Aid, Institutional Transplants, and Democracy

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Abstract

The paper revisits the impact of aid on institutions and discusses the role of pre-existing institutional conditions and institutional transplants in explaining the reported (adverse) institutional impact of aid. The paper provides an empirical investigation based on cross-country regressions on a sample of 68 developing countries over the period 1984-2003. The findings support the hypothesis that poorly received institutional transplants – and subsequent institutional crises – largely account for aid's adverse impacts on democratic institutions in developing countries. The analysis also offers evidence that aid does fuel state illegitimacy.

1. Introduction

A historical perspective reveals that institutional transplants from one place to another is a widespread phenomenon. As emphasised by Djankov, Glaeser, La Porta, Lopez-De-Silanes, and Shleifer (2003), transplantations can be held responsible for a large amount of the institutional variation among countries. For instance, the French legal system has been exported to Spain, Portugal, Holland, Latin America, West Africa and some parts of Asia, while the German legal system has been transplanted to Switzerland, Austria and Japan. Similarly, the legal system of the USSR was introduced to socialist countries (Djankov, Glaeser, La Porta, Lopez-De-Silanes, and Shleifer, 2003). These transfers occurred either on a voluntary basis or through political events or colonialism, as reported in the extensive research on the subject (Berkowitz, Pistor, and Richard, 2003; Mamadouh, De Jong, and Lalenis, 2003; Rodrik, 2004; Englebert, 2000a; Beaulier, 2008).

A number of scholars have discussed the fact that – importantly – the transfer of institutions determines the outcomes of institutional and economic development for host countries. Acemoglu, Johnson, and Robinson (2001) provided an explanation of comparative development, shedding light on the impact of colonial experiences on early and current institutions. According to these authors, the types of institutions that were established by Europeans in the colonies determined the quality of post-colonial institutions, which then persisted over time.

Other scholars have discussed the role of history and institutional transplantation in shaping the modern institutions of developing countries. Englebert (2000a) explored the hypothesis that the extent to which colonial institutions have clashed with indigenous ones can explain, to a significant extent, the current state of institutions in developing countries. This rationale is also supported by Dia (1996), who argues that the crisis caused by the weak institutional capacity of developing countries is essentially due to a structural and functional disconnection between the informal indigenous institutions embedded in the local context and the formal institutions that have been borrowed from abroad.

[1] African Development Bank. The views expressed in this paper are those of the author and do not necessarily reflect the views or policies of the African Development Bank.

Early debates on the effectiveness of aid have raised the issue of the potentially damaging effects of aid on recipient countries' institutions. Some argue that aid engenders institutional crises in recipient countries by fuelling corruption and weakening democratic accountability and governance. Several empirical studies have indeed shown that dependence on aid can undermine institutional quality by weakening accountability, encouraging rent-seeking and corruption, fomenting conflict over the control of aid funds, siphoning off scarce talent from the bureaucracy and alleviating the pressure to reform inefficient policies and institutions (Hoffman, 2003; Knack, 2001; Svensson, 2000; Alesina and Weder, 2002; Brautigam and Knack, 2004). The purpose of this paper is to explore the hypothesis that the failure of institutional transplants (that is, the extent to which imported colonial institutions have clashed with pre-existing indigenous institutions) accounts for the adverse institutional impacts of aid in recipient countries. The theoretical underpinning of such a hypothesis is that countries where indigenous institutions did not successfully mesh with colonial institutions ended up with weak and long-lasting post-colonial institutions, which then formed the foundation for weak institutional frameworks, translating into reported adverse impacts of aid on institution-building.

We provide an empirical investigation of our main hypothesis with regard to the causal impact of aid and also examine how this crisis has affected the quality of institutions, proxied by an index of democratic accountability. We rely on the work of Englebert (2000b) and Dia (1996) to construct a proxy of unsuccessful institutional transplants, which create "state political illegitimacy", assuming that a structural disconnection between indigenous norms and modern transplanted practices and institutions creates a crisis of legitimacy for state institutions.

The remainder of this paper proceeds as follows: section 2 provides a discussion on the feasibility and appropriateness of institutional transplants; section 3 examines the implications for the aid effectiveness debate. Section 4 provides the empirical analysis, and section 5 concludes.

2. Do institutional transplants work?

Countries have often modelled their institutions on experiences from foreign countries, either on a voluntary base or under pressure or influence. For a long time, countries have borrowed political institutions, business practices and policies from each other (Mamadouh, De Jong, and Lalenis, 2003), through channels mainly including official assistance for development and colonial experiences. Yet, concerns have been raised over the effectiveness of institutional transplants; that is, whether the transplanted institutions are appropriate to the recipient country's local context and whether they meet a particular need. This issue has been discussed in the work of Desai and Snavely (2007), which focused on the transfer of institutional norms and structures from the US to some formerly communist European countries and to Russia through institutional and professional capacity-building projects. The authors emphasised that institutional effectiveness is highly context-dependent, and for that reason, institutional settings and models that have proven to be effective in one country may end up failing in other countries. Rodrik (2006) also discusses this point using the experience of the implementation of the Washington Consensus precepts[2], which failed in the 1990s. The

[2] The term 'Washington Consensus' summarizes the ten economic prescriptions offered by the Bretton Woods institutions to revitalize the developing economies affected by the debt crisis in the 1990s. Those recommendations advocated fiscal

Washington consensus was marked by massive support for institutional transplants based on Western countries' models and using a 'one-size-fits-all' approach. More specifically, the process relied on Anglo-American institutional blueprints such as political democracy, an independent judiciary, a professional bureaucracy, a small public enterprise sector, a developed stock market, a financial regulation regime that encourages prudence and stability, labour market institutions that guarantee flexibility, etc. (Ha-Joon, 2006). These transfers turned out to be poorly matched with the local contexts and not to deliver the expected economic outcomes. On a different note, Jacoby (2000) emphasised the importance of legitimacy for institutional transplantation processes, indicating that a transplanted institution needs to have political legitimacy in the host country in order to function well; this legitimacy is facilitated when the transplanted institution fits well with the local norms and the pre-existing institutional settings. Therefore, successful formal institutions in Western countries may not work well when transplanted into developing countries, as they could be designed to function in conjunction with a particular set of informal institutions (Ha-Joon, 2006). Some authors have also discussed the point that transplants are made problematic because institutions, which by definition have the potential to evolve quickly and suddenly, are introduced alongside institutions that change slowly (for example, norms, beliefs and values), creating problems of coherence between these different institutions (Roland, 2004).

3. Implications for the reported institutional impacts of aid

This study aims at investigating the extent to which the failure of institutional transplants accounts for the adverse effects of aid on institutions and, more specifically, on democratic accountability as reported in the literature. This section offers a brief discussion of the theoretical arguments and establishes a parallel with the so-called "failure of institutional Transplants" hypothesis, while also focusing on democratic accountability. A substantial part of the aid effectiveness literature has blamed aid for weakening government accountability, which is referred to as the obligations of a government to ensure quality institutions in return for tax resources mobilised from citizens. According to Brautigam (1992), when they receive high levels of aid, recipient governments are made more accountable to donors and less to taxpayers, as aid reduces their dependence on tax revenues. Indeed, large and sustained aid flows are believed to reshape the relationship between government elites and local citizens by weakening the incentive of the former to maintain legitimacy and build effective institutions, given that they rely less on revenues collected from their own population (Moss, Pettersson, and Van De Walle, 2006). Foreign aid, which can contribute up to 50 percent of some African governments' budgets, could therefore be blamed for providing these governments with an independent source of "unearned" revenue, without having to undertake reforms that could lead to a transparent and accountable government (Mkandawire, 2010). According to Dia (1996), the ongoing institutional crisis in developing countries is caused by the structural disconnection between the formal institutions that have been transplanted from modern Western models and the informal institutions rooted in the local culture of recipient countries. Dia (1996)'s core argument is that the structural disconnection between indigenous and modern practices and institutions – the latter having been replicated from "successful" modern western models – has created a crisis of legitimacy and accountability, affecting governance and the efficiency of public administration. This suggests that the failure of institutional transplants could potentially explain the weak government accountability that persists in most developing countries and for which aid dependence has been blamed.

discipline, the reorientation of public spending, tax reforms, trade and market liberalization, the stabilization of exchange rates, the improvement of competitiveness, the removal of trade barriers, the liberalization of foreign direct investments, the massive privatization of public enterprises, deregulation, and the safeguarding of property rights.

4. Empirical evidence

4.1. The data

We hypothesise that aid has an adverse impact on institutions, which no longer holds when our proxy for the institutional crisis (resulting from unsuccessful institutional transplants) is taken into account, demonstrating that this proxy later accounts for the reported negative impact of aid. We rely on the International Country Risk Guide (ICRG) index of democratic accountability, which we use as a proxy for institutional quality. The ICRG data cover a wide range of countries as well as a long time period. The ICRG's democratic accountability index assesses how responsive a government is to its people, based on the idea that the less responsive it is, the more likely this government will fall – peacefully in a democratic society but possibly violently in a non-democratic one. The index ranges positively on a scale from 0 to 6, with higher scores indicating better accountability. Aid dependency is computed by scaling the country's receipt of Official Development Assistance (ODA) by its Gross Domestic Product (GDP) and by its Gross National Income (GNI). Our dataset includes 68 developing countries over the period 1984-2003. We select the set of controls for our regression models based on the literature on the determinants of institutional quality. Ethnolinguistic fractionalisation (the likelihood that two citizens belong to two different ethnic or linguistic groups) is assumed to be a determinant of democratic accountability, as ruling bureaucrats may favour members of their own group (Mauro, 1995). Countries with a higher degree of fractionalisation should therefore experience a lower degree of democratic accountability. We also included, as a covariate, the level of income (GDP per capita, assuming that a higher income level should lead to greater accountability by being accompanied by a higher demand for efficient institutions. We also control for British legal origin (proxied by a dummy variable indicating whether the country is a former British colony). We control for the share of primary product exports in the gross national product, measured as of 1980 to account for the fact that countries with a long track record of such exports may experience a different institutional pathway. Other controls included in the model include *landlock* (a dummy indicating whether the country is landlocked) and *disteq*, which measures the country's distance from the equator. Following the work of Barro (1999), we also included in the set of controls a proxy for urbanisation, as a large urban population should put more pressure on governments to ensure better political accountability.

4.2. State illegitimacy as a proxy for historical institutional disconnection

We relied on the approach developed by Englebert (2000b) to construct our proxy of the institutional crisis resulting from unsuccessful institutional transplants (that is, the disconnection between transplanted and indigenous institutions. We also focus on the historical channel of institutional transfer, namely colonial experience; this approach follows Dia (1996), who assumes that the disconnection between the central government and civil society existed before the country's independence, when governments were strongly centralised and lacked accountability to civil society, transparency and strong legislative checks and balances. This structural disconnection between indigenous and modern practices and institutions created a state legitimacy and accountability crisis, the rationale being that institutions that evolve endogenously to a society as a result of domestic social relations are more likely to be historically legitimate from a societal point of view (Englebert, 2000b). The historical continuity of state institutions and the homogeneity of the mix of pre-colonial and post-colonial political institutions are, therefore, assumed to be crucial for legitimacy. We construct our "state illegitimacy" dummy (summarised in Table 1) based on the following process[3]: for each country in our sample, a set of five dichotomous steps are defined; then, for each of these steps, the country is tested for illegitimacy by being issued a score of 0 or 1. If, at any step, a country scores 1, the process ends and the country is given the status of 'legitimate'. If not, the process proceeds to the next stage. If a country does not score 1 by the final step (5), it is considered 'illegitimate'. More specifically, the first step assesses whether the country experienced colonisation and allows us to exclusively focus on history as a channel of institutional transplants, while the remaining steps address the impact of (i) settlement, (ii) political independence and (iii) post-colonial time on the pre-existing local norms. Following to Englebert (2000b), we assume no conflict between pre- and post-colonial institutions in cases where no human settlement took place before colonisation. State illegitimacy is expected to be associated with a lower quality of institutions. Indeed, the lack of state legitimacy, which was inherited during the post-colonial era, is a source of political contestation and regime instability, leading elites to implement neo-patrimonial rather than developmental policies, ultimately weakening the quality of governance (Englebert, 2000b). After following the process described above, we find 28 states characterised as "legitimate" and 40 as "illegitimate" at the end of their colonial period[4]. Because we hypothesised that aid does have a direct effect on legitimacy, we first ran a simple bivariate probit regression of aid dependency on state legitimacy. Table 2 summarises the results, which show that an increase in aid levels tends to be associated with a lower likelihood of the recipient country having an illegitimate state (column 1). In column (2), we address the potential endogeneity of the aid variable by running Instrumental-variable-probit estimations. We use two instruments to identify the exogenous variations in aid: the conventional deficit (as a share of GDP) of the five main donors weighted by the geographical distance from the recipient country and the total outstanding debt of the donor (GDP ratios) of the five main donors weighted by the geographical distance from the recipient country. More specifically, for each recipient country and each year, we first identify the five main aid donors. Then, we weight the total amount of aid by the geographical proximity (proxied by the inverse of bilateral distance) of the recipient country to Washington (for Canada and the United States), Brussels (for European donor countries), Tokyo (for Japan) and Canberra (for Australia and New Zealand). Indeed, as explained by Tavares (2003), the rationale for this is that when a donor country increases its total aid outflows, recipient countries that are closer to that donor experience an exogenous increase in aid inflows. Finally, we include the following as additional controls[5] in the model: income, legal origin, ethnic fractionalisation, geography (distance from the equator), and a proxy of institutional quality, which is the constraint on executive power. The Amemiya-Lee-Newey minimum chi- square statistic and the associated p-value confirm that the null hypothesis of valid instruments cannot be rejected (p=0.15). The instruments seem not to have a direct effect on state legitimacy, with their only effect on this variable being via their effect on aid. In summary, these findings suggest that aid has a direct effect on state illegitimacy as measured by our dummy variable.

4.3. Some stylised facts

Table 3 reports the results of comparisons of the institutional and economic average performances of countries identified as having legitimate states with those of the countries

[3] Please refer to Englebert (2000b) for more details.
[4] Please see Appendix B.
[5] Please refer to appendix A for the detailed descriptions.

classified as having illegitimate states. A look at these statistics reveals that countries with legitimate states tend to perform better than countries with illegitimate states with regard to a range of institutional variables, including democratic accountability, government corruption, rule of law, bureaucratic quality, and democracy. Illegitimate countries also tend to have slightly lower levels of income. Interestingly, the analysis also reveals that illegitimate states tend to receive significantly more aid. Table 3 shows that the illegitimate States in our sample are, on average, three times more dependent on aid. While it is conceivable that this may simply be because state illegitimacy is correlated with poor institutional quality and low levels of income, aid may also be feeding illegitimacy directly through the inadequate transfer of institutions and norms, as previously discussed.

4.4. Model and identification strategy

We study the impact of aid and state illegitimacy on democratic accountability using the following econometric model:

$$\mathrm{Accountability}_i = \alpha + \begin{Bmatrix} \beta(\mathrm{Aid})_i \\ \gamma(\mathrm{State\ illegitimacy})_i \\ \delta(\mathrm{Controls})_i \end{Bmatrix} + \mu_i \qquad (1)$$

The regression coefficients α, γ and δ quantify, respectively, the impact of aid dependence (aid/GDP ratio), state illegitimacy (computed as explained above) and a set of control variables including the income level (log), the legal origin, the ethnolinguistic fractionalisation, the size of the urban population (log), geography (proxied by the country's distance from the equator and by a dummy variable indicating whether a country is landlocked or not) and the share of exports of primary products in the gross national product. We use robust estimates of standard errors based on the Huber-White sandwich. Given the focus on long-term impacts (as we assume that institutions have been relatively persistent since the end of the colonial period), we consider the average values of all of our variables over the period of estimation (1984-2003), the 'between-groups' variation in democratic accountability being more relevant than the 'within-groups' variation.

We address the potential endogeneity of aid with instrumental variables techniques. Indeed, aid may be influenced by the quality of institutions, which has been identified as crucial to the effectiveness of aid and also as a selectivity factor. It should also be noted that countries with weak institutions tend to attract higher aid inflows, not because aid conditionalities are not effective but simply because low-quality institutions are correlated with low levels of development and income, which are targeted by donors. To address this potential reverse causality bias between aid and democratic accountability, we rely on the same set of instrumental variables discussed in section 5.2 above: the main donors' conventional deficit and total outstanding debt, weighted by the reverse bilateral distance from the donor. The rationale of using these instruments is based on the fact that the better donor countries' finances are, the more willing they are to provide aid (Faini, 2006; Brun, Chambas, and Guerineau, 2008). Yet, some concerns may be raised over a possible correlation between our state legitimacy variable and democratic accountability as measured by the ICRG index. State illegitimacy and political accountability may indeed be expected to be mutually reinforcing. However, evidence tends to challenge this, especially for developing countries. A country may indeed be categorised as having a legitimate state according to the approach proposed by Englebert (2000b), yet it may not perform very well with regard to democratic accountability (Egypt). Similarly, a country with an illegitimate state may perform relatively well in terms of democratic accountability (Ghana). We rule this out by estimating the impact of democratic accountability on State illegitimacy using a probit model; the findings, which are summarised in Table 7, show that democratic accountability does not significantly affect the regression.

4.5. Findings and discussion

The regression results reported in Table 4 support our research hypothesis. Unsurprisingly, results presented in column (1) show that higher levels of aid dependency are significantly and negatively associated with weak democratic accountability. Using ordinary least squares regressions, we also find that being a country with an illegitimate state significantly reduces the level of democratic accountability by 0.50%. Interestingly, the results presented in column 3 indicate that when controlling for state legitimacy, aid no longer has a significant effect on democratic accountability. This specific finding supports the point that state illegitimacy – importantly – explains institutional quality (which we proxy by democratic accountability) and tends to eclipse the impact of aid. This also suggests that the reported adverse impacts of aid on institutions may operate by transferring norms and practices and feeding the institutional disconnection crisis. The estimates summarised in column (4) include the full set of controls. State illegitimacy continues to adversely impact democratic accountability, with aid continuing to remain neutral. State illegitimacy negatively and significantly enters the regression, with having an "illegitimate" state status translating into a 0.50% reduction in the level of democratic accountability. Income, ethnolinguistic fractionalisation, and distance to the equator never approach statistical significance, while legal origin, urbanisation and exports of primary products emerge as the most powerful predictors of democratic accountability. Surprisingly, British legal origin is found to negatively and significantly impact democratic accountability. While this may sound counter-intuitive (as most of the empirical literature on institutional development finds that former British colonies tend to perform better than countries with a different colonial experience), the fact that democratic accountability does not proxy institutional quality as a whole alleviates these concerns. With the exception of column (2), all specifications are based on two-stage least squares (2SLS) to address the likely endogeneity of our aid variable, which may arise from a reverse causation with democratic accountability. Overidentification tests performed for the instrumental variables for aid confirm the quality of the instruments, as the p-values associated with the Hansen statistic are well above 0.10 across all specifications. Table 5 further validates this with the first-stage regression statistics, showing that the two instrumental variables meet expectations in terms of both sign and significance.

Finally, we went a step further in the regressions and checked the robustness of our main results relative to the use of an alternative measure of aid dependency and to the exclusion of outliers (for aid dependency). Table 6 summarises the results, which confirm the previous findings. Columns (1) and (2) replicate specifications (1) and (4) from table 4, respectively, but using the aid/GNI ratio instead of the aid/GDP ratio. Columns (3) and (4) present a similar replication, but exclude Liberia, Mozambique and Guinea-Bissau, which were identified as outliers using the approach developed by Hadi (1994, 1992).

5. Concluding remarks and policy implications

This study discusses the role of institutional transplants in explaining the reported adverse impact of aid on institutions in developing countries. The study hypothesises that unsuccessful institutional transplants are at the root of an institutional crisis in developing countries, a crisis that accounts for aid's adverse impact on institutions in recipient countries. The findings of the research have three main policy implications. First, the research suggests that local contexts matter for institutional transplants and should definitely be taken into consideration. Second, as suggested by Berkowitz, Pistor, and Richard (2003), institutional reforms (particularly those borrowed from other countries) need to be domestic demand-driven in order to ensure a good fit with these pre-existing local conditions and ensure legitimacy. Third, Aid, which has also played a role in transferring institutions, may be given a role in correcting the long-lasting impacts of history through appropriately designed conditionalities and technical assistance programs, so that the potential uniqueness of contexts and the local constraints and opportunities are carefully managed.

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Appendix A: Data definition and sources

Variable	Definition	Source
Official development assistance (ODA)	Total net disbursements including grants and loans with a grant element of more than 25%	OECD/DAC
Aid%GDP	ODA measured as a percentage of GDP	Author's calculation from OECD/DAC aid statistics and World Development Indicators 2008
APD%GNI	Aid (% of gross capital formation). Aid includes both official development assistance (ODA) and official aid. Ratios are computed using values in U.S. dollars converted at official exchange rates.	OECD/DAC statistics and World Bank estimates
Illegitimacy	State Illegitimacy. Dummy variable taking the value 1 for countries classified as having an "illegitimate" state and 0 otherwise. See section 5.2 for computation details	Englebert (2000a)
Dem. Account	Democratic accountability; measure of how responsive is a government to its people. Scaled from 0 to 6, higher values denoting greater accountability.	International Country Risk Guide
Corruption	Indicator of corruption as reported by international consultants. Scaled from 0 to 6, higher values denoting less corruption	International Country Risk Guide
Law & Order	Indicator of corruption as reported by international consultants. Scaled from 0 to 6, higher values denoting less corruption	International Country Risk Guide
Bur. Qual.	Indicator of corruption as reported by international consultants. Scaled from 0 to 6, higher values denoting less corruption	International Country Risk Guide
Freed. House ind.	Democracy index, ranged from 1 (best) to 7 (worse)	Freedom House
Polity index	Combined score of democracy and autocracy, ranged from -10 (full autocracy) to +10 (full democracy)	Polity IV project
Income (log)	Natural logarithm of gross domestic product (GDP) divided by midyear population (constant 2000 US$)	Word Development Indicators 2008
Legal origin	Origin of country legal system. Dummy variable taking the value 1 for former British colonies and 0 otherwise.	Global Development Network Growth Database
Eth. Frac.	The probability that two random selected individuals within the country belong to the same religious and ethnic group	Atlas Narodov Mira
Urban population (log)	Natural logarithm of urban population (% of total). Urban population refers to people living in urban areas as defined by national statistical offices	World Development Indicators, 2008
Disteq	Distance from Equator of capital city measured as abs(Latitude)/90	Rodrik (2004)
Exp80	Share of primary products in the Gross National Product in 1980	Global Development Network Growth Database
Landlock	Dummy variable indicating if the country is landlocked (1) or not (0)	Global Development Network Growth Database
Debt	Oustanding debt of the five main donors weighted by the geographical distance	Brun, Chambas, and Guerineau (2008). This

		refers to the data used in Brun, Chambas, and Guerineau (2008) and kindly shared with us by the authors.
Deficit	Conventional deficit of the five main donors weighted by the geographical distance	Brun, Chambas, and Guerineau (2008). This refers to the data used in Brun, Chambas, and Guerineau (2008) and kindly shared with us by the authors.

Appendix B: Sample countries

1. Angola*	16. Ecuador*	31. Jamaica	46. Oman	61. Turkey
2. Argentina	17. Egypt	32. Jordan*	47. Pakistan	62. Tanzania*
3. Burkina Faso*	18. Gabon*	33. Kenya*	48. Panama	63. Uganda*
4. Bolivia*	19. Ghana*	34. Liberia*	49. Peru*	64. Uruguay
5. Brazil	20. Guinea*	35. Sri Lanka*	50. Philippines*	65. Venezuela
6. Botswana	21. Gambia*	36. Morocco	51. Papua New Guinea*	66. Vietnam
7. Chile	22. Guinea-Bissau*	37. Madagascar*	52. Paraguay	67. Zambia*
8. Cote d'Ivoire*	23. Guatemala*	38. Mexico	53. Sudan*	68. Zimbabwe*
9. Cameroon*	24. Guyana	39. Mali*	54. Senegal*	
10. Congo (Rep.)*	25. Honduras	40. Mozambique*	55. Sierra Leone*	
11. Colombia	26. Haiti	41. Malawi*	56. El Salvador	
12. Costa Rica	27. Indonesia*	42. Malaysia*	57. Syria*	
13. Cuba	28. India*	43. Niger*	58. Togo*	
14. Dominican Rep.	29. Iran	44. Nigeria*	59. Thailand	
15. Algeria*	30. Iraq*	45. Nicaragua	60. Tunisia	

*Countries classified as having an Illegitimate State

Appendix C: Tables

Table 1: Constructing the State illegitimacy dummy

Steps		Legitimate State (0)	Illegitimate State (1)
(1)	Was the country colonised in modern times?	No	Yes (go to step 2)
(2)	When it reached independence, did the country recover its previous sovereignty, identity or effective existence?	Yes	No (go to step 3)
(3)	If the country was created by colonialism, was there a human settlement pre-dating colonisation?	No	Yes (go to step 4)
(4)	Did the colonisers (and/or their imported slaves) reduce the pre-existing societies to numerical insignificance (or assimilate them) and become citizens of the new country?	Yes	No (go to step 5)
(5)	Does the post-colonial state commit severe violence against pre-existing political institutions?	No	Yes

Source: Adapted from Englebert (2000b)

Table 2: Aid dependency and state illegitimacy (probit cross-sectional regressions, 1984-2003).

Variable	Coefficients (Std. err.)	
	(1)	(2)
	Probit	IV Probit (two-step)
Aid%GDP	0.09(b) (2.68)	2.14(b) (1.96)
Income		0.004 (.00)
Legal origin		−39.40(b) (-5.95)
Eth. fract.		-0.83 (-0.01)
Disteq		1.49 (0.01)
Exec. const.		25.5 (0.01)
Intercept	-0.28 (-1.28)	−108.20(b) (-2.88)
Obs	67	39
Pseudo R^2	0.15	-
ALN min. chi-sq stat.*	-	6.72
p-value	-	0.15

Notes: z-statistics reported in parentheses. (a): denotes significance at 1%; (b): denotes significance at 5%; (c): denotes significance at10%.*Amemiya-Lee-Newey min. chi-sq stat.

Table 3: Selected institutional and economic performance indicators: legitimate and illegitimate states compared

Variable	IIlegitimate (n) [a]	Legitimate (n) [b]	P-value (a<b)
Dem. Account	2.85 (40)	3.36 (28)	0.0131
Corruption	2.60 (40)	2.76 (28)	0.1757
Law and Order	2.66 (40)	3.22 (28)	0.0031
Bur. Qual.	1.47 (40)	1.80 (28)	0.0330
Polity index	-.94 (40)	2.76 (28)	0.0032
Income (log)	22.57 (40)	23.93 (27)	0.0005
Aid%GDP*	10.32 (40)	3.20 (27)	0.0008

Notes: P-values refer to the probability of the observed difference;
*P-values referring to the probability of (a>b)

Table 4: State illegitimacy, aid and democratic accountability (OLS and 2SLS cross-sectional regressions, 1984-2003).

Dependent variable: Democratic accountability				
	(1)	(2)	(3)	(4)
Variable*	2SLS	OLS	2SLS	2SLS
Aid (%GDP)	−0.05(c) (0.03)		0.03 (0.03)	0.05 (0.04)
Illegitimacy		−0.51(a) (0.22)	−0.76(a) (0.31)	−0.80(a) (0.34)
Income (log)				0.15 (0.14)
Legal origin				−0.64(a) (0.28)
Eth. fract.				0.01 (0.01)
Urban pop. (log)				0.76(b) (0.37)
Disteq				-0.01 (0.01)
Exp80				−1.65(b) (0.85)
Landlock				0.59(c) (0.32)
Intercept				0.59(c) (0.32)
R^2	0.93	0.07	0.93	0.95
Obs	43	68	43	39
Overidentification test for aid's instruments				
Hansen J Stat.(p-value)	9.27 (0.23)	-	4.25 (0.37)	3.11 (0.53)

Notes: *Heteroskedasticity-Robust standard errors in brackets. (a): denotes significance at 1%; (b): denotes significance at 5%; (c): denotes significance at10%.

Table 5: First-stage regressions (refer to table 4)

Variable*	Coefficient (Std. err.)
Illegitimacy	2.06 (2.01)
Income (log)	−3.16(a) (0.62)
Legal origin	-0.69 (2.31)
Eth. fract.	-0.02 (0.05)
Urban pop. (log)	-3.61 (3.01)
Disteq	0.07 (0.09)
Exp80	4.33 (6.77)
Landlock	-1.76 (2.54)
Debt	−0.10(a) (0.03)
Deficit	−19186.60(c) (10701.62)
Obs	39
R^2	76.40

Notes: *Heteroskedasticity-Robust standard errors in brackets. (a): denotes significance at 1%; (b): denotes significance at 5%; (c): denotes significance at10%.

Table 6: Robustness checks (IV cross-sectional regressions, 1983-2004)

	Dependant variable: Democratic accountability			
	Aid(%GNI)		Excl. outliers	
Variable*	2SLS	2SLS	2SLS	2SLS
Aid(%GDP)	0.03 (0.04)	0.06 (0.05)	0.04 (0.04)	0.07 (0.05)
IIlegitimacy	−0.76(a) (0.32)	−0.75(a) (0.31)	−0.71(a) (0.31)	−0.73(a) (0.30)
Income (log)		0.18 (0.19)		0.19 (0.19)
Legal origin		−0.56(a) (0.26)		−0.48(c) (0.27)
Eth. fract.		0.01 (0.01)		0.01 (0.01)
Urban pop. (log)		0.92(a) (0.42)		1.06(a) (0.44)
Disteq		-0.01 (0.01)		-0.01 (0.01)
Exp80		−1.52(b) (0.72)		−1.27(b) (0.65)
Landlock		0.61(c) (0.32)		0.59(c) (0.32)
Intercept	2.66(a) (0.42)	-5.22 (6.08)	2.65(a) (0.46)	-6.14 (6.13)
R^2	0.93	0.96	0.93	0.96
Obs	43	39	41	38
Overidentification test for aid's instruments				
Hansen J Stat. (p-val)	3.93 (0.41)	2.40 (0.49)	3.38 (0.33)	2.18 (0.53)

Notes: * Heteroskedasticity-Robust standard errors in brackets. (a): denotes significance at 1%; (b): denotes significance at 5%; (c): denotes significance at10%.

Table 7: Impact of democratic accountability of State illegitimacy (IV probit cross-sectional regressions, 1984-2003).

	Dependent variable: State illegitimacy	
	Aid(%GNI)	Excl. outliers
Variable*	2SLS	2SLS
Aid(%GDP)	6.29(b) (2.02)	6.81(c) (1.65)
Dem. account.	-38.11 (-0.01)	-40.57 (-0.01)
Income (log)	16.17 (0.02)	3.17 (0.00)
Legal origin	-9.90 (0.00)	-48.69 (-0.01)
Eth. fract.	1.29 (0.01)	2.72 (0.01)
Urban pop. (log)	60.43(a) (2.83)	144.53 (0.01)
Disteq	1.47 (0.00)	1.52 (0.00)
Exp80	-52.13 (-1.18)	-39.77 (-0.85)
Landlock	67.71 (0.01)	95.49 (0.01)
Intercept	-636.94 (-1.78)	-682.07 (-1.51)
Obs	39	38
Over-identification test for aid's instruments		
Hansen J Stat. (p-val)	4.92 (0.30)	4.80 (0.31)

Notes: *Heteroskedasticity-Robust z statistics in brackets. (a): denotes significance at 1%; (b): denotes significance at 5%; (c): denotes significance at10%.