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## **The Aid Paradigm for Poverty Reduction - does it make sense?**

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Abstract: Whilst thinking on economic policy for development has undergone many shifts with the perceived weak results of earlier adjustment reforms a new donor consensus has emerged based around the central themes of economic growth, good governance and social development. This paper examines the logic behind this new Aid paradigm and discusses the empirical evidence to support it. A nuanced story is revealed with country circumstances playing a critical role and particular interventions varying in impact across countries. For example, growth does not always lead to gains for the poor that match the national average; public expenditure needs to be targeted to achieve social development but effective targeting is difficult; governance reform may be critical but there is no simple governance blueprint and the corruption-growth association need not always be negative.

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## Introduction

Dani Rodrik and others have stressed that in terms of the details of economic policy for development the old certainties of the 1990's Washington Consensus have been replaced by a much more nuanced country and situation-specific perspective. On the macro front there can be general agreement that large budget deficits and real exchange rates that are seriously out of line with competitive real rates will create major problems, but beyond that in terms of a range of other policies there are many points of debate.<sup>1</sup> Paradoxically whilst one consensus was breaking down in the late 1990's, another was forming within the donor community on the overriding importance of poverty reduction and on the key mechanisms to achieve it. This paper examines the Aid paradigm that has emerged in relation to poverty reduction. It sets out the shared assumptions of a selection of key institutions gleaned from their strategy statements and reports the empirical evidence on the validity of these assumptions, drawn in particular from recent work on Asia that the author has been involved with. The conclusion is nuanced - the evidence broadly supports the paradigm but simple interpretations can be misleading and care is required in its application in specific circumstances.

### Poverty Reduction: the overriding goal.

The Millenium Development Goals (MDGs) reflect the aspirations of the donor community with the poverty target of halving extreme poverty between 1990 and 2015, no doubt symbolically, set as the first goal. The broad dimensions of the paradigm can be seen from the strategy statements circa the year 2000 of some of the central players of the aid community - the World Bank, two key regional banks the Asian Development Bank (ADB) and the Inter-American Development Bank (IDB) and the Department for International Development (DFID), the UK Development agency- on how to reduce poverty. The World Bank in World Bank (2000: 6-8) wrote of a three-pronged approach of *promoting opportunity*, (through economic growth, with an acknowledgement of the significance of the pattern of growth), *facilitating empowerment* (particularly through greater participation and improvements in governance) and *enhancing security* (particularly through the strengthening of the assets and human capital of the poor). The Asian Development Bank in its Long-Term Strategic Framework, ADB (2001) stressed three core strategic areas of *sustainable economic growth* (that raised incomes, created jobs and reversed environmental degradation), improvement in *governance* (including greater participation as part of improved governance) and *social development* (in terms of improvements in health and education and thus the human capital of the poor). The Inter-American Development Bank in IDB (2003: 6-12) wrote of the need for *sustainable economic growth*, *democratic governance* (that facilitates growth, empowers the poor and helps ensure that growth is broad and participatory), *human development* (that strengthens human capital), *social protection* (that reduces the vulnerability of the poor and enhances their economic security) and *political and social inclusion* (that improves the governance structure). DFID (2000a: 25-43) identified the key elements of *pro-poor*

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<sup>1</sup> Rodrik (2006) writes of Washington 'Confusion' replacing Consensus.

*economic growth* (specifically making markets work for the poor), *effective government* (particularly though combating corruption, respect for human right and reductions in conflicts) and *investment in people* (though better health and education and higher skills).

Although there is some difference in terminology the similarities are clear. The key common denominators are the focus on growth (with both pro-poor and sustainable dimensions identified), governance (and by implication greater empowerment for the poor) and social development (leading to improved human capital). The logic is one of cumulative progress where advance on one front reinforces that on another.<sup>2</sup> Figure 1 sets out a schematic versions of the inter-relations with the bold lines showing the major directions of causation and the dotted lines showing weaker feedback relations. Thus improved governance will have a positive impact on growth (for example through a strengthened legal system) and on social development (though more effective delivery of social programs). Growth will reduce poverty (for example through job creation) and improve social development (for example through higher government revenue for social programmes). Poverty reduction in turn will have a positive (but weaker) impact on growth (for example by bringing the poor into productive activity) and on social development (for example by allowing children to attend school). Social development may also have a positive (but weaker) impact on governance (for example as the poor can participate more fully) and on growth (for example through the productivity effect of their higher human capital).

Insert figure 1

Naturally this simplifies a complex reality and in the short-term at least it is clear there may be trade-offs (for example between growth and social development and between growth and distribution). The growth versus social development trade-off is to be avoided by striving to protect the government social expenditures on health and education that serve the poor, so these are not sacrificed in favour of more growth-oriented programmes. The growth versus distribution tension inherent in any poverty reduction strategy is resolved primarily in favour of growth, with little focus on re-distributional measures. The references to ‘pro-poor growth’ that were common circa 2000 usually meant growth from which the poor can benefit rather than the more intuitive meaning of growth that disproportionately benefits the poor.<sup>3</sup> More recent discussions (for example World Bank 2006a) focus on ‘inclusive growth’ implying growth from which the poor have equal

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<sup>2</sup> This is explicit in World Bank (2000) and ADB (2001)

<sup>3</sup> For example DFID (2000b) defines pro-poor growth as growth that “includes the poor by maximizing their opportunities and by utilizing their skills, time and physical resources” (DFID 2000). A more rigorous definition based on welfare axioms is provided by Ravallion (2004) who defines pro-poor growth ( $p$ ) as the mean growth rate of the incomes of the poor. Here  $p = g*d$ , where  $g$  is actual mean income growth and  $d$  is a distributional term given by the ratio of actual decrease in poverty divided by the decrease in poverty if there had been no distributional change over the growth period. Hence if distributional change favours the poor  $d$  will exceed 1.0 and pro-poor growth  $p$  will exceed mean growth.

opportunity to benefit, as obstacles relating to either market imperfections, geography or ethnic and social divisions are removed. In part this new focus reflects the evidence on rising inequality in a number of countries.<sup>4</sup> Growth in these discussions is typically referred to as 'sustainable', in the broad sense of non-damaging to the environment. Again there have been many discussions of what this actually means in practice. At a project level it is now standard to conduct impact assessments and to build in appropriate mitigatory measures. Going beyond this to reverse degradation and address regional and global climatic impacts is much more difficult and requires interventions to meet explicit environmental goals. Progress here is much less clear.

In terms of specific aid interventions donors have focused on four broad areas

- physical infrastructure projects in traditional infrastructure sectors where the private sector was not interested to invest;
- social development expenditures of either a hard type (for example construction of schools and clinics) or soft type (for example training, curricula, inoculation programs);
- narrowly targeted interventions to reach the very poor (for example with credit, food, roads, electrification, slum improvement);
- institutional change to improve governance and the enabling environment for the private sector.

The first of these was to address the growth objective, with some possible direct effects on poverty, the second and third to improve social development and the last to address governance and institutional issues.<sup>5</sup>

The above discussion is simplified but as a set of generalizations it should have enough validity to allow a check on the key assumptions and mechanisms of the paradigm against the substantial body of empirical evidence.

### **What do we know of the causes of poverty reduction?**

Despite increasingly sophisticated estimation techniques and the apparent precision of the first MDG (on halving extreme poverty 1990-2015) global and national poverty remains

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<sup>4</sup> For Asia, Ali and Zhuang (2007 table 2) report rising Gini coefficients in Bangladesh, Cambodia, China, India, Lao PDR, Nepal, Pakistan, the Philippines, Sri Lanka and Vietnam). These contrast with falls in inequality in Thailand, Malaysia and Mongolia and a virtually static position in Indonesia. However there is still little evidence establishing a systematic relationship between growth and changes in equality; see Fields (2001) and Adams (2004).

<sup>5</sup> There are similarities with the diagnosis of the Sachs report (UN 2005) on countries making poor progress on achieving the MDGs. It stresses four broad explanations for failures to meet targets; poor governance, 'poverty traps' (where countries are too poor to make the necessary investments), 'pockets of poverty' (where there are major backward regions in a country) and policy neglect (particularly in relation to environmental management). The solution it proposes varies with the cause of non-achievement of targets. In the first instance the key will be governance reform, and in the last instance a shift to more informed policies. For the poverty trap and pockets of poverty cases a 'big push' financed by aid funds is recommended. This is to be concentrated on physical and social infrastructure, particularly in rural areas.

difficult to quantify with accuracy. There has been substantial debate about poverty data and discrepancies have emerged between alternative measures based on household surveys, or the national accounts. There is also the technical problem that for international comparisons, as what is to be measured is the poor's access to goods and services the conversion must be at a purchasing power parity not the nominal exchange rate.. Poverty estimates have proved highly sensitive to errors and changes in purchasing power parity exchange rates.

Despite these acknowledged difficulties very considerable empirical work has been carried out and one of the key stylized facts of recent development experience is the relationship between economic growth (the increase in mean income) and absolute poverty reduction (a decline in the population share below an agreed poverty line). Using the \$1/day poverty line most cross country estimates derive an elasticity of about -2.0 for the poverty headcount in response to an increase in per capita income, so a 1% increase in income per capita is associated with a 2% fall in the poverty measure (World Bank 2000).<sup>6</sup> Such elasticities are merely an average relationship with the possibility for wide country variations with initial inequality and its change over a growth period influencing how far the poor benefit. The possibility for wide country variation in the response of poverty to growth is highlighted in the results of Warr (2000) who on the basis of time series analyses in individual countries finds the elasticity of the headcount measure of poverty to growth ranging from a low of -0.7 in the Philippines to a high of -2.0 in Thailand. This seems readily explicable by the fact that the Philippines experienced a rise inequality from the mid 1980's, whilst Thailand experienced a fall. Similarly China and India show strikingly different poverty-growth elasticities of -2.6 and -1.0, respectively, with the hypothesized explanation greater access to land by the poor in China (Chaudhuri and Ravallion 2006: table 1).

The growth-poverty-inequality nexus was examined in the well known paper by Dollar and Kraay (2002) looking at the relation between changes in the income of the poor (taken as the mean income of the bottom quintile) and growth (change in mean income). Their widely cited result of on average a close to one to one relationship can be interpreted as confirmation of the result noted above that on average there seems in the past to have been no systematic relation between growth and changes in income distribution. With no change in distribution the poor will benefit proportionately to the same extent as everyone else, although their absolute gain will be much less than those at the higher end of the income distribution. However, once again this average relation has been shown not to apply in individual countries. In time series case studies Balisacan and Pernia (2003) find an income poverty elasticity (ratio of the change in income of the poor to the change in mean income) of 0.54 for the Philippines and in a similar exercise for Indonesia Balisacan et al (2003) find an income poverty elasticity of 0.71. Hence rather than the one to one relation, in the Philippines the poor received just over half the national average proportionate gain and in the Indonesia roughly two-thirds. Again this is readily explicable in terms of estimates of inequality and its change in the two countries.

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<sup>6</sup> In such exercises growth typically accounts for between half and two thirds of the variation in poverty with the rest due to inequality and its change over time.

Given the significance of national variation in the growth-poverty links a critical question is what policy interventions have worked to reduce poverty, either directly or through their growth effect.

*How successful have direct poverty interventions been?*

Various forms of targeting have been used in an attempt to transfer resources to poor households both as part of short-run responses to short-run crises or as apart of longer term support. These include measures such as free or subsidized basic commodities, cash transfers, employment creation schemes, infrastructure investments in backward areas and microfinance.<sup>7</sup> In addition to these 'narrow targeting' measures, there was also 'broad targeting' in the sense of a focus of public expenditure on programs like primary health care and primary education judged to benefit the poor disproportionately. By and large experience with these distribution-oriented interventions has been disappointing with most measures suffering from the twin problems of under-coverage (so many of the poor were missed) and leakage (so a significant proportion of benefits went to the non-poor).

Subsidized foodstuffs often leaked to the market for sale at a commercial price; for example for the subsidized rice program in Indonesia at the time of the Financial Crisis roughly one quarter of beneficiaries were not poor and only roughly half the target group were reached (Maxwell and Perdana 2005). Even the *zakat* system of Islamic charity that provides cash transfers to the poor and destitute has been found to have a significant leakage, although probably less so than for other cash transfer schemes; in urban areas roughly two-thirds of recipients in Pakistan are outside the bottom quintile (Arif 2006). Employment guarantee programmes now have a major role in poverty alleviation in India although their past record is again disappointing with high costs per job and in places evidence that the level of wages set have encouraged those just above or around the poverty line to take up the schemes (Srivastava 2005).

Location targeting giving priority to expenditure in backward areas has been an important policy tool, particularly in geographically large countries. However it has also proved a relatively imprecise measure missing the poor who live in non-backward areas and not excluding all of the non-poor in the target area. In PRC, for example, between 30% and 40% of the poor were estimated to live in non-poor counties in the 1990's and although there was evidence that the poor county program raised county level income, how much of this went to the poor was unclear (Wang 2005). Regional policy in Thailand has operated so that there is no clear negative association link between provincial income per capita and receipts per capita under poverty reduction programmes, implying a failure of targeting at the provincial level (Warr and Sarntisart 2005). There is no automatic guarantee that the poor will always benefit disproportionately from health and education expenditure, since this will depend on the nature of the programmes and how they are funded. However there is the potential for such benefits from well designed primary education and healthcare interventions. For example, there are estimates for Indonesia showing proportionately higher gains for the bottom quintile from primary

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<sup>7</sup> Studies in Weiss (2005) examine the effectiveness of such measures in a number of countries.

health and education expenditure (Morrison 2002). None the less this is not an inevitable outcome.

Microfinance is widely regarded as an innovative and effective means of reaching the poor, although it is often viewed as a route out of poverty for those clustered around the poverty line rather than for the core or chronic poor. However work on Pakistan demonstrates the effectiveness of micro credit in raising the living standards of very poor borrowers, whilst the bank concerned pursued its own commercial objectives (Montgomery 2006). The difficulties with targeting measures are a combination of governance and technical issues. Poor governance has no doubt contributed to much of the leakage, however there have also been technical problems in identifying precisely who the most needy are and where they are located. These operational difficulties must partly explain why high leakage rates are found in countries with diverse political traditions and levels of corruption (such as India and Indonesia). For its advocates, the attraction of microfinance with its reliance on self-targeting and increasingly on the commercial incentives of banks is that it avoids most of these problems.

#### *How has trade reform impacted on poverty?*

Trade reform has been an important although still controversial aspect of reform programmes supported by donors. Theory suggests that if trade reform, in terms of lower barriers, accompanied by exchange rate adjustment, can stimulate exports (principally of labour-intensive goods) and raise growth it will be poverty reducing. This is the standard assumption in donor country programmes. However even if this favourable scenario works out in the long-run, theory also allows for the possibility of short-run losses for some, including the poor, out of the relative price effects, and the output and employment re-allocation generated by significant reform. In their authoritative survey of the impact of trade reform on poverty Winters et al (2004: 107) comment “ while there are many causes of optimism that trade liberalization will contribute positively to poverty reduction, the ultimate outcome depends on many factors”; however they also note that “...concerns that trade liberalization has generally adverse effects on the employment or wages of poor people or on government spending on the poor due to falling fiscal revenues are not well founded, even though specific instances of each of these problems can be identified.” Modelling work by Khan (2006) supports the view of a lack of serious negative effects on the poor in the short-run even for an archetype South Asia economy starting with an average tariff of 40%. In so far as growth is raised through higher exports there will be positive longer-run effects on poverty.

Apart from the general link between higher exports, growth and employment, some of the strongest evidence of the positive effect of trade reform on poverty is where it leads to a relative price rise for poor producers of internationally tradable crops. This has been documented for example in the case of rice growers in Vietnam and Indonesia (Winters et al 2004). However care is still needed in interpreting these results since such price rises benefit net producers of the crops and hurt net consumers. In a detailed study of these ambiguous outcomes in the Philippines using a macro modelling approach Cororaton



(2006) shows that while liberalization of import controls on rice is poverty reducing overall, some of the poorest groups lose since they will have to buy rice at higher prices that have now risen to world market levels. He also simulates the effect of alternative compensatory mechanisms necessary to offset these effects on the very poor. The implication is that to fully address poverty concerns trade reform must be part of a policy package that considers the range of possible poverty consequences, with compensatory measures built in where negative effects are identified.

When it comes to inequality there is now mounting evidence that trade reform as part of the globalization process may have exacerbated inequality by raising the returns to capital and skilled labour relative to unskilled labour. Causation is difficult to confirm but in many cases increased openness to trade and capital flows has been accompanied by rising inequality (Goldberg and Pavcnik 2007). Different mechanisms have been suggested to account for this association including biases in technical change and a weakening in the bargaining power of organized labour. One persuasive argument links changes in equality to the spread of global production networks. This is on the grounds that it will be the labour-intensive parts of such networks that are located in poorer countries with lower wages. However whilst the products that are outsourced in this way will have a low skilled to unskilled labour ratios in rich countries they will often be relatively skilled labour intensive in the poorer countries to which production is outsourced. Hence it will be the wages of skilled labour that rise relative to that of unskilled in the host country. This argument has been used, for example, to explain distributional shifts in Mexico after its entry to NAFTA (Feenstra and Hanson 1996). The general point is that the evidence that trade reform and globalization add to absolute poverty is fairly weak, however in relative terms because of distributional shifts there is greater cause for concern.

#### *How far do social improvements follow income growth?*

There is fairly conclusive evidence that social improvements do not follow automatically from economic growth in the fact that most of the monitoring exercises on progress towards the MDGs suggest that income poverty targets are largely on track in most countries outside sub-Saharan Africa (largely due to growth performance) but that social indicators, like infant mortality rates, some of the gender equality measures and access to clean water and sanitation lag behind (see for example UNESCAP et al 2006, and UN 2005). More formal cross-country analyses confirm that pro-poor expenditure may itself have little direct impact.

A readily available welfare measure is the UNDP Human Development Index (HDI) that combines a measure of income (GDP per capita in purchasing power parity terms) with indicators for health (life expectancy) and education (enrolment ratios). Across countries there is no correlation between change in the HDI and economic growth (although there is a correlation with change in growth). Detailed analysis of the impact of the most potentially 'pro-poor' public expenditures (water and sanitation, education and health) finds no direct association between the HDI and an index of such expenditure for low income countries, although there is a significant positive relation for middle income countries. Infant mortality rates have also been used separately as an alternative welfare

measure and here whilst income levels and aid are strongly and negatively associated with infant mortality the public expenditure index is not a significant explanatory variable (Gomanee et al 2005). These results whilst reflecting no more than country averages illustrate the point that achieving social development through higher public expenditure is by no means a simple task, although there will no doubt have been cases where such expenditures have contributed to social development and benefited the poor disproportionately. In particular the links between expenditure on water and sanitation and improved health outcomes have been demonstrated and an improved transportation network has been shown to improve school attendance (Fay et al 2003). The implication is that to achieve social development target public expenditure under a 'broad targeting' strategy still needs to be well designed.

*How do physical and social infrastructure impact on growth and poverty reduction?*

Infrastructure activity has conventionally been a central arm of donor activity in part because with the externality and public good characteristics of some infrastructure projects they meet the market failure rationale for public sector involvement. Infrastructure is also expected to have a direct impact on growth. The case for physical infrastructure impacting directly on growth is intuitively clear. Transport is needed to move goods between producers and consumers, power provides the energy for economically productive activity and telecommunications provides the information flows necessary for trade and production. Similarly soft or social infrastructure provides the institutional base for productive activity and their improvement can impact significantly on the incentive to invest.

There have been many efforts to quantify the economic impact of infrastructure using a variety of methodologies. Macro analyses using a production function approach have generally derived very high, perhaps implausibly high, rates of return, which are higher in low income countries.<sup>8</sup> An alternative approach is to link infrastructure with 'trade costs' and test for the sensitivity of trade flows to reductions in these non-tariff barriers on the assumption that higher trade flows create higher incomes.<sup>9</sup>

Empirical analyses of the impact of infrastructure across countries based on a form of growth accounting, up to recently have suffered from problems of measurement (how to quantify infrastructure accurately in an index) and causation (how to be sure that causation does not run from growth to infrastructure rather than the other way around). Both obstacles have been largely overcome in recent years. Data compilation at the

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<sup>8</sup> "In recent years these methods have suggested economic returns on investment projects averaging 30-40 percent for telecommunications, more than 40 percent for electricity generation and more than 200 percent for roads (although when outliers are excluded the average is about 80 percent for roads" (Estache 2004:4).

<sup>9</sup> Macroeconomic modelling can simulate the impact of reductions in trade costs due to improvements in infrastructure as well as any total factor productivity gains due to infrastructure improvements; see Roland Holst (2006).

World Bank has now created a comprehensive infrastructure database that can be used to derive synthetic weighted indices of infrastructure stock both in terms of quantity and quality (Canning 1998). Such developments have allowed rigorous assessment of the impact of infrastructure. For example, Calderon and Serven (2005) in a cross sectional analysis covering 121 countries 1960 -2000 test for the impact of infrastructure stocks on growth and inequality. They find that infrastructure has a significant and positive impact on growth (that is not due to any reverse impact from growth to infrastructure) and in a separate model they find infrastructure to have a significant negative impact on inequality. These results are robust to changes in the infrastructure measures used. In support of the paradigm's reasoning the authors argue that “ the conclusion that infrastructure both raises growth and lowers income inequality implies that infrastructure development may be a key win-win ingredient for poverty reduction” (p 27).

### *Infrastructure, poverty and welfare*

The positive infrastructure-growth relation suggests that in turn infrastructure will lower poverty. This could be through its growth effect or it could be directly via distributional shifts that impact on the poor. Empirically in cross-country analyses it is difficult to establish infrastructure-poverty links that do not run via growth. For example, in a regression analysis Jalilian and Weiss (2006) find that their synthetic infrastructure index has no significant relation with poverty headcount measures when it is included separately with growth, although the latter variable is always strongly significant.<sup>10</sup>

The lack of a direct relationship between the infrastructure index and poverty measures is no doubt due to the fact that only certain types of infrastructure activity will have major direct poverty consequences. To establish these requires a focus on country or sector case studies and a variety of methodologies have been used for this purpose. Much of the evidence relates to infrastructure activities that serve the poor directly, principally rural roads and electrification. For example, Fan and others employ a simultaneous equation model to investigate the impact of different types of public expenditure on production and poverty through a variety of channels. The model was first applied to India (Fan et al 1999) and subsequently to PRC (Fan et al 2002), with a later unpublished application to Thailand on behalf of the Bank. In the model rural poverty will be affected through various channels such as changes in agricultural production, non-agricultural employment, wages and the internal terms of trade. For India government expenditure on rural roads dominated all other categories of expenditure in terms of its poverty reduction impact with a much higher poverty impact per unit of expenditure. The impact of roads on poverty consists of roughly 25% in terms of higher agricultural productivity, 55% in higher non-agricultural employment and the remaining 30% due to higher rural wages.

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<sup>10</sup> Only if the infrastructure index is interacted with an education variable (school enrolment ratio) does it become significant with the expected negative sign, implying that a better educated population is better placed to take advantage of the opportunities for poverty reduction offered by infrastructure. Similarly in their country study of the Philippines, Balisacan and Pernia (2003) find that a variable for electricity has no significant relation with poverty and one for roads is significantly and positively related. The expected sign for roads is only obtained by interacting the variable with a schooling measure.

For India however the results show very low and statistically insignificant poverty effects from the other infrastructure categories irrigation and power. The low return to irrigation is rationalised in that past investment had already allowed for higher yields as a part of the Green Revolution and that given this adequate infrastructure stock marginal returns from additional investment would be very low.

For China a different pattern of results emerge. Here in terms of poverty reduction it is investment in social infrastructure (education and agricultural research and development) that dominate all other expenditure categories, particularly in the poorer Western region. Of the three physical infrastructure categories considered there is consistency with the Indian results in that rural roads have a stronger poverty impact than telecommunications, power or irrigation. In China the impact of these infrastructure activities on poverty is largely through their contribution to higher non-farm employment and increased rural wages. Again irrigation shows the lowest poverty effect, although its overall growth effect is positive and higher than for power.<sup>11</sup>

An alternative approach is applied to rural roads in Lao PDR in Warr (2006). Lao has a very difficult topography and many villages have no all-weather road access. Household expenditure survey data is available at two points in time and this allows the specification of a regression model to explain household consumption expenditure. Consumption is explained by household characteristics (like age and education of head of household and ownership of assets like cattle), village characteristics (like access to electricity) and the status of road access. Predicted expenditure and implied poverty levels derived from this model can be compared with the expenditure and poverty predicted when village road status is varied from the actual to all-year access (or alternatively dry season access only). The difference in poverty levels under the alternative road status scenarios gives an estimate of the overall poverty impact of a major road building programme. The results suggest the poverty impact would be very substantial as granting all household all-weather access is estimated to lower the incidence of rural poverty by 7 percentage points. Looking back over past investment the approach suggests roughly one sixth of the poverty reduction that actually took place between the two survey dates was due to road improvements.

Evidence of the importance of rural electrification in poverty reduction is provided for the Philippines by Balisacan and Edillon (2005). Using the coefficients from an earlier regression model and estimates of costs for different public projects they simulate outcomes from different expenditure packages. The proportion of households nationally without electricity is 30% and a programme to bring electricity to all of these shows high

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<sup>11</sup> Similarly, evidence of the impact of rural infrastructure more generally is also found at the county level in China where infrastructure facilities are found to be a key determinant of household consumption growth in an analysis across counties (Jalan and Ravallion 2002). The 'spatial poverty trap' hypothesis (Jalan and Ravallion 1998) was advanced initially in the context of China. It argues that the returns to household assets in a locality are depressed by the low stock of physical and social infrastructure and that through externalities there are high returns to investing in a package of infrastructure measures to serve the disadvantaged localities.

economic returns and a higher impact on the poor per unit of expenditure than any of the alternatives.

Hence there is ample evidence from varying sources and countries that well designed infrastructure schemes in rural areas can make a difference to poverty directly by providing services and market opportunities to the poor; which type of infrastructure activity will generate the highest poverty impact will vary with circumstances and the nature of the binding constraints on poverty reduction.

### *What are the links between governance, growth and poverty?*

There is a growing literature that argues that establishing a favourable governance environment is the key to sustained economic growth. In addition there can be some positive direct impact from governance to both social development and poverty reduction. Hence in this view whilst there are feedbacks of various types it is the governance-growth link that provides the key relation (see Figure 1 above).

At one level this conclusion is virtually a tautology, since if governance is defined broadly as the means of organizing and running a society and economy then clearly it is important for economic success for there to be 'good governance'. There is scope for confusion in policy discussion since there are various dimensions of governance. In their major empirical work on indices of governance Kaufmann et al (2003, 2005) use the general definition of "the traditions and institutions by which authority in a country is exercised." They focus on three 'governance clusters' with various indicators involved in each cluster;

- the political process by which governments are selected, monitored and replaced (covering for example measures of civil liberties and political rights)
- the capacity of a government to formulate and implement policy (covering for example policy credibility, the quality of the bureaucracy and regulatory processes)
- the respect of citizens and the state for national institutions (covering for example, the rule of law, property rights and contract enforcement, judicial independence, control of corruption).

This is a wide-ranging list with different dimensions likely to be of differing degrees of importance for economic growth. Broadly speaking the three clusters correspond to the three aspects of governance raised most frequently in popular discussion – 'democracy', 'government effectiveness' and 'the rule of law/corruption'.

### *Evidence on governance, growth and poverty*

If institutions are the rules of a particular governance environment there is mounting evidence that they are the key fundamental determinant of growth. Proximate causes of

growth may be factor accumulation and technical change, but the fundamental determinants will be the forces that drive these proximate causes. This evidence on the role of institutions comes partly from disappointing country experiences with conventional economic reform programmes in the absence of significant institutional change (the relative failure of ‘first generation reform’) and partly from increasingly sophisticated cross-country analyses that use measures institutional quality, along with other control variables, to explain cross country growth experience.

Technically establishing the link between institutions and growth has been complex because of the endogenous nature of institutional change that evolves as part of the growth process and because of the difficulty of quantifying institutional quality. However there is now a consistent body of studies that finds a strong positive correlation between various measures of institutional quality and economic growth with strong evidence that causation runs principally from institutions to growth, rather than in the opposite direction (Acemoglu et al 2001, Kaufmann and Kraay 2002, Kaufmann et al 2005). In an important paper Rodrik et al (2004) contrast the impact of institutions with that of the other candidate fundamental determinants of growth from the recent literature – openness to trade and geography. They find conclusively that “the quality of institutions ‘trumps’ everything else. Once institutions are controlled for measures of geography have at best weak direct effects on incomes... similarly once institutions are controlled for trade is almost always insignificant..”

Recent exercises along these lines rely heavily on the Kaufmann et al measures of institutions and their realism is heavily dependent on the accuracy these measures.<sup>12</sup> Whilst countries with high or low quality institutions may be easy to identify quantifying the range for the majority of countries in between is far from easy. The preferred measure from Kaufmann et al appears to be the rule of law index on the grounds that this covers intuitive notions of the role of contract enforcement and property rights (for example this is the index used in Rodrik et al 2004). Recently, however, Jalilian et al (2007) have examined the impact on growth of the effectiveness of government administration and the quality of regulation using the indices from Kaufmann et al. They find these administrative and regulatory variables to have a strong growth effect controlling for other factors. In addition they provide some suggestive evidence that the growth effect of these variables is stronger than that of the other dimensions of governance as measured by Kaufmann et al. Hence from this evidence there is a suggestion that the rule of law per se is less important than an effective government administrative structure.<sup>13</sup>

Corruption (typically defined as ‘the use of public office for private gain’) is the aspect of governance that has received the most attention in donor circles in recent years. This is partly because of its assumed impact on the use of resources destined initially for the

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<sup>12</sup> The authors themselves caution that “margins of error remain substantial relative to the units in which governance is measured and these margins of error need to be taken seriously when comparing countries with each other or over time. This is especially the case when attempting to classify countries into groups according to their levels of governance..” (Kaufmann et al 2003: 39).

<sup>13</sup> This result comes from the higher coefficient on a weighted variable combining the effectiveness and regulatory indices in comparison with weighted combinations of the other governance indices. The authors themselves caution that they would not wish to overemphasise the result given the data limitation issues.

poor (so corruption leads to weak targeting) and partly because it is assumed to lead to lower overall growth, as rent-seeking associated with corruption diverts resources from productive activity. The impact of this aspect of governance has also been incorporated in cross-country empirical analyses. Various measures of corruption are available but again the Kaufmann et al series is often taken as the most rigorous.<sup>14</sup> The bulk of empirical studies find that controlling for other factors corruption tends to have a significant negative impact on both growth and investment, including FDI. This is substantiated by the result of investor surveys from some countries (Cambodia, Indonesia and the Philippines in East Asia) where corruption is identified as a serious constraint on business (World Bank 2006b: table 7.1).

However there is a more nuanced story when one considers that some of the present (Korea, China) and past (Indonesia) high-growth economies have been characterised by high degrees of corruption by international standards. This 'East Asian paradox' is supported by a comprehensive cross-country study using four alternative indicators of corruption (of which the Kaufmann et al Control of Corruption index is the most rigorous) (Rock and Bennett 2004). For the Kaufmann et al index (but not the others) as expected higher corruption is associated with significantly lower economic growth and a lower investment share across all developing countries in the sample. These results prove to be much stronger for small than for large countries (where the coefficient on the corruption variable is of the expected sign but insignificant). The unexpected result comes when developing countries are split into large East Asia NIEs (covering China, Indonesia, Korea, Thailand and Japan) and other developing countries. Now whilst corruption as expected has a negative growth effect in the majority of countries, in the East Asian group, controlling for other factors, higher levels of corruption are strongly associated with higher economic growth. Hence corruption seems bad for growth, except paradoxically in most of the fast growing economies of recent years.<sup>15</sup> This analysis revives the idea of the East Asian developmental state where corrupt practices and informal payments coexisted with positive developmental interventions by governments. There is a vast literature on the transferability of this experience to other countries and points in time. Given the difficulties of transferring this experience to the present it is difficult to use it as a justification for corruption.

The growth impact of the political aspects of governance is much less clear. Relatively fast growing DMCs have had both autocratic systems (China), well established democracies (India) and unstable democracies (Thailand, Pakistan, Bangladesh). From cross-country studies of the democracy-growth link the prevailing consensus is that there is little direct relationship. However qualifications to the lack of relationship have been

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<sup>14</sup> World Bank (2006b) chapter 7 has a comprehensive survey of the empirical and theoretical literature on corruption with a focus on East Asia.

<sup>15</sup> There is an extensive theoretical literature that addresses the theory of corruption; for example Schleifer and Vishny (1993) stress that a centralized 'hard state' can set predictable channels for corruption and act as a single monopolist channelling bribes through to the centre. This is in contrast with a weak state where numerous officials extract bribes in a decentralized and disorganized fashion and act as independent competing monopolists. Indonesia under the Suharto regime and Korea under the Park regime are obvious examples. In contrast the Philippines post- Marcos can be taken as a decentralized regime with weak and fragmented government where officials behave as competing monopolists.

that democracy may have a non-linear impact, helping growth at lower levels of democracy but harming it at higher levels (Barro 1996) and that democracy may be associated with more stable growth even when on average there is no tendency for democracies to have higher growth than non-democracies (Rodrik 1999). Democracy may also help reduce corruption through the mechanisms of political accountability and press freedom and there is some cross-country empirical evidence that democracy works to reduce corruption, but only with a very substantial time lag (something like 40 years) (World Bank 2006a: 284-284). Arguably measures of democracy are even more uncertain than other aspects of governance and hence not too much weight can be placed on these cross-country results.<sup>16</sup> Probably the most that can be said is that the view that the once common view that a strong authoritarian regime is necessary to take difficult decisions on issues of reform finds no support from this strand of the empirical literature. However the East Asian experience highlighted in the discussion of corruption above tends to contradict this finding for a small number of successful cases of strong government intervention.

As is now widely recognized political systems more than any other aspects of governance need to evolve internally rather than be imposed externally. However there is also the expectation that improvements in governance, for example through less corruption in the administration of targeting initiatives and greater local participation in poor area development programs will have a direct effect on poverty. Some support for this view is provided by project case-studies. World Bank (2004) for example discusses how participation by the poor affected through governance reforms can lead to better outcomes in terms of service delivery. Implementing such changes will be a challenge however, since even with adequate funding, without community support and the necessary balance of incentives, the local response to the opportunities for participation may be weak. Equally when decisions are left to local communities there is no automatic guarantee that the most needy will benefit.<sup>17</sup> Furthermore greater local participation is normally closely linked with decentralization of political authority from central to local government bodies, a process which has gone much further in some countries than in others.

Cross-country analyses of the governance-poverty links controlling for other influences are relatively rare. A recent study Henderson et al (2007) explores the link between bureaucratic effectiveness and income of the poor across countries. To capture this version of governance they use not the Kaufmann et al index, but an index of 'Weberianness' designed to capture the meritocratic and independent nature of the state

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<sup>16</sup> The studies referred to here use the Freedom House index.

<sup>17</sup> Balisacan and Edillon (2005) discuss the participatory programs introduced in the Philippines in the 1990's. the Comprehensive and Integrated Delivery of Social Services (CIDSS) program was the flagship of the Ramos administration's efforts at poverty reduction. An official review found it to be a success, but a more rigorous independent evaluation found no evidence that change in the targeted areas was statistically different from that elsewhere. In a village level study from India Srivastava (2006) shows that the definition of the most needy by villagers themselves can differ substantially from those identified by reference to an income poverty line.



bureaucracy across countries.<sup>18</sup> The authors use this index in an otherwise standard regression model to explain income of the poor (defined as the mean income of the bottom quintile). The index of bureaucratic quality is positively related to the income of the poor controlling for other factors and is statistically significant (but only weakly so). This is suggestive evidence that the quality of public bureaucracy is a factor in explaining the effectiveness of poverty reduction activities.<sup>19</sup>

*Is there a blueprint for a governance model?*

Simplistic versions of governance reform are sometimes equated with the transplanting of the Anglo-American model of developed country structures to lower income environments. However, the effectiveness of this governance model has been challenged strongly. Rodrik, in a series of influential papers has argued that the empirical evidence on the importance of institutions for growth, that he and others have generated, is an empty box as far as precise policies are concerned since “institutional outcomes do not map into unique institutional designs ... what works will depend on local constraints and opportunities” (Rodrik 2004:9).

The argument is that advanced capitalism has developed based on differing institutional arrangements in Japan, the UK, continental Europe and the US and that country experimentation based on local situations has been critically important. Hence for example while protection of property rights may be critical for the investment climate and growth this can be achieved in a variety of ways. Recent experience in East Asia is alluded to with Korea in the 1960's and 1970's and China in the reform period cited as illustrations of how successful institutional change can evolve gradually in the face of local constraints. Further it is suggested that comprehensive governance reform is rarely required to set off growth and that modest piecemeal institutional improvements may be adequate to stimulate a growth spurt that later becomes self-sustaining.

In the Introduction to a series of country case studies of institutions and growth Rodrik (2003:17) sets out the central lesson. “The onset of economic growth does not require deep and extensive institutional reform. This is perhaps one of the most important (and encouraging) lessons to emerge from the country narratives. It is also a lesson that is sharply at variance with conventional wisdom on institutional reform which holds that the complementary nature of institutional reforms requires a long list of such reforms to be pursued simultaneously.”

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<sup>18</sup> This index was developed by Evans and Rauch (1999) on the basis of questionnaire responses from expert commentators in 35 countries. It is meant to reflect the degree to which state agencies in the countries covered were characterized by meritocratic recruitment and long-term career prospects. The hypothesis is that meritocratic bureaucracies are less likely to be prone to corruption and will be driven by an ‘esprit de corps’ to act independently of vested interests.

<sup>19</sup> The authors probably overstate the conclusions in arguing “the balance of presumption must be that bureaucratic effectiveness of public institutions, in a given country, is likely to be decisive for that country’s ability to reduce poverty.” This may well be the case but the nature of the index and its weak significance (at the 10% level) suggest that simply their prior presumption is being confirmed.

For example, change in India in the 1980's in terms of a more positive climate for private investors is cited as having a key role in stimulating an improved growth rate prior to the main reforms of the early 1990's.<sup>20</sup> Further recent work along these lines that stresses the context-specific element of governance reform includes Grindle (2007) and Meisel and Aoudia (2008). If this view of institutional reform is correct it suggests plenty of scope for country level discussions between governments and donors on ways of introducing modest but positive change.

## **Conclusions**

The Aid paradigm set out at the outset aims to be flexible and adaptable to allow priorities for projects and programs to be determined at the country level. This flexibility is critical since whilst the chain of reasoning underlying figure 1 is broadly confirmed by the evidence nothing is inevitable and impacts will vary with circumstances.

As has been confirmed many times poverty responds to economic growth although the strength of the response varies between countries and the type of growth and what happens to inequality matter for the speed of poverty reduction. Social improvements do not inevitably follow with growth although broadly there is an association between income levels and measures of welfare. Direct narrowly targeted interventions have a fairly poor track record in terms of targeting efficiency and even broader social expenditure need not be associated with progress on social indicators. The strong implication is that policy and programme design is critical.

In recent years there has been a revival of interest in physical infrastructure activity amongst donors and there is strong evidence that this type of investment is critical for sustained growth. Donors have also tried to link infrastructure projects with direct poverty impacts. Here the evidence is more nuanced and it is clear that in terms of direct poverty effects it matters greatly what type and location of infrastructure is involved, with certain types having strong poverty-reducing effects in some circumstances.

Good governance is sometimes discussed as if it were a simple panacea for development problems. Governance is a multi-dimensional concept that it is tricky to measure in cross-country comparisons. There is evidence linking some governance indicators with economic growth, but equally it seems the case that not all governance reform is critical either for growth or poverty-reduction. Further it is likely that simple blue-prints will not work and that country experimentation in governance improvements will be important.

These conclusions may remove some of the certainty from donor discussions of policy change but that presumably should be welcomed.

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<sup>20</sup> "Under Rajiv Gandhi, the government made some tentative moves to encourage capital goods imports, relax industrial regulations and rationalize the tax system. The consequence was an economic boom incommensurate with the modesty of the reforms" (Rodrik 2003: 19).

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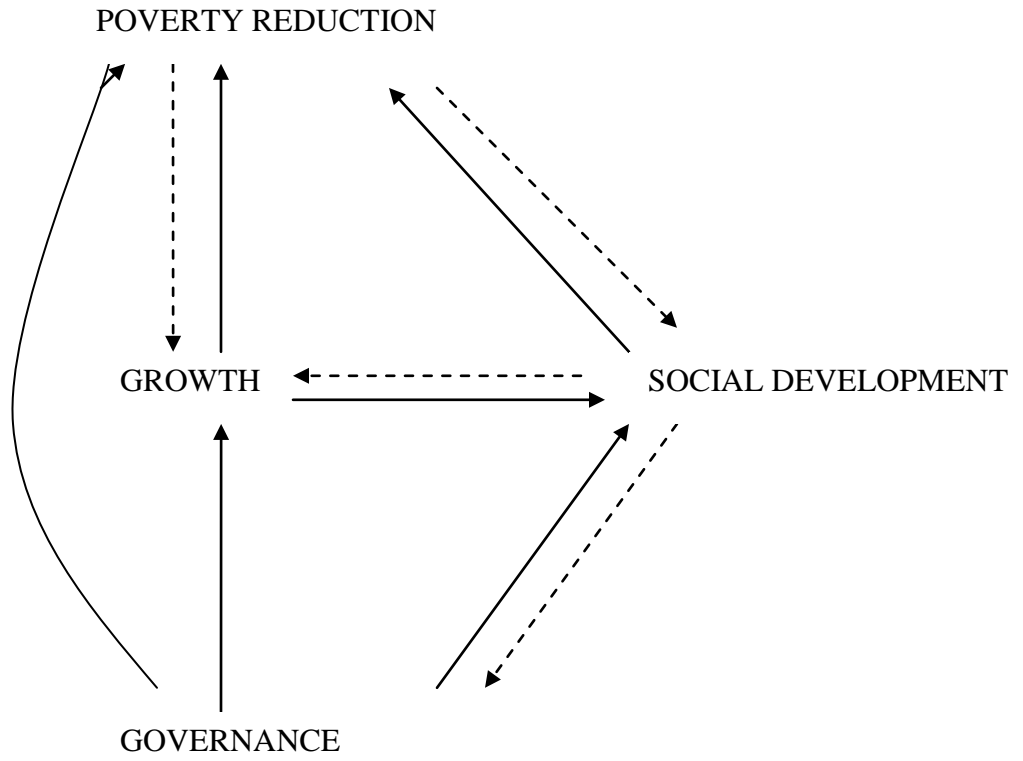


Figure 1 Aid paradigm interactions



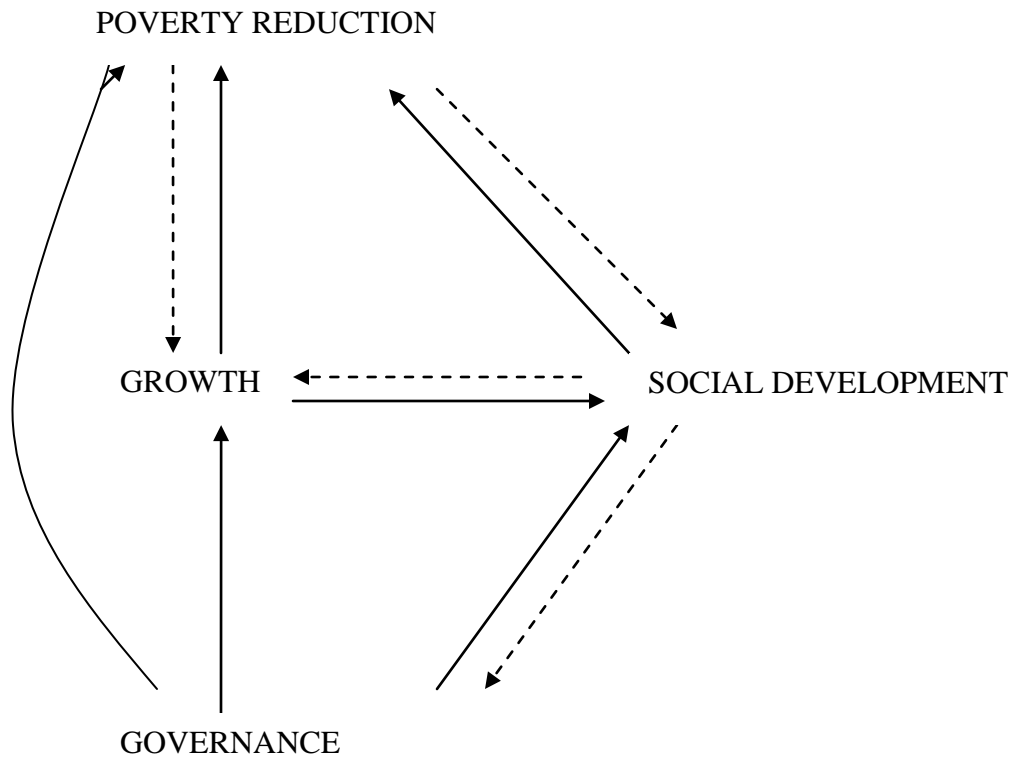


Figure 1 Aid paradigm interactions