1951, when the first Ghanaian leaders gained partial control of the government.[23] In Brazil the opening year is 1930, when the modernizing government of Getúlio Vargas overthrew the previous government of agrarian oligarchs. In each case, I stop the analysis in 2000. As a group, over these periods of analysis, Ghana, Brazil, and Taiwan have been through ten regime transitions: Taiwan had one, from autocracy to democracy, Brazil had three, and Ghana had six (Przeworski et al. 2000, Marshall and Jaggers 2000).

The length of my timescale means that I cannot rely on traditional sources of data on education spending, such as those from UNESCO or the *World Development Indicators.* These sources rarely cover years prior to 1970, and cover years before 1995 only sparsely, and, in my experience, often with some error.[24] Instead, I gathered data on education spending from official archives in each country. Official statistics, of course, have their own reliability problems. But in each of the three countries they are available at a reassuring level of detail. More importantly, if the data are indeed biased, it is likely that they are systematically biased

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[23] Ghana does not actually gain formal independence from the U.K. until 1957, but throughout the 1950s independence was a foregone conclusion and an elected Ghanaian government had control of much of government policy—including education policy—starting in 1951.

[24] For example, *World Development Indicators* reports that there were 2.3 million primary students in Ghana in 1975, an enrollment almost double Ghana's officially recorded figure and improbably inconsistent with *WDI's* figures for 1970 and 1980.

either up or down; there is little reason to believe that they are biased systematically either in favor or in opposition to my periodization.

Of the three countries, I have the most complete data for Taiwan: my data set contains annual data from 1950 on spending and enrollment at every level.[25] For Ghana, I also have comprehensive data from 1951, although not for every year.[26] For Brazil, I have excellent enrollment data, but the spending data are spottier, and are complicated by Brazil's federal system, which divides responsibility for education between federal, state, and municipal governments. I have complete, though not annual, data for the 1940s, 1950s, and 1960s for all levels of government, but for the 1970s and 1980s, when Brazil's autocratic government was somewhat less than transparent about its spending, I have complete spending data for only a few years, and for the remainder my data set covers only federal spending.[27] (I am still putting together data for the 1990s, but in the data presented below I include one year, 1995, for basic comparison.)

For each case, I use the data on spending and enrollments to categorize the education policy as one of the nine types in Table 4. If the policy falls into boxes 4 through 9, each of which include heavy investments in primary education, I conclude that the government is pursuing a pro-poor education policy.

The data on democratic institutions come from the widely-used measures in Przeworski et al. (2000), except Brazil prior to 1945, for which I use the Polity IV measure

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[25] Data on Taiwanese education are from *Education Statistics of the Republic of China*, various editions (e.g., Republic of China 2005b). I converted spending figures to 2001 NT$ using the Consumer Price Index series from Republic of China (2005a); index values for prior to 1959 are from the Provincial Bureau of Accounting and Statistics, cited in Jacoby (1967 pg. 286, Table C.16).
[26] Ghanaian educational statistics are from various editions of the *Statistical Yearbook* (e.g., Ghana 1973) until 1969 and from various editions of *Education Statistics, Digest of Education Statistics of the Republic of Ghana* and the *Quarterly Digest of Statistics* (e.g., Ghana 1997) thereafter. Spending figures for most years are from the *Annual Estimates,* which are issued by the Ministry of Finance (e.g., Ghana 1999). I convert them to 2001 cedis using price indices from various editions of the *Quarterly Digest of Statistics* and from Ewusi (1986).
[27] Data on Brazilian enrollments and spending are compiled from various editions of *Anuário Estatísticos do Brasil.* I converted figures to 2004 reais using deflators from IPEA (2006).

of democracy (Marshall and Jaggers 2000). I assume that, if a country is classified as a democracy, its vital constituency includes the poor (either a cross-class alliance or a vital constituency of the poor alone), and, according to the institutional model, should pursue a pro-poor education policy. Elections can theoretically make their mark on policy before they take place; to allow time for campaigning and other preparations for an election, I conclude that democratization may have caused a pro-poor education policy if the policy was implemented up to four years, or about one election cycle, prior to the first election.

For information on the political entrepreneurs at the heart of the interest-group model, I rely on work from my dissertation, but in each case I briefly describe the relevant conclusions. I also include in the Appendix tables showing for each country the vital constituencies and any successful political entrepreneurs of the poor. If a government includes a successful political entrepreneur of the poor, I predict that its government will pursue a pro-poor education policy. The interest-group model does not allow for campaigning and other efforts by an incumbent government to court newly powerful citizens; thus I do not conclude that the interest-group model correctly predicted a pro-poor education policy unless the policy is implemented *after* a political entrepreneur successfully organizes the poor and enters a government with their support.

My categorizations of the nature of employers in each country also come from my dissertation. These categorizations do not speak directly to whether a government implements a pro-poor education policy; but since they are instrumental to understanding why an actual education system looks as it does, I cannot simply eliminate them from the analysis. Rather, I control for them in a sense by assuming that both the institutional and interest-group models account identically for employer demands. Returning to Table 4, this is equivalent to saying that the row is pre-determined, and the job of each model is to predict

which column education policy will fall into, since it is the columns, not the rows, that describe whether an education policy is pro-poor. For example, boxes 1 and 2 describe education policies with very different sorts of worker training, but both are focused on elites; boxes 8 and 9 likewise include very different systems of worker training, but both are pro-poor.

*5. Institutions and Interest Groups in Taiwanese Education*

Viewed through an institutional lens, Taiwan's vital constituency is stable for most of its history: Taiwan from 1949 to 1996 is an autocracy. The institutional model predicts that autocratic governments implement elitist education policies and democratic governments implement pro-poor education policies. Thus for Taiwan, the predictions of the institutional model are simple: Taiwan should implement pro-poor education policies at the earliest in 1992, or the equivalent of one election cycle prior to its shift to democracy.

By contrast, the interest-group model shows two vital constituency shifts: one in the mid-1960s, and one in the late 1980s. Governments in two of the resulting three periods included political entrepreneurs of the poor: the Kuomintang from 1949 to the mid-1960s, and from the mid-1980s on, native Taiwanese nationalists and their Democratic Progressive Party (DPP). The Kuomintang began its rule of Taiwan in 1949 with a vital constituency of soldiers and bureaucrats from the mainland, and organized and courted Taiwanese farmers as a buffer against Communism and native Taiwanese elites, whom it also repressed. As the Kuomintang secured its position, it gradually abandoned Taiwanese farmers in the 1960s in favor of export-oriented manufacturing enterprises, and created a new group of loyal native-Taiwanese elites, who helped keep control of farmers and workers and secured their votes in rigged elections. In the 1980s, after decades of repression, the original group of native-

Taiwanese elites began grass-roots organization of Taiwanese farmers and workers around a message of Taiwanese nationalism. Their Democratic Progressive Party gained power with the poor throughout the 1990s, as the Kuomintang began losing elections to DPP candidates. In 2000, the Kuomintang lost the presidency.

Thus the interest-group model yields a prediction of pro-poor education policies in two eras: 1949 to the mid-1960s, and the mid-1980s on. Figure 3 shows the predictions of the two models below the actual education policy pursued, for which I provide evidence momentarily. In the figure, pro-poor policies are bolded. It is immediately apparent that the interest-group model does a good job of predicting pro-poor education policy in Taiwan: it is only a few years early in predicting a change away from pro-poor education policy in the mid-1960s, and is very accurate with the shift to pro-poor education policy in the late 1980s. By contrast, democratic institutions fail to account for a sizeable period of pro-poor education policy: they entirely fail to capture the period from 1949 to the mid-1960s, and are almost a decade late in predicting the pro-poor policies pursued from the mid-1980s. (To control for worker training, Figure 3 assumes that both models predict the same worker training types: Taiwanese employers demand few skilled workers before the 1960s, in the 1960s, their demands increase and the government provides broad worker training, and in the mid-1980s their demands again fall because they gain access to skilled workers at lower wages in China.)

Figure 3 – Predicted and actual education policy in Taiwan, 1949-2000
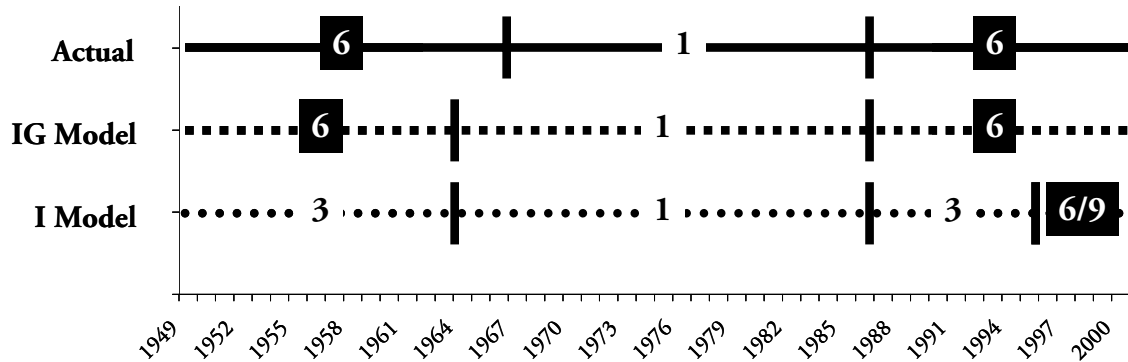
Notes: "IG Model": Predictions from the Interest-Group Model (using political entrepreneurs); "I Model": Predictions from the Institutional (regime-type) model. Education policy types are in Table 4 and as follows: 1: Top-down with broad worker training; 2: Top-down with selective worker training; 3: Top-down with no worker training; 4: All levels with broad worker training; 5: All levels with selective worker training; 6: All levels with no worker training; 7: Bottom-up with broad worker training; 8: Bottom-up with selective worker training; 9: Bottom-up with no worker training. Any type 4-9 is pro-poor by virtue of its investments in primary education; such types are bolded in the figure.

The remainder of this section supports Figure 3. In Figures 4-7 I provide data on enrollments, the division of the government budget between levels, and per-student spending at each level. Following the figures, I briefly discuss the development of the system to buttress the link between it and Taiwan's changing vital constituency.
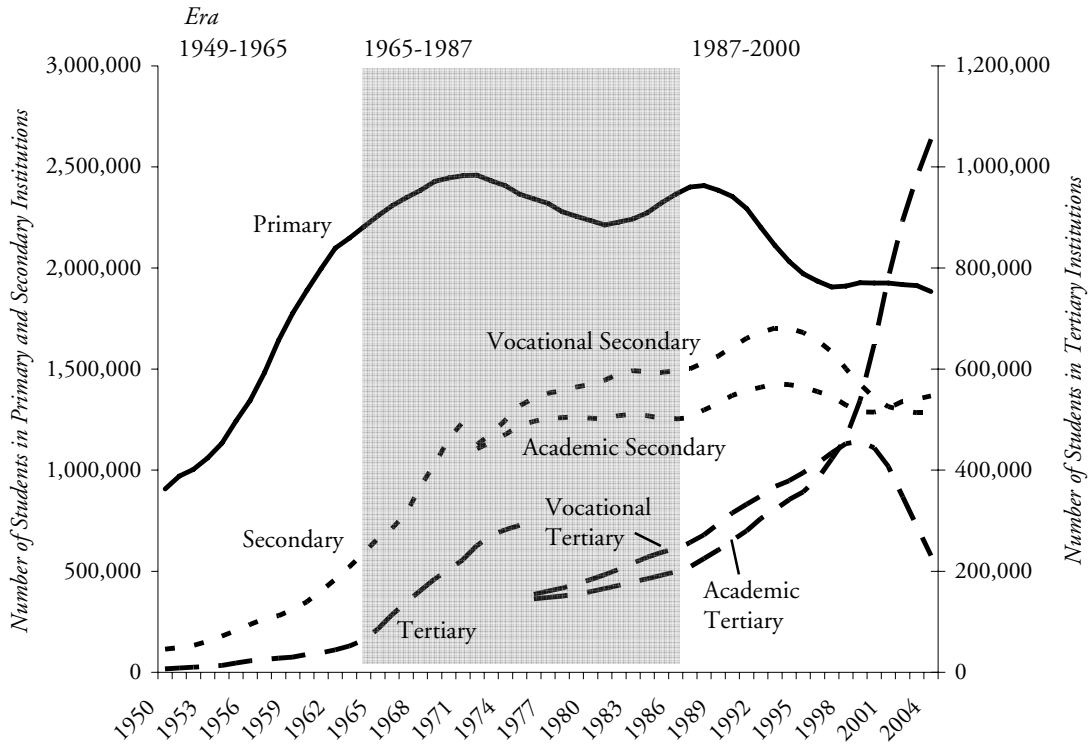
Figure 4 - Enrollments in Taiwan

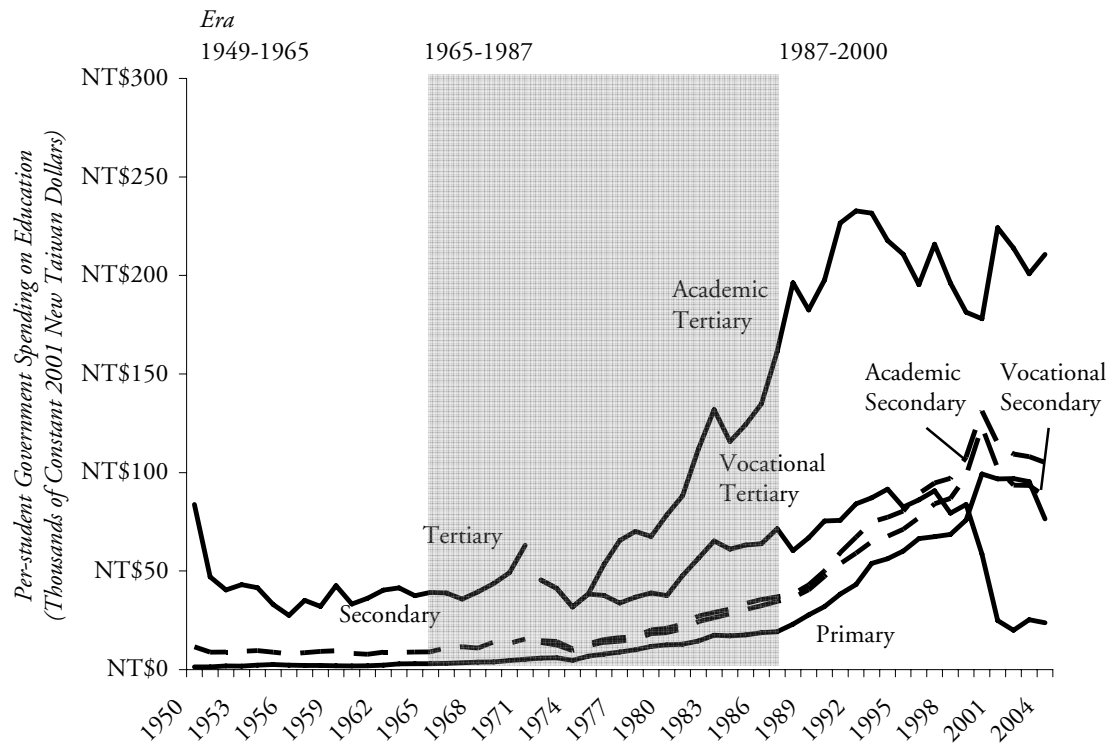*Figure 5 - Per-student Spending in Taiwan*

Figure 6 - Per-student Spending on Vocational and Academic Secondary Education in Taiwan
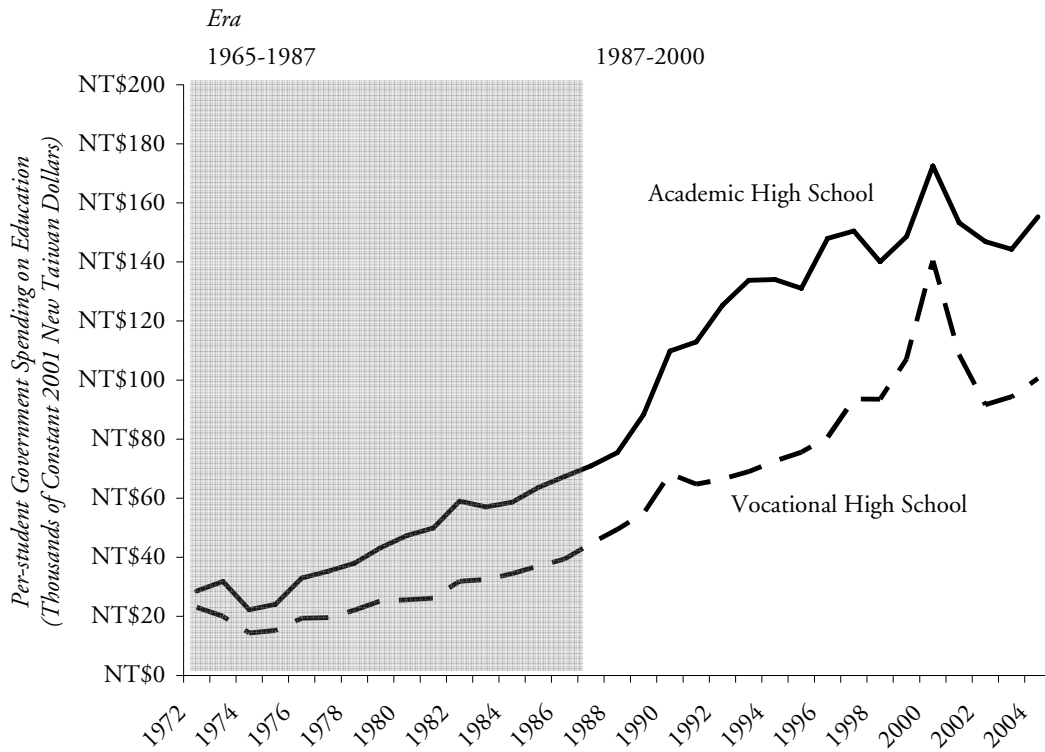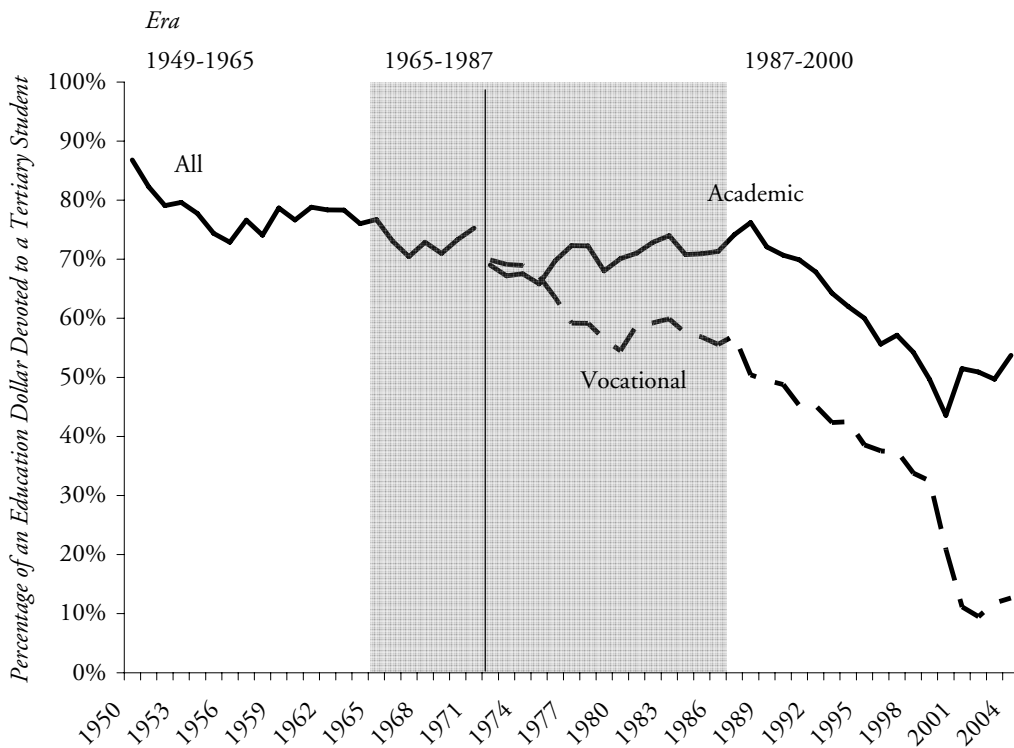

Figure 7 - Relative Tertiary Per-Student Spending in Taiwan

Taiwan's new Chinese government inherited from the departing Japanese colonialists a system of broad primary education, but little else.[28] From this base, the Kuomintang built an extraordinary system to serve its vital constituency. The vital constituency in this early period was a cross-class alliance, of farmers and the core Kuomintang elite of mainlander Chinese; hence the system the Kuomintang built was two-pronged: one to keep the farmers happy, one to satisfy the elite. For the farmers, high-quality primary education was provided universally; by 1965, primary enrollment reached 97 percent. For the mostly-mainlander elites, higher education, which began from a much-smaller base, expanded even more rapidly.[29] By the late 1950s, a mainlander male had more than a 40-percent chance of attending a university—an astonishing record in such a poor country. Figure 4 shows the enrollment increases. In Figure 5, we can see that, after an initial drop representing the high start-up costs of the higher-education system, the government maintained per-spending on the secondary and tertiary levels. Although not apparent in the figure, per-student spending on primary students was also rising: even accounting for inflation, it more than doubled from 1950 to 1965.

But by 1965, the vital constituency was changing: farmers were out and many large manufacturing employers in the vital constituency were beginning to demand increasing

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[28] At the end of World War II, enrollment was 71 percent. But higher education was limited and exclusive. In 1939, only nine junior high schools enrolled substantial numbers of Taiwanese students, and the sole university, Taihoku National University, the predecessor of National Taiwan University, was for the Japanese only (Woo 1991).

[29] The number of junior high schools quadrupled, from 66 in 1950 to 272 in 1965, and the number of senior high schools more than doubled, from 62 in 1950 to 142 in 1965. In 1950 Taiwan had a single university; by 1965 it had ten. Colleges went from three to eleven; junior colleges, from three to twenty (Republic of China 2005b).

numbers of skilled workers, leading them to demand worker training from the government to lower skilled wages (i.e., broad worker training).[30]

~ 1965 – mid-1980s.

The education policy the government settled on reflected this change in the vital constituency: starting in the mid-1960s, the education system siphoned off the workers' and farmers' children into a new vocational training system, leaving the academic system in tact for the children of elites.[31] The siphoning was facilitated by a series of access controls and tracking at the junior high school level that ensured that elite children were groomed for academic secondary education, while children of the lower classes were prepared for vocational schools.[32] Figure 4 shows the stagnation of academic enrollments while vocational education expanded; Figure 5, however, shows that simultaneously increasing amounts were being spent on academic students. In Figure 6 we can see more easily the diverging per-student spending at the secondary level.[33] The government was able to keep the cost of educating vocational students low by outsourcing much of vocational education to the

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[30] Until 1965 unemployment had held steady at around six percent; after 1965, it declined sharply. More than two-thirds of the increase in the labor force was absorbed into manufacturing and related industries (Kuo, Ranis, and Fei 1981). Consequently manufacturing wages, which were actually falling in the 1950s, began in the 1960s to increase. From 1960 to 1970, real manufacturing wages increased on average by seven percent a year.

[31] This new system was built under the guise of "manpower planning" (the gendered term is ubiquitous)—an idea, in vogue at the time, that a government could anticipate the skilled-worker demands of its economy and adjust the education system to provide workers with those skills. Ironically, Taiwan would become by many accounts a poster case for its advantages (Li 1981, Woo 1991). But I show in my dissertation that, in fact, the timing and character of the sort of manpower planning the KMT adopted placed it squarely in the service of the vital constituency, not the economy.

[32] Though tracking students was technically against Ministry of Education regulations, the Ministry turned a blind eye to the practice (interviews with Shih Ying, Wu Jin, Chen Peiying, Fan Sun-lu, Huang Yu-shi). As a result, during this period, a person's family background, particularly their education, quickly overshadowed all other factors in determining how likely a student was to enter college, while ethnicity was of small and lessening importance. This change is demonstrated by a large and growing body of econometric evidence (Chen and Lin 2004, Chen 2005, Louh 2001, Gannicott 1973).

[33] This despite the higher natural cost of educating a vocational student (World Bank 1993).

private sector.[34] Figure 7 shows the ratio of per-student tertiary spending to other levels: the academic tract retained its per-student spending advantage, while relative per-student spending at the tertiary vocational level falls precipitously.

This system operated effectively through the late 1980s, delivering academic education to elites and skilled workers to employers. But by the late 1980s, with the thawing of relations with mainland China, employers were able to access skilled labor from there, removing the need for vocational education. At the same time, the vital constituency was changing, as Taiwanese nationalists forced the KMT to compete for the native Taiwanese lower classes.

Mid-1980s – 2000.

The 1980s ushered in a period of nearly continuous change in Taiwanese education, as the Taiwanese government tried to satisfy its expanding vital constituency with a rigid education budget.[35] The reforms were complex but can be grouped into two phases: improvements in and then abandonment of vocational education; and reform of the academic system.[36] The effect of these two together was to increase massively the access of ordinary Taiwanese to the academic track, especially at the higher levels, while shifting resources to the lower levels, especially primary. In Figure 4, we can see the changes in

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[34] In 1965, less than a third of the 75,000 students in senior vocational high schools were in private schools; in 1987, it was 60 percent of 450,000 students. In 1965, 61 percent of the 30,000 students in junior (technical) colleges were in private schools; in 1987, it was 79 percent of 260,000 students (Republic of China 2005b).
[35] From 1987 to 2000, the percentage of the government budget spent on education increased only marginally, from 16.5 percent in 1987 to 19 percent in 2000. The yearly increase of .2 percentage points annually in the proportion of the budget devoted to education was actually slightly less than the annual increases from 1950 to 1987, which averaged .22 percentage points a year.
[36] The reforms to the vocational system began almost immediately after the lifting of Martial Law in 1987, when President Chiang Ching-kuo appointed a new Minister of Education, Mao Kao-wen, who did not believe in manpower planning. Mao moved swiftly to increase resources to the vocational system and free up the system to improve its students' education. But these changes were not enough to satisfy the increasingly vocal masses, who wanted academic, not vocational education. In 1994, a large protest movement began, which prompted the government, after it bought a few years by establishing a reform committee, to increase quality and reform curricula at the lower levels and expand access to college.

enrollment: access was increasing at all levels. Also note that after the mid-1990s, academic tertiary education skyrocketed, largely replacing vocational tertiary education; in this period, the government simply upgraded many previously-vocational tertiary institutions into academic institutions. Figure 5 shows the decline of per-student spending at the tertiary level, while spending at the primary and secondary levels shot upward. The patterns naturally reflect a decline in relative spending on tertiary students, as shown in Figure 7.

The reforms, while inevitable given the changing political environment, have led predictably to discontent with education in Taiwan, as increasing access overwhelms the government's ability to provide each student with the quality of education the system had previously provided. Today few Taiwanese are satisfied with Taiwanese education.

6. Ghana and Brazil

Taiwan is in many respects a unique case: it is an Asian tiger, and an example of "growth with equity" (Fei, Ranis, and Kuo 1979) under a stable autocracy. Its government is perhaps, then, an outlier, a country that ignored its autocratic incentives to provide education only to elites. To buttress the case that interest groups, not institutions, explain education policy generally, I look in this section to Ghana and Brazil, countries with little in common with Taiwan.

Ghana

Institutionally, Ghana is the most unstable of the three cases: since gaining independence from the UK in 1957, it has gone through six regime transitions (Przeworski et al. 2000). Its first two democratic periods were short-lived—1969-1972 and 1979-1981—but its recent transition to democracy in 1992 has so far proven durable. The period

since 1992 is, then, the clearest candidate for pro-poor education policy, if democratic institutions cause pro-poor policies. The two democratic governments at the start and finish of the 1970s are also possible candidates.

By the interest-group model, the picture looks quite different. Rather than six shifts, political entrepreneurs of the poor appear just twice: Kwame Nkrumah in the period before he was overthrown in 1966, and J.J. Rawlings after he takes power around 1979-81 (his regime rules briefly in 1979, and takes power permanently in 1981). During the middle period, from 1966 to 1979/81, there are no successful political entrepreneurs of the poor, and the elites consequently rule unchallenged. Ghana gained independence from the U.K. under Nkrumah's leadership with a vital constituency of farmers, migrant workers, and the armed forces, and soon added to these a new Ghanaian junior bureaucracy and a network of public companies and their employees. After a military coup in 1966, the vital constituency returned to its pre-independence coalition: the bureaucracy, armed forces, tribal elites, and foreign companies, along with a new class of Ghanaian business entrepreneurs. With some adjustments after the military took control in 1972, this vital constituency stayed generally in tact until 1979, when J.J. Rawlings, a political entrepreneur from the lower ranks of the military, again organized the poor; after 1981, a new government seized power and ruled until 2000, through a democratic transition in 1992, with a new, anti-elite vital constituency of farmers and workers, foreign companies, and the armed forces (minus its senior officers).

Thus the interest-group model predicts pro-poor policies prior to 1966, and after 1981. Figure 8 shows the predictions by the two methods, along with the actual policies Ghanaian governments pursued, evidence for which follows. Pro-poor education policies are in bold. In this figure we can see evidence that Taiwan was not an outlier: in Ghana, too, governments responded to the incentives created by the organization of the poor by a

political entrepreneur, not the incentives created by democratic institutions. The only

period during which the institutional model correctly predicts pro-poor education policy is

after 1992, but even for that period the causal case is implausible, since the government

began to reform the education system to serve the poor in the mid-1980s, long before it ever

contemplated a return to democracy. For the earlier democratic periods which bracketed the

1970s, one might make a case that these were too short for the pro-poor policies to show up

in data on the education system; yet the reality is that these democratic governments were

courting elites, not the poor, and they showed no signs of trying to pursue pro-poor

education policies. (As with Taiwan, Figure 8 draws on analysis from my dissertation to

control for employer demands. The only time these demands make a difference is in the

early 1970s, when the economy begins a downward spiral that eliminated most employer

demand for skilled labor; this spiral ended in the mid-1980s, and at that time employers

again began to demand selective worker training, as they did prior to the 1970s depression.)

Figure 8 - Predicted and actual education policy in Ghana, 1951-2000
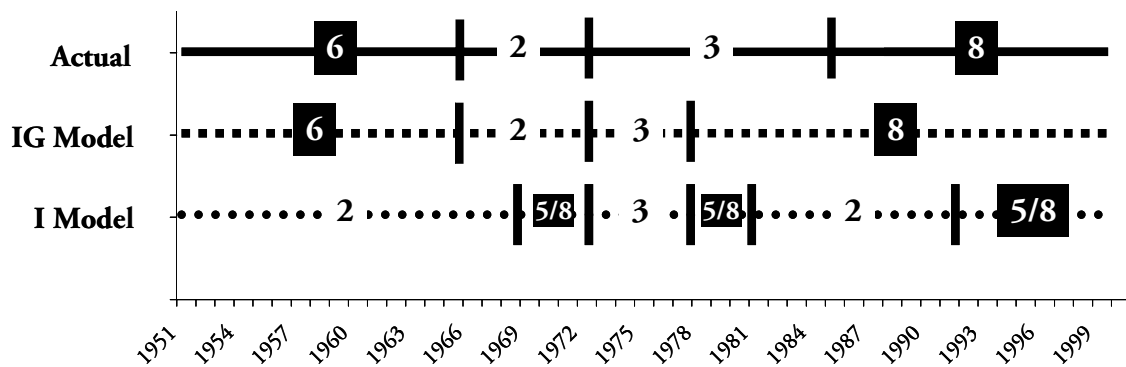
Notes: See Figure 3.

Figures 9-13 support the categorizations of actual education policy in Figure 8 with

data on enrollments, the division of the government budget between levels, and per-student

spending at each level. The government pursues pro-poor policies in two periods: prior to 1966, and after 1986.
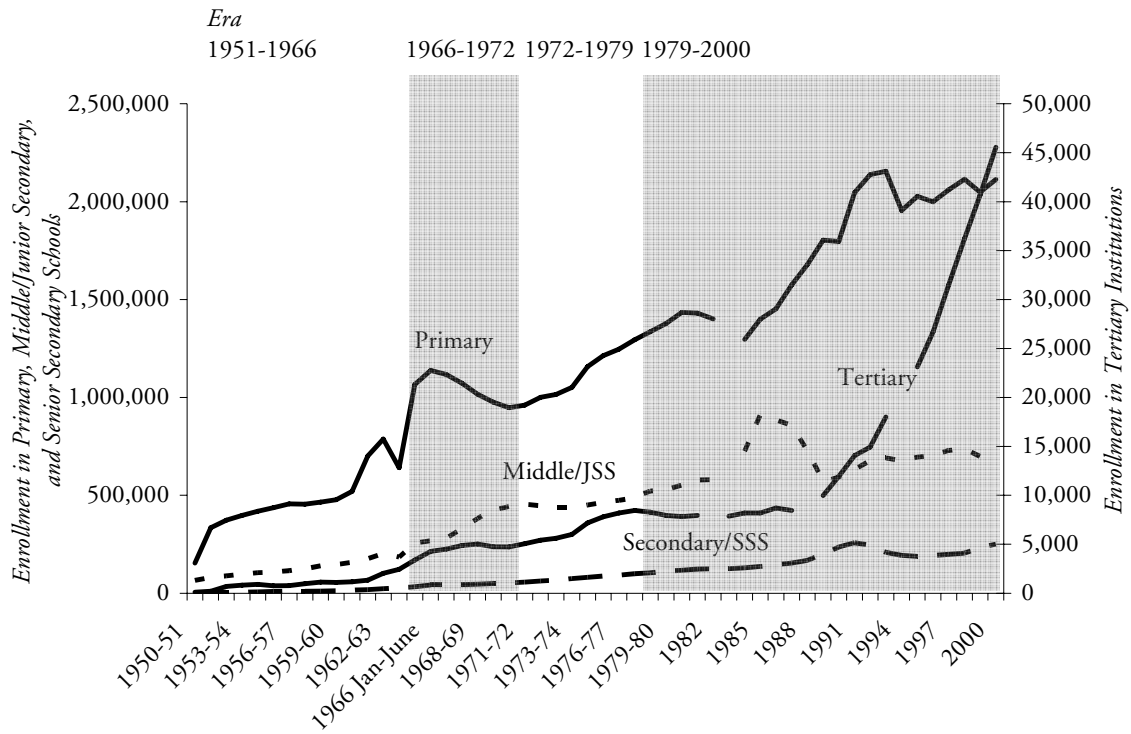
Figure 9 - Enrollments in Ghana

Figure 10 - Division of the Ghanaian Education Budget by Level, Excluding Scholarship Spending
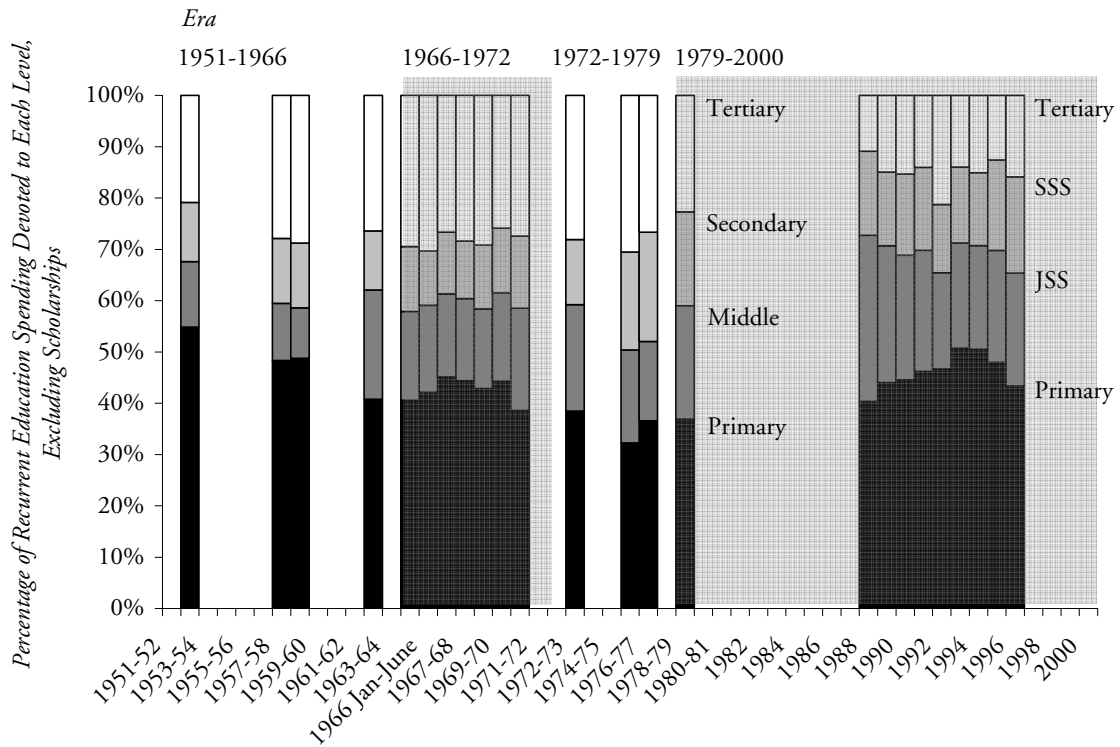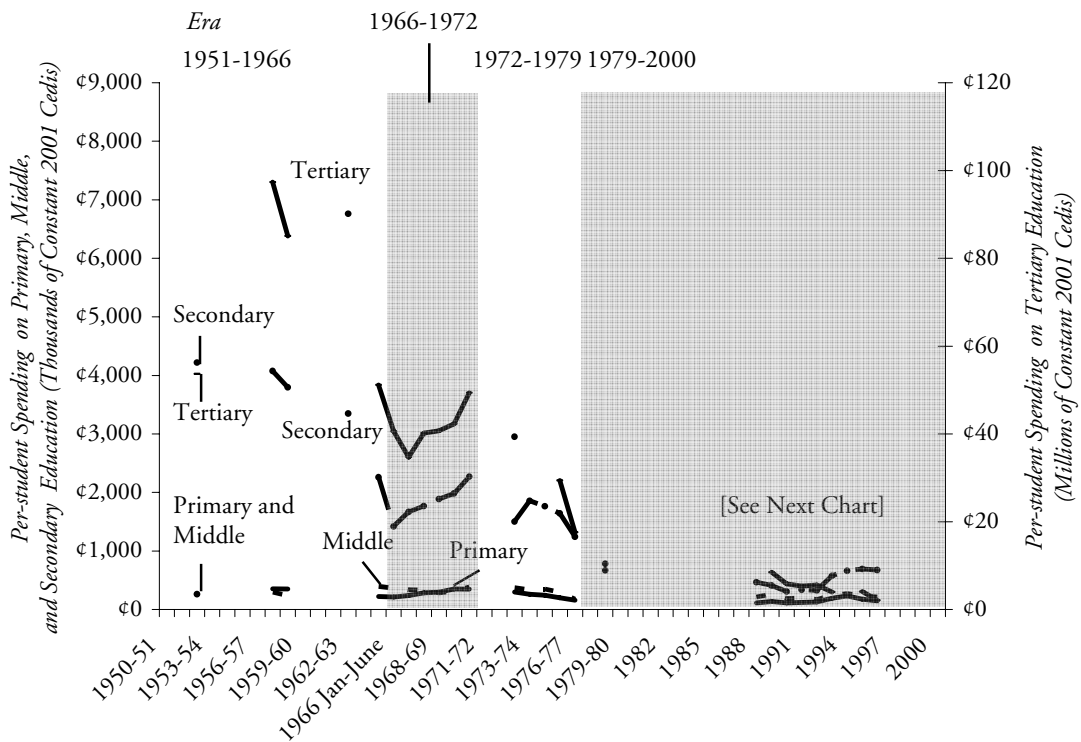

Figure 11 - Per-Student Spending in Ghana

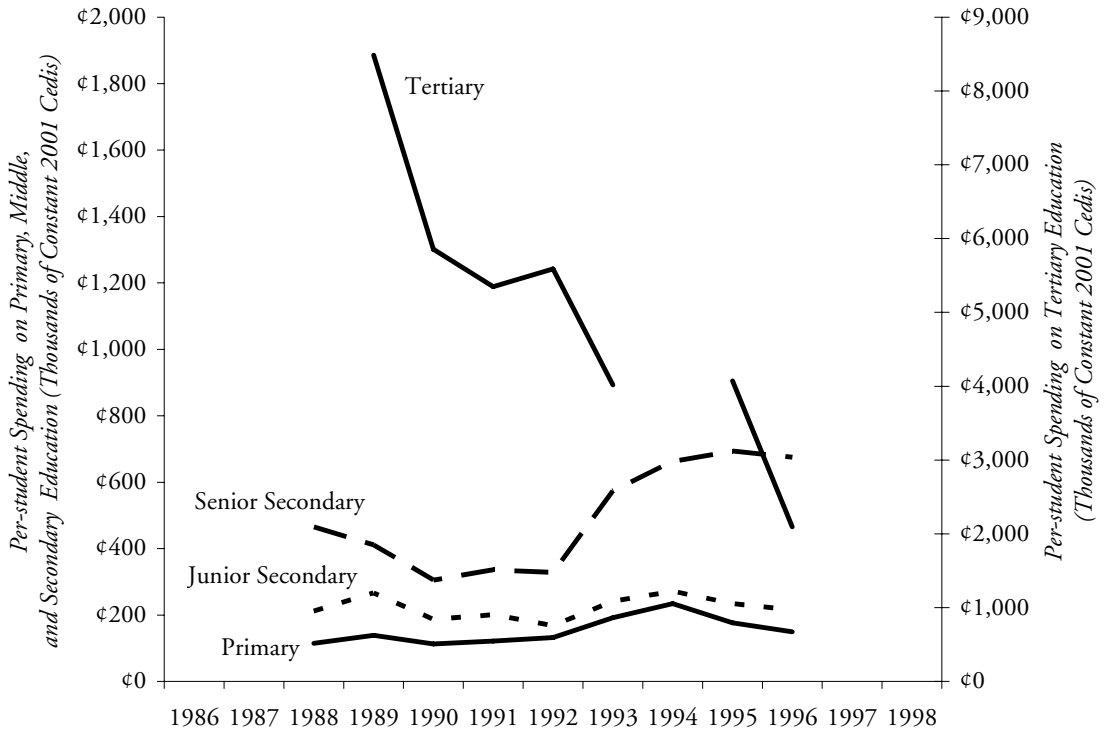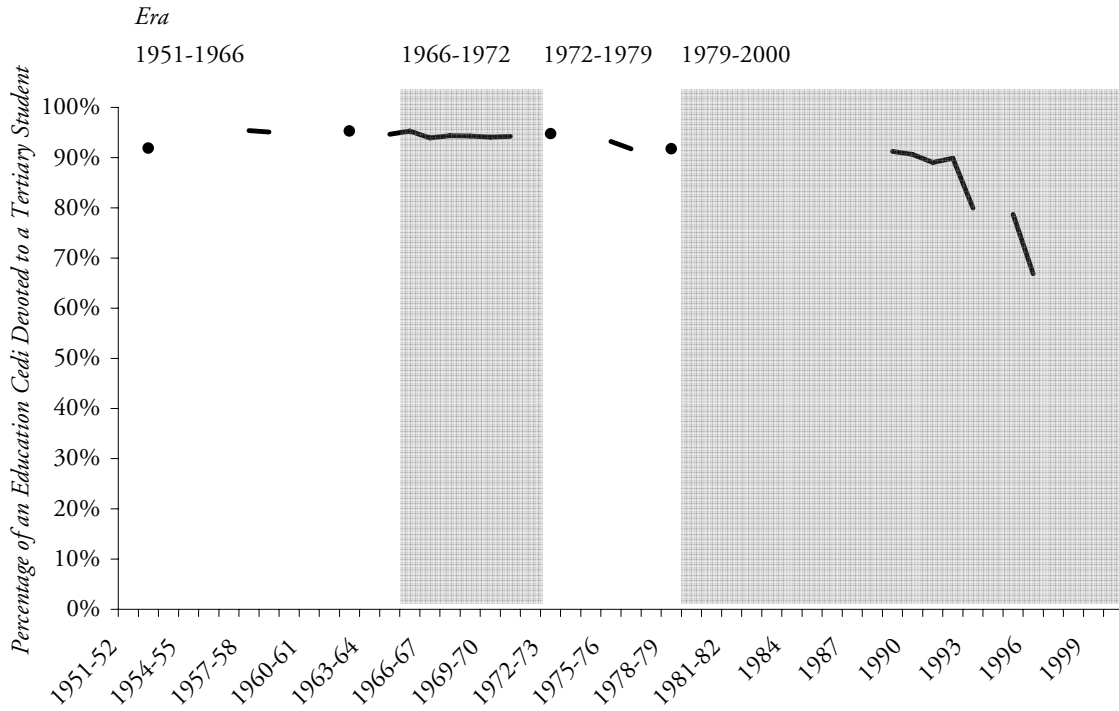*Figure 12 - Per-Student Spending in Ghana After the 1987 Reforms*

*Figure 13 - Relative Tertiary Per-Student Spending in Ghana*

Brazil

Like Ghana, Brazil provides more institutional variation than Taiwan. Since 1930, when its modern state was born, Brazil has been through three transitions, with periods of similar length in between each—allowing plenty of time for democratic governments to implement pro-poor education policies. If institutional incentives cause pro-poor policies, Brazil should have implemented pro-poor education policy in its two democratic periods: 1945 to 1964, and after 1985 (Przeworski et al. 2000, Marshall and Jaggers 2000).

Of the three cases, Brazil is the country in which the vital constituencies predicted by the two methods are most similar; yet still there are important differences, and the predictions of the interest-group method for pro-poor education policy are different enough to provide additional evidence that political entrepreneurs, not institutional incentives, cause pro-poor education policies. Over this period, Brazil had two successful political entrepreneurs of the poor. The first was Getúlio Vargas and the party he created, the Brazilian Workers' Party (PTB), which organized the urban working class—though not the rural poor—from 1930 until the 1964 military coup. The second was the Workers' Party (PT) of Luiz Inácio Lula da Silva, which, beginning in the late 1980s and early 1990s, has gradually organized both the rural and urban poor. Getúlio Vargas took power in the 1930s on the backs of a populist coalition in the 1930s of urban workers and emerging business elites, and ruled as an autocrat until the end of World War II. After the war, the same coalition ruled under democratic institutions. This coalition broke down in the tumultuous 1960s, as business elites realigned with the agrarian elites who had dominated before the 1930s: for a brief period, from 1961-1964, the workers ruled on their own; they were subsequently overthrown by a military government in 1964 that declared itself to be temporary, but which decided after 1967 to stay in power. The resulting military

dictatorship gradually gave way to democracy in the 1980s as the vital constituency expanded to include the middle class and rural political networks that could deliver votes. In the 1990s, with the PT organizing underneath these rural political networks, the vital constituency began to incorporate the rural poor themselves.[37]

Thus the interest-group method predicts pro-poor policies in two periods: from 1930 to 1964 (narrowly targeted, since only the urban poor were inside the vital constituency); and from the late 1980s on, as the PT gradually organized the poor as an independent political force. Figure 14 compares actual education policy in Brazil to the predictions of the two methods. Both correctly predict the pro-poor policies of the 1990s, as well as the elitist policy following the 1964 coup. But only the interest-group method predicts the full pre-1964 period of pro-poor education policy, which extends all the way back to 1930: prior to World War II period, Getúlio Vargas's fascist *Estado Novo* invested heavily in primary education despite being resolutely autocratic. (Except for a brief period from 1960-1964, when employers were outside the vital constituency, Brazilian industry has demanded selective worker training since the 1930s.)

Figure 14 - Predicted and actual education policy in Brazil, 1930-2000
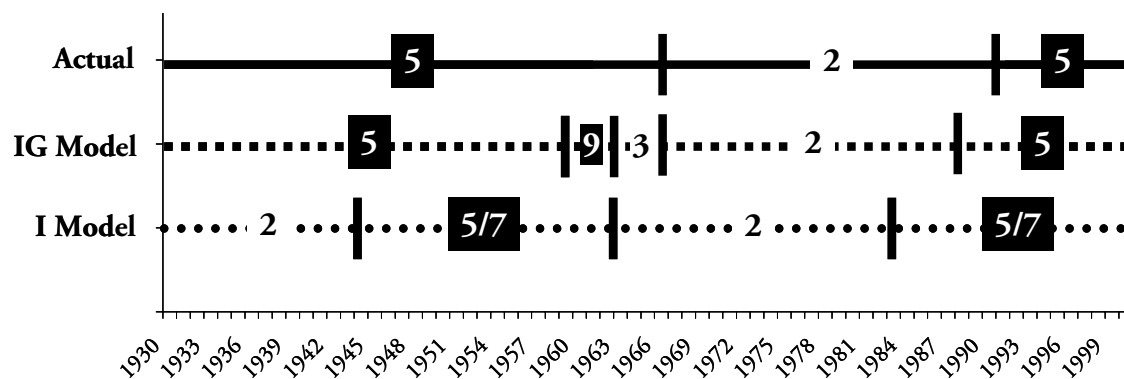
Notes: See Figure 3.

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[37] The vital constituency also shifted geographically over time, a dynamic I analyze in my larger dissertation project by examining, in addition to federal education policy, education policy in two states: Bahia and São Paulo.

Figures 15-19 support Figure 14. Figure 15 shows enrollments, and Figures 16-19 show spending: Figures 16 and 18 show the division of budgets and per-student spending at all levels, while Figures 17 and 19 show federal spending only. Both sets of spending data are necessary, because for most of the period since 1930, responsibility for education was split between levels, with state and municipal governments mostly responsible for primary and secondary and the federal government mostly responsible for the universities. The exception to this is during the autocratic period after the 1964 coup, when centralization focused responsibility for funding of all education levels with the federal government. Starting in 1966, I only have data on federal spending, but, because of this centralization, federal spending is much more representative of overall government priorities than in the other periods.
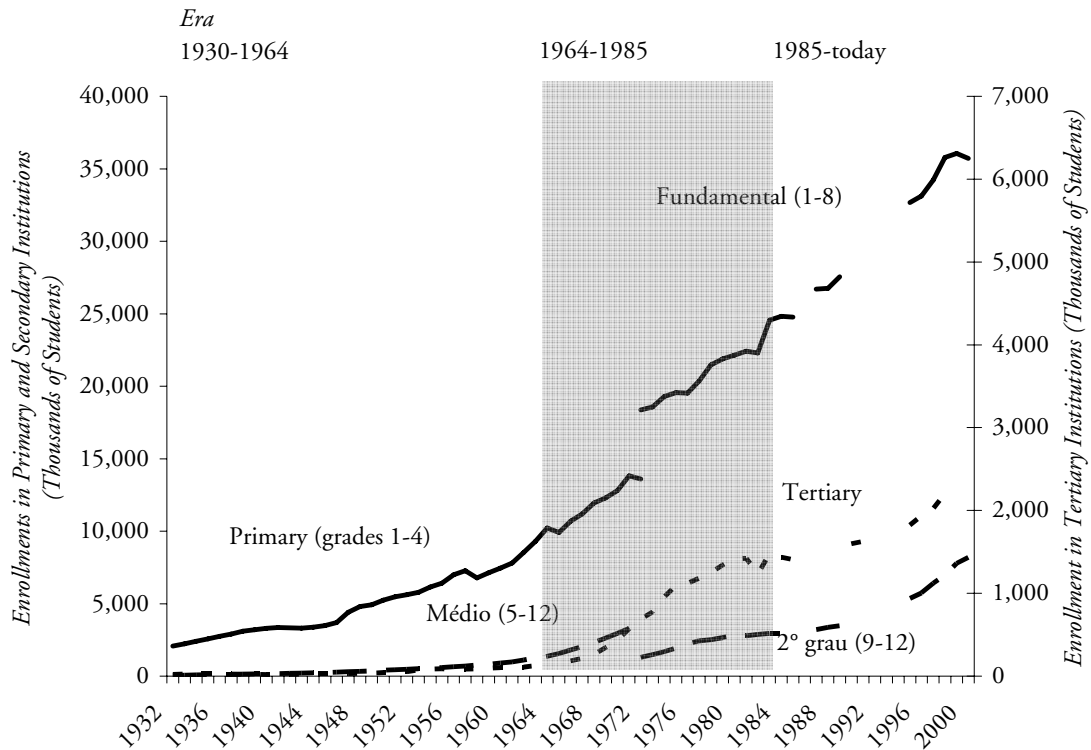
Figure 15 - Enrollments in Brazil

Figure 16 - Division of the Brazilian Education Budget, All Levels of Government
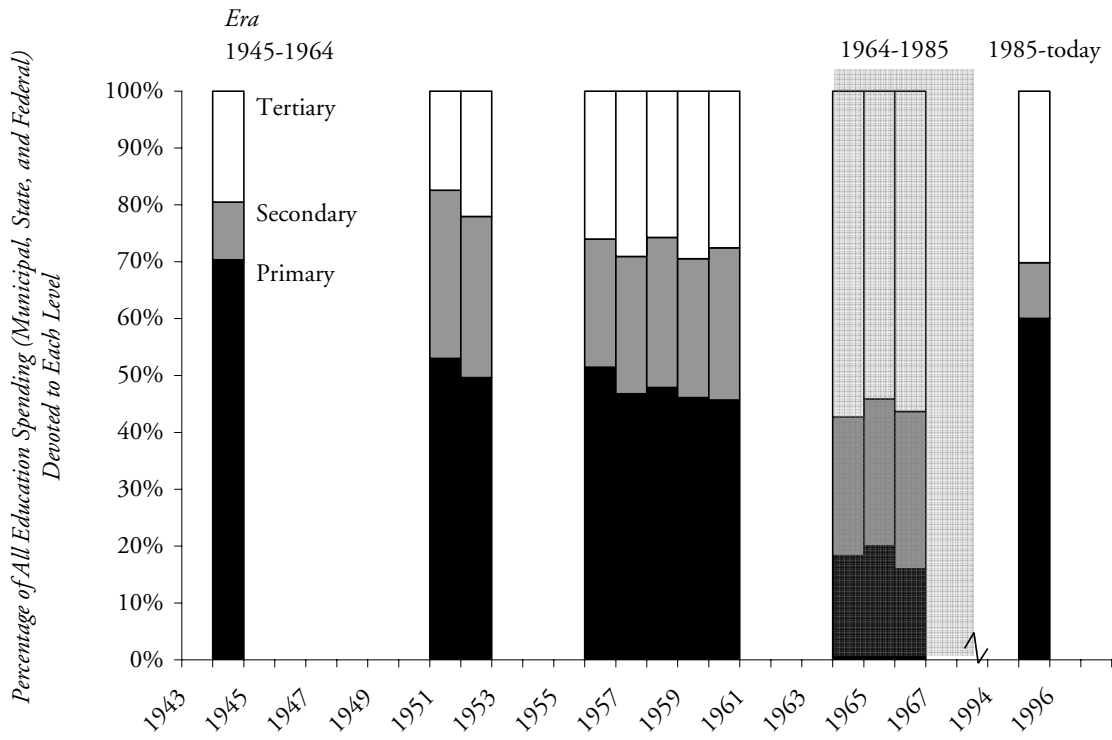

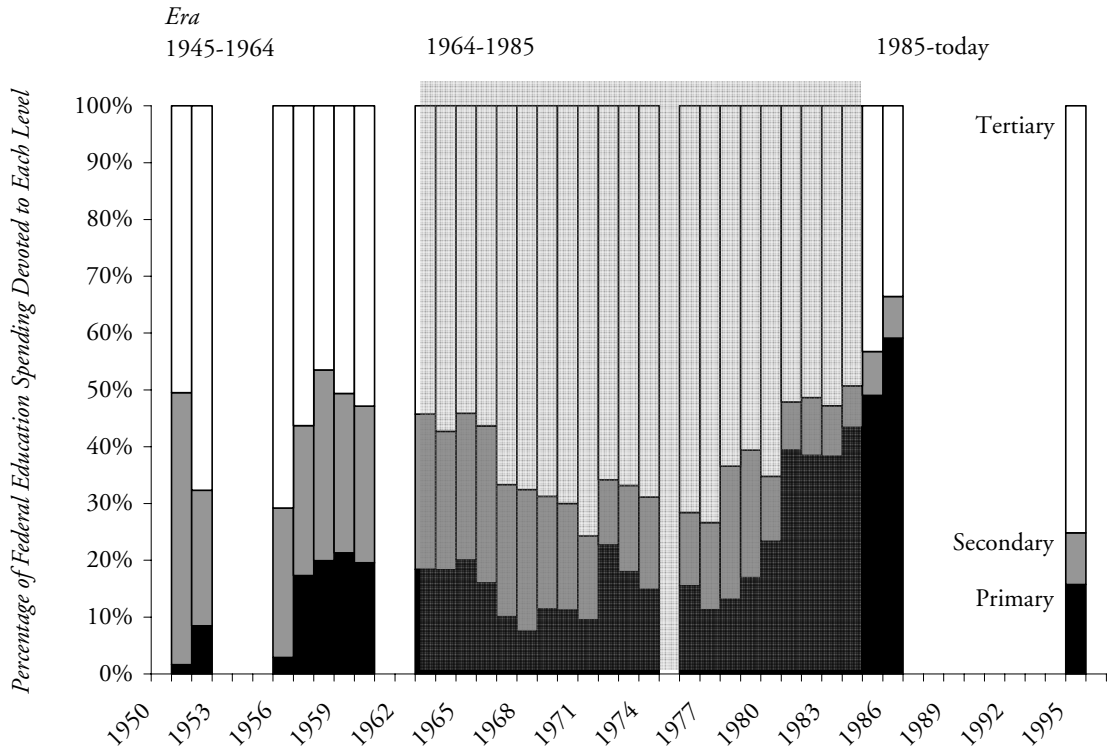*Figure 17 - Division of the Brazilian Education Budget, Federal Only*

Figure 18 - Per-Student Spending in Brazil, All Levels of Government
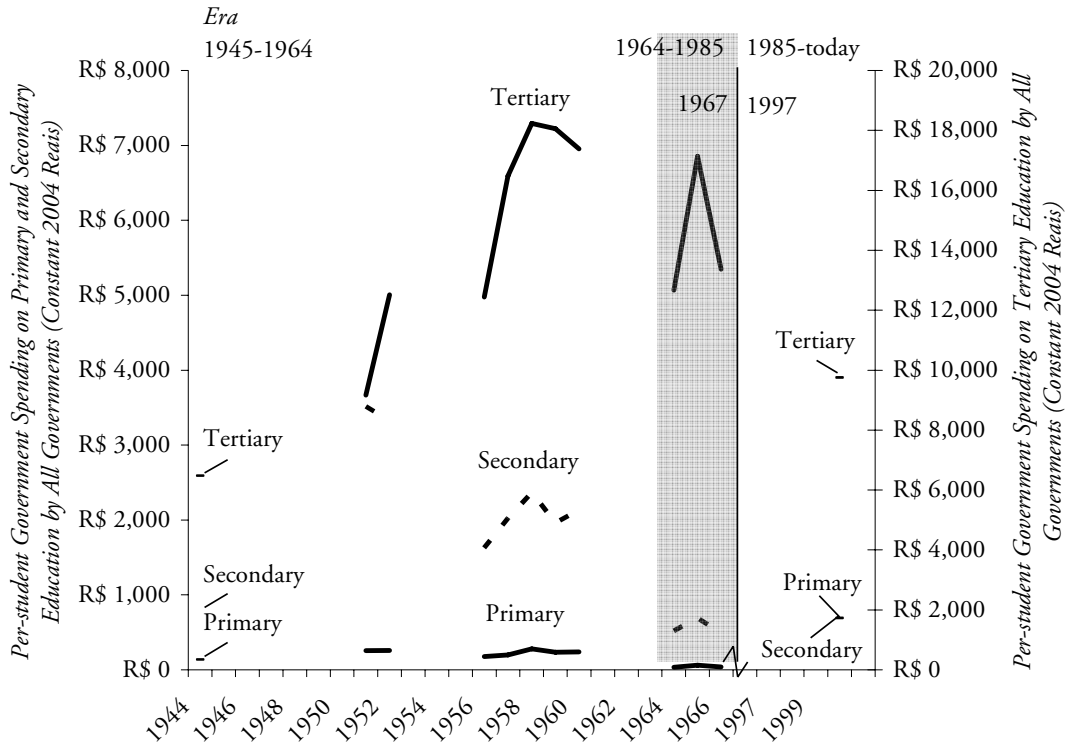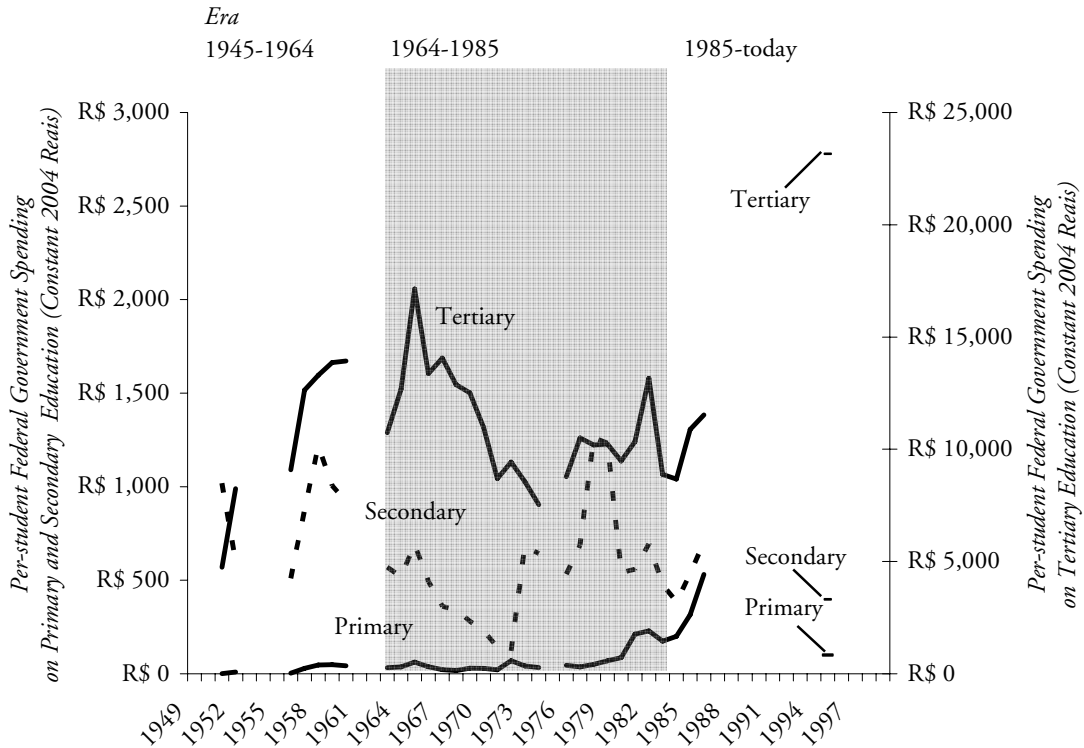

Figure 19 - Per-Student Spending in Brazil, Federal Only

45

7. Conclusions

This paper presents evidence that a successful political entrepreneur of the poor, not democratic institutions, generates pro-poor policies in developing countries. A government makes pro-poor policy when its power depends on the support of the poor. The conventional wisdom is that democratic institutions put the government in the service of the poor, because the government needs the poor's votes to survive in power. I find considerable evidence from three very different developing countries against this hypothesis. Over the last half-century or more, democratic institutions in Ghana, Taiwan, and Brazil were never sufficient, or even necessary, to pro-poor education policies. Rather, pro-poor policies followed the successful organization of the poor by political entrepreneurs into a viable political force; only then could the poor credibly offer their support to a government to act in their interests.

Why should political entrepreneurs be more successful than democratic institutions at supporting pro-poor governments? One plausible possibility is that institutions are simply too weak in developing democracies, allowing rulers and elites to circumvent them (e.g., Acemoglu, Robinson, and Verdier 2003). Yet among the three countries in this paper there are examples of strong democratic institutions: e.g., Brazil prior to 1964, a period for which democratic institutions still cannot offer an adequate explanation for pro-poor education policy, which began a decade-and-a-half prior to democratization.

Thus a more plausible possibility is that the incentives created by democratic institutions for rulers to court the poor are never strong enough to overcome the other incentives that rulers face, incentives that force rational rulers to serve elites unless and until the poor are an organized locus of countervailing political power. There is no doubt that democratic institutions, weak or strong, create incentives for governments to serve the poor:

in any country with a right-skewed distribution of income, the poor will constitute the largest block of votes. Yet the mere existence of these incentives is not enough to make them salient. A typical developing country will have powerful and wealthy elites, with enormous collective-action advantages, who are in a far better position to cause a government trouble than the poor: a government that wants to stay in power would be foolish to ignore them, whatever its institutional incentives. A government that did ignore them—a government that listened only to its institutional incentives, successfully courted the poor, and won over the median voter, without paying heed to the power of the elites—would likely find itself out on the doorstep shortly after the election, their way blocked by tanks. The day before Brazil's 1964 coup, Brazil was a fully-institutionalized democracy with two decades of history under its belt; but a few years before the coup, the cross-class alliance of both workers and elites that underpinned this democracy broke down, and in 1964 workers were ruling on their own, shutting out elites. Brazil's democratic institutions gave workers the numbers to win elections, but institutions on their own did not give workers the power to fend off an elite challenge, and in 1964 elites simply declared workers unfit to hold the franchise, and eliminated the institutions of democracy.

Thus democratic institutions are not sufficient to make the poor a source of countervailing political power. But neither are they necessary. When the poor are successfully organized, they are a source of countervailing power and can support a government regardless of whether that government is an autocracy or a democracy. In all three countries examined in this paper, the poor were at various times able to organize and support autocratic governments, and by virtue of this support they received pro-poor education policies. The key was the political entrepreneur, who (or which) allowed the poor

to realize the latent political power inherent in their numbers by subsidizing their collective-action costs, allowing the poor to support a government.

How to reconcile the findings in this paper with the body of cross-country analyses showing a correlation between democracy and pro-poor policies? The key may lie in the conditions that make successful political entrepreneurship more or less likely. Democracy is more than elections; it can also provide freedoms of voice and association that facilitate organizing. These freedoms do not cause the organization of the poor, but they may make the organization of the poor easier, and perhaps more sustainable. In the past two decades, all three of the countries examined in this paper have democratized. In two of the three—Ghana and Taiwan—political entrepreneurship long preceded democratization, so democratization was not plausibly a cause of political entrepreneurship. But it is surely not a coincidence that, once the poor were organized, in both countries they pushed for democracy. Similarly, Brazil's Vargas, a political entrepreneur to workers, ruled with authoritarian institutions in the 1930s and early 40s, but democratized under pressure from his base after World War II. And Brazil's democratization in the 1980s, while not caused by political entrepreneurship of the poor, may have helped the PT as they organized the rural poor in the 1990s.

On the other hand, without democratic freedoms, political entrepreneurship of the poor seems to be harder. In the three countries in this paper, each of the five instances of successful political entrepreneurship under autocracy was facilitated by a split among elites, which weakened their hold on power and facilitated entrepreneurship.[38] In three of these the country eventually democratized—Ghana in 1992, Taiwan in 1996, and Brazil in 1945—

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[38] An elite split is not essential to successful political entrepreneurship of the poor, but where elites are unified successful entrepreneurship seems to require extraordinary, and perhaps violent measures. Witness Cuba's 1959 revolution.

and in the other two—Taiwan and Ghana in the 1960s—the end of the elite split spelled the end of the political entrepreneurship. In Taiwan, the elite split ended when the incumbent elites won and did not need the poor on their side anymore: the KMT played political entrepreneur to the farmers only while it needed them on its side to secure the island against hostile elites and the threat of a communist insurgency; as soon as these threats subsided, the KMT simply stopped its entrepreneurship and the poor lost their power—and their pro-poor policies. And in Ghana, the incumbent elites lost: Nkrumah's autocratic government fell in 1966 to hostile elites, and when these elites retook the government, the poor lost their political entrepreneur.

Thus the evidence from these three countries suggests that, while democratic institutions are not necessary to a vital constituency of the poor, they may help the poor to organize, and help them to stay organized. While the question is beyond the scope of this paper, if this is indeed the case, it would explain the correlation between democracy and pro-poor education policies. Political entrepreneurship of the poor both causes pro-poor policy, and may be associated with democracy.

The evidence in this paper is not conclusive. The case studies deal at a level of abstraction that precludes a true test of causation. Such a test would require detailed study of the genesis of pro-poor policies, linking them explicitly to the political power of the poor as realized by political entrepreneurs. Likewise, such a test would require a complementary cross-national analysis testing the interest-group model against other possible causes of pro-poor policy, including institutional causes. The evidence in this paper is intended as a first step, lending weight to the interest-group model.

Yet the evidence strongly suggests that the conventional optimism on democratic institutions needs re-evaluation. Efforts at democratization are currently in vogue, in part

based on the belief that democracies serve the poor. Democracy clearly has much else to recommend it: its attendant freedoms of association, voice, and choice are valuable, and may ultimately help the poor to organize. But on its own, democracy is neither necessary nor sufficient to serve the poor. Instead, pro-poor policies depend on a politically empowered poor.

APPENDIX

Interest Groups and Political Entrepreneurs in the Vital Constituencies

The following tables show, for the periods of each case, the vital constituencies and any political entrepreneur on whom a vital constituency relied.

Table 5 - Political Entrepreneurs and Vital Constituencies in Taiwan

Era:	1949 – ~1965	~1965 – mid-1980s	late-1980s – 2000
Successful Political Entrepreneur	Chiang Kai-Shek and the Kuomintang (KMT)	None	Taiwanese Nationalists: the Democratic Progressive Party (DPP)
Groups in the Vital Constituency[†]	Bureaucracy Military Employers Farmers [KMT]	Bureaucracy Military Local Taiwanese Factions Employers	Bureaucracy Military Local Taiwanese Factions Taiwanese Nationalists [KMT] Employers Farmers [KMT] Workers [KMT]
Groups outside the Vital Constituency	Taiwanese Elites	Farmers Workers	

[†] If the group is organized with the help of a political entrepreneur, the entrepreneur is in brackets.

Table 6 - Political Entrepreneurs and Vital Constituencies in Ghana

Era:	1951 – 1966	1966 – 1972	1972 – 1979	1979 – 2000
Successful Political Entrepreneur	Kwame Nkrumah and the Convention People's Party (CPP)	None	None	J.J. Rawlings and the Provisional National Defense Council (PNDC)
Groups in the Vital Constituency[†]	Junior Bureaucracy Military Public Companies Workers [CPP] Farmers/Migrant Workers [CPP]	Bureaucracy Military Public Companies Foreign Companies Domestic Entrepreneurs Tribal Elites	Military Public Companies Domestic Entrepreneurs Tribal Elites	Military Foreign Companies Workers [PNDC] Farmers/Migrant Workers [PNDC]
Groups outside the Vital Constituency	Tribal Elites Senior Bureaucracy Foreign Companies	Workers Farmers/Migrant Workers Foreign Entrepreneurs	Bureaucracy* Foreign Companies Workers Farmers/Migrant Workers Foreign Entrepreneurs	Bureaucracy Domestic Entrepreneurs Foreign Entrepreneurs Tribal Elites

[†] If the group is organized with the help of a political entrepreneur, the entrepreneur is in brackets.
* The Bureaucracy does not exit the vital constituency until 1975.

Table 7 - Political Entrepreneurs and Vital Constituencies in Brazil

Era:	1930 – 1961	1961 – 1964	1964 – 1967
Successful Political Entrepreneur	Getúlio Vargas and successors	Unions and the Brazilian Workers' Party (PTB)	None

Groups in the Vital Constituency[†]	Bureaucracy
	Military
	Entrepreneurs-*cum*-
	   Industrial Elites
	Workers
	   [Vargas/PTB]
		Workers [PTB]	Military
			Bureaucracy

Groups outside the Vital Constituency	Agrarian Elites Traditional Middle Class Peasants Urban Poor	Bureaucracy Industrial Elites Agrarian Elites Military Peasants Urban Poor	Industrial Elites Agrarian Elites Workers Peasants Urban Poor

Era:	1967 - ~1985	~1985 - 2000
Successful Political Entrepreneur	None	Unions and the Workers' Party (PT)
Groups in the Vital Constituency[†]	Military Industrial Elites Agrarian Elites Bureaucracy	Industrial Elites Agrarian Elites Military Bureaucracy
Groups outside the Vital Constituency	Workers Peasants Urban Poor	Workers [PT] Peasants [PT]* Urban Poor [PT]*

[†] If the group is organized with the help of a political entrepreneur, the entrepreneur is in brackets.
* As the PT grows in strength as a political entrepreneur, it brings peasants and the urban poor into the political arena as forces in their own right. In 2002, the PT wins the presidency in part with their support.

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