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# The Role of Social Institutions in Determining Aid Effectiveness

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# Abstract

In recent years, scholars and policymakers have placed growing attention on the issue of aid effectiveness, that is, the efficiency of donor assistance in achieving stated economic and human development objectives. While research has tended to highlight the need for greater capacity building and improved governance as mechanisms to make aid 'effective', the social origins of such mechanisms have not been thoroughly examined. Using the latest crosscountry indicator series on aid effectiveness from the OECD and the Indices of Social Development, hosted at the Institute of Social Studies in the Hague, this paper examines the determinants of effective aid spending, and finds a significant effect linking the quality of aid assistance to social institutions relating to public order and trust. These effects are verified when instrumenting social institutions by measures of state history, suggesting that long-term political development is the main source of public order and the presence of state institutions capable of effective management of aid flows.

Whereas in the 1970s international donors were willing to provide significant assistance to governments with major weaknesses in budgetary oversight and accountability, such as Mobutu's Zaire or Suharto's Indonesia, in recent years, there has been a growing recognition among donors that not only the quantity of international development aid but also its efficient use matters for international development. To this end, for example, the 2005 Paris Declaration saw partner countries and donors agree to hold each other accountable for making progress against agreed commitments and targets by monitoring their implementation, and in a series of follow-up summits these commitments have been further built upon (OECD 2005).

However, as yet the conditions which lead to the effective use of donor aid have not been extensively studied. In a widely cited article, Burnside and Dollar (2000) attempted to show that the impact of aid on GDP growth is positive and significant in developing countries with 'sound' institutions and economic policies (i.e. open trade, fiscal and monetary discipline) and not significant in countries with "poor" such policies. However, their study has been extensively criticized on account of the lack of robustness of their estimates and the underspecification of their models (Roodman 2007, Easterly et al. 2000). To some extent, these problems are inherent within studies of aid effectiveness, which must overcome the endogeneity of aid allocation to economic underperformance (as donors may prioritize countries with greater development challenges), the long and variable lag that may exist between provision of development aid and its expected outcomes, and the difficulty of operationalising 'effectiveness' itself. As a result, empirical literature in this field remains underdeveloped, despite the massive importance of the research for policymakers and the international development community more generally.

## 1 An Alternative Approach to Studying Aid Effectiveness

Aid effectiveness can be defined as the degree to which donor assistance succeeds in delivering upon its stated objectives, such as raising standards of health, literacy, facilitating economic growth or improving standards of governance. As a result, finding a reliable measure of aid effectiveness is fraught with difficulty: first, donor aid projects may have very long project cycles, making it difficult to identify results, and second, different metrics may be applicable to different interventions. Despite efforts to introduce greater quantitative metrics into aid evaluation, the value of most projects is still left to qualitative judgments by development professionals operating in the field, who have the benefit of familiarity with the country context, and can inspect the gap between a project's intentions and the quality of delivery by local partners in government and civil society.

As a consequence, this paper uses a proxy for such perceptions, by using the proportion of donor aid which is handed over to country responsibility for example via direct budget support - as an indicator of the effectiveness of country governments in making use of donor funds. While there are a number of possible explanations for variation in using partner countries' systems, principle among these are donors' fears of financial misuse, the desire for risk avoidance, and the desire for control over how resources are allocated (OECD, 2011b). By contrast, where governments are perceived to be reliable partners and have delivered on aid projects with donor financing, international donors are more likely to give money to country governments to disburse, while a reputation for corruption, displacement, or ineffective delivery will cause donors to cease financing, or seek alternative means of dispensation such as partnership with international NGOs or local civil society groups. Similarly, a major factor preventing aid effectiveness is the fungibility of aid into unproductive activities in the public sector, where aid recipients offset their prior commitments with donor funds and divert the former into other areas of spending (Mosley 1987).

Researching the ability of recipient governments to run their own aid budgets takes on particular policy relevance at the present time, as a major plank of the 2005 Paris Declaration envisages an increase in the ownership by developing countries, with the latter leading their own development policies and strategies, and managing their own development work on the ground (OECD 2011a). This will inevitably entail that a higher proportion of donor aid that will be channeled via country systems, rather than be directly managed by donor agencies. It is thus especially important to understand the circumstances under which such systems are reliable for use, with sufficient local expertise, institutions and management to ensure the effective use of donor funds with minimal waste, graft, or diversion into unforeseen areas of expenditure.

#### 2 Empirical Tests

As a proxy for the extent to which aid is effectively deployed within countries, this paper takes an indicator or the extent to which international aid donors make use of developing countries' public financial management (PFM) systems, collated and published in the recent OECD (2011a) flagship report on aid effectiveness. The measure of donor use of country PFM measures the percentage of aid provided by donors that makes use of three elements of partner countries' PFM systems: budget execution, financial reporting and auditing. The indicator shows the average percentage of aid for the government sector using country PFM systems across these three components (OECD 2011a). While there may be context-specific reasons why any one particular donor may trust a recipient with direct budget support, we can expect such particularities to cancel out in aggregate, such that donor use of country PFM is a good proxy for their perception of recipient governments' reliability.

What factors might determine why some country governments are perceived as more reliable partners in implementing development projects than others? First, levels of corruption will deter the effective use of donor funds due to obvious reasons, such as embezzlement or fraud. Where recipient governments are believed to divert monies for personal gain, whether it is the use of project funds for discretionary purchases, the practice of clientelism via job creation on donor projects, or, at the limit simple embezzlement of project resources, donors are unlikely to continue future cooperation unless driven by higher-level political exigencies. We can therefore include as an independent variable a measure of control of corruption, taken from the Worldwide Governance Indicators, as a measure in this regard. Similarly, other aspects of governance may also matter, such as the existence of a strong and meritocratic bureaucracy which is capable of implementing projects on the ground: even where a government is not engaged in ostensibly corrupt behaviour, failure of practical implementation in donor projects may cause donors to seek alternative partners in order to accomplish development goals. A variable for government effectiveness, also from the Worldwide Governance Indicators, is also included in our regression models.

Second, we also include the full range of the social development indices from the Indicators of Social Development project, which has aggregated over 200 indicators from over 25 sources into a series of six indices (Foa and Tanner 2011). The rationale for doing so, is as follows. The strength of civil society might determine the allocation of funds to the government sector, as disbursing funds via local partner NGOs is one of the main alternatives to using country systems. The strength of the civic sector is captured by two measures from the indices of social development: a *civic activism* index which measures the extent of popular participation in protest, petition, and media; and a *clubs and associations* index which tracks data on membership of voluntary associations and groups. Even if we believe that the proportion of donor aid spent via country PFM reflects as much the reliability of civil society partners

7

as it does the effectiveness of government spending, it is important to include these variables as controls.

Third, the level of cohesion between ethnic and religious groups may act as an important determinant of aid effectiveness, due to the association between intergroup fragmentation, clientelism, and poor governance (Alesina et al. 2003). We therefore include the indices of social development measure for intergroup cohesion, which takes data on ethnic ties and tensions between salient groups in each society. Fourth, a more general measure of interpersonal safety and trust, based on data on reported social trust and levels of crime, may be a predictor of aid effectiveness due to the complementarities of social capital with the functioning of formal institutions. Baliamoune-Lutz and Mavrotas (2009), for example, find a statistical association between 'social capital' and the level of aid effectiveness. The interpersonal safety and trust item is therefore included in the regression. Finally, gender equality may be associated with the effectiveness of development aid, in line with research linking women's empowerment and improved resource management, and a measure of gender equality from the indices is also included (Westermann, Ashby, and Pretty 2005).

In addition, a measure for log GDP per capita is also included, in case there are factors which lead donors to prioritize or de-emphasize use of country financial systems to disburse aid in low-income versus medium-income economies.

The model to be estimated is:

$$y = x_{1,\dots,n} + x_{2\dots n} + x_3$$

where *y* is the percentage of donor aid that is channeled via country systems,  $x_1$  is a series of indicators of governance,  $x_2$  is the set of social development indices, and  $x_3$  is a measure of log income per capita.

1.

Results with a range of model specifications are shown below in Table

#### TABLE 1 Proportion of Donor Aid Entrusted to Country Governments

Dependent variable: Percentage of Donor Aid Channeled via Country PFM, 2005

		(1)	(2)	(3)
	Log GDP per capita	0.104 (0.083)	- 0.176** (0.062)	- 0.147** (0.05)
2005	Civic Activism, 2005	0.0 82 (0.546)	0.247 (0.482)	-
	Gender Equality, 2005	0.3 (0.467)	0.4 (0.386)	0.257 (0.342)
	Interpersonal Safety and Trust,	1.2 48*** (0.354)	1.149* ** (0.31)	1.184 *** (0.288)
	Clubs and Associations, 2005	0.2 93 (0.204)	-	-
	Intergroup Cohesion, 2005	- 0.819 (0.43)	- 0.945* (0.373)	- 0.917** (0.34)
2005	Control of Corruption, 2005	0.3 62 (0.198)	0.262 (0.147)	0.249 ** (0.09)
	Government Effectiveness,	- 0.222 (0.2)	0.000 (0.139)	-
	Constant	0.9 22 (0.721)	1.634* * (0.507)	1.541 *** (0.442)

Ν	37	47	50
Adi. r2	0.3		
,	05	0.295	0.325

\* significant at the 0.05 level, \*\* significant at the 0.01 level, \*\*\* significant at the 0.001 level.

The most striking feature of the multivariate models is the robustness of the association between the interpersonal safety and trust measure, and the proportion of aid monies channeled via domestic country systems. This is consistent with the argument and empirical results found in Baliamoune-Lutz and Mavrotas (2009), namely that higher levels of 'social capital' may increase aid effectiveness. The results also indicate that donors entrust proportionately more of their aid to country governments which are higher income, which have lower levels of corruption, and in societies that have higher levels of safety and interpersonal trust. Perhaps counter-intuitively, the coefficients appear to indicate that governments in societies with lower levels of intergroup cohesion are *more* likely to receive direct funding from donors; meanwhile, no significant effect is found between use of country systems and gender equality, either of the two civil society measures, or government effectiveness.

In accordance with our expectations, in the final specification (Model 3) control of corruption emerges as significantly associated with use of country PFM, such that donors channel significantly larger shares of aid to governments with lower levels of corruption than those in which corruption is greater. The magnitude of the effect indicates a 25 percentage point increase in donor aid for each unit increase in the control of corruption score, which runs approximately from -2.5 to +2.5.

Yet the largest and most robust association appears to run between the interpersonal safety and trust measure and use of recipient government institutions to disburse aid, insofar as a 29.5 percentage point increase in use of

country PFM results from each 0.25 increase on the safety and trust index. The strength of this association is shown in Figure 1, which simply shows the bivariate scatterplot of the two variables, without controls. The correlation coefficient of r = 0.44 indicates a reasonable degree of covariance between the two indicators.

FIGURE 1 Use of Country PFM, and Interpersonal Safety and Trust Index



The bivariate association tells us that in countries with lower crime and greater interpersonal trust, for example, Vietnam, Egypt, or Jordan, donors are more likely to make use of country systems to disburse aid funds, rather than attempt to disburse such finds via other channels such as partner NGOs or direct assistance. This association is brought out even more clearly in the residual plot that control for the variables in the regression, which is shown below in Figure 2.

FIGURE 2 Use of Country PFM, and Interpersonal Safety and Trust Index (Residual Plot from Regression Model 3)



## 3 Explaining the Association from Interpersonal Safety and Trust to Aid Effectiveness

Why are donors so much more likely to entrust funds to governments in countries where levels of social trust and public order are relatively high? One explanation for this association would be that levels of social trust may reflect something about the reliability of partner governments to refrain from practices such as embezzlement or wasteful use of resources. However, in the regression models we have already controlled for measures of quality of governance, such as corruption and government effectiveness, making such an interpretation problematic. A second interpretation might be that the level of social trust and criminality determines the ease with which projects can be implemented on the ground: in extreme high crime environments, there may be practical barriers to implementation, related to the danger of operating in slum areas or remote region of a country. Yet a problem here is that our measure only shows the proportion of funds which are given to country PFM, rather than funds overall; and we have no reason to believe that in countries with weak social institutions we would expect civil society actors to prove any more or less reliable partners for donor organizations that the official government sector.

In their finding that countries with higher levels of social trust experience more rapid economic growth, Knack and Keefer (1997) suggest that survey items on social trust may reflect some unobserved aspect of the rule of law and functioning of institutions: that in countries with more effective mechanisms for regulating interpersonal relations and providing contract security, levels of trust will be correspondingly higher, even if the nature of such mechanisms may vary from country to country, or be rooted in informal institutions or cultural norms rather than explicit institutional mechanisms. Given the high correlation between surveys of social trust and measures of crime, and the prevalence of crime data in the estimation of the interpersonal safety and trust scores, this appears an intuitive interpretation of the finding. The interpersonal safety and trust index aggregates data on crime victimization from Afrobarometer, Latinobarometer and the International Crime Victim Survey, data on homicide from the UN, WHO, and Interpol, and rates of crime prevalence and social trust from surveys such as the World Values Surveys, Asian Barometer, and the Doing Business surveys.

Yet to return to our earlier question, why would measures of trust or crime prove better proxies for institutional quality than other governance indicators, such as the control of corruption and government effectiveness measures, which are also included in the regressions above? Here there are two potential answers. The first is that 'direct' measures of crime are a better indicator of the rule of law than ratings based primarily upon expert assessments, due to response bias and 'halo effects' in the case of the latter: in that countries are rewarded based on positive but irrelevant attributes such as their level of income per capita or democracy (Rose-Ackerman 2004). As such, the interpersonal safety and trust measure may capture aspects of the overall level of lawfulness that are not captured in expert-assessment ratings, or aggregative indices based on such ratings. This is illustrated by figure 3, which shows the correlation of income per capita with the Worldwide Governance Indicator for Rule of Law - which aggregates a range of expert ratings, along with harder crime data - and then the correlation of income per capita with a World Health Organisation measure for humanly-caused deaths per 100,000 (perhaps the most valid measure of the extent to which citizens live in security of their life and estate). Ratings of rule of law correlate to a far greater degree with income per capita than with the actual risk to one's livelihood.

FIGURE 3 In General, Subjective Ratings Correlate Highly with Income per capita, but 'Actionable' Items do not – suggestive of Halo Effects and Response Bias



#### GDP per capita and subjective ratings on Rule of Law

# GDP per capita and medical reported rate of violent deaths per 100,000

The second argument by which direct measures of crime and interpersonal trust may function as more reliable estimates of the reliability of governments to manage donor projects, is that they capture a different aspect of variation in government effectiveness that is not accounted for in governance indices, for example because they capture informal institutions and norms rather than the formal policies or institutions measured in ratings projects.

#### 4 Further Empirical Tests

We can test the hypothesis that levels of interpersonal safety and trust are reflective of deeper processes of institutional development, by instrumenting for the interpersonal safety and trust item using the *State Antiquity* index produced by Bockstette, Chanda and Putterman (2002), which is a historical variable for state formation. This index is constructed by taking each period from 1 to 1950 AD, and allocating points to countries if there was i) a government above the tribal level; ii) if that government was locally based rather than that of a foreign empire; and iii) a fractional point to represent the extent of the country's modern territory that was under the control of this earlier government. The data from the fifty periods is combined, thereby offering an index of state history for a large sample of countries. In their analyses, Bockstette et al. (2002) show that this measure is correlated with measures of political stability and rule of law, as well as rates of economic growth during the period following decolonisation (1960-95).

#### FIGURE 4 State Antiquity Index



Source: Bockstette et al. (2002). Shown is the state history index with a discount rate 50. This measure is used consistently throughout this analysis.

The distribution of 'state history' across the world is shown in Figure 4. It can be seen that the largest concentrations are in Eurasia, and specifically across the 'chain of civilizations' running from western Europe, to the lands of the former Ottoman Empire, to Persia, India, and finally to China and Japan. Smaller concentrations can also be seen around the indigenous civilizations of the Americas, and around the horn of Africa. It is largely across the Eurasian belt, however, that from the early modern period states began to take shape in something like their present borders, and where we see the beginnings of centralized monarchies, a salaried, selective, and trained bureaucracy, mechanisms of state surveillance and control, such as the census and land cadastre, and the beginnings of comprehensive tax reforms.

Results after instrumentation are shown in Table 2.

	(1)	(2)	(3)
Interpersonal Safety and Trust, instrumented using the State Antiquity Index	1.464* (0.599)	1.965* (0.902)	1.769* (0.789)
Log GDP per capita	0.002 (0.079)	-0.058 (0.07)	-0.075 (0.052)
Civic Activism	-0.159 (0.576)	-0.262 (0.608)	-
Gender Equality	-0.118 (0.373)	-0.137 (0.38)	-0.152 (0.328)
Clubs and Associations	0.411 (0.203)	-	-
Control of Corruption	0.288 (0.181)	0.081 (0.146)	0.085 (0.089)
Government Effectiveness	-0.297 (0.216)	-0.034 (0.155)	-
Constant	-0.221 (0.67)	0.249 (0.627)	0.368 (0.532)
N	36	48	15
Adj. r2	0.276	0.04	0.14

TABLE 2 Two-Stage Least Squares, Using State Antiquity

Instrumenting for social trust and safety using the state antiquity variable, we remain able to predict donor usage of country mechanisms to disburse assistance flows. The implication of this result is that there is some portion of the variance in social institutions, in the form of the safety and trust measure, which reflects the process of state formation and which also explains the perceived reliability of country governments in managing aid projects independently.

# 5 Thinking about State History as a Long-Term Determinant of State Capacity

Why would state formation serve as a predictor of both contemporary levels of trust and public order, as measured by the interpersonal safety and trust index, and the perceived reliability of recipient governments to disburse donor funds? Such an argument would be consistent with a range of recent regional studies which support the association between legacies of central government and its contemporary performance in areas such as delivering public goods. In South Asia, for example, the differential performance of parts of India following the 'states reform' of the 1950s appears to be traceable to legacies of precolonial state formation. Gerring et al. (2011) show that indirect rule was the preferred mode of governing in areas where precolonial polities were already well-developed, and Bannerjee and Iyer (2004) have shown that such areas have tended to do better economically since independence. Likewise, Singh (2011) shows that the success of public goods delivery in states of contemporary India can be explained not by 'social capital,' but rather by 'regional subnationalism', which in turn reflects the legitimacy and coherence of precolonial subnational polities (Singh 2009, 2011).

Not only in South Asia, but also in Africa, the recent literature points to evidence of an association between historical state formation and the current performance of public institutions. Looking at public goods provision within Africa, Gennaioli and Rainer (2007) find that precolonial centralization is associated with higher levels of provision, as countries with a greater proportion of centralized ethnic groups have more paved roads, a greater percent of infants immunized for DPT, lower infant mortality, a higher adult literacy rate, and greater schooling attainment. They hypothesize that precolonial centralization improved public goods provision by increasing the accountability of local chiefs. Likewise, taking the case of Botswana, Acemoglu, Johnson and Robinson (2001) and Robinson and Parsons (2006) argue that the country's exceptional record of public administration within Africa is a consequence, not of ethnic homogeneity, but rather precolonial processes of political centralization, driven by conflict against outsiders. Again, the performance of postcolonial institutions appears to be rooted in the strength of precolonial political structures.

The notion that there is a link between long-term processes of state formation in developing countries and the quality of their public institutions, and in particular their ability to deliver public services, is therefore well-rooted in the literature.

Higher levels of trust and safety (low crime) are quite likely a direct consequence of long-term processes of state formation, which explains why the state antiquity measure functions well as an instrument for the safety and trust index. Indeed, we can show the strong predictive effect of state antiquity upon measures of interpersonal safety and trust in a series of regressions on the components of this index.

From the data sources gathered under the personal security and safety cluster, it is possible to take a subset of 37 indicators that have been aggregated by the Indices of Social Development into 9 subindices, each reflecting a different source<sup>2</sup>. These 9 subindices cover Afrobarometer survey responses on personal security and crime risk, International Crime Victim Survey responses on crime victimization, World Health Organisation estimates of the rate of violent death, based on postmortem assessment, data released by governments to Interpol on rates of fraud, murder, theft and rape, under condition of anonymity, business surveys asking managers to assess the salience of crime as a business constraint, Latinobarometer data on crime victimization, International Crime Victim Survey items on perceptions of personal security and safety, and United Nations Criminal Justice Information Network data on the rate of homicide per 100,000. In addition, these are supplemented by an additional item selected to measure aspects of compliance with the state, such as surveyed willingness to pay taxes (World Values Survey 2000-7). The figures below then show both the raw correlation between state

<sup>&</sup>lt;sup>2</sup> The International Crime Victim Survey data has been broken down into two subindices, one for the 'pure' crime victimization questions, reflecting whether one has been subject to certain kinds of criminal act (fraud, robbery, extortion, etc) and the second for subjective perceptions of safety and security (whether one feels safe in one's neighbourhood at night, etc).

history and the relevant subcomponent from the indices of social development project, followed by the partial correlation after controlling for log GDP per capita, ethnolingustic fractionalisation, membership of voluntary associations and colonial status (0/1). Note that for the survey indices which take crime items (Afrobarometer and ICVS), the polarities are reversed such that a higher score indicates a lower level of criminality.

FIGURES 5 Raw Scatterplots and Component-plus-Residual Plots

Afrobarometer Crime Data and State History (r = 0.59)





United Nations Criminal Justice (Log) Homicide Rate and State History (r = -0.43)



Component-plus-Residual Plot (p = 0.000)\*\*\*



International Crime Victim Survey, Crime Victimization Rates and State History (r = 0.42)

Component-plus-Residual Plot (p = 0.089)<sup>+</sup>





WHO (Log) Homicide Rate and State History (r = -0.37)



Component-plus-Residual Plot (p = 0.018)\*



Interpol Crime Rate and State History (r = -0.42)



Component-plus-Residual Plot (p = 0.000)\*\*\*



World Bank Business Survey (Managers Stating Crime as a Major Business Constraint) and State History (r = 0.44)



Component-plus-Residual Plot (p = 0.033)\*



Latinobarometer Crime Victimization and State History (r = -0.44)



0.912)

Component-plus-Residual Plot (p =



International Crime Victim Survey "Feel Safe in Neighbourhood" Items and State History (r = 0.44)



Component-plus-Residual Plot (p = 0.005)\*\*



23

Acceptable to 'Cheat on Taxes if you have the Chance' and State History (r = 0.18)

#### Component-plus-Residual Plot (p = 0.05)\*



These plots suggest that, for most operationalisations of the interpersonal safety and trust items, there appears to be a strong association with state history. Because state history is lagged deep into the past, it cannot be caused by the contemporary degree of rule of law; therefore we may assume that either it is causally prior or that there is some additional, omitted variable which can explain this covariance.

### 6 Conclusion

This paper adds fresh insights to the debate on aid effectiveness, using an altenative proxy for the extent to which country institutions are capable of disbursing aid flows effectively. If we assume that donor willingness to use country PFM, such as budget support, is a measure of the perceived reliability of such systems, then we can estimate the social and political institutional factors which make such willingness more or less likely. In line with our theoretical assumptions, levels of corruption are a significant determinant of donor willingness to work via recipient governments in disbursing aid flows. However the strongest and most robust association is between use of country financial management systems and levels of social trust and safety, which we interpret as reflecting an otherwise unobserved component of the reliability of recipient governments in delivering upon aid projects.

In terms of the implications of these results for policymakers, there are perhaps two points which can be made. The first is that donor avoidance of using country PFM, including budget support, is rational, and can be explained empirically. Thus a quite sober conclusion is that the objective of increasing donor aid via country PFM may be inappropriate, where such systems have not been rigorously evaluated for their reliability and effectiveness. The fact that donor usage of direct mechanisms such as budgetary support can indeed be strongly predicted by indices of corruption or social trust seems supportive of the interpretation that donor take-up - or avoidance - of country PFM is a entirely rational response to the perceived reliability of such systems. Donors should not rush to increase their use of country institutions where such institutions are not trusted.

Second, donors may nonetheless be underutilizing the domestic management capacity of some countries, and social institution indices can be a useful diagnostic for identifying cases where increased take-up of country PFM is more or less likely to succeed; from the regressions in Table 1 for example, it is possible to use the residuals to show where use of PFM is less than would be expected, based on our social and political institutional data. In countries such as Mali, Mongolia, Rwanda and Albania the proportion of aid disbursed by country PFM is far lower than we would predict based on these estimates, with direct support to the government being less than 50 per cent in most cases. Analysis of social and governance indices may therefore be a useful mechanism for identifying cases where country ownership of development project can be increased, in line with the commitments made in the Paris Declaration.

#### References

- Acemoglu, Daron, Simon Johnson and James Robinson, 2002, "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution", Quarterly Journal of Economics, November, 1231-1294.
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat and Romain Wacziarg (2003) "Fractionalization," *Journal of Economic Growth*, Springer, vol. 8(2), pp. 155-94.
- Baliamoune-Lutz, M. and George Mavrotas. (2009). "Aid Effectiveness: Looking at the Aid–Social Capital–Growth Nexus", *Review of Development Economics*, Vol 13 Issue 3, 510-525.
- Banerjee, A., L. Iyer and R. Somanathan (2004). "History, Social Divisions and Public Goods in Rural India", *Journal of the European Economic Association* 3, nos. 2-3: 639-647.
- Bernhard, Michael and Ekrem Karakoç (2007) Civil Society and Legacies of Dictatorship, *World Politics* 59, 539-67.
- Bockstette, Valerie, Areendam Chanda and Louis Putterman, 2002, "States and Markets: The Advantage of an Early Start," *Journal of Economic Growth* 7: 347-69, 2002.
- Burnside, C. and David Dolla (2000). "Aid, Policies, and Growth," *American Economic Review*, American Economic Association, vol. 90(4).
- Chanda, A. and Louis Putterman (2004). "The Quest for Development: What Role Does History Play?" *World Economics* 5 (2): 1-31.
- Chanda, Areendam and Louis Putterman, forthcoming, "State Effectiveness, Economic Growth, and the Age of States," in Matthew Lange and Dietrich Rueschemeyer, eds., States and Development: Historical Antecedents of Stagnation and Advance. Basingstoke, England: Palgrave Macmillan.

De Haan, A., van Staveren, I. Webbink, E. and Roberto Foa (forthcoming).

"Going the Last Mile in Analyzing Multi-Dimensional Well-Being and Poverty: Indices of Social Development", *Forum for Social Economics*.

- Easterly, W., Levine, R. and D. Roodman (2000). "New Data, New Doubts: A Comment on Burnside and Dollar's 'Aid, Policies and Growth'", *NBER Working Paper Series*, Working Paper 9846.
- Gennaioli, N. and I. Rainer (2007). "The modern impact of precolonial centralization in Africa," *Journal of Economic Growth*, Springer, vol. 12(3).
- Gerring, J., Ziblatt, D. Gorp, J. V. and Julian Arevalo (2011). "An
  Institutional Theory of Direct and Indirect Rule", *World Politics* 63 (3): 377-433.
- Glaeser, Edward L., La Porta, Rafael, Forencio Lopez-de-Silanes and Andrei Shleifer, 2004, "Do Institutions Cause Growth?" Journal of Economic Growth, 9(3): 271-30.
- Foa, R. and Jeffery Tanner (2011). "Methodology of the Indices of Social Development", Institute for Social Studies Working Paper Series (www.indsocdev.org): the Hague.
- Knack, S., and Keefer, P. (1997). "Does Social Capital have an Economic Payoff? A Cross-Country Investigation", The Quaterly Journal of Economics 112 (4):1251-1288.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. Vishny, (1997). "Trust in Large Organizations," *American Economic Review Papers and Proceedings*, 87(2): 333-338.
- Levi, M. (1998), "A State of Trust" in Braithwaite and Levi, eds. *Trust and Governance*, pp. 77-101. New York: Russell Sage Foundation.
- Mosley, P. (1987). *Foreign Aid: Its Defense and Reform*. KY: University Press of Kentucky.
- OECD, (2005). "The Paris Declaration on Aid Effectiveness". March 2nd. OECD Publishing: Paris.

- OECD, (2011a) "Aid Effectiveness 2005-10: Progress in implementing the Paris Declaration". OECD Publishing: Paris.
- OECD (2011b), Supporting Capacity Development in Public Financial Management – a Practitioner's Guide, The Task Force on PFM, OECD, Paris.
- Putnam, Robert with Robert Leonardi and Raffaella Y. Nanetti (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- Robinson and Parsons (2006). "State Formation and Governance in Botswana", *Journal of African Economies*, Vol. 15, No. 1, pp. 100-140.
- Roodman, D. (2007). "The Anarchy of Numbers: Aid, Development and Cross-Country Empirics". *The World Bank Economic Review* 21 (2): 255–277.
- Rose-Ackerman, S. (2004). "Governance and Corruption," in Bjørn Lomborg, ed. *Global Crises, Global Solutions*. Cambridge UK: Cambridge University Press, pp. 301-344.
- Singh, P. (2009), Subnationalism: The Concept, a Measure and its Application to Indian States'. Delivered on a panel entitled 'New Methodological Approaches to Ethnicity and National Identity' at the American Political Science Association Meeting, Toronto, Canada.
- Singh, P. (2011), 'We-ness and Welfare: A Longitudinal Analysis of Social Development in Kerala, India', World Development, Volume 39, Issue 2.
- Westermann, O., Ashby, J., & Pretty, P. (2005). Gender and social capital: The importance of gender differences for the maturity and effectiveness of natural resource management groups. World Development, 33, 1783-179.