Deepening Our Understanding of the Effects of US Foreign Assistance on Democracy Building
Final Report

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Executive Summary

Does USAID's democracy promotion program work? Although some prior studies have examined specific projects in individual countries, no prior effort has studied the question on a world-wide basis, and no prior study has encompassed the entire post Cold-War period. Vanderbilt University and the University of Pittsburgh have undertaken this research in a two-phased effort. In the first phase of that research, we found that the answer to that question was "yes." That is, on average, in the period 1990-2003, USAID's investments in democracy promotion produced significant increases in the national level of democracy as measured by Freedom House and Polity IV indicators. However, that study left many unanswered questions, and thus motivated this second phase of the research.

The current report presents the results of the second phase of the project "Cross-National Research on USAID's Democracy and Governance Programs." This analysis complements and extends the study "Effects of U.S. Foreign Assistance on Democracy Building: Results of a Cross-National Quantitative Study," presented in January, 2006, and a shortened version published in *World Politics.*[1] The present study expands the initial effort in many ways, covering more years and including more variables. In addition, the current study responds to numerous suggestions made by readers of the prior report and published article, including those from academic and policy settings, as well as to the comments made by the expert panel convened to review the results of this work and to the comments made by the audience present in the public presentation of the study at the Center for Strategic and International Affairs (CSIS) on December 7, 2007.

In the current effort, the data set is extended from 14 years to cover 15 years (1990-2004) and 165 countries, yielding 2,416 observations (country-years). This expansion proved to be particularly important because the prior data set ended in 2003, the year of the U.S. invasion of Iraq, and thus did not capture the effect of the surge in democracy spending in that country that occurred in 2004. The main measure of democracy used in the study continues to be the widely used Freedom House index, complemented by the Polity IV index. USAID DG (Democracy and Governance) assistance is measured as "actual appropriated" funds (explained more fully in the text), now in constant 2000 dollars rather than 1995 dollars as in the prior report, both as an aggregated total for each country, and also broken down into four main areas: 1) Elections and Political Process; 2) Rule of Law, 3) Civil Society; and 4) Governance. A fifth category covering regional and sub-regional programs was also included.

The revised study includes several new variables, including the percentage of funds invested in particular sub-sectors, the volatility of USAID DG investment, and the trend in USAID DG investment to determine if any of these variables influences the impact of DG spending on democracy. In the revised study, the impact of political culture is measured for the first time in order to determine if certain values can create a

[1] Steven E. Finkel, Anibal Pérez-Liñán and Mitchell A. Seligson, "The Effects of U.S. Foreign Assistance on Democracy Building, 1990-2003", *World Politics*, volume 59, (April, 2007) pp. 404-439.

more receptive environment for DG dollars. The study also includes other forms of foreign assistance added as controls variables, including total investment in other (non-DG) programs, non-USAID assistance (including funds from the National Endowment for Democracy, NED), total U.S. development assistance not channeled through USAID or NED, bilateral non-US foreign assistance and military assistance. Additionally, in order to better study the problem of "endogeneity" we developed a new measure of the degree to which a given country was a priority for the U.S. State Department. Finally, the revised study includes additional improved control variables, such as a new measure of democratic diffusion, and an expanded set of human rights measures.

Findings

Replication and Extensions

In the first part of this report we replicate the findings of the first phase using the extended dataset and provide some extensions to the initial study. The main analytical device of the study is to calculate the democracy trend for each of the countries in the world that could have received U.S. DG assistance during the period 1990-2004. Those trend lines become part of our "baseline model" to which we add the impact of many variables, especially DG assistance, to determine if that assistance had an impact once all other factors that we could reasonably expect to influence the process of democratization have been taken into account. For this second phase of the research, we began with the baseline model from the prior phase (i.e., a "hierarchical growth model" predicting the country's overall level and trends in democracy as measured by the Freedom House and Polity IV indicators), which included a two-year rolling average of USAID DG and non-DG appropriations and a series of other donor-related variables including funding from other OECD donors and the National Endowment for Democracy.

What we find in this second phase is that the results of the analysis for 1990-2004 remain consistent with our previous results, namely, that DG assistance increases national levels of democracy among recipient countries, but the impact is smaller than the one documented during Phase 1 of the project. Further analysis indicates that this difference is mostly explained by the unusually high level of USAID DG investment in Iraq in 2004 (the extreme levels of USAID DG assistance were not followed by an equivalent change in democracy scores). We propose and test alternative ways of dealing with this issue, each of which leads to the same conclusion, namely that once the "Iraq effect" is controlled for, democracy assistances has a positive effect on democracy at the same level as in the previous study. Specifically, the positive impact is such that $10 million of USAID DG funding would produce an increase of more than one-quarter of a point (.29 units) on the 13-point Freedom House democracy index in a given year— or about a five-fold increase in the amount of democratic change that the average country would be expected to achieve, *ceteris paribus*, in any given year.

In the previous study, we devoted much attention to the potential problem of the "endogeneity" of USAID DG assistance, that is, the possibilities that either unobserved variables were causing both USAID DG allocations and democratic outcomes, thus producing a spurious relationship between the two, or that USAID DG funding allocations were the direct *effect* (and not the cause) of the democratic development that a country had attained. The endogeneity of USAID DG assistance is perhaps the main

counter-hypothesis to the overall findings that we presented in the previous study, and the issue has been raised in nearly every public presentation in academic and non-academic settings that we have made on the project over the past several years. In addition, the expert panel from the previous study urged us to redouble our efforts to make certain that the results truly were robust in the face of this potential problem. In the revised study, with more extensive testing, the effect of USAID DG remained consistent in models addressing the problem of endogeneity in much more detail. These additional tests make it far more likely that the findings reported in the initial report and in this follow-up report are valid, and that USAID DG assistance does, indeed, produce a positive impact on democracy in recipient countries.

The revised study also probed more deeply the over-time impact of USAID DG assistance within the context of what are referred to as "lagged endogenous variable" models. The main finding of this section is that democracy assistance may take some time to "work." The immediate impact of USAID DG assistance on Freedom House is estimated to be .020, so that a one-million dollar rolling average investment changes Freedom House scores by .020 units. If the million dollar investment was continued in the next year, the *two-term cumulative multiplier* effect would be .033. Continuing these calculations for a persistent one-million dollar rolling average investment over three, four, and five years yields cumulative impacts of .041, .047, and .050 on the Freedom House scale. In the revised study, then, it is found that the long-run effects of a *permanent* one million dollar investment in USAID DG investment are quite a bit higher than in the baseline model, and that a permanent *ten* million dollar investment is predicted to have a cumulative (equilibrium) impact of over one-half of a point on the Freedom House scale.

Under What Conditions Does Democracy Assistance Work Best?

The second part of this report analyzes the conditions under which USAID DG assistance is more effective. We tested for differences in the impact of DG investment across geographic regions. The results suggest that the effect of democracy assistance is hard to distinguish across regions, although investment in Africa seems to be on average more productive. Our limited findings in this area underscored the relevance of collecting retrospective data on USAID DG investment for the 1980s, and the need to preserve the updated data series in the future.

Is democracy assistance more effective in some social contexts than in others? The answer is that the marginal effect of a million dollars invested in democracy assistance seems to be greater in those countries that are in greater need of external assistance (i.e., countries that are poorer, socially divided, and suffer from lower levels of human capital). Above a certain level of development (measured by the UNDP Human Development Index) the effect of USAID DG is statistically indistinguishable from zero. Given the estimates for this model, this threshold is approximately .71 (roughly the human development levels achieved by Brazil or Tuvalu). This finding again suggests that democracy assistance has a significant impact in those countries in greater socio-economic need.

Democracy assistance also makes a stronger contribution under conditions of state failure. Although this may be surprising, given the uncertain conditions that prevail in failed states, related analyses tend to support this insight.

Democracy assistance is less effective in countries that receive a large percentage of U.S. military assistance. This pattern, moreover, appears to explain fully the "Iraq Effect" described above. Because Iraq represented a foreign policy priority mainly for security reasons in 2004 (e.g., it received 23 percent of all security assistance in 2004, vis-à-vis 0.6 percent for the average eligible country) and it was also the largest recipient of democracy assistance (31 percent of all USAID DG funds spent in 2004), the overall impact of USAID DG was depressed when compared to a model including data for 1990-2003. In fact, once we allow the effect of USAID DG to be conditional on the U.S. security priority variable, the impact of the Iraq effect loses its statistical significance, indicating that it is in fact an extreme manifestation of a more general pattern by which democracy assistance is less powerful when the overall policy towards the recipient country is driven by security concerns.

Our analysis also found that democracy assistance is less effective when investment is unstable, that is when funds are allocated to the recipient country in a volatile way. The findings suggest that in about half of the recipient countries the level of uncertainty in democracy investment may be high enough to compromise its impact.

Analysis of Democracy Sub-Sectors

The third part of the report explores the impact of sub-sectoral investment in the areas of Elections, Rule of Law (and human rights in particular), Civil Society (and free media in particular), and Governance on different dimensions of democracy. The results show that, for the models estimated on identical or virtually identical sub- or sub-sub-sectoral outcomes in the previous study–civil society, free media, and human rights—the addition of the 2004 data (and the Iraq 2004 dummy variable) leads to findings that are very similar to our original results. That is to say, USAID civil society and media assistance have a significant positive impact directly on their respective sectors, and USAID human rights assistance has a significant negative impact on the human rights outcome. Using new outcome indicators, the current study finds that elections spending has significant positive impact directly on the subsectoral outcome related to Elections, with some additional impact of the governance spending. Governance spending, in addition, impacts the Governance dimension, though the effect is relatively small in substantive magnitude.

We collected additional data to extend our analysis of the Human Rights sub-sub-sector. The purpose of the extended analysis was to explore the anomalous and troubling negative impact of USAID DG Human Rights sub-sectoral assistance that had been found in our first study. Our new data allowed us to investigate a number of alternative hypotheses that might have accounted for this relationship. These hypotheses provided new insights into institutional and behavioral influences on human rights abuse. Unfortunately, they did not significantly ameliorate the negative impact of human rights assistance on respect for human integrity.

The Role of Political Culture

The fourth part of the report analyzes the role of political culture in mediating the impact of democracy assistance. The addition of political culture variables, operationalized in terms of multivariate indicators of Institutional Trust, Personal Satisfaction, and Social Engagement, finds that culture conditions the impact of USAID DG. Specifically, culture exerts a *positive facilitative* effect for USAID DG assistance; as a country's political culture is more democratic, the impact of U.S. democracy assistance has stronger effects on the country's Freedom House score.

What appears to matter the most for facilitating USAID DG assistance is not the level of institutional trust in a country, nor levels of optimism or life satisfaction, but rather the degree to which the country's citizens are trusting of one another, are psychologically engaged with politics, and are less strongly nationalistic in their political orientations. At these highest levels of Social Engagement, the impact of the USAID DG effect is three times its level in the baseline model for all eligible countries. Two culture dimensions, Personal Satisfaction and Social Engagement, have a significant impact on the slope of countries' democratic growth trajectories as well. That is, countries with higher levels on these dimensions increase more rapidly on the Freedom House index, irrespective of the impact of USAID DG assistance. In this regard, culture appears to play a generally facilitative role in the development of democracy, as well as providing a more receptive environment for USAID DG assistance in particular to succeed.

The data on political culture, however, were available for only about half of the countries in the study, thus limiting the generalizability of this finding. Moreover, since the availability of culture data limit the study to providing a single fixed value for each country over the 15-year time period, it is not possible to determine in this study if early investments of USAID DG assistance helped to improve the culture, which then made democracy assistance more effective generally.

We conclude by noting that the evidence supporting a positive impact of USAID on democracy is clear. This does not mean, of course, that in the future this will continue to be the case. Shifts in where, when and how USAID spends its democracy assistance, and shifting trends in democracy world-wide could make the assistance more or less effective in the future. Yet, we feel that the 14 years of data we have analyzed here provide a robust basis for drawing the conclusion that USAID DG assistance in the post-Cold War period has worked.

Introduction

Under what conditions does democracy and governance (DG) assistance have its greatest impact? Are some investment strategies more effective than others? This study constitutes the second phase of the project "Cross-National Research on USAID's Democracy and Governance Programs," and attempts to answer those questions . The first phase of the study was conducted by our team between January and November of 2005 under a USAID-funded subgrant from the Association Liaison Office (ALO). The initial study analyzed the impact of USAID's democracy and governance programs using a world-wide sample of 165 countries between 1990 and 2003 (Finkel, Pérez-Liñán, and Seligson 2006; 2007). The results of the analysis at the time indicated that:

1. USAID Democracy and Governance appropriations have a modest but significant positive impact on democracy. This effect occurs over and above the expected democratization trend in each country, and after controlling for a host of time-varying and country-level economic, social and political attributes.
2. Using the Freedom House index as a measure of democracy, one million dollars (measured in constant 1995 dollars, or the equivalent of 1.2 million dollars in 2004) would produce an increase in democracy 50 percent greater than the improvement in democracy otherwise expected by the average country in the sample during any given year.
3. The study uncovered lagged effects of USAID DG appropriations, suggesting that programs may take several years to generate full outcomes, and that the effects of USAID DG assistance may be cumulative. (However, long-term effects were not captured by the model. The estimation assumed that whenever USAID DG funds were withdrawn, the country's level of democracy would return to the expected democratic trajectory within a year.)
4. The research also disaggregated USAID DG assistance into four main sub-sectors: Elections and Political Processes, Rule of Law, Civil Society, and Governance. Certain models disaggregated the investment portfolio even further, exploring the impact of the sub-sub-sectors for Human Rights (part of Rule of Law) and Mass Media (part of Civil Society). The analysis suggested that, just as USAID DG assistance in general matters for overall levels of democratization, sub-sectoral and sub-sub-sectoral appropriations tend to be effective on the dimensions of democracy for which they are targeted. Only two exceptions seemed to defy this pattern:
    a. In our tests, Governance appropriations appeared to have no impact, yet we lacked appropriate measures of democratic performance in the governance area.
    b. In contrast to the other sub-sectors, investment in human rights programs was correlated with a decline in human rights in recipient countries. This result does not seem to be just the result of human rights assistance flowing to problematic countries. We explore some of the possible explanations for this finding below.

The presentation of the results at the Woodrow Wilson Center in October of 2005 elicited new questions from the Expert Panel, the audience, and the USAID team. The

second phase of the study is intended to address some of those issues. The main goals of this study are:

- To update the data set in order to include new indicators and longer time-series.
- To address some remaining questions about the initial results, in particular questions about endogeneity (to what extent can the positive effects be explained by USAID DG funds flowing only to the promising cases?) and about the long-term impact of USAID DG investment.
- To analyze the conditions under which democracy assistance has stronger effects, in particular the impact of different social, economic, and political characteristics of the recipient countries; as well as of different funding strategies adopted by USAID.
- To incorporate political culture factors as control variables that might condition the impact of assistance.
- To explore further the negative impact of US assistance on human rights observed in the first study.

As in the first phase of the project, an expert panel was convened that helped guide the research at critical junctures. The team consisted of: Professor Michael Coppedge, Professor of Political Science, University of Notre Dame; Professor Mark Hallerberg, Professor of Public Management and Political Economy, Hertie School of Governance (Berlin); and Professor Pamela Paxton, Associate Professor of Sociology, Department of Sociology, Ohio State University. Without their invaluable advice, this study would have suffered many flaws. Any flaws in the study are, of course, the fault of the authors and not the review panel or those at USAID.

Data and Measurement

The dataset for this project comprises 195 countries for the period 1990-2004. Thirty countries have been excluded from the analysis because they are advanced industrial democracies (and therefore *de facto* ineligible for foreign assistance), thus the effective sample is constituted by 165 countries over a period of 15 years, yielding a total of 2,416 observations.[2] Appendix 1 presents the list of countries included in the study and the total amount of USAID DG assistance that each country received over the period. Technical issues about the definition of the population of independent states, as well as the treatment of cases of secession and re-unification were addressed according to the principles established during the first phase of the study (Finkel, Pérez-Liñán, and Seligson 2006, 15-16).

[2] All countries are observed between 1990 and 2004, with the exception of twenty-four countries that, as a result of geopolitical shifts, enter the sample after 1990 (Armenia, Azerbaijan, Bosnia-Herzegovina, Belarus, Estonia, Georgia, Croatia, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Moldova, Macedonia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan in 1991; the Czech Republic, Eritrea, and Slovakia in 1993; Palau and the West Bank in 1994, and East Timor in 2002), and Czechoslovakia that exits the sample after 1992.

The dataset comprises two types of variables: time-varying factors (also referred in this study as *Level 1* variables), and country-level characteristics (*Level 2* variables). Variables in the first group (for instance, investment in democracy assistance and annual GDP growth) display variation across countries as well as within countries over time, while items in the second group (e.g., the size of the country) vary across countries but basically remain stable over time. The main variables in the analysis (democracy and USAID investment) are time-varying; Level 2 variables are treated as country characteristics that not only play a role as controls, but also may mediate the impact of Level 1 factors (including USAID investment) on democracy.

Democracy and Governance Programs

With the assistance of Andrew Green, the USAID team updated and revised the database on USAID DG programs. The updated database contains 44,958 entries at the activity level for all USAID sectors between 1990 and 2005. Each entry reports the purpose of the activity, the total amount appropriated in current dollars, and the recipient country.[3] Our analysis covers only until 2004 because information for other variables was not available for 2005.[4] In addition to the new information for 2004 and 2005, the revised database improved the coding of funds for Elections and Political Processes channeled through centralized mechanisms (e.g., the Consortium for Elections and Political Process Strengthening, CEPPS), and of funds for Civil Society related to labor programs channeled through the American Center for International Labor Solidarity (ACILS).

We aggregated the activity-level data to measure the size of USAID sectors and sub-sectors in different countries and years. Because funds obligated during any given year may be spent the following year, we computed two-year means (corresponding to the current and past fiscal years) of the total amount obligated in each sector or sub-sector. Our indicators thus reflect two-year running means of appropriations at the country-year level, measured in millions of constant 2000 dollars.[5] The indicators (and the respective variable names reported in the Codebook) are:

1. Total investment in **Democracy and Governance** (henceforth USAID DG) programs (AID100). This sector comprises four sub-sectors, namely:

[3] The amounts in the database generally reflect "actual appropriations" or the amount for which USAID is allowed by Congress to incur obligations for specific purposes. In our previous work we referred to these totals as "obligations" (Finkel et al. 2006; 2007). In this report we use the term "appropriations" as a better short-hand for actual appropriations, but this change in terminology does not reflect a change in the composition of the data.

[4] At the time we updated our dataset, information from Polity IV, the CIRI Human Rights Project, and the World Bank's Database on Political Institutions, among others, was not yet available for 2005. This lag between the availability of one set of data (USAID appropriations) and the other measures is inevitable, such that if we were to add 2006 appropriations data from USAID we would then need to wait until the other measures would become available for that year.

[5] In Phase 1 of the project, we used 1995 dollars, but recent versions of the *World Development Indicators* (World Bank 2006) have adopted 2000 as the base year for constant dollars. We followed this practice so that all economic series would have a common metric.

1.1. **Elections and Political Processes** (AID110): Activities oriented towards electoral assistance, support for the development of political parties, and legislative representation.

1.2. **Rule of Law Programs** (AID120): Funding for human rights programs and for legal and judicial development.

1.2.1. **Human Rights Programs** (AID121): This sub-sub-sector is already captured by Rule of Law totals. When this variable is included in models dealing specifically with human rights outcomes, a residual category for Rule of Law programs (AID122) reflects only the remainder funding (mostly oriented towards judicial development).

1.3. **Civil Society Programs** (AID130): Programs oriented towards the promotion of independent mass media, civic education, and labor organization.

1.3.1. **Free Media Programs** (AID131): This sub-sub-sector is already captured by Civil Society totals. When this variable is included in models dealing specifically with free speech outcomes, the estimates for Civil Society (AID132) reflect only the remainder funding.

1.4. **Governance Programs** (AID140): A very diverse category, this variable covers transparency and anti-corruption projects, decentralization, local government, and legislative assistance programs.

1.5. **Regional and Sub-Regional Programs** (RSAID100): This variable captures the funds "available" to countries in a particular geographic area from programs operating at the regional or sub-regional level. The amount was calculated by dividing the total funding for those programs in any given year by the number of countries in the region (or sub-region).

2. A new group of variables was developed to describe **USAID's patterns of investment in particular countries**. Most of these variables were created as "Level 2" factors:

2.1. **Percentage of funds invested in particular sub-sectors** (P110, P120, P121, P130, P131, P140). Those variables indicate the percentage of the total USAID DG portfolio in a particular country that was obligated in each sub-sector in any given year (based on the two-year running averages). For instance a value of 55 for AID110 indicates that fifty-five percent of the USAID DG funds invested in the country over the last two years were allocated to Elections and Political Processes.

2.2. **Volatility in USAID DG Investment** (L2.V100). This "Level 2" variable captures the overall volatility of the democracy investment in each recipient country during the period 1990-2004. Volatility is defined as the average (positive or negative) deviation from the "expected" level of USAID DG funding, based on past levels of funding and a time trend (for a similar procedure, see Lensink and Morrissey 2000). The variable was estimated in three steps:

(1) Investment (AID100) was predicted for each individual country as:

$$AID100_t = a + b_1(YEARNUM_t) + b_2(AID100_{t-1}) + \varepsilon_t$$

where $AID100_t$ represents the size of the sector (or sub-sector) in the country in year t, and YEARNUM is a time counter (1990=1, 1991=2,…).

(2) We computed the standard deviation of residuals ε_t within in each country.

(3) Volatility was measured as the standard deviation of the residuals ε_t divided by the average $AID100_t$ for the country. This calibration of the measure corrected for the correlation between the gross amount of USAID DG assistance received by countries and the fluctuations in total spending observed in them.[6]

2.3. **Trend in USAID DG Investment** (L2.R100). This Level 2 variable captures the presence of a sustained effort (or retrenchment) in the DG sector. The values reflect the average yearly change in USAID DG investment in the country, divided by the average level of investment during the period 1990-2004.

In addition to the USAID DG indicators, we collected information on other forms of foreign aid as control variables:

3. **Total investment in other (non-DG) USAID programs** (AID000). This category includes funding devoted to Agriculture and Economic Growth, Education, Environment, Health, Humanitarian Assistance, Conflict Management and Mitigation, and Human Rights programs not managed by the DG Office (e.g., human trafficking programs). An additional variable (RSAID000) captured the funds available to countries in a particular geographic area from non-DG programs operating at the regional or sub-regional level. A third, Level 2 variable (L2.999A) captured all U.S. development assistance invested in the country between 1946 and 1989 (measured in millions of constant 2000 dollars).
4. Non-USAID assistance:
   4.1. **Investment from the National Endowment for Democracy** (AIDNED). Information was collected from the annual report on U.S. Overseas Loans and Grants, commonly known as the "Greenbook" (USAID 2006).
   4.2. **Total U.S. development assistance other than USAID or NED programs** (AID_2). This value was estimated as the difference between the total loans and grants reported by the Greenbook as Economic Assistance, and the totals for the AID and AIDNED variables. For simplicity, we refer to this variable as *here
   4.3. **Other Donor Assistance** (DG and Non-DG: ODA100 and ODA000). Those variables reflect official development assistance provided by countries other than the United States to the particular recipient for democracy-related and non-

[6] In the volalitity, trend and portfolio analyses below (Section II), we exclude non-recipient countries from consideration, as our goal is to assess the impact of different investment strategies among countries in which the US actually invests. However, to verify the results of our analysis we run alternative models in which non-recipient countries received a score of zero for variables in the L2.V and L2.R batteries. The substantive findings discussed in Section II remained unchanged.

democracy related programs (measured in millions of 2000 dollars, as a two-year average). Data excludes multilateral cooperation. Information was compiled from the OECD's Creditor Reporting System (OECD 2006).

4.4. **U.S. Military Assistance Priority** (FPP01). This item was measured as the percentage of total U.S. military aid disbursed in any given year allocated to the recipient country. This indicator seeks to capture to what extent the recipient country constituted a geo-political strategic priority for the U.S. (USAID 2006).

Dependent Variables

In order to assess democratic outcomes, we employed two general measures of democracy (the Freedom House and Polity indices) and five composite indices. In general, because of its widespread universal use in democracy studies, we used Freedom House as our baseline measure of democracy and employed alternative indices to verify the robustness of our results. Put in other terms, if we began with any other measure, many readers might question why we did not use Freedom House as our reference point, even though indicator construction for national-level measures of democracy is still a highly contested field in contemporary political science (Munck and Verkuilen 2002). Using a checklist that is distributed to country experts, Freedom House rates the presence of political rights and civil liberties in 192 countries every year. Scores for the two items range from 1 to 7, with 7 being the lowest level of freedoms in each case (Freedom House 2004a). Following the widespread practice in the field of democracy studies, we inverted the scores so that the high numbers would reflect high levels of democracy, rather than the counter-intuitive scoring method used by Freedom House in which low numbers mean high democracy, and combined them into a single index of democracy, ranging from 1 (autocratic) to 13 (democratic). The Polity IV score ranges between -10 (autocratic) and +10 (democratic); it reflects the competitiveness and openness of executive recruitment, the competitiveness and regulation of political participation, and the constraints on the chief executive. (For definitions of these components, see Marshall and Jaggers 2002).

The five composite indices were designed to measure sub-sectoral outcomes, dimensions of democracy that have been specifically targeted by the programs discussed in the previous section of this report.[7] The indices were constructed using factor analysis in order to combine related indicators originating from multiple sources. (Detailed information on the factor analysis is available in Appendix 2). Factor scores were calibrated to have a mean of 50 and a standard deviation of 10, and thus can be roughly interpreted as scales ranging from 0 to 100.[8] For the second phase of the project, we have adjusted the composition of some indices following the suggestions of the Expert Panel,

[7] We remain agnostic on whether these measures reflect different dimensions or whether they capture overlapping aspects of the democratization process. We selected component items intended to measure the same (or closely related) theoretical constructs, to the extent that those constructs were relevant for USAID funding priorities.

[8] Because in the composite scales a value of 50 represents the average case (country-year) in the sample, and the standard deviation is set by construction to 10, actual values range from 24 to 78, and extreme values (0 or 100) do not occur.

and introduced a new index of good governance that captures administrative transparency and efficiency. The five sub-sectoral composite indicators are

1. **Free and Fair Elections** (EL15): the first factor resulting from the analysis of indicators of Electoral Competition (Vanhanen 2003); Electoral Competitiveness in Legislative Elections (Keefer 2005, 14-15); Women's Political Rights (Cingranelli and Richards 2004), Competitiveness of Participation (Marshall, Jaggers, and Gurr 2005), and Democratic Accountability (ICRG 2006).[9]
2. **Respect for Human Rights** (RL15): the first factor resulting from the analysis of Political Killings, Disappearances, Torture, Political Imprisonment (Cingranelli and Richards 2004), and Political Terror (Gibney 2004).
3. **Conditions for Civil Society** (CS08): the first factor resulting from the analysis of Restrictions on the Organization of Minorities (Minorities at Risk Project 2004), Freedom of Assembly, Religious Freedom, Respect for Worker's Rights, Freedom of Movement, and Respect for Women's Economic Rights (Cingranelli and Richards 2004).
4. **Free Media** (RL16): the first factor resulting from the analysis of Freedom of the Press (Freedom House 2004b, three-point and 100-point scales); Freedom of Speech (Cingranelli and Richards 2004), and Restrictions on Freedom of Expression (Minorities at Risk 2004).
5. **Good Governance** (GV16): the first factor resulting from the analysis of subjective measures of Perceptions of Corruption (Transparency International 2005); Conditions for Investment; Administrative Corruption; and Bureaucratic Quality (Erb, Harvey, and Viskanta 1996; ICRG 2001; ICRG 2006).[10]

Control Variables

The last set of variables comprises controls for social, economic, and political conditions in the country. Some of the control variables are what we refer to as "Level 1" controls, which can vary over time for a given country. Others are what we call "Level

[9] Based on a network of country specialists, the International Country Risk Guide (2006) created a subjective measure of democratic accountability ranging from zero to six, in which values between 0 and 2.5 correspond to autarchies; 3 to 4 to one-party states; 4.5 to "dominated" democracies; and 5 to 6 to "alternating democracies." The measure is highly subjective, yet correlates well with similar indicators.

[10] In Phase 1 of the project we used some of the World Bank's *Governance Matters* indicators, but this source provides no data prior to 1996 and only bi-annual data for 1996-2004. In contrast, the International Country Risk Guide has developed a battery of subjective items that serve as components of its aggregate country-risk score since 1984. ICRG collects information from a network of 75 to 125 country specialists on a quarterly basis and "grades" countries based on this information. The *Investment Profile*, which ranges from 0 to 12, measures the risk resulting from contract viability and expropriation, profits repatriation, and delays in payments to foreign credits. The *Corruption* index is a subjective measure ranging from 0 (less transparency) to 6 (more transparency), capturing "actual or potential corruption in the form of excessive patronage, nepotism, job reservations, 'favor-for-favors', secret party funding, and suspiciously close ties between politics and business." Finally, the measure of *Bureaucratic Quality*, ranging between 0 and 4, reflects subjective perceptions of whether bureaucracies are "autonomous from political pressure and have an established mechanism for recruitment and training," and to what extent "a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions" (ICRG 2006).

2" controls, which are stable or very nearly stable characteristics of a country over the 1990-2004 time period covered by the study.[11]

The time-varying, **Level 1** controls include:

1. **Annual Growth in Per Capita GDP** (PRF01), based on GDP figures in constant 2000 dollars (World Bank 2006).
2. **Index of Social and Political Conflict** (POL05). Banks' index provides a weighted average of eight forms of conflict (each form originally coded as a yearly event count based on The New York Times): assassinations, general strikes, guerrilla warfare, government crises, purges, riots, revolutions, and anti-government demonstrations (Banks 2005).
3. **State Failure Indicator** (POL25). This dichotomous variable indicates the occurrence of ethnic or revolutionary wars, genocide or politicide episodes, or violent regime changes in any given year (Political Instability Task Force 2006).
4. **Democratic Diffusion** (DIF07). Based on our discussion of the subject with Mark Billera of the USAID team, we created a new measure of democratic diffusion. The diffusion score for any given country reflects the average Freedom House score for all countries in the world (excluding the case in question) during the previous year, with the values of the other nations' FH scores weighted by the distance between their capitals and the capital of the country in question (influences closer to the country are weighted more heavily, based on the inverse of the distance).[12]
5. We created a dummy variable that identifies the single observation corresponding to Iraq in 2004 (Iraq in every other year, as well as every other country, are coded as zero). The rationale for this ID variable is discussed in the following section.
6. We gathered and used measures of a number of independent variables to operationalize a set of alternative hypotheses generated in our effort to explain the anomalous negative relationship between respect for human rights and USAID sub-sector assistance intended to promote respect for rights. These measures include indicators of (1) press freedom, (2) international governmental and non-governmental associations presence, (3) constitutional provisions designed to promote basic rights, establish and protect judicial independence, and regulate states of emergency, (4) a measure of actual judicial independence, and (5) perceived threats to leader

[11] The Level 2 variables are either attributes that did not change at all during the period under study (e.g., historical conditions that reflect the trajectory of the country prior to 1990), or because they reflect conditions that change slowly over time and, in the absence of detailed time-series, were assumed, reasonably we argue, to be considered "constants".

[12] The diffusion measure employed in Phase 1 of the project (Finkel et al. 2006) reflected the average Freedom House score for all countries in the region (excluding the country in question) during the previous year. The new measure includes all countries in the world, but weights their influence according to the distance from the target country *i*. Let d_{ij} denote the distance between the capitals of countries *i* and *j*, the formula to compute the spatial lags for country *i* a time *t* is:

$$DIF07_{it} = \sum_{j=1}^{J} \frac{d_{ij}^{-1}}{\sum_{j=1}^{J} d_{ij}^{-1}} \times DG02_{jt-1}$$

continuation in power. They are described fully in the section analyzing respect for human rights and in Appendix 7.

We also computed an additional Level 1 variable capturing the number of times that a Secretary or Assistant Secretary of State was mentioned in relation to (i.e., in the same sentence with) a particular country by the *New York Times* in any given year. This variable (FPP04), conceived as a measure of the State Department's priorities in any given year, does not convey any sense of direction (i.e., DOS orientation toward the countries may have been positive or negative, irrespective of the number of public references). We discuss this item separately from the list of independent variables because this factor was not employed in our models as a predictor of democracy, but as an *instrument* for USAID DG; that is, a factor able to predict (at least in part) the allocation of democracy funds in any given year, but not the level of democracy.[13] We employ this instrument to create a proxy for democracy assistance in the models dealing with endogeneity presented later in the report.

The **Level 2** control variables are:

7. Prior Democracy (L2.03). This variable captures the number of years that the country was rated as "Free" by Freedom House between 1972 and 1989. We employ this variable as an indicator of the country's democracy "stock".
8. State Failure Indicator, 1960-89 (L2.12). This variable reflects the number of years between 1960 and 1989 that the country suffered political anarchy *or* foreign intervention according to the Polity database.
9. Average population, measured in thousands 1990-2004 (L2.20) (World Bank 2005).
10. Average Income per Capita, 2000-05 (L2.21). This variable captures the average per capita income at purchasing power parity reported by the Central Intelligence Agency between 2000 and 2005 (Central Intelligence Agency 2005). This indicator is highly correlated with PPP values reported by the World Bank, but has better coverage (195 countries vs. 177 in WDI).
11. Income share of top 20 percent households, 1990-2004 (L2.22) (World Bank 2006).
12. Land area of the country, measured in square kilometers (L2.23).
13. Ethnolinguistic Fractionalization (L2.25). This measure is an average of the Annett and the two Fearon indices of ethnolinguistic fractionalization, all measured using the same formula (Annett 2001; Fearon 2003; Fearon and Laitin 2003).[14] Values close to zero indicate high homogeneity, and values close to one indicate extreme ethnic fractionalization.
14. Human Development Index, circa 1990 (L2.28). To construct the Human Development Index, UNDP collects information on life expectancy at birth, adult

[13] For all eligible country-years, the contemporaneous correlation of the DOS variable with DG assistance is .30.

[14] The formula for ethnolinguistic fractionalization is: $1 - \sum^{n}_{i=1} p_i^2$, where p_i denotes the population share for each of the n ethnic groups in the country. Fearon estimated one index based on the figures of the *Atlas Narodov Mira* and a second one using the CIA's *World Factbook*.

literacy, combined gross primary, secondary, and tertiary enrolment ratios, and real GDP per capita (PPP$). The index is constructed in three steps: (1) adult literacy and combined gross enrolments are combined into a single index of educational attainment (with literacy representing two-thirds of the measure); (2) all indicators are re-calibrated to vary between 0 and 1; and (3) the HDI is computed as simple average of the life expectancy index, educational attainment index, and adjusted GDP index. Higher values indicate better living conditions (UNDP 2006).

We also collected additional data on political culture using public opinion surveys. Because the number of surveys is limited—in many cases it was hard to find more than one survey per country—and because cultural traits are expected to be relatively stable over time, we treated public opinion data as Level 2 (we averaged individual responses within each country, created a country-level indicator). The main source for our culture data was the World Values Survey (WVS). When WVS had conducted more than one survey in a given country, we averaged the relevant variables across waves. For countries not covered by WVS, we used other sources if an equivalent survey item was available. As alternative sources we employed the AmericasBarometer carried out by the Latin American Public Opinion Project (LAPOP), the Afrobarometer, and the Asian Barometer. In all cases we re-scaled the items in a 0-100 scale to be consistent. The large number of missing values (anywhere between 50 and 64 percent of the eligible countries, depending on the item, lacked survey data) prevented any reliable imputation, and forced us to work with a very limited sub-sample of countries. Because of this reason, we do not include cultural variables in the baseline models, but treat them in a separate section.

Based on an exploratory analysis of ten culture variables (see Appendix 3 for details), we selected nine of them to create three composite scales. The indices are:

15. **Institutional Trust** (L2.C1)**.** Average scores for Trust in the Government, trust in the Justice System, and trust in Parliament. The survey questions read: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: Is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" Scores for the three variables range from 0 (no institutional trust at all) to 100 (a great deal of institutional trust).
16. **Personal Satisfaction** (L2.C2). Average score of three items
    - Satisfaction with democracy, measured as through the question: "On the whole are you very satisfied, rather satisfied, not very satisfied or not at all satisfied with the way democracy is developing in our country?" Scores range between 0 (not at all satisfied) and 100 (very satisfied);
    - Life satisfaction, measured through the question: "All things considered, how satisfied are you with your life as a whole these days?" Scores range between 0 (dissatisfied) and 100 (very satisfied); and
    - Happiness, measured through the question: "Taking all things together, would you say you are: very happy, quite happy, not very happy, or not at all happy?" Scores range between 0 (not at all happy) and 100 (very happy).

17. **Social Engagement** (L2.C3), the average of

- Interpersonal trust, measured through the question: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" Scores range between 0 (need to be very careful) and 100 (most people can be trusted).
- Interest in politics, measured using the question: "How interested would you say you are in politics?" Scores range between 0 (not at all interested) and 100 (very interested).
- National pride, based on the question: "How proud are you to be [Nationality]?" The factor analysis reported in Appendix 3 suggested that this item was inversely related to the underlying construct (social engagement), therefore we inverted the scores to range between 0 (very proud) and 100 (not at all proud).

Table 1 presents the list of 64 variables included in different sections of this study. Twenty-six Level 1 variables and six Level 2 variables have been incorporated as new items in this phase of the project.

Several sources contained incomplete information, creating a problem with missing values. Listwise deletion (i.e., dropping cases with missing information on any variable) resulted in a poor solution because it reduced the geographic coverage of the analysis significantly (see also King et al. 2001, 51-52). In order to minimize the number of missing values, we imputed a few key variables. Whenever possible, we used alternative sources of information to estimate the data. For instance, if GDP data from the World Bank database (WDI) was not available for a particular observation, we estimated the values using the Penn World Tables and the CIA Factbook (Heston, Summers, and Aten 2002). In other cases, although a second measure of the same concept was not readily available, the high correlation among some variables in the dataset (e.g., between the Freedom House and the Polity indices) facilitated the imputation process. Because multiple imputation proved difficult in the context of our study, we adopted an expectation-maximization (EM) procedure for the estimation of missing data (Allison 2001; McLachlan and Krishnan 1997).[15] Appendix 4 summarizes the variables that required imputation, the percentage of missing values, and the variables employed to obtain EM estimates.

[15] EM is a maximum-likelihood technique that employs information from other variables to estimate missing data. "In simple cases, this involves running regressions to estimate β, imputing the missing values with a predicted value, reestimating β, and iterating until convergence" (King et al. 2001, 55). We considered multiple imputation (i.e., creating multiple datasets with different estimates). However, practical reasons (the need to impute at multiple stages of the analysis—measurement and causal modeling—and the difficulty to implement multiple imputation with the software for some of the models we estimated) led us to adopt a more parsimonious EM procedure (Allison 2001; King et al. 2001).

Table 1. Variables Included in the Study

Level 1 (Time-varying covariates)

Outcomes (Democracy)
- Freedom House score, 1-13 scale
- Polity score, –10-10
- Index of Free and Fair Elections
- Index of Human Rights
- Index of Civil Society
- Index of Free Press
- Index of Good Governance*

USAID Activity
- Total USAID DG Assistance
- Total USAID Non-DG Aid
- Elections and Political Processes
- Rule of Law Programs
- Human Rights Programs
- Rule of Law (non-Human Rights)
- Civil Society Programs
- Free Media Programs
- Civil Society (Non-Media)
- Governance Programs
- Regional Programs, DG
- Regional Programs, non-DG
- Percentage invested in Elections*
- Percentage invested in Rule of Law*
- Percentage invested in Human Rights*
- Percentage invested in Civil Society*
- Percentage invested in Media Programs*
- Percentage invested in Governance*

Other Forms of Assistance
- National Endowment for Democracy*
- US Assistance other than USAID or NED
- Other Donor Assistance on DG (bilateral)
- Other Donor Assistance on Non-DG (bilateral)
- US Military Aid Priority (% of annual worldwide)

Additional Control Variables
- Annual Growth in Per Capita GDP
- Democratic Diffusion*
- Index of Social and Political Conflict
- State Failure Indicator *
- Iraq 2004 dummy*
- Threat/Protest Index*
- Civil War*
- Five Freedoms Index*
- Freedom to Strike*
- Fair Procedure Index*
- Formal Judicial Independence Index*
- Courts have Exclusive Competence*
- No Special, Military Courts*
- State of Emergency Varimax scores Factor 1*
- State of Emergency Varimax scores Factor 2*
- Actual Judicial Independence*
- Intnl. Intergovernmental Orgs Memberships*
- Intnl. Nongovernmental orgs count logged*
- Index of Freedom of Press*

Instruments for AID100
- State Department Priorities [FPP04]*

Level 2 (Country-level characteristics)

USAID Activity
- Total U.S. Aid 1946-89
- Volatility in USAID DG, 1990-2004*
- Trend in USAID DG, 1990-2004*

Additional Control Variables
- Years Rated "Free" by FH 1972-89
- State Failure Indicator, 1960-89
- Average Income Per Capita, 2000-05
- Average Population, 1990-2004
- Income Share of top 20%, 1990-2004
- Land Area of the Country
- Ethnolinguistic Fractionalization
- Human Development Index*
- Institutional trust*
- Personal satisfaction*
- Social Engagement*

* New variables not included in Phase 1 of the project.

Part I – Replication and Extensions

The "Baseline" Model

We begin by replicating the "baseline model" from the previous phase of the project, i.e., the hierarchical growth model predicting the country's overall level and trends in democracy as measured by the Freedom House (FH) and Polity IV indicators. In this model, FH and Polity IV are predicted from a random country-specific linear time trend, a series of country-level independent variables that determine the level and slope of the time trend, the two-year rolling average of USAID DG and non-DG appropriations and a series of other donor-related variables including funding from other OECD donors and the National Endowment for Democracy. The multi-level or "hierarchical" model can be expressed in two equations, one (at "Level 1") predicting intra-country growth in FH or Polity scores over time, and the other (at "Level 2") predicting the magnitude of the Level 1 coefficients with time-invariant country level characteristics:

Level 1: Intra-country Growth

(1) $$y_{ti}=\pi_{0i} + \pi_{1i}a_{ti} + \pi_{2i}AID_{ti} + \pi_{ki}v_{kti} + \varepsilon_{ti}$$

where a is a time-related variable, in this case the year of observation (1990, 1991, 1992…2004), ε_{ti} is a random error term, and π_{0i} and π_{1i} are regression coefficients that represent the individual country's (linear) growth trajectory. Specifically, π_{0i} is the "intercept" of the growth model, that is, individual county i's "starting point" on, for example, the Freedom House or Polity score at the first wave of data collection (1990), and π_{1i} is the linear slope of the growth trajectory, such that the individual country changes by π_{1i} units on the Freedom House or Polity score for every change in one unit of a, in this case one year. Coefficient π_{2i} captures the impact of foreign assistance on the level of democracy, while AID_{ti} indicates the amount invested in country i during year t. The v_{kti} represent additional time-varying "covariates," i.e., factors that have potentially different values for a given country at each year, and which may influence the given democratic outcome at a specific time. The π_{ki} then represent regression coefficients linking the k^{th} time-varying covariate to y_{ti}. All USAID-related variables, including U.S. Democracy and Governance (DG) appropriations, non-DG appropriations, regional and sub-regional DG and non-DG appropriations, and non-U.S. donor appropriations are treated in this model as "time-varying covariates." The set of time-varying covariates also includes the time-specific control variables such as economic performance, democratic diffusion, extent of political violence, state failure, and U.S. foreign policy priorities. The full set of Level 1 variables in the "baseline model" may be found in Table 1.

The second portion of the growth model attempts to explain *why* certain countries have higher or lower π_k coefficients, i.e., why some countries begin the period at higher or lower levels of democratization, why some countries change more rapidly than others,

and why some countries may have higher or lower effects on democratic outcomes from particular time-varying covariates. In equation form, we estimate:

Level 2: Inter-Country Differences

(2.0) $\pi_{0i} = B_{00} + B_{0m}X_{mi} + r_{0i}$

(2.1) $\pi_{1i} = B_{10} + B_{1m}X_{mi} + r_{1i}$

(2.2) $\pi_{2i} = B_{20}$

(2.3) $\pi_{ki} = B_{k0}$

where

B_{00} is the average ("fixed") population intercept or starting point for the growth trajectory;

B_{0m} is the average ("fixed") effect of some country characteristic X_m on the country's growth trajectory intercept;

B_{10} is the average ("fixed") population slope for the democratization trend;

B_{1m} is the average ("fixed") effect of some country characteristic X_m on the country's growth trajectory slope;

B_{20} is the average ("fixed") population effect for DG investment;

B_{k0} is the average ("fixed") population slope for the k^{th} time-varying covariate *v;*

r_{0i} is the deviation, or residual, of country *i*'s growth trajectory intercept from the value predicted by the population average B_{00} and all of the $B_{0m}X_m$; and

r_{1i} is the deviation, or residual, of country *i*'s growth trajectory slope from the population average B_{10} and all of the $B_{1m}X_m$;

Equations (2.0) to (2.3) thus predict the *magnitude* of the Level 1 coefficients in equation (1) with country-level characteristics, which include relatively stable factors such as level of economic development, past political and democratic history, human development and the like. A full set of the Level 2 variables included in the baseline model can also be found in Table 1. Equations (2.0) and (2.1) express the growth curve intercepts and slopes as random coefficients, predicted imperfectly from the stable country-level characteristics with residual random variation captured in the *r* disturbances. Equations (2.2) and (2.3) predict the effects of the time-varying covariates as fixed across countries; this is the normal specification for time-varying covariates in the absence of strong expectations to the contrary. We relax this assumption in the last section in the attempt to understand the factors that determine size of the π_{2i} coefficient for USAID DG assistance, that is, the conditions under which USAID DG assistance has larger or smaller effects.

The model of equations (1) and (2) can be seen as a *hierarchical*, or a *multilevel* model because Level 1 (equation 1) represents intra-country differences in initial levels of democratic outcomes and growth over time, and Level 2 (equation 2) models the level and growth rates as functions of individual-level differences on important explanatory variables. The model is also called a "mixed" model that contains both "fixed" and "random" effects—in this case the *B* coefficients are fixed, either at the level of the overall population of countries (B_{00}, B_{10}, B_{20}, and B_{k0}) or as deviations from the population averages that are determined by Level-2 explanatory variables (B_{0m}, and B_{1m}), while the r_{0i}, r_{1i}, and ε_{ti} terms are random disturbances. Because of the complex nature of

the model's error term (in this case $r_{0i} + r_{1i}\, a_{ti}+\varepsilon_{ti}$), the assumptions necessary for ordinary least squares (OLS) estimation—errors that are independent, normally distributed and with constant variance—are inherently inappropriate.[16] In order to cope with this problem, the model is estimated instead via iterative maximum likelihood procedures, which are implemented in statistical software packages designed for estimating hierarchical linear models. The baseline model includes both *heteroskedastic* error variances, whereby the residual democracy score may vary more at some time periods than others, as well as *autocorrelated* disturbances, which allow for the error term $\varepsilon_{(t-1)i}$ to influence its successive value ε_{ti}, as is commonly the case in longitudinal data. The model thus captures the key features of intra-country longitudinal growth, inter-country differences in the growth coefficients, as well as estimating the form of the error term variances and covariances that is likely to obtain with over-time data on democratic outcomes.[17]

The results of the baseline model for the 1990-2004 time period are shown in **Table 2**. It can be seen that the USAID DG coefficient for both FH and Polity IV are statistically significant, as they were in the previous grant's analyses. However, it is also the case that the magnitude of the USAID DG effect is considerably smaller in both models than was reported earlier. The size of the coefficient in the Freedom House model has fallen to .018, a 28% drop from its value of .025 in the previous study, and the size of the DG coefficient in the Polity IV has fallen even more sharply to .023, a nearly 48% drop from its value of .044 in the previous study (see Finkel, Pérez-Linán, and Seligson 2006, Table 4). We shall explore these differences in more detail below; for now we simply note that the inclusion of the 2004 data does not change the core finding that USAID DG assistance has significant impact on both Freedom House and Polity democracy scores within the context of the baseline hierarchical growth model, though the size of the effect is considerably attenuated from that reported earlier.

The other results from the baseline model largely corroborate the findings from the previous study. Nearly all of the other donor variables (including the new NED variable) show insignificant effects, aside from the anomalous negative effect from US development assistance other than USAID or NED in the Freedom House model (but not in the Polity IV model). Economic growth and social and political conflict have similar effects in the FH model as before, and the new measures of democratic diffusion and time-specific state failure show significant effects in the expected directions in both the FH and Polity models.

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[16] In this case the errors are dependent because r_{0i} and r_{1i} are common to each individual, and they have unequal variances because r_{0i} and r_{1i} vary across individuals and r_{1i} a_{ti} varies across occasions of measurement.

[17] We estimated the models using the MIXED module in SPSS 15.0 . We specified the error term structure initially to be (ARH1) in order to model both the heteroskedastic and autocorrelated nature of the disturbances. The Polity IV models in Table 2, though, attained the best fit through an autocorrelation-only specification (i.e. without the heteroskedasticity option).

Table 2. The Growth Model for Freedom House and Polity IV Democracy Scores

Dependent Variable	2(a) – Freedom House		2(b) – Polity IV	
	Coefficient	S. Error	Coefficient	S. Error
Level 1				
Democracy and Other Assistance				
USAID DG	**0.018****	0.005	**0.023***	0.012
USAID Non-DG	**0.001***	0.001	0.001	0.001
National Endowment for Democracy	0.132	0.168	-0.172	0.327
US Assistance other than USAID or NED	**-0.001****	0.000	-0.001	0.001
Regional-Subregional DG	-0.010	0.123	-0.020	0.268
Regional-Subregional Non-DG	-0.010	0.013	0.018	0.022
Other Donor Assistance on DG	8.1E-005	0.001	0.001	0.001
Other Donor Assistance on Non-DG	-4E-006	9.1E-005	-0.000	0.000
Economic and Political Factors				
Annual Growth in GDP per Capita	**0.009****	0.002	-0.003	0.005
US Military Assistance Priority	**-0.049****	0.018	-0.052	0.043
Democratic Diffusion	**0.185****	0.088	**1.151****	0.155
Social and Political Conflict	**-0.001****	0.000	-0.001	0.001
State Failure Indicator	**-0.696****	0.076	**-1.941****	0.173
Level 2				
Effect on (Level-1) Intercept				
Average Intercept	**6.738****	0.245	**1.512****	0.421
Prior Democracy	**0.280****	0.051	**0.480****	0.086
State Failure, Pre-1990	-0.499	0.751	-1.082	1.477
Income Per Capita	-0.027	0.069	-0.159	0.117
Population	-3E-006	2.5E-006	-2E-006	4.2E-006
Income Inequality	**0.075****	0.033	0.070	0.056
Ethnic Fractionalization	-0.987	1.086	-0.806	1.849
Pre-1990 USAID	5.6E-005	4.7E-005	**0.000****	0.000
Size in Square Km	-5E-005	0.0001	-8E-005	0.0003
Human Development Index	**6.938****	2.526	**14.186****	4.316
Effect on (Level-1) Trend				
Average Slope for Growth Curve	**0.054****	0.016	**0.063***	0.033
Prior Democracy	-0.005	0.003	-0.009	0.006
State Failure Indicator	0.000	0.045	-0.009	0.110
Income per Capita	0.002	0.004	0.004	0.009
Population	1.4E-007	1.5E-007	-2E-007	3.0E-007
Income Inequality	-0.000	0.002	0.003	0.004
Ethnic Fractionalization	**0.127****	0.064	0.179	0.135
Size in Square Km	**-2E-005***	9.5E-006	1.3E-005	2.0E-005
Pre-1990 USAID	-7E-007	2.7E-006	-4E-006	5.7E-006
Human Development Index	0.061	0.150	-0.391	0.313
Model Statistics and Variance Parameters				
Random Variance (Intercept)	5.807**	0.906	9.981**	3.445
Random Variance (Slope)	0.013**	0.003	0.022	0.015
Autocorrelation. (rho)	0.801**	0.020	0.895**	0.026
Model Deviance/AIC	6539.983	6575.983	9986.495	9994.495

Note: **significant at p<.05; *significant at p<.10 (two tailed). Indented variable labels indicate interactive effects.

The average country begins the period slightly above the midpoint of the FH and Polity scales, with starting points being higher for countries with stronger democratic traditions, for countries with higher levels of human development, and (in the Polity IV model) for countries that were recipients of USAID assistance before 1989. The Level 2 results predicting the size of country growth trajectories are also largely the same as reported earlier. The average country changes by .054 units on the FH scale and .063 on the Polity index over time, approximately the same average change as was reported in the previous study. As in the previous study, we find that almost none of the country level variables significantly predict the size of the country's growth trajectory slope. The only Level 2 variables to have significant impact on the growth trajectory slope in the Freedom House model are ethnic fractionalization and size, with larger, more heterogeneous countries increasing at a faster pace. Thus, this analysis leaves us with much the same picture we had before, with USAID DG assistance as a significant predictor of growth in democracy, as measured by both Freedom House and Polity IV,

The "Iraq Effect" and Other Influential Cases

The main difference between the 2004 results and those reported in the previous grant's analyses is the attenuation of the USAID DG assistance variable. While the inclusion of new data, of course, will always lead to at least some minor changes in statistical results, the magnitude of the differences in the estimated effect (a 30-50% drop) for the variable that is of primary importance to this study, in our view, warranted further investigation. The most likely reason for such a dramatic change is the presence in 2004 of one or more cases with a large amount of "leverage" on the regression results, that is, cases that have such large (small) amounts of USAID DG assistance coupled with such small (large) levels of democracy that their inclusion reduces the magnitude of the estimated coefficients across the entire sample. We explored this possibility by estimating models that exclude one case at a time so that we can see how the exclusion of the case(s) changes the magnitude of the estimated coefficients. Specifically, we estimated a variant of the Freedom House and Polity IV baseline model 2,416 times, each time excluding one country-year from consideration and registering the value of the USAID DG coefficient.[18] **Table 3** shows the results of this estimation and the cases that exert that most leverage on the coefficient, that is, the cases whose exclusion changed the coefficient the most.

[18] We used the "jackknife" routine in STATA for this purpose. The baseline model in this case was estimated with the XTREGAR module, and was equivalent to the baseline hierarchical growth model without a random coefficient for "year" and without the heteroskedastic option for the error term.

Table 3. The Iraq Effect:
Cases with Unusual Leverage on the USAID DG Coefficient

3(a) - Freedom House			3(b) – Polity		
country-year	Coefficient	z-score		Coefficient	z-score
Average coefficient	0.018		Average coefficient	0.036	
(standard deviation)	(0.0002)		(standard deviation)	(0.0005)	
Iraq 2004	**0.026**	**42.077**	**Iraq 2004**	**0.056**	**42.062**
Iraq 2003	0.019	7.861	Serbia and Montenegro 2000	0.042	13.083
Colombia 2000	0.019	6.703	Iraq 2003	0.040	8.684
Haiti 1993	0.019	5.749	Haiti 1993	0.039	6.905
West Bank and Gaza 1994	0.019	5.246	Haiti 1994	0.039	5.920
Haiti 1994	0.019	4.718	West Bank and Gaza 1994	0.038	4.205
Panama 1992	0.019	4.532	Colombia 2000	0.038	3.934
Egypt 1998	0.019	4.417	Russian Federation 2000	0.037	3.512

Note: "z-score" refers to the number of standard deviations away from the average coefficient of .018 (Freedom House) or .036 (Polity IV) that the USAID DG coefficient represents in a model *without* including the given country-year in the estimation.

The first row of the table shows that the average of the 2,416 estimated coefficients for the USAID DG effect on Freedom House ratings is .018, with a standard deviation of .0002, and the average coefficient for the USAID DG effect on Polity IV ratings is .036, with a standard deviation of .0005. Below these figures are the cases in each estimation that have the most leverage, as indicated by the size of the estimated coefficient excluding that case, and its "z-score," or how many standard deviations the coefficient that results from excluding the case is from the average value. It can be seen that one case, Iraq in 2004, is exerting an extraordinary amount of downward leverage on the USAID DG coefficient—excluding this case would produce an estimated coefficient of .026 on Freedom House, and .056 on Polity, with both values being approximately the same magnitude as that estimated from the 1990-2003 data. That is, the exclusion of Iraq 2004 from the analysis would completely "restore" the size of the USAID DG coefficient to the value found in the previous study. This is an astonishing effect for one case out of 2,416, as confirmed by the huge z-score of 42.1 for the Iraq 2004 case in both the Freedom House and Polity IV models. No other case comes close to exerting this kind of leverage. The next highest z-scores for Freedom House belong to Iraq in 2003 (z of 7.9) and Colombia in 2000 (z of 6.7), with a resulting USAID DG coefficient of .019 if either of those cases were to be excluded. The next highest z-score for Polity IV belongs to Serbia-Montenegro in 2000 (z of 13.1 and a coefficient of .042 through exclusion, followed by Iraq in 2003 (z of 8.7 and a coefficient of .040 through exclusion). Many of the other cases with the highest leverage are the same for the two models, and in all other cases the magnitude of the changes in the USAID DG coefficient are modest by excluding any given country year from consideration.

Why is this effect occurring? It is clearly the result of an extremely large amount of USAID DG assistance to Iraq in 2004 ($261 million in 2000 dollars), coupled with the very low Freedom House and Polity IV democracy ratings (3 and -5). The amount of USAID DG assistance to Iraq itself in 2004 is far more than the amount given to any other country at any time in the data set, with the next highest value being 86.5 million to

Serbia-Montenegro in 2003 and 2004, and the average value for recipient countries being just under $5 million (in standard 2000 dollars) in any given year. In other words, Iraq received 52 times the average amount of democracy assistance in 2004.

Because of the unusual leverage that Iraq 2004 is exerting on the USAID DG coefficient in our models, we decided to undertake two "corrective" procedures. One is to include an indicator ("dummy") variable for Iraq 2004 in subsequent models as an additional "control variable" predicting Freedom House and Polity IV scores. This strategy assumes that there is something so fundamentally different about the particular case that it should not be included within the general causal framework that holds for the other 2,415 country-year cases. We believe that this is a reasonable approach, given that the distribution of USAID democracy foreign assistance in Iraq that year occurred in a completely non-standard context, namely that of regime change brought on by largely U.S. military force.[19] Re-estimating the hierarchical growth baseline model with an IRAQ 2004 dummy variable included yields significant USAID DG coefficients of .029 for Freedom House and .044 for Polity IV, both values being somewhat higher than their magnitude in the original research based on data through 2003 (see **Table 4**).[20] Further, the IRAQ 2004 dummy variable itself shows significant coefficients of -4.5 for Freedom House and -10.3 for Polity IV, indicating that, controlling for all other variables in the model, Iraq in 2004 is predicted to be substantially lower on both of the overall democratic indices than other cases in the analysis. In fact, the magnitude of the unique negative effect for Iraq 2004 is over one-third of the total scale distance for Freedom House and nearly one half of the total scale distance for Polity IV.

The second strategy for handling the Iraq 2004 case is to attempt to explain the reasons for its leverage in subsequent analyses, specifically in our models that assess when and where USAID DG has more or less impact. It may be the case, for example, that USAID DG has weaker impacts in other settings where democracy is low, in other settings with high ethnic fractionalization, or in other settings with high US military assistance as well. As we pursue these models, we can then assess whether the IRAQ 2004 dummy variable is still significant, or whether this case can be subsumed under the more general causal process. We shall present evidence regarding these possibilities in the analyses we present in Part II below. For now, though, we shall include the dummy variable for IRAQ 2004 from the analyses in the rest of this document unless otherwise noted. [21]

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[19] For instance, funding amounts for democracy assistance programs in Iraq are inflated by extraordinarily high security costs (plus higher salaries, extra home leaves, etc.). As a result, spending $1 million in Iraq may not have the same impact as spending $1 million in a different setting.

[20] Note that some Level 2 predictors with no significant effect in Table 2 also have insignificant effects in Table 4. The elimination of four predictors (state failure for 1960-89, population, income per capita, and US assistance for 1946-89) does not alter the results of the baseline model. In Parts II, III, and IV we eliminate those predictors from the model in order to simplify the baseline equation.

[21] Another possibility would be to transform the AID variables into logarithmic form, so that the $261 million dollars for Iraq 2004 would not be nearly as distinct from the assistance received by other countries. The natural logarithm of $261 is 5.56, which is not so much greater a value than 4.44, the log of the DG assistance to Serbia in 2003 and 2004 ($85 million). We rejected this strategy because of its fundamental incompatibility with all of the analyses that we have done in the project to this point. See Finkel *et* al. (2006, 59-62) for a discussion of alternative possibilities for scaling and standardizing the AID variables.

Table 4. New Baseline Model with Control for Iraq 2004

Dependent variable:	2(a) – Freedom House		2(b) – Polity IV	
	Coefficient	S. Error	Coefficient	S. Error
Level 1				
Democracy and Other Assistance				
USAID DG	**0.029****	0.006	**0.044****	0.014
USAID Non-DG	0.000	0.001	0.000	0.001
National Endowment for Democracy	0.071	0.168	-0.279	0.328
US Assistance other than USAID or NED	-0.000	0.000	0.001	0.001
Regional-Subregional DG	-0.018	0.122	-0.051	0.268
Regional-Subregional Non-DG	-0.010	0.013	0.017	0.022
Other Donor Assistance on DG	4.5E-005	0.001	0.001	0.001
Other Donor Assistance on Non-DG	-6E-007	9.0E-005	-0.000	0.000
Economic and Political Factors				
Annual Growth in GDP per Capita	**0.009****	0.002	-0.004	0.005
US Military Assistance Priority	-0.029	0.018	-0.025	0.044
Democratic Diffusion	**0.181****	0.088	**1.156****	0.154
Social and Political Conflict	**-0.001****	0.000	-0.001	0.001
State Failure Indicator	**-0.740****	0.076	**-1.994****	0.173
Iraq 2004	**-4.509****	1.046	**-10.309****	3.057
Level 2				
Effect on (Level-1) Intercept				
Average Intercept	**6.776****	0.244	**1.583****	0.421
Prior Democracy	**0.281****	0.051	**0.477****	0.086
State Failure, Pre-1990	-0.537	0.749	-1.092	1.475
Income Per Capita	-0.030	0.068	-0.159	0.117
Population	-3E-006	2.5E-006	-2E-006	4.2E-006
Income Inequality	**0.073****	0.033	0.068	0.056
Ethnic Fractionalization	-0.914	1.085	-0.732	1.849
Pre-1990 USAID	5.2E-005	4.7E-005	**0.0002****	8.1E-005
Size in Square Km	-4E-005	0.0002	-7E-005	0.0003
Human Development Index	**7.064****	2.521	**14.252****	4.314
Effect on (Level-1) Trend				
Average Slope for Growth Curve	**0.050****	0.016	**0.056***	0.033
Prior Democracy	-0.005	0.003	-0.009	0.006
State Failure Indicator	-0.000	0.045	-0.011	0.109
Income per Capita	0.003	0.004	0.005	0.008
Population	1.7E-007	1.4E-007	-2E-007	3.0E-007
Income Inequality	0.000	0.002	0.003	0.004
Ethnic Fractionalization	**0.117***	0.064	0.165	0.135
Size in Square Km	**-2E-005****	9.5E-006	0.000	0.000
Pre-1990 USAID	-9E-007	2.7E-006	-4E-006	5.7E-006
Human Development Index	0.035	0.149	-0.430	0.312
Model Statistics and Variance Parameters				
Random Variance (Intercept)	5.874**	0.905	10.269**	3.379
Random Variance (Slope)	0.013**	0.003	0.022	0.014
Autocorrelation (rho)	0.795**	0.021	0.893**	0.026
Model Deviance/AIC	6519.931	6555.931	9971.079	9979.079

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Extensions: Long-Run Effects of USAID DG Assistance

One limitation of the baseline model is that, in its current form, USAID DG assistance is assumed to exert only a temporary impact on a country's level of democracy. That is, USAID DG assistance is modeled as a time-varying covariate in the hierarchical growth model, so that its effect operates on Freedom House or Polity IV ratings at a given point in time, and the effects are assumed by dint of the choice of our statistical model to die out immediately thereafter. Such a formulation fails to capture the potential and quite realistic assumption of a longer-run impact of USAID DG investments, in that USAID DG programs may take several years or more to "work;" moreover, a permanent increase in USAID DG assistance over time may cumulate in ways that are not well-described by the single, time-specific USAID DG coefficient in the current baseline model. We have therefore devoted considerable attention in our current work to estimating models that can provide a more meaningful sense of the longer term effects of USAID DG assistance on democratic outcomes.

In the previous study, we made some progress on assessing longer-term effects by adding a lagged value of USAID DG assistance to the model, so that we predict Freedom House or Polity IV scores with the current two-year average of USAID DG (DG_{it}) and the previous year's value as well (DG_{it-1}). The previous findings (Table 6, p. 61 in Finkel *et al.* 2006) were that both coefficients had statistically significant values of .017. Re-estimating this model with the full 1990-2004 data sets yields an insignificant lagged USAID DG value unless the IRAQ 2004 dummy variable is included, in which case the coefficient for current democracy assistance is .026 ($p<.001$) and lagged democracy assistance is .012 ($p<.07$). In the context of this kind of statistical model, known as a "finite distributed lag" model because of the limited number of lags specified, the coefficients may be interpreted as follows:

1) The effect of a million dollar increase in the current two-year rolling average of USAID DG on current Freedom House ratings is .026 (the coefficient for USAID DG_{it});
2) The effect of each million dollar increase in the current two-year rolling average of democracy assistance on Freedom House ratings one year in the future is .012 (the coefficient for USAID DG_{it-1});
3) The effect of a *temporary* million dollar increase in the two-year rolling average of USAID DG assistance is therefore .026 in the first year, .012 in the second year, and then 0 for all subsequent years;
4) The effect of a *permanent* million dollar increase in the two-year rolling average of USAID DG assistance is therefore .038 units on the Freedom House scale, as the effect in years 2 and higher will be .026 from the current year's assistance added to the .012 from the previous year's value.

These results are suggestive of a process whereby USAID DG assistance takes some time to "work," and whereby sustained increases in funding may therefore cumulate to some degree over time as well. However, the basic structure of a finite distributed lag model prevents us from saying anything more in this regard. Longer-lag lengths are possible to include, but we lose one year's worth of data for each lag value of democracy

assistance that is added to the model. And more generally, the specification of the model ensures that the effect of any given year's assistance is a transient one, whether it is over one or two time periods. This is not a completely implausible specification but certainly a restricted one.

A more general dynamic panel model that allows for longer-term lag effects takes the following form:

(3) $y_{it} = \alpha + \beta_1 y_{it-1} + \beta_2 x_{it} + \beta_3 x_{it-1} + \beta_4 z_{it} + u_i + k_t + \varepsilon_{it}$

where

y_{it-1} is the lagged value of the Freedom House scale, or what is called the "lagged endogenous variable,"

x_{it} and x_{it-1} are the current and lagged values of USAID DG assistance,

z_{it} are all other time-varying covariates and Level 2 time-invariant independent variables in the model,

u_i is a country-specific effect that subsumes all unmeasured, stable country factors, (and which, when added to the overall population intercept α, may viewed as equivalent to the intercept of the country's growth trajectory in the baseline model),

k_t is a time-specific effect, such that events in any given year affect all countries' democracy ratings in that year, independent of all other variables in the model,

ε_{it} is the error term for a given country's Freedom House score in a given year *t*, and

β_1 through β_4 are regression coefficients to be estimated.

This model is referred in the econometric literature as an "Autoregressive Distributed Lag" (ADL) model, and is one of the standard models used in the field to estimate both short and long-run dynamic processes. Here we report the results of this model, estimated in the statistical package STATA 9.2. (see **Table 5**). The estimation of the model proceeds first by *differencing* all variables to eliminate the confounding effects of the u_i term. It then applies relatively complex "instrumental" variable methods to estimate the effects of the lagged endogenous variable, which, by construction, is correlated with the error term of equation (3), even after the differencing process.[22]

[22] The model is estimated via STATA's XTABOND routine, which applies the Generalized Method of Moments estimator developed by Arellano and Bond (1991). See Wavro (2002) for a good introduction to these methods for political scientists.

Table 5. Dynamic Models with Lagged Freedom House Democracy, Generalized Method of Moments Estimation

	5(a) USAID DG and USAID DG Lagged		5(b) USAID DG	
	Coefficient	**St. Error**	**Coefficient**	**St. Error**
Democracy and Other Assistance				
USAID DG	**0.018***	0.010	**0.020****	0.089
USAID DG Lagged	0.005	0.011	---	---
USAID Non-DG	-0.000	0.001	-0.000	0.001
National Endowment for Democracy	**0.386***	0.226	**0.388***	0.224
US Assistance other than USAID or NED	0.000	0.000	0.000	0.000
Regional-Subregional DG	-0.087	0.140	-0.088	0.141
Regional-Subregional Non-DG	-0.009	0.021	-0.010	0.021
Other Donor Assistance on DG	-0.000	0.001	-0.000	0.001
Other Donor Assistance on Non DG	-0.000	0.021	-0.000	0.000
Economic and Political Factors				
Annual Growth in GDP per Capita	**0.011***	0.006	**0.011***	0.006
US Military Assistance Priority	-0.013	0.016	-0.015	0.016
Democratic Diffusion	0.018	0.168	0.018	0.169
Social and Political Conflict	-0.001	0.001	-0.001	0.001
State Failure Indicator	**-0.760****	0.197	**-0.762****	0.198
Freedom House Lagged	**0.644****	0.063	**0.648****	0.061
Iraq 2004	**-5.331****	1.297	**-5.165****	1.249
N	2086		2086	
Arellano-Bond z-test for second order autocorrelation	1.13 p=0.2572		1.13 p=0.2579	

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

The results in column 5(a) show that when lagged USAID DG assistance is included, it does not achieve statistical significance. Dropping the lagged value of USAID DG assistance yields the preferred model of column 5(b), with a significant coefficient for contemporaneous USAID DG of .020, controlling for the lagged differenced endogenous variable (with a significant effect of .648) and all other variables in the model. The model is satisfactory in other respects, with only a few meaningful substantive differences from the baseline model: the effects of democratic diffusion and social and political conflict are now insignificant, and the effect of National Endowment for Democracy (NED) assistance is now significant.[23] We note also that the model satisfies the two statistical conditions for the applicability of the Arellano-Bond method: the instrument set used for proxying the lagged differenced endogenous variable truly is

[23] The insignificant results for democratic diffusion and political conflict are not unsurprising because these variables are relatively stable over time, and, especially in the case of diffusion, the variables come close to being washed out altogether in the differencing process of the model. The results for the National Endowment for Democracy variable are more striking, but, as will be shown in the next section, they do not hold up once controls for the possible "endogeneity" of the funding process are introduced.

exogenous to the process (i.e., unrelated to the differenced error term), and there is no second-order autocorrelation in the differenced error terms.[24]

The USAID DG coefficients of the model may be expressed in terms of their short and longer-term impacts.[25] In the notation of equation (3), the immediate impact of USAID DG assistance on Freedom House is β_2, or in this case .020, so that a one-million dollar rolling average investment changes Freedom House scores in the same time period by .020 units. If the million dollar investment was continued in the next time period, the *two-term cumulative multiplier* effect would be $\beta_2 *(1+\beta_1)$, where β_1 again is the coefficient for the lagged differenced endogenous variable. In this case the two-term cumulative effect would be .020*(1+.648) or .033. Continuing these calculations for a persistent one-million dollar rolling average investment over three, four, and five time periods yields cumulative impacts of .041 after three periods, .047 after four periods, and .050 after five periods.[26] The "long-run multiplier effect," representing the total effect of USAID DG on FH at some equilibrium point as time approaches infinity, is $\beta_2/(1-\beta_1)$, or in this case .056. Thus, we see that in this specification, the long-run effects of a *permanent* one million dollar investment in USAID DG investment are quite a bit higher than in the baseline model, and that a permanent *ten* million dollar increase is predicted to have a cumulative (equilibrium) impact of over one-half of a point on the Freedom House scale.[27] This is stronger evidence than has been reported thus far in the project that USAID DG investment has not only immediate impact on levels of democracy in recipient countries, but also has impacts that cumulate to some degree over time and, under certain reasonable statistical assumptions, endure after funding has been withdrawn.

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[24] The first condition is satisfied through the "Sargan test," with a chi-square value of 98.28 with 90 df (p=.26), and the second condition is satisfied through the Arellano-Bond test for second order autocorrelation, with a z of 1.49, p=.14.

[25] De Boef and Keele (2005) and Kaplan (2002) have good expositions of how these effects are calculated from the estimated coefficients in dynamic time series or panel models.

[26] The general formula for cumulative impacts is $\beta_2 (1+\beta_1+\beta_1^2+\beta_1^3+\ldots.\beta_1^{s-1})$, with each additional β_1 term representing the incremental effect for the given extra time period. See Kaplan 2002, p. 88.

[27] The presence of the lagged endogenous variable in this model means that the effects of even *temporary* increases in AID DG funding will not immediately dissipate by next year, as is assumed in the baseline model. The effects of a temporary one million dollars investment at time *t* equals β_2 the first year, $\beta_2\ \beta_1$ the second year, $\beta_2\ \beta_1^2$ the third year, and so on. Thus, given the coefficient of .648 for the lagged endogenous variable, a one-million dollar investment maintains 65% of its initial impact in the following year, 42% of its initial impact two years hence, and dissipates to zero a full ten years after the initial investment.

Extensions: The Endogeneity of USAID DG Assistance

In the previous study, we devoted much attention to the potential problem of the "endogeneity" of USAID DG assistance, that is, the possibilities that either unobserved variables were causing both USAID DG allocations and democratic outcomes, thus producing a spurious relationship between the two, or that USAID DG funding allocations were the direct *effect* (and not the cause) of the democratic development that a country had attained. The endogeneity of USAID DG assistance is perhaps the main counter-hypothesis to the overall findings that we presented in the previous study, and the issue has been raised in nearly every public presentation in academic and non-academic settings that we have made on the project over the past several years. In addition, the expert panel from the previous study urged us to redouble our efforts to make certain that the results truly were robust in the face of this potential problem.

One possible source of the endogeneity of USAID DG assistance is from its association with unobserved variables that (by definition) we were unable to include in the analyses and which are also related to democratic outcomes. For example, countries with better organized political parties may have a greater likelihood of attracting USAID DG funding, and better organized parties may also produce pressure for greater political rights and hence higher levels of overall democracy. As another example, following (Paxton and Morishima 2005), countries that are more peripheral than others in the global economic system may have a lower likelihood of receiving USAID DG funding compared to more integrated countries, and peripheral/integrated status may then lead to different levels of democracy. In both of these cases, the variable in question is not included in the observed data set, and thus they both represent unmeasured potential influences on the receipt of democracy assistance and the level of a country's democratic attainment.

An even more serious possibility, though, is that even after taking into account stable unobserved factors in the fixed effects or first differences models, there is still endogeneity in the process, such that levels of democracy *cause* USAID DG appropriations and not the reverse. Indeed, it appears to be part of the "conventional wisdom" regarding USAID DG assistance in the scholarly community, as evidenced by the claim of Knack (2004, 259) that "AID currently has an explicit policy of directing more aid to countries that appear to be making greater progress towards democratization."[28] As part of our endogeneity discussion in the previous study (pp. 62-67), we provided ample anecdotal evidence that USAID does not necessarily fund those countries "trending democratic," so we will not repeat those arguments here. For the skeptics, though, the issue must be settled by estimating statistical models that control for this possibility.

To recap the statistical issues involved: if there are effects from democracy "causing" USAID expenditures, the consequence is that the assistance variable at a given time point will be correlated with the idiosyncratic error term of the Freedom House equation, leading to the inability to estimate the effect of USAID DG assistance on democracy

[28] We note, however, that no direct evidence was presented by Knack in making this claim.

without bias. The standard approach to this problem is to utilize instrumental variables or Two-Stage Least Squares (2SLS) regression. In the first stage, a proxy variable is estimated by regressing USAID DG appropriations on all exogenous variables as well as on several predictors ("instrumental variables") which are assumed to a) have no direct effect on the Freedom House scores in that year, and b) have some significant influence on the USAID DG variable. The predicted value of democracy assistance at time *t* from this equation is the best estimate of USAID DG levels, purged of their contemporaneous relationship with the Freedom House time *t* error term. In the second stage, the USAID DG proxy variable is used to estimate the effects of USAID DG assistance on Freedom House scores without bias.

In the previous study, we included as instruments in the first stage regression predicting democracy assistance at time *t* the twice-lagged level of assistance (i.e. USAID DG_{t-2}) and the country's inflation and unemployment rates. This specification is plausible, yet there were several limitations to the analyses we conducted there. First, we provided no empirical verification that the set of variables indeed satisfied the exogeneity restrictions necessary for inclusion in the analysis, that is, that they were unrelated to the Freedom House error term at time *t*. Second, we provided no empirical verification that the instrument set was *strongly* related to time *t* USAID DG assistance, so that they would serve as good proxies for the USAID DG endogenous variable. And third, we had no "built-in" exogenous variables in the study in the sense that none were designed explicitly to serve as instruments for USAID DG assistance; our set of instruments was arrived at by panel analysis convention (in the case of the twice-lagged variable) or through examining the pattern of results in exploratory models. These limitations have all been overcome in our current analyses, and we present the results of three endogeneity models for the effect of USAID DG assistance on Freedom House ratings in **Table 6** below. These models, as will be discussed, have the added statistical advantage of controlling for the *other* source of endogeneity bias discussed above, the potential confounding effects from unobserved stable variables.

Table 6. The Effect of USAID DG Assistance: Endogeneity Models

	6(a)		6(b)		6(c)	
	Coefficient	**St. Error**	**Coefficient**	**St. Error**	**Coefficient**	**St. Error**
Democracy and Other Assistance						
USAID DG	**0.022****	0.008	**0.020****	0.009	**0.019****	0.008
USAID Non-DG	0.001	0.001	0.000	0.001	0.000	0.001
National Endowment for Democracy	0.079	0.175	0.325	0.243	-0.066	0.218
US Assistance not USAID or NED	-0.000	0.001	-0.000	0.001	-0.000	0.001
Regional-Subregional DG	-0.130	0.146	-0.061	0.136	0.020	0.138
Regional-Subregional Non-DG	**-0.022***	0.012	-0.008	0.021	-0.002	0.178
Other Donor Assistance DG	0.000	0.001	-0.000	0.001	-0.001	0.001
Other Donor Assistance Non DG	-0.000	0.000	-0.000	0.000	-0.000	0.000
Economic and Political Factors						
Annual Growth in GDP per Capita	**0.008****	0.003	0.009	0.006	**0.010***	0.006
Military Assistance Priority	-0.011	0.024	-0.009	0.015	-0.018	0.017
Democratic Diffusion	0.163	0.117	-0.028	0.150	0.048	0.164
Social and Political Conflict	**-0.001***	0.000	-0.001	0.001	-0.001	0.001
State Failure Indicator	**-0.856****	0.091	**-0.818****	0.193	**-0.745****	0.177
Freedom House Lagged	--	--	**0.679****	0.058	**0.656****	0.046
Iraq 2004	**-4.311****	1.632	**-3.591****	1.612	**-3.930****	1.481
Constant	**0.313****	0.092	0.000	0.016	-0.003	0.013
N	2251		2086		2086	
R-squared (uncentered)	0.0826		---		----	
Sargan Test of Exogeneity of Instruments [x^2 (df)]	0.379 (3) p=0.94		207.06(184) p=0.12		381.77(364) p=0.25	
Arellano-Bond z-test for second order autocorrelation			1.44 P=0.15		1.07 p=0.29	

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

The model in **Table 6a** begins with all variables being expressed in first differences. This serves to eliminate stable unobserved country-level factors from possibly confounding the causal estimates. We then treat the USAID DG assistance variable as endogenous. The proxy variable was constructed using all exogenous time-varying covariates, along with differenced values of inflation and our measure of State Department priorities (the number of times that a Secretary or Assistant Secretary of State was mentioned in relation to a particular country by the *New York Times*). As noted earlier, we created the latter variable in the hopes that it might serve as a suitable instrumental variable, in that more State Department mentions for a given country would potentially be correlated with additional USAID DG assistance, but not necessarily correlated with democratic outcomes in that period. (This assumption was confirmed in the statistical tests that we will discuss). Following Lewbel (1997), we also augment this instrument set with the second and third moments of the USAID DG variable (for a recent application of this procedure, see Rudra (2005)). This is done explicitly to increase the explanatory power of the instrument set in the first stage, as the problem of "weak instruments" hampers the efficient estimation of the effects of the endogenous

variables. The results of this estimation show a significant democracy assistance effect of .022. In addition, the model as a whole satisfies the assumptions of the instrumental variable procedures: the Sargan test of the model's overidentifying restrictions supports the exogeneity assumptions regarding the instruments ($\chi 2$ of .379 with 3 df, p=.94);[29] the hypothesis that the instruments are irrelevant in the first-stage equation can be decidedly rejected (LR value of 1794.1 with 4 df, p<.0001); and the State Department foreign policy priority instrument predicts USAID DG assistance in the first stage in ways that make theoretical sense, as more State Department mentions lead to significantly more USAID DG assistance in the country's next obligation cycle.

In **Table 6b**, we show the results from estimating of an extended Arellano-Bond dynamic panel model that includes the lagged endogenous Freedom House variable. This is then the "endogenous USAID DG assistance" version of the model in Table 5b. Recall that the Arellano-Bond Generalized method of moments (GMM) estimator makes use of the panel structure of the data to include additional instruments in the form of more distant lags of the model's variables. Specifically, for the endogenous variables (in this case both lagged Freedom House scores and USAID DG assistance), twice-lagged variables and, where possible, all lags further back in time are used in the instrument set, along with other instruments that may be specified. In this case, we augment the "internal" lag-based instruments with the inflation rate, the State Department variable, and the two higher-order moments of the assistance variable. The results again confirm the significance of the USAID DG assistance effect. The value of the USAID DG variable is .020 more than twice its standard error and nearly identical to its value in Table 5b. The model again passes all relevant statistical tests, as the Sargan test supports the exogeneity of the instruments ($\chi 2$ of 207.06 with 184 df, p=.12), and the test for second-order autocorrelation is negative (z=1.44 p=.15).

In **Table 6c**, we show the results of an extended endogeneity model that treats **all** democracy assistance --- from USAID, from the National Endowment for Democracy, and from other OECD donors --- as potentially endogenous. Again, the effect from USAID DG assistance remains significant with a value of .019, while the effects from NED and other donors are not statistically distinguishable from zero. The model passes the relevant Sargan ($\chi 2$ of 381.77 with 364 df, p=.25) and second-order autocorrelation tests as well (z=1.07, p=.29).

All of this evidence shows that the USAID DG assistance effect initially demonstrated in the earlier hierarchical growth and dynamic panel models is robust; it remains after assuming that assistance is endogenously related to Freedom House scores, and it remains in endogeneity models that include the endogenous lagged dependent variable as well. We are confident that the new methods employed here provide a sounder statistical basis on which to make these claims.[30]

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[29] The Sargan test essentially tests whether the correlation between the second stage regression's residuals and the set of instrumental variables is indeed 0, as required by the IV procedure. See Baltagi (2005: 141).

[30] As noted, the models in Table 6 also provide evidence that USAID DG assistance has statistically significant effects on Freedom House scores, controlling for the potentially confounding effects of stable

Part II – Under what Conditions Does Democracy Assistance Work Best?

In this section we present the findings regarding the conditional effects of democracy funding. The fundamental question is: Under what conditions does USAID DG assistance have a greater or smaller impact? We began our exploration of this problem by modeling USAID DG impact as a function of initial country characteristics (geographic location and general democratic conditions), and of USAID investment strategies (the trend and volatility in democracy investment).

The analysis conducted in the following sections builds on the "baseline model" presented in Part I. In the baseline model, represented by equation (1), the level of democracy in any given country-year is estimated as a function of a country-specific intercept (π_{0i}), a country-specific democratization trend (π_{1i}), the impact of USAID DG assistance (π_{2i}), and the impact of additional k covariates (π_{ki}):

(1) $$y_{ti}=\pi_{0i} + \pi_{1i}a_{ti} + \pi_{2i}AID_{ti} + \pi_{ki}v_{kti} + \varepsilon_{ti} \ .$$

Throughout Phase 1 of the project, as well as in the previous sections of this report, we have assumed that the effect of USAID DG assistance is the same for all recipient countries. Thus, Equation (2.2) presents the coefficient for USAID DG as equivalent to the "average" effect for the whole sample (B_{20}).

(2.2) $$\pi_{2i}= B_{20} \ .$$

However, it is likely that particular conditions (whether characteristics of a recipient nation or features of the USAID strategy towards the country) enhance or hinder the effects of USAID DG investment. For instance, countries with highly repressive regimes may be less permeable to democracy assistance. Alternatively, democracy funding may have greater impact in countries in which USAID has a sustained and consistent, as opposed to a more sporadic, presence. If this is the case, the impact of USAID DG assistance will vary from country to country as a function of country-level characteristics, just as the democratization trend (π_{2i}) is expected to vary from case to case. Equation (2.2b) reflects this extension of the baseline model, in which the impact of USAID DG assistance for country i (π_{2i}) is modeled not just as a function of the "average" effect (B_{20}), but also of m country characteristics ($X_1, X_2,\ldots, X_m$):[31]

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unobserved (country-level) factors. In other models that control *exclusively* for this possibility (i.e., without also dealing with the reverse causality issue) USAID DG also shows significant effects, with values of .031 in a traditional "fixed effects" model, and .021 in a "first differences" model, respectively. These results are also shown in **Appendix 5**.

[31] It would also be possible to include a random error term in equation (2.2b), such that the size of the DG assistance coefficient would depend on the included Xs, with some degree of predictive error. These models – with three random effects on the country level intercept, the slope of its democratic time trajectory, and the AID DG coefficient -- proved too complex to obtain reliable estimates.

(2.2b) $\pi_{2i} = B_{20} + B_{2m}X_{mi}$.

In the following sections we explore different types of "Xs"--regional characteristics, domestic socio-economic conditions, local political conditions, international influences, and investment patterns. Another way to understand equation (2.2b) is to consider B_{2m} as the coefficient for an interaction between the Level 1 predictor USAID DG assistance and the Level 2 variable X_m. By substitution of (2.2b) into (1), the mixed model becomes

(1b) $y_{ti}=\pi_{0i} + \pi_{1i}a_{ti} + B_{20}AID_{ti} + B_{2m}X_{mi}AID_{ti} + \pi_{ki}v_{kti} + \varepsilon_{ti}$

In this model, B_{20} represents the impact of $1 million of USAID DG when the mediating variable X_m is zero (which in our sample usually indicates the value for the "average country," as we have "centered" most independent variables at their means). In turn, B_{2m} represents the change in baseline coefficient B_{20} for every one-unit change in the mediating variable X_m. Thus, when the mediating variable is different from zero, the overall impact of democracy assistance is conditional on the level of X, and the overall coefficient of interest can be estimated as $B_{20}+B_{2m}X_{mi}$.[32] Following this logic we also explore the role of time-varying factors, such as economic performance or political and social conflict, that may mediate the effect of democracy investment using interaction terms between USAID DG and particular Level 1 independent variables.

Because this strategy requires the introduction of multiple interaction terms in some models, and in order to simplify the specification of our basic equation, in the rest of the report we employ a "trimmed" baseline model that eliminates all independent variables with insignificant coefficients in **Table 4a**. The elimination of four Level 2 predictors (the state failure measure for 1960-89, population, income per capita, and total US assistance between 1946 and 1989) does not alter the results of the baseline model and simplifies the specification considerably.[33]

Regional Effects

We first analyzed regional patterns.[34] Is USAID DG investment more effective in some regions than others? Some caveats are in order when we analyze this question. First, differences across regions may relate to the period covered by the study (for instance, democratization was steadily increasing in Eastern Europe during the 1990s, while most regime changes had taken place in Latin America during the 1980s). Second, regional locations are likely to "proxy" for other characteristics (culture, initial regime conditions, etc.). Thus, interpretation of regional patterns should be made with care.

[32] This also means that the standard error for the AID coefficient is conditional on the values of X, complicating the interpretation of significance levels, but we address this problem below.
[33] It should be noted that the "trimmed" baseline model does include the Level 1 (time-specific) state failure variable, as well as the UNDP Human Development Index, which is a partial reflection of a country's GDP per capita.
[34] We defined regions following standard USAID criteria. See Appendix 1 for a list of countries by region.

In order to capture regional effects, we introduced regional dummy variables in equations (2.0) for the initial level of democracy, (2.1) for the linear time trend, and (2.2b) for the impact of USAID DG. The baseline category comprises countries in Europe and Oceania,[35] and five dichotomous variables were included to indicate that countries were located in Africa, Asia, Latin America, Eurasia, or the Middle East. The resulting Level-2 equation for the USAID DG effect is presented as (2.2c) below:

(2.2c) $\pi_{2i} = B_{20} + B_{21}(\text{Africa}) + B_{22}(\text{Asia}) + B_{23}(\text{Latin America}) + B_{24}(\text{Eurasia}) + B_{25}(\text{Middle East})$

where B_{20} now represents the USAID DG coefficient for the average country in Europe and Oceania, B_{21} indicates the difference of the USAID DG coefficient for the average African country compared to the one for the reference category (B_{20}), and the remaining coefficients indicate the distance between the effect for other regions and the one for the reference category.

Table 7 summarizes the results for the regional models using Freedom House as the dependent variable, and with unconditional effects not related to regions being omitted to save space. The baseline coefficient for USAID DG (i.e., in Europe and Oceania) is significant. The effect of democracy assistance in Asia, Latin America, Eurasia, and the Middle East does not differ significantly from its impact on countries in the baseline group but the impact of USAID DG assistance in Africa is significantly greater. An investment of 10 million dollars is expected to increase the Freedom House democracy score by 0.29 points in Europe, while the same ten millions are expected to increase democracy by 0.82 points in Africa. This pattern may be explained by some of the general conditions prevailing in Africa. We explore some of those conditions below.

Figure 1 illustrates the effects of USAID DG by region. The dotted lines represent the 95 percent confidence intervals based on the conditional standard errors for each region (we present confidence intervals as a continuous band for graphical purposes). The impact of USAID democracy assistance is positive and significant (and virtually indistinguishable from the baseline effect) for Asia and the Middle East. The effect is not significant for Latin America and Eurasia, but it is also indistinguishable from the baseline effect. Given the historical limitations in the data discussed above (e.g., the democratization process occurred in Latin America mostly during the 1980s), it is hard to reach clear conclusions regarding Latin America and Eurasia. This fact underscores the need to collect retrospective data on USAID DG investment for the 1980s, and the need to produce comparable time series in the future.

[35] We lumped together Europe and Oceania because Pacific Islands are not recipients of DG funds (only Papua New Guinea received $0.2 million during the period under study) and thus it made little sense to treat Oceania as a region with a distinctive DG effect.

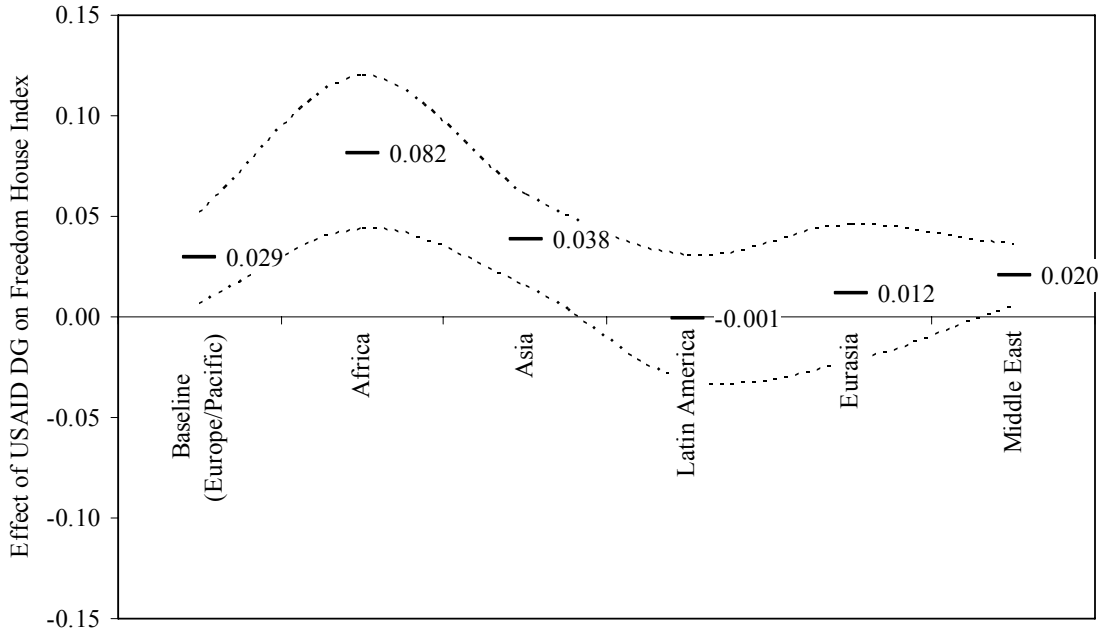
Table 7. Summary Table of Regional Differences in USAID DG Effects, Levels of Democracy, and Time Trends

	Coefficient	Std. Error
Democracy assistance		
Baseline coefficient for USAID DG	**0.029****	0.012
Africa	**0.052****	0.023
Asia	0.009	0.016
Latin America	-0.030	0.020
Eurasia	-0.018	0.021
Middle East	-0.009	0.014
Latent democratization trend		
Baseline Slope for Growth Curve	**0.073***	0.038
Africa	0.084	0.058
Asia	-0.027	0.051
Latin America	-0.015	0.046
Eurasia	**-0.254****	0.064
Middle East	-0.074	0.050
Initial level of democracy (Intercept)		
Baseline Intercept	**8.640****	0.589
Africa	**-2.212****	0.962
Asia	**-2.941****	0.833
Latin America	-1.133	0.755
Eurasia	**-1.768***	1.036
Middle East	**-4.388****	0.834

Note: Dependent variable is Freedom House. Baseline coefficients correspond to the average country in Europe and Oceania. Coefficients for regions indicate the distance between the coefficient for the typical country in the region and the Average coefficient. ** Significant at p<.05; * Significant at p<.10

Besides the effects of the democracy assistance, Table 7 highlights the considerable differences in the initial levels of democracy across regions. While the typical country in Europe and Oceania entered the sample with 8.6 points in the Freedom House scale (similar to the average Latin American country), the average country in other regions entered the sample at 6.9 in Eurasia, at 6.4 in Africa, at 5.7 in Asia, and at 4.3 in the Middle East. The typical country in the sample displayed an upward growth curve (an increase of roughly 0.07 Freedom House points per year) except in the case of Eurasia (with an average decline of -0.18 points per year).

Figure 1. Impact of USAID DG, Conditional on Region



Note: Entries indicate the conditional impact of $1 million for USAID DG; dotted lines indicate 95% confidence interval (estimates from Table 7).

Socio-Economic Conditions

Is democracy assistance more effective in some social contexts than in others? In this section we explore the role of domestic structural conditions as mediating variables in the process of democracy assistance. In this regard, two hypotheses come to mind. The first one is that democracy assistance has greater impact in countries that are better able to employ the resources—countries that are wealthier, better educated, socially cohesive, and with greater levels of human capital. The second, and opposite one, is that USAID DG will have greater impact in countries with a stronger need for development assistance —countries that are poorer, socially divided, and suffer from lower levels of human capital. We test those hypotheses by treating structural conditions in **Table 4** as mediating factors. One Level 1 variable (annual per capita GDP growth) and four Level 2 predictors (ethnoliguistic fractionalization, income inequality, the size of the country, and the Human Development Index) have been analyzed in interaction with USAID DG.

The results presented in **Table 8** tend to support the second hypothesis over the first one. The marginal effect of a million dollars invested in democracy assistance seems to be greater in those countries that are in greater need of external assistance. In this model, the mediating effects of economic growth, income inequality, and country size are insignificant (the coefficients for the interaction terms are virtually zero and have p-values ranging from .76 to .98). However, USAID DG assistance makes a greater

contribution in countries that are ethnically divided. For the average country, an investment of one million dollars is expected to improve Freedom House scores by .027 points. In a country one standard deviation above the mean in terms of ethnic fractionalization, the same investment is expected to produce an improvement of .046 points. **Figure 2** shows the size of the USAID DG coefficient at different levels of ethnic fractionalization.

The coefficient for the interaction between USAID DG and the Human Development Index is of borderline significance (p=.108) and it has a negative sign (indicating that aid matters less in countries that are wealthier, more educated, and with higher levels of life expectancy). This pattern deserves closer examination. Because the effect of democracy assistance in **Table 8** is conditional on human development, the standard error for the overall USAID DG coefficient (i.e., the estimate of uncertainty for coefficient π_{2i} in equation 1) is not the standard error for USAID DG alone (i.e., for coefficient B_{20} in equation 2.2b), but a *conditional* standard error, determined by the level of human development in each case.[36] Thus, the confidence interval around the expected impact of USAID DG will vary according to the HDI index in each case. This will be the case in all of the conditional effects models we examine in this section.

In order to illustrate these patterns, **Figure 2** depicts the size of the (conditional) coefficient for USAID DG and the 95 percent confidence interval around this estimate at different levels of human development. For the average country in the sample, with an HDI of .619, the expected impact of one million in USAID DG investment is .027 (the baseline coefficient in **Table 8**). For the country with the largest observed HDI in the sample (Israel, with .857) the expected impact of one million dollars would be barely .001 Freedom House points (indeed, Israel has not been a recipient of democracy funds). The size of the confidence interval the figure indicates that, above a certain HDI threshold, the effect of USAID DG is statistically indistinguishable from zero. Given the estimates for this model, this threshold is approximately .71 (roughly the human development levels achieved by Brazil or Tuvalu).

This finding again suggests that democracy assistance has a significant impact in those countries in greater socio-economic need. Indeed, in a model including interactions of USAID DG with both regional and socio-economic variables, all regional interactions became insignificant. This result (the table is not shown to save space) indicates that the greater impact of democracy assistance in Africa (reported in Table 7) may be explained by the prevailing socio-economic conditions in the region.

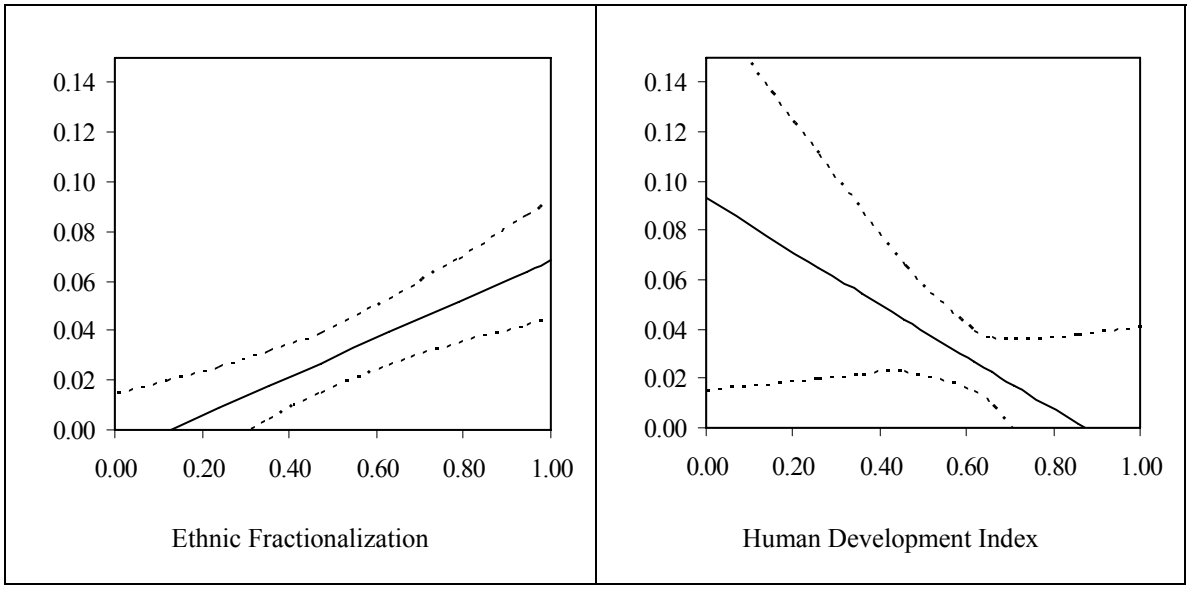
[36] Following the notation for equation 2.2b, the conditional standard error can be computed as $[var(B_{20})+X^2 var(B_{2m})+2X cov(B_{20}\, B_{2m})]^{½}$ (see Brambor, Clark, and Golder 2006).

Table 8. The Conditional Effects of USAID DG Assistance: Interactions with Socioeconomic Conditions

	Coefficient	S. Error
Level 1		
USAID Democracy assistance		
Baseline coefficient for USAID DG	**0.027****	0.006
Annual Growth in GDP per Capita	-0.0001	0.000
Ethnic Fractionalization	**0.078****	0.021
Income Inequality	-2E-005	0.001
Size in Square Km	-3E-008	1.4E-006
Human Development Index	**-0.107†**	0.066
Other Assistance		
USAID Non-DG	0.000	0.001
National Endowment for Democracy	0.075	0.171
US Assistance other than USAID or NED	-3E-006	0.0004
Regional-Subregional DG	0.019	0.123
Regional-Subregional Non-DG	-0.008	0.013
Other Donor Assistance on DG	-2E-005	0.001
Other Donor Assistance on Non-DG	-1E-005	9.0E-005
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.009****	0.003
US Military Assistance Priority	-0.023	0.018
Democratic Diffusion	**0.182****	0.086
Social and Political Conflict	**-0.001****	0.000
State Failure Indicator	**-0.718****	0.077
Iraq 2004	**-3.969****	1.100
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**6.783****	0.243
Prior Democracy	**0.284****	0.049
Income Inequality	**0.073****	0.032
Ethnic Fractionalization	-0.827	1.079
Size in Square Km	-0.0001	0.000
Human Development Index	**6.209****	1.839
Effect on (Level-1) Time Trend		
Average Slope for Growth Curve	**0.048****	0.016
Prior Democracy	-0.004	0.003
Income Inequality	-0.0002	0.002
Ethnic Fractionalization	**0.107***	0.063
Size in Square Km	**-1E-005***	7.9E-006
Human Development Index	0.107	0.108
Model Statistics and Variance Parameters		
Random Variance (Intercept)	5.908**	0.881
Random Variance (Slope)	0.012**	.003
Autocorrelation (rho)	0.791**	0.021
Model Deviance/AIC	6456.902	6492.902

Note: **significant at p<.05; *significant at p<.10 (two tailed) †significant at p .108.
Dependent variable is Freedom House.

Figure 2. Impact of USAID DG, Conditional on Ethnic Fractionalization and HDI



Note: Lines indicate the size of the USAID DG coefficient (vertical axis) at different levels of the intervening variables (horizontal axes). Dotted lines indicate 95% confidence intervals (estimates from Table 8).

Domestic Political Conditions

Can a similar argument be made with regard to local political conditions? Is democracy assistance more effective in some political contexts than others? In **Table 9**, we analyze the conditional effect of USAID DG according to two time-varying covariates (Banks' index of social and political conflict and the indicator for whether or not the country experienced State Failure that year), and one country-level predictor (the prior "stock" of democracy, or the number of years the country was rated "free" between 1972 and 1989). The state failure dummy captures extreme forms of political instability (ethnic wars, revolutionary wars, genocide, abrupt regime breakdowns) in any given year. The baseline coefficient for USAID DG in this model is marginally significant at the .1 level. None of the interaction terms are significant, indicating that the effect of USAID DG is not significantly different from the baseline coefficient when the mediating variables increase by *one unit*. However, the direction of the coefficients hints at larger USAID DG effects under worse political conditions (state failure, less democratic experience), and the estimate for the interaction between state failure and USAID DG is close to the .1 level (p=.129). For these reasons, we analyzed the conditional effects in more detail.

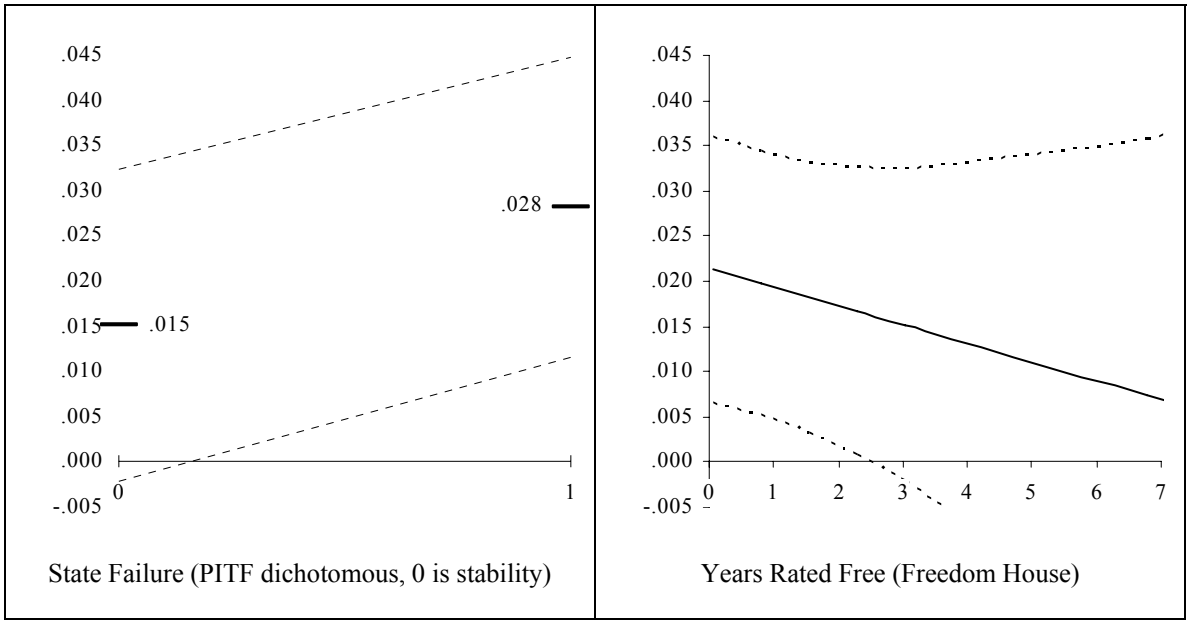
Table 9. The Conditional Effects of USAID DG Assistance: Interactions with Domestic Political Conditions

	Coefficient	S. Error
Level 1		
USAID Democracy assistance		
Baseline Coefficient for USAID DG	**0.015***	0.009
Social and Political Conflict	4.4E-005	4.3E-005
State Failure Indicator	**0.013†**	0.009
Prior Democracy	-0.002	0.002
Other Assistance		
USAID Non-DG	0.000	0.001
National Endowment for Democracy	0.022	0.169
US Assistance other than USAID or NED	-0.000	0.000
Regional-Subregional DG	-0.011	0.122
Regional-Subregional Non-DG	-0.008	0.013
Other Donor Assistance on DG	8.2E-005	0.001
Other Donor Assistance on Non-DG	-7E-006	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.009****	0.002
US Military Assistance Priority	-0.025	0.018
Democratic Diffusion	**0.179****	0.086
Social and Political Conflict	**-0.001****	0.000
State Failure Indicator	**-0.757****	0.077
Iraq 2004	**-6.616****	1.872
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**6.752****	0.243
Prior Democracy	**0.283****	0.049
Income Inequality	**0.073****	0.032
Ethnic Fractionalization	-0.932	1.079
Size in Square Km	-0.000	0.000
Human Development Index	**6.451****	1.839
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**0.052****	0.016
Prior Democracy	-0.004	0.003
Income Inequality	-0.0002	0.002
Ethnic Fractionalization	**0.124***	0.064
Size in Square Km	-1E-005	7.9E-006
Human Development Index	0.101	0.109
Model Statistics and Variance Parameters		
Random Variance (Intercept)	5.783**	0.877
Random Variance (Slope)	0.012**	0.003
Autocorrelation (rho)	0.798**	0.020
Model Deviance/AIC	6442.90	6478.90

Note: **significant at p<.05; *significant at p<.10 (two tailed) † significant at p .129. Dependent variable is Freedom House.

Figure 3 depicts the conditional coefficients for USAID DG at different levels of State Failure and Prior Democracy. In Table 9, the baseline coefficient for USAID DG is marginally significant at the .1 level for non-failed states (variable POL25=0) and for countries with an average democratic experience (rated "free" for about 3 years between 1972 and 1989, in the sample of eligible countries). When we observe extreme political instability, the USAID DG coefficient grows from .015 to .028, and it becomes statistically significant at the .05 level. Given the size of the confidence interval (depicted in the graph), this difference of .013 Freedom House points is not enough to establish that the effect of democracy assistance is substantively different under conditions of state failure (thus, the interaction term in Table 9 is insignificant), but this difference is enough to reduce the statistical uncertainty for the estimate. In other words, we can be more confident that democracy assistance makes a contribution (whatever its size) under conditions of state failure. Although this may be surprising, given the uncertain conditions that prevail in failed states, the analysis of prior democracy tends to support this insight. The effects of USAID DG are more consistent (and thus significant at the .05 level) for countries with no prior democratic experience than for those with longer democratic traditions. As in the previous section, the analysis of conditional coefficients suggest that countries with a greater "need" for democracy assistance are the ones in which such investment is more effective.

Figure 3. Coefficient for USAID DG,
Conditional on State Failure and Prior Democracy



Notes: Dotted lines indicate 95% confidence intervals (estimates from Table 9).

Given the results in **Table 9**, we also explored the role of prior democracy by looking at the Freedom House trichotomous classification (Free, Partially Free, and Not Free) during the year prior to the year under study. We created two dummy variables (one for Free and another for Not Free observations) and computed interactions between those variables and USAID DG. The reference category in this model corresponded to Partially Free cases. The results (not reported here to save space), indicated that investment in Partially Free countries makes a significant contribution to democratization, and that the effect of investment in Free or Not-Free countries does not differ from this estimated baseline impact. Thus the immediately prior level of democracy does *not* condition the effect of USAID DG assistance; what appear to matter are extreme conditions of state failure, and the lack of historical experience of the country with democratic government.

International Factors

In **Table 10**, we explore the role of two time-varying covariates, democratic diffusion and U.S. foreign security priorities, as international or "external" factors mediating the impact of democracy assistance. As described above, Democratic Diffusion is measured for each country using a weighted average of democracy in the world during the previous year, excluding the country in question, and weighting every other country's democracy score according to the distance from the country's capital city. Priority given by U.S. foreign policy to security concerns for each country is measured using the percentage of total U.S. security assistance (military and anti-narcotics aid) received by a particular country in any given year. Both interactions in **Table 10** are significant and negatively signed. The democratic diffusion interaction indicates that, when a country's external environment is already more democratic, USAID DG is less effective. This finding supports other results presented above indicating that democracy assistance makes a greater contribution in more difficult contexts, but we note that it should be interpreted cautiously, as the coefficient for diffusion is not significant in the full multivariate model that we present below.

The coefficient for the interaction between U.S. Military Assistance Priority and democracy assistance is also negative, suggesting that democracy programs are less effective when the U.S. provides larger amounts of military assistance. This effect, moreover, appears to explain fully the "Iraq Effect" that we detected earlier in Table 3. Because Iraq represented a foreign policy priority mainly for security reasons in 2004 (e.g., it received 23 percent of all security assistance in 2004, vis-à-vis 0.6 percent for the average eligible country) and it was also the largest recipient of democracy assistance (31 percent of all USAID DG funds spent in 2004), the overall impact of USAID DG was depressed when compared to a model including data for 1990-2003.

Table 10. The Conditional Effects of USAID DG Assistance: Interactions with External Factors

	Coefficient	S. Error
Level 1		
USAID Democracy assistance		
Baseline coefficient for USAID DG	**0.036****	0.006
US Military Assistance Priority	**-0.001****	0.000
Democratic Diffusion	**-0.010***	0.005
Other Assistance		
USAID Non-DG	0.000	0.001
National Endowment for Democracy	0.016	0.169
US Assistance other than USAID or NED	-0.001	0.000
Regional-Subregional DG	-0.013	0.122
Regional-Subregional Non-DG	-0.009	0.013
Other Donor Assistance on DG	0.000	0.000
Other Donor Assistance on Non-DG	1.1E-007	9.0E-005
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.009****	0.002
US Military Assistance Priority	-0.015	0.018
Democratic Diffusion	**0.180****	0.086
Social and Political Conflict	**-0.001****	0.000
State Failure Indicator	**-0.731****	0.077
Iraq 2004	0.164	2.548
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**6.788****	0.242
Prior Democracy	**0.285****	0.048
Income Inequality	**0.073****	0.031
Ethnic Fractionalization	-0.979	1.074
Size in Square Km	-0.000	0.000
Human Development Index	**6.347****	1.831
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**0.050****	0.016
Prior Democracy	-0.004	0.003
Income Inequality	-0.000	0.002
Ethnic Fractionalization	**0.125***	0.064
Size in Square Km	-1E-005	8.0E-006
Human Development Index	0.111	0.110
Model Statistics and Variance Parameters		
Random Variance (Intercept)	5.731**	0.874
Random Variance (Slope)	0.013**	0.003
Autocorrelation (rho)	0.797**	0.020
Model Deviance/AIC	6427.196	6463.196

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

In fact, once we allow the effect of USAID DG to be conditional on the U.S. Military Assistance Priority variable, the Iraq 2004 dummy loses its statistical significance, indicating that the "Iraq effect" is in fact an extreme manifestation of a more general pattern by which democracy assistance is less powerful when the overall policy towards the recipient country is driven by security concerns (Bueno de Mesquita and Downs 2006). We note that none of the other interaction models presented thus far have the same impact on the Iraq coefficient; that is, the Iraq 2004 variable is still significant after including all other interactions *except* the military assistance variable.

It is worth noting that the U.S. Military Assistance Priority variable does not distinguish between different forms of military assistance (e.g., training vs. equipment). It also does not measure U.S. military intervention *per se*, but rather reflects overall U.S. security or geo-strategic concerns in the bilateral relation with a given country. The evidence suggests that, to the extent that USAID democracy assistance is provided in settings where U.S. geo-strategic concerns constitute a priority for bilateral relations, the effectiveness of democracy programs will decline.

In order to verify the previous findings, we estimated a model including all interactive terms that were significant in Tables 8, 9, and 10 (plus the few terms that approached the .1 level of significance in those models). This time we excluded the Iraq 2004 dummy, because this case is subsumed into the more general pattern captured by the security priority variable. The results, presented in **Table 11**, are consistent with the overall findings described above. The impact of USAID DG is greater when countries:

- are ethnically divided,
- have lower levels of human development,
- face major instances of political instability, and
- are not recipients of large amounts of U.S. military assistance.

The interaction with the diffusion variable, as noted above, is now insignificant in the full model, (p=.704), indicating that we cannot reject the hypothesis that USAID DG works equally, regardless of the democratic nature of the country's neighborhood.[37]

Figure 4 plots these conditional coefficients for the four significant interaction effects. The conditional effect of foreign security assistance (depicted in the lower-right) is noteworthy. Because 95 percent of the countries in the sample individually receive less that 1 percent of the security assistance disbursed in any year, any small deviation from the variable's mean (0.6 percent) tends to reflect a U.S. security priority and therefore affects the significance of the USAID DG coefficient. The graph indicates that USAID DG is insignificant (at the .05 level) for every recipient of more than 1.1 percent of the total security assistance in any year. This group of countries, however, represents only 4.3 percent of the cases in our sample. It includes countries such as Afghanistan, Colombia, Egypt, Iraq, Jordan, Turkey, and Pakistan.

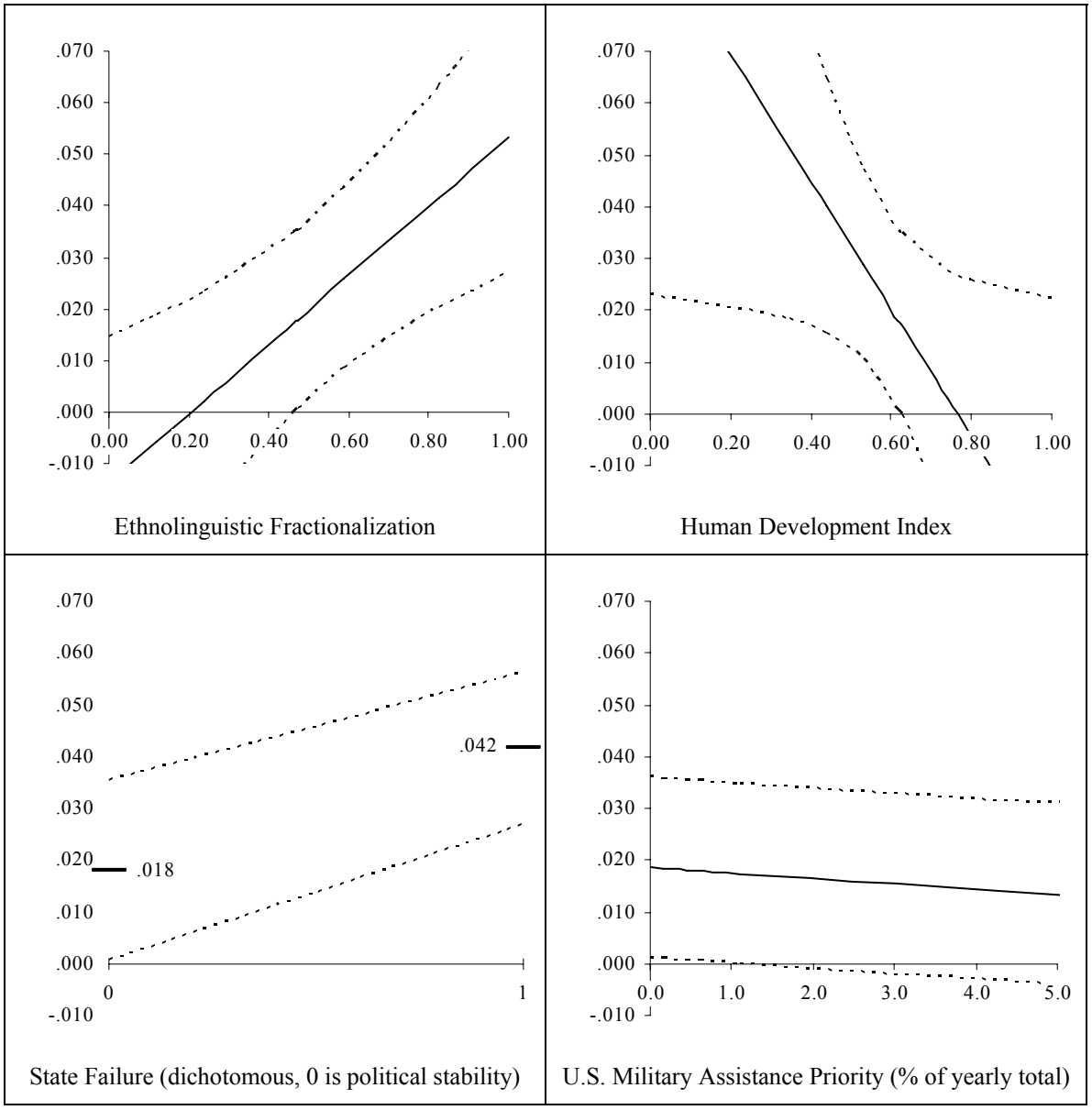
[37] The results here confirm the earlier finding that diffusion has a positive impact on FH scores; the analysis here says only that the effect of DG assistance does not depend on the recipient country's neighborhood.

Table 11. The Conditional Effects of USAID DG Assistance: Multivariate Final Model

	Coefficient	S. Error
Level 1		
USAID Democracy Assistance		
Baseline coefficient for USAID DG	**0.018****	0.009
Ethnic Fractionalization	**0.067****	0.022
Human Development Index	**-0.124****	0.060
State Failure Indicator	**0.024****	0.010
Military Assistance	**-0.001****	0.000
Democratic Diffusion	0.002	0.007
Other Assistance		
USAID Non-DG	-7E-005	0.001
National Endowment for Democracy	0.035	0.170
US Assistance other than USAID or NED	-0.000	0.000
Regional-Subregional DG	0.017	0.122
Regional-Subregional Non-DG	-0.007	0.013
Other Donor Assistance on DG	3.5E-007	0.001
Other Donor Assistance on Non-DG	9.3E-007	9.0E-005
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.009****	0.002
US Military Assistance Priority	-0.014	0.018
Democratic Diffusion	**0.187****	0.086
Social and Political Conflict	**-0.001****	0.000
State Failure Indicator	**-0.734****	0.077
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**6.780****	0.243
Prior Democracy	**0.285****	0.049
Income Inequality	**0.071****	0.032
Ethnic Fractionalization	-0.872	1.082
Size in Square Km	-0.000	0.000
Human Development Index	**6.083****	1.841
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**0.049****	0.016
Prior Democracy	-0.005	0.003
Income Inequality	-0.000	0.002
Ethnic Fractionalization	**0.110***	0.063
Size in Square Km	**-1E-005***	7.9E-006
Human Development Index	0.114	0.108
Model Statistics and Variance Parameters		
Random Variance (Intercept)	5.917**	0.883
Random Variance (Slope)	0.012**	0.003
Autocorrelation (rho)	0.792**	0.021
Model Deviance/AIC	6432.312	6468.312

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

Figure 4. Conditional Coefficient for USAID DG



Notes: Lines indicate the size of the USAID DG coefficient (the vertical axis) at different levels of the intervening variables (horizontal axis). All other intervening variables held at their means (or 0 for State Failure). Dotted lines indicate 95% confidence intervals (based on Table 11).

Investment Strategies

It is reasonable to assume that USAID's investment strategy towards each country may also shape the impact of democracy assistance. Levels of commitment, consistency in investment patterns, the composition of the USAID DG portfolio, and other aspects of USAID work may vary across recipient countries, with different implications for democracy assistance. This is one of the areas in which the growth curve models may

prove more useful, yet it is also one in which prior knowledge to guide our hypotheses is less well developed.

In order to assess the impact of volatility on USAID DG effects, we introduced Level 2 *volatility* and *trend* variables as mediators for the impact of democracy assistance. As explained in the first section of the report, the *volatility* variable captures the degree of fluctuation in USAID investment over the period 1990-2004. This variable reflects the extent to which yearly funding has departed from the level that would be expected given the observed time trend and the level of funding during the previous year. The *trend* variable, in turn, reflects the evolution of investment over time (positive values indicate a pattern of growing investment). Our expectations are, following Lensink and Morrissey's (2000) work on foreign assistance, that more overall volatility in investment will decrease the impact of investment at any given point in time, and the countries with consistently increasing USAID DG allocations will show stronger effects from that investment than countries with consistently decreasing investment.

Table 12 presents the results of two models using Freedom House as the dependent variable. For the purpose of this analysis, we have worked with the sub-sample of recipient countries (N=1,805) rather than the sample of eligible countries (N=2,416). That is, we have treated the values for the volatility and trend variables as missing for countries that never received USAID DG assistance.[38] Model 12a reproduces the baseline specification presented in Table 4 (including the Iraq dummy, but dropping the four predictors with insignificant coefficients in Table 4). Model 12b reflects the revised specification with multiple interaction terms (and eliminating the Iraq dummy) just presented in Table 11.

In both models, the coefficient for the baseline USAID DG effect (i.e., when assistance is at its overall average value) is similar in magnitude and significant at the .05 level. In Model 12a, the interaction with the trend variable is significant at the .1 level, suggesting that democracy assistance has a greater impact when investment in the recipient country expands over time. This effect, however, is insignificant in Model 12b, once we control for other mediating factors (p=.984). The mediating effect of volatility is negative in both models, but it fails to achieve conventional levels of significance. However, the effect is close to the .1 level (p=.118) in Model 12a; because of this reason we analyzed the behavior of the conditional coefficient more carefully.

[38] We estimated alternative models including non-recipient countries assuming values of zero in the volatility and trend variables, and the results were consistent. Restricting an analysis of funding strategies to countries that actually received funds, in our view, makes greater theoretical sense.

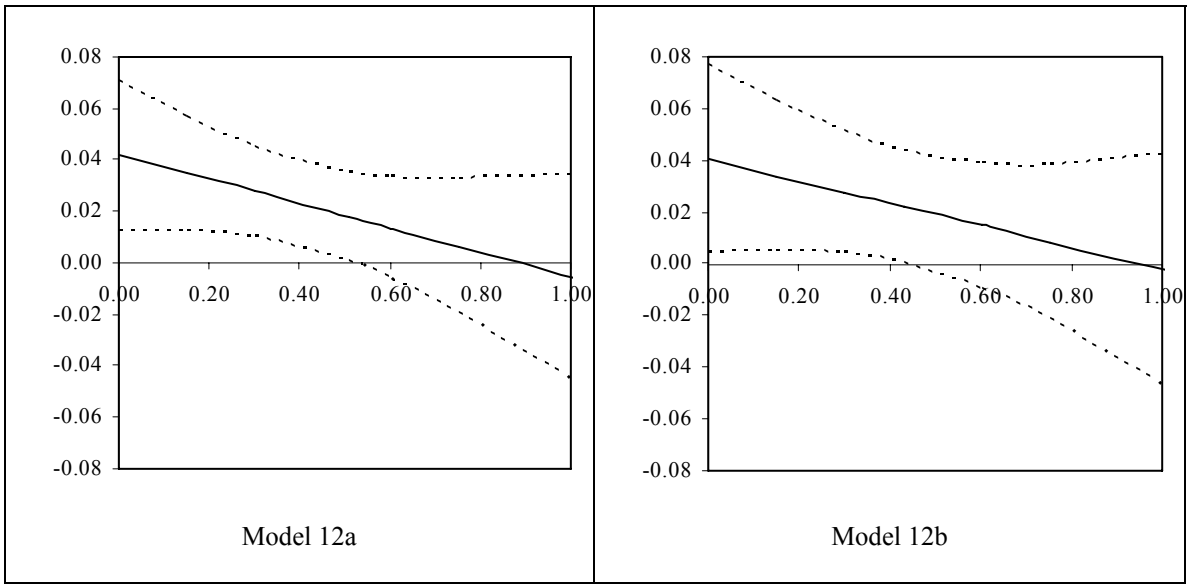
Table 12. The Conditional Effect of USAID DG Assistance: Interactions with Aid Volatility and Trend

	12(a) – With Iraq		12(b) – Without Iraq & Multivariate	
Level 1				
USAID Democracy Assistance				
Baseline coefficient for USAID DG	**0.042****	0.015	**0.040****	0.018
Trend in DG Aid, 1990-2004	**0.043***	0.025	0.001	0.026
Volatility in DG Aid, 1990-2004	-0.047	0.030	-0.042	0.033
Ethnic Fractionalization	---	---	**0.054****	0.024
Human Development Index	---	---	**-0.133****	0.065
State Failure Indicator	---	---	**0.030****	0.011
Military Assistance	---	---	**-0.001****	0.000
Democratic Diffusion	---	---	-0.002	0.007
Other Assistance				
USAID Non-DG	0.001	0.001	0.000	0.001
National Endowment for Democracy	0.071	0.180	-0.006	0.183
US Assistance other than USAID or NED	-0.000	0.000	-0.000	0.000
Regional-Subregional DG	0.035	0.143	0.041	0.143
Regional-Subregional Non-DG	-0.011	0.014	-0.009	0.014
Other Donor Assistance on DG	-0.000	0.001	-0.000	0.001
Other Donor Assistance on Non DG	-1E-005	9.5E-005	4.5E-006	9.5E-005
Economic and Political Factors				
Annual Growth in GDP per Capita	**0.009****	0.003	**0.008****	0.003
US Military Assistance Priority	-0.029	0.023	-0.020	0.025
Democratic Diffusion	**0.196****	0.099	**0.215****	0.099
Social and Political Conflict	-0.000	0.000	-0.000	0.000
State Failure Indicator	**-0.758****	0.086	**-0.771****	0.087
Iraq 2004	**-4.867****	1.311	---	---
Level 2				
Effect on (Level-1) Intercept				
Average Intercept	**7.629****	0.407	**7.613****	0.410
Prior Democracy	**0.172****	0.059	**0.169****	0.060
Income Inequality	**0.071****	0.032	**0.068****	0.033
Ethnic Fractionalization	0.573	1.180	0.595	1.192
Size in Square Km	-8E-005	0.000	-8E-005	0.000
Human Development Index	**6.121****	1.931	**5.679****	1.946
Trend in DG Aid, 1990-2004	**-3.813****	1.203	**-3.766****	1.212
Volatility in DG Aid, 1990-2004	**-1.104****	0.424	**-1.035****	0.428
Effect on (Level-1) Trend				
Average Slope for Growth Curve	**0.057***	0.031	**0.058***	0.030
Prior Democracy	-0.006	0.004	-0.006	0.004
Income Inequality	-0.001	0.002	-0.001	0.002
Ethnic Fractionalization	0.123	0.085	0.113	0.084
Size in Square Km	-1E-005	9.2E-006	-1E-005	9.1E-006
Human Development Index	0.032	0.139	0.057	0.138
Trend in DG Aid, 1990-2004	-0.082	0.088	-0.088	0.087
Volatility in DG Aid, 1990-2004	-0.007	0.030	-0.011	0.029
Model Statistics and Variance Parameters				
Random Variance (Intercept)	3.622**	0.957	3.817**	0.958
Random Variance (Slope)	0.016**	0.004	0.015**	0.004
Autocorrelation (rho)	0.819**	0.023	0.816**	0.023
Model Deviance/AIC	5004.710	5040.710	5028.031	5064.031

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

Figure 5 presents the coefficients for USAID DG conditional on the volatility of the investment. In Model 12a, the coefficient for USAID DG becomes insignificant above a level of volatility equivalent to 0.51. In Model 12b the outcome is similar: the coefficient for democracy assistance fails to meet the .05 level of significance above 0.43 points of volatility. To provide a substantive interpretation of this result, consider that a value of 1.0 in the volatility scale would roughly indicate that the average yearly fluctuation in USAID DG (above and beyond any changes explained by an ongoing investment trend in the country) is as large as the average level of investment during the period. For instance, if the average democracy assistance per year is $10 million, a volatility score of 1.0 would indicate that the expected fluctuation from year to year, once we control for any regular trend, would be $10 million. A volatility score of 0.5 would indicate an expected fluctuation of $5 million per year (i.e., average investment could be cut by half, or increased by 50 percent next year). About 52 percent of the recipient countries in the sample registered levels of USAID DG volatility above 0.5 points. This means that in about half of the recipient countries the level of volatility in democracy investment may be high enough to compromise its impact.

Figure 5. Coefficient for USAID DG, Conditional on Volatility of the Investment



Notes: Lines indicate the size of the USAID DG coefficient (the vertical axis) at different levels of volatility (the horizontal axis). Dotted lines indicate 95% confidence intervals.

The remaining interaction terms in Model 12b are consistent with the other findings in **Table 11**. The results presented throughout this section of the report indicate that USAID DG investment is more reliable when countries "need" it more (when they are less developed, ethnically divided, or undergoing major forms of political instability), when U.S. military assistance is low, and when assistance is deployed consistently and without major fluctuations.

Part III – Analysis of Sub-Sectors

In this part of the report we analyze the contribution of particular sub-sectors of USAID DG assistance (Elections, Civil Society, and Governance) and sub-sub-sectors (Human Rights, Free Media) to specific aspects of democracy. As explained in the introduction of the report, we have created composite measures to capture aspects of democratic performance targeted by USAID programs: the presence of free and fair elections, respect for human rights, conditions for the emergence of a vibrant civil society, independent media outlets, and efficient and transparent governance.

There were several criticisms of our previous work on this subject by the expert panel, notably the inclusion of one of the two overall Freedom House democracy dimensions in our measure of *Free Elections*, and the lack of a good overall measure of governance. As noted earlier, we have undertaken a considerable review of the sub-and sub-subsectoral outcomes and changed the measures in several instances.[39]

We show the results of the baseline hierarchical growth models for each sub- and sub-subsectoral outcome in **Table 13** below. The models, akin to the one presented in **Table 4a**, include the Iraq 2004 dummy variable, but do not include lagged USAID DG variables. The results show that, for the models estimated on identical or virtually identical sub- or sub-sub-sectoral outcomes in the previous study–civil society, free media, and human rights—the addition of the 2004 data (and the Iraq 2004 dummy variable) leads to findings that are very similar to our original results. As in the previous study, Elections spending has a significant impact (.092) on the sub-sectoral outcome related to Elections, with some additional impact of the governance spending (.060). In the civil society model, civil society assistance has a significant effect of similar magnitude (.292) as in the previous study, with governance outlays also showing a significant impact of .098. The free media model shows a strong impact of USAID DG media outlays (.573), with an additional impact (.151) of non-media Civil Society spending. And the Human Rights model shows a similar pattern as in the previous study, with Human Rights spending having a strong negative impact (-.664) and elections spending having a relatively weaker positive impact (.152). We analyze the negative coefficient for the human rights sub-subsector in the following section.

[39] In the revised index of Free and Fair Elections, we have eliminated the Freedom House measure of political rights (to avoid overlaps with the general measure of democracy), and incorporated the World Bank's indicator of Electoral Competitiveness in Legislative Elections (from the Database on Political Institutions) and ICRG's index of Democratic Accountability. In the revised Civil Society index, we eliminated Green's Index of Civil Society to reduce the amount of imputation (the Green index only covers Eastern Europe and the former Soviet Union).

Table 13. Summary of Effects from Sub-Sector and Sub-Sub-Sector Analyses

Sub-Sector and Sub-Sub-Sector Democracy Assistance	13.1 Elections	13.2 Human Rights	13.3 Civil Society	13.4 Free Media	13.5 Governance
Elections	0.092*	0.152*	n.s.	0.185**	n.s.
Rule of Law (all sub-sub-sectors)	n.s.	--	n.s.	n.s.	n.s.
-Human Rights	--	-0.664**	--	--	--
-Non Human Rights	--	n.s.	--	--	--
Civil Society (all sub-sub-sectors)	n.s.	n.s.	0.292**	--	n.s.
-Media	--	---	--	0.573**	---
-Non-Media	--	---	--	0.151**	---
Governance	0.060**	n.s.	0.098*	n.s.	0.070**

Note: Entries are coefficients for sub-sectoral and sub-sub-sectoral USAID DG variables in models using specific democracy dimensions as the dependent variables. General specification is otherwise equivalent to trimmed baseline model described in the text. Full results shown in Appendix 6.
** Significant at p<.05; * Significant at p<.10 (two-tailed); n.s. Not significant at the .10 level.

For the new outcome indicator, the results are also positive. Governance spending is the only type of assistance that impacts the new Governance dimension, though the effect is relatively small in substantive magnitude. The size of the coefficient indicates that increasing USAID governance funding by $10 million in a given year would raise the governance score by about 7/10 of a point on the 100-point scale of efficient governance and transparency.

Are sub-sectoral outcomes driven by the absolute level of investment in an area, or by the relative priority placed on some issues versus others? Our next set of models addresses this question (**Table 14)**. We include in the sub-sectoral models a new Level 1 variable: the percentage of the total USAID DG portfolio invested in the particular sub-sector in any given year. This variable is intended to capture whether the effect of sub-sectoral funds results from the total level of funding, reflected by the USAID variables, or by the prioritization of any particular sub-sector, reflected by the portfolio indicators. In other terms, is it more effective to invest *more* in a particular sub-sector, or to expand the *relative weight* of the sub-sector in the overall portfolio? The results presented in Table 14, indicate that, while the level of sub-sectoral investment affects particular dimensions of democracy (consistent with the patterns shown in Table 13), the relative emphasis given to particular sub-sectors does not have a direct impact on democratic outcomes.

Table 14. Sub-Sectoral Effects According to Patterns of Investment

Sub-Sector Democracy Assistance	14.1 Elections	14.2 Human Rights	14.3 Civil Society	14.4 Free Media	14.5 Governance
Elections					
Elections	n.s.	**0.155***	n.s.	**0.186****	n.s.
Percentage invested in Elections	n.s.	---	---	---	---
Rule of Law					
Rule of Law (all sub-sub-sectors)	n.s.	---	n.s.	n.s.	n.s.
-Human Rights	----	**-0.747****	---	---	---
-Non Human Rights	----	n.s.	---	---	---
-Percentage invested in Human Rights	----	n.s.	---	---	---
Civil Society					
Civil Society (all sub-sub-sectors)	n.s.	n.s.	**0.296****	---	n.s.
Percentage invested in Civil Society	---	---	n.s.	---	---
-Media	---	---	---	**0.559****	---
-Non Media	---	---	---	**0.152****	---
-Percentage invested in Free Media	---	---	---	n.s.	---
Governance					
Governance	n.s.	n.s.	**0.157****	n.s.	**0.081****
Percentage invested in Governance	---	---	---	---	n.s.

** Significant at p<.05; * Significant at p<.10 (two-tailed); n.s. Not significant at the .10 level.

Understanding the Impact of Human Rights Assistance

As we have noted in this and previous reports, the most unanticipated result in the extensive analyses of the initial study of the effects of U.S. foreign assistance on democracy building in the period 1990-2003 is the negative impact of receiving rule of law funding directed at the improvement of human rights on the performance of nations in protecting or abusing the personal integrity rights of their populations. The finding persists through the models reported above.

Our plan for investigating this anomalous and troubling finding called for an investigation of alternative hypotheses that might demonstrate the spuriousness of the anomalous relationship between democracy assistance in the human rights area and human integrity abuse:

1. reexamining the "reverse causality" explanation
2. reexamining the "measurement error" explanation
3. investigating the effects of potential omitted independent variables
4. exploring theory and analysis that might explain a "genuine relationship"

We examined each of these alternative hypotheses carefully. A full report on our investigations is given in Appendix 7. The full statistical model for that investigation is given in Table A7.1 in that appendix. To avoid distraction from the principal thrust of our work in this report, we only summarize our procedures, analyses, and conclusions here.

To test the *reverse causality explanation* -- that the relationship between development assistance devoted to improving human rights and respect for human integrity occurs because assistance is directed to countries with problematic records on respect for personal integrity precisely because of their suspect records, we estimated endogeneity models similar to those in Table 6 above. We found little change in the estimated negative impact of USAID DG human rights assistance on our measure of countries' respect for human integrity. However, the models do not pass the relevant tests for the exogeneity of the instrument set, and, thus, we can't be certain that we have good instruments to serve as proxies for the HR AID allocation. So the possibility of endogeneity in the process remains, even though all of our efforts to control for this have yielded essentially similar results as presented previously

The *measurement or reporting error explanation* contends that "more democracy assistance in the human rights area leads to higher levels of revealed human rights abuses, but not necessarily higher levels of actual abuse." If this explanation were true, it could mean that Rule of Law - Human Rights and other USAID DG assistance were achieving an important goal, increasing sensitivity to and reporting of human rights abuses. In the short run, such success would manifest itself in apparent -- but not real -- increase in abuses. We used existing data on press freedom and found interpolated annual data on the within country presence of international governmental and nongovernmental associations (IGOs/NGOs) to serve as proxies for increased reporting of human rights abuses.

The *omitted variables explanation* suggests that the anomalous relationship between human rights assistance and human integrity abuse occurs because our models omit variables that are key to interpreting or ameliorating the relationship. After reviewing the human rights literature, we posited indicators of constitutional structure, including both formal and actual judicial independence, as omitted variables that were worthy of exploration. We generated cross-national time series data on these omitted variables and tested their effects in the model that is developed in Appendix 7.

The *genuine relationship explanation* posits that leaders who find themselves under pressure to improve their human rights performance actually respond by becoming more repressive because they feel their grip on power to be threatened. Our analysis plan confronted this explanation more directly by including into our full statistical models of human integrity performance empirical indicators of events or circumstances that would be perceived as threatening by potentially repressive leaders. Specifically, w*e collected and analyzed comprehensive data on four threat indicators: Organized Nonviolent Protest, Organized Nonviolent Rebellion, Organized Violent Rebellion,* and *Civil War.* Our analysis explores whether these indicators—taken individually or collectively—serving as proxies for leaders' perceptions that cause them to abuse rights more as they perceive themselves to be more threatened.

In discussing these four interpretations of the negative relationship between human rights assistance and human rights protection, it is important to remember that they are not mutually exclusive. Indeed, all four could be partial explanations for the relationship.

The statistical model for our investigations is presented in Table A7.1 in Appendix 7. It shows some encouraging and interesting results.

- Freedom of Press contributes to respect for human rights, an encouraging finding, but not one that supports the reporting error hypothesis.
- Increases in IGO/NGO strength does appear to be associated with increased human rights abuse, thus providing some support for the reporting error hypothesis.
- None of the formal measures of constitutional provisions intended to protect/promote human rights or judicial independence showed any relationship to respect for human rights, but
- Actual judicial independence was strongly associated with greater respect for human rights – a most encouraging finding.
- Increased activity that would appear threatening to political leaders were strongly negatively associated with respect for human rights, thus supporting the proposition that at least some human rights abuse may be the result of perceptions of threat by political leaders.

Unfortunately for our analytical purposes, the negative relationship between Rule of Law - Human Rights assistance and respect for human rights persisted, despite our best efforts to eradicate it by testing alternative hypotheses asserting that it may be due to reverse causation, measurement or reporting error, the influence of important omitted variables, or the real reaction of leaders to perceived threat resulting from increased protest or rebellion activities. Our effort to untangle the web of relationships that may underlie this distressing and presumptively anomalous relationships and to model them statistically has been largely unsuccessful in its basic purpose.

Part IV – Political Culture

One of the weaknesses of the first phase of the project was that we did not attempt to include controls for political culture in the analysis, nor investigate whether culture had a conditioning effect on USAID DG assistance similar to the effects we have shown for ethnic fractionalization, human development, and other variables in Section III above. This absence was not for lack of interest in this subject, since all three of the authors of the first study have written extensively on political attitudes and their relationship to democratic development. Rather, the team recognized early on that there was no easy way to tap into political culture variables for the whole list of "potential recipient" countries.

We spent considerable effort in searching for usable and reliable cross-national public opinion data on culture-related variables. After reviewing both the literature on political culture and the major surveys that have been conducted outside of ineligible countries, we drew up a list of variables for which we could find the largest amount of relevant data. These variables include: (1) Interpersonal trust; (2) Support for democracy as a form of government; (3) Institutional trust (government, parliament, justice system); (4) Satisfaction with democracy; (5) Happiness; (6) Life satisfaction; (7) Interest in politics; and (8) Nationalism. We then searched all data available from the most prominent cross-national data bases, including the World Values Survey (all four rounds), the AfroBarometer (the first two rounds and the third, as available), the Asian Barometer, and the AmericasBarometer (and other data bases from LAPOP, the Latin American Public Opinion Project at Vanderbilt Univesity).[40]

This search indicated that, of the 165 eligible countries included in our study, public opinion data on the above items exists for approximately 60 to 80 countries (depending on the specific measure). That is, there are missing values for 50 to 64 percent of the countries in our study. **Table 16** below reports the number of countries in each region for which there is available data on every specific item.

The large amount of missing data made it impossible to include political culture as a general control variable in earlier parts of the study, as we would have had to "impute" values for far too many countries than we believed was defensible. We thus decided to restrict the culture analyses to those countries where reasonable estimates of political culture could be constructed, and to present the findings in a separate section to demarcate these more restricted analyses from the other portions of the report.

[40] In the exploratory phase, we also analyzed the data available through the New Democracies Barometer, the International Social Survey Program (rounds 1995-2004), the EuroBarometer, the European Values Survey, and the Korea Barometer.

Table 16. Number of Countries for Which There is Public Opinion Data, by Region

Region (Total number of countries in the region)	Interpersonal Trust	Support for Democracy	Satisfaction Democracy	Trust in Parliament	Trust in Government	Trust in Justice	Happiness	Life Satisfaction	Interest in Politics	Nationalism
Africa (of 48)	11	5	16	16	16	16	5	5	16	10
Asia (of 25)	13	10	12	12	12	9	11	11	13	11
Eurasia (of 12)	8	8	8	8	8	7	8	8	8	8
Europe (of 18)	17	17	17	17	15	17	17	17	17	17
Latin America (of 31)	10	20	19	21	20	21	10	20	21	19
Middle East (of 19)	8	6	5	5	6	1	8	8	8	8
Oceania (of 12)	0	0	0	0	0	0	0	0	0	0
TOTAL	**67**	**66**	**77**	**79**	**77**	**71**	**59**	**69**	**83**	**73**

Further, the paucity of culture data over time for the same country on the same indicators means that we cannot treat culture as a "Level 1" time-varying factor. That is, culture here is treated as a set of stable country characteristics, with individual items being measured by aggregating as many responses to survey questions on a given dimension as was possible to obtain during the time period covered by the study (1990-2004). This strategy means that we cannot examine how a country's overall democratic political culture may have changed over time, nor how such changes may have been linked to USAID DG assistance. Still, most analysts of political culture treat the concept as a relatively enduring country-level characteristic, and we follow this approach, to some degree for theoretical reasons, and to some degree due to data necessity.

Our strategy was to construct a small number of Level 2 culture variables that would provide information about different aspects of key aspects of political culture on as many countries as possible. We then included these Level 2 variables in statistical models for these countries in exactly the same way as we have treated other country-level characteristics in the analyses thus far: as possible predictors of a country's level and trajectory on Freedom House scores, and as possible conditioning factors that influence the size of the USAID DG coefficients. Our working hypothesis is that countries with cultures that promote trust and social engagement are ones in which democracy assistance will have a stronger impact. Conversely, in countries with less trusting and engaged political cultures, the impact of democracy assistance will be attenuated.

We proceeded by first attempting to determine whether there were distinct dimensions of political culture for this set of variables that could be identified via factor analysis. These analyses would then allow us to create scales from the multiple items that would load on the given factors; these scales would provide more reliable information about the dimensions of culture than would any single indicator, and would also allow us to reduce the number of variables in our analysis to a more manageable

level. The results of the factor analyses for all 10 items are shown in Appendix 3, and indicate that three distinct dimensions emerged:

- An **Institutional Trust** dimension, comprising "Trust in Government," "Trust in Parliament," and "Trust in the Judicial System";
- A **Personal Satisfaction** dimension, comprising "Satisfaction with Democracy," "Life Satisfaction," and "Personal Happiness"; and
- A **Social Engagement** dimension, comprising "Social Trust," "Political Interest" and reversed levels of "National Pride" (i.e. less nationalist orientations).

We then constructed scales for each of these dimensions by taking, for each country, the *within dimension* average of the non-missing indicators. That is, if a country had no missing data on the three Satisfaction indicators, the overall dimension score would be the average of the three individual scores. If the country had missing data on "Satisfaction with Democracy" only, then its score on the Satisfaction dimension would be the average of its score on the other two items, Life Satisfaction and Personal Happiness. If the country had missing data on two of the three indicators, the overall score for the dimension would be its score on the third indicator. The country was treated as completely missing for the Satisfaction analysis only if it was missing on all three of the dimension's indicators. This strategy, again, was applied to maximize the number of valid cases for the analyses. It was successful in this regard, as there are 79 valid countries for the Institutional Trust analysis, and 82 valid countries for the analyses of the effects of Satisfaction and Social Engagement dimensions.

In **Tables 17, 18 and 19**, we show the results of three analyses that explored the role of each culture dimension as a factor mediating the impact of U.S. democracy assistance, and as factors in their own right influencing the level and trajectory of Freedom House scores over time. The models are from the trimmed baseline model from Section II of this report for all eligible countries that also have valid scores on the given culture dimension. In terms of the mediation effect of political culture on the size of the USAID DG assistance coefficient, the results are similar across all three analyses. In all of the models, the effect of USAID DG assistance is negative for the countries lowest on political culture (i.e. when the culture dimension and the interaction term are zero), and the effect *increases* as the country exhibits higher and higher values on the given culture dimension. This indicates that culture exerts a *positive facilitative* effect for USAID DG assistance; as a country's political culture is more democratic, the impact of U.S. democracy assistance has stronger effects on the country's Freedom House score. While this pattern is common to all three culture dimensions, the interaction effect is statistically significant only for the Social Engagement dimension (Table 19). What appears to matter the most for facilitating USAID DG assistance is not the level of institutional trust in a country, nor levels of optimism or life satisfaction, but rather the degree to which the country's citizens are trusting of one another, are psychologically engaged with politics, and are less strongly nationalistic in their political orientations.

Table 17. The Conditional Effects of USAID DG Assistance: Interactions with Institutional Trust

	Coefficient	S. Error
Level 1		
USAID Democracy Assistance		
Baseline coefficient for USAID DG	-0.010	0.034
Institutional Trust	0.001	0.001
Other Assistance		
USAID Non-DG	0.001	0.001
National Endowment for Democracy	-0.034	0.197
US Assistance other than USAID or NED	-0.001	0.000
Regional-Subregional DG	0.113	0.160
Regional-Subregional Non-DG	-0.018	0.017
Other Donor Assistance on DG	0.000	0.001
Other Donor Assistance on Non-DG	-9E-005	0.0001
Economic and Political Factors		
Annual Growth in GDP per Capita	0.003	0.004
US Military Assistance Priority	**-0.046***	0.024
Democratic Diffusion	-0.070	0.156
Social and Political Conflict	-0.000	0.000
State Failure Indicator	**-0.300****	0.119
Iraq 2004	**-2.613****	1.203
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**8.879****	1.557
Prior Democracy	**0.162****	0.060
Human Development Index	**7.369****	2.514
Institutional Trust	-0.040	0.031
Effect on (Level-1) Trend		
Average Slope for Growth Curve	0.029	0.121
Prior Democracy	-0.006	0.005
Human Development Index	0.032	0.191
Institutional Trust	0.002	0.002
Model Statistics and Variance Parameters		
Random Variance (Intercept)	3.684**	1.010
Random Variance (Slope)	0.023**	0.006
Autocorrelation (rho)	0.809**	0.024
Model Deviance/AIC	3208.142	3244.142

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

Table 18. The Conditional Effects of USAID DG Assistance: Interactions with Personal Satisfaction

	Coefficient	S. Error
Level 1		
USAID Democracy Assistance		
Baseline coefficient for USAID DG	-0.006	0.037
Overall Satisfaction	0.001	0.001
Other Assistance		
USAID Non-DG	0.001	0.001
National Endowment for Democracy	0.012	0.195
US Assistance other than USAID or NED	-0.001	0.000
Regional-Subregional DG	0.114	0.155
Regional-Subregional Non-DG	-0.020	0.017
Other Donor Assistance on DG	0.000	0.001
Other Donor Assistance on Non-DG	-7E-05	9.84E-05
Economic and Political Factors		
Annual Growth in GDP per Capita	0.003	0.004
US Military Assistance Priority	**-0.030***	0.018
Democratic Diffusion	-0.029	0.148
Social and Political Conflict	-0.000	0.000
State Failure Indicator	**-0.299****	0.116
Iraq 2004	**-3.247****	1.096
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**10.690****	1.913
Prior Democracy	**0.231****	0.062
Human Development Index	**7.419****	2.360
Overall Satisfaction	**-0.068****	0.033
Effect on (Level-1) Trend		
Average Slope for Growth Curve	-0.197	0.139
Prior Democracy	**-0.009****	0.004
Human Development Index	0.024	0.169
Overall Satisfaction	**0.005****	0.002
Model Statistics and Variance Parameters		
Random Variance (Intercept)	4.409**	1.081
Random Variance (Slope)	0.022**	0.006
Autocorrelation (rho)	0.802**	0.025
Model Deviance/AIC	3299.400	3335.400

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

Table 19. The Conditional Effects of USAID DG Assistance: Interactions with Social Engagement

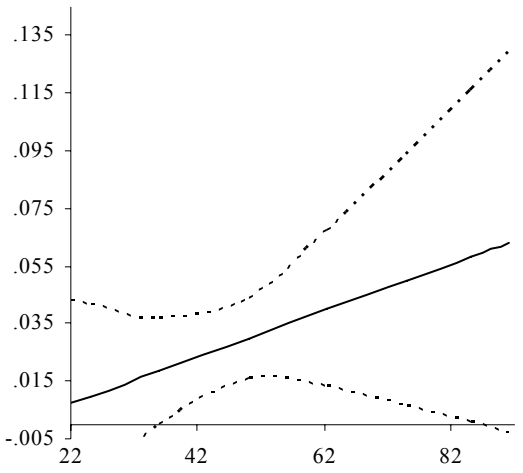
	Coefficient	S. Error
Level 1		
USAID Democracy Assistance		
Baseline coefficient for USAID DG	-0.045	0.034
Social Engagement	**0.002****	0.001
Other Assistance		
USAID Non-DG	0.001	0.001
National Endowment for Democracy	-0.007	0.193
US Assistance other than USAID or NED	**-0.001***	0.000
Regional-Subregional DG	0.061	0.156
Regional-Subregional Non-DG	-0.015	0.016
Other Donor Assistance on DG	4.02E-05	0.000536
Other Donor Assistance on Non-DG	-8E-05	9.85E-05
Economic and Political Factors		
Annual Growth in GDP per Capita	0.002	0.004
US Military Assistance Priority	-0.024	0.017
Democratic Diffusion	0.009	0.149
Social and Political Conflict	-0.000	0.000
State Failure Indicator	**-0.311****	0.116
Iraq 2004	**-3.908****	1.116
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**7.587****	0.940
Prior Democracy	**0.174****	0.060
Human Development Index	**7.779****	2.369
Social Engagement	-0.022	0.028
Effect on (Level-1) Trend		
Average Slope for Growth Curve	-0.035	0.067
Prior Democracy	-0.003	0.004
Human Development Index	-0.017	0.165
Social Engagement	**0.004****	0.002
Model Statistics and Variance Parameters		
Random Variance (Intercept)	4.547**	1.101
Random Variance (Slope)	0.021**	0.005
Autocorrelation (rho)	0.804**	0.024
Model Deviance/AIC	3296.598	3332.598

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent variable is Freedom House.

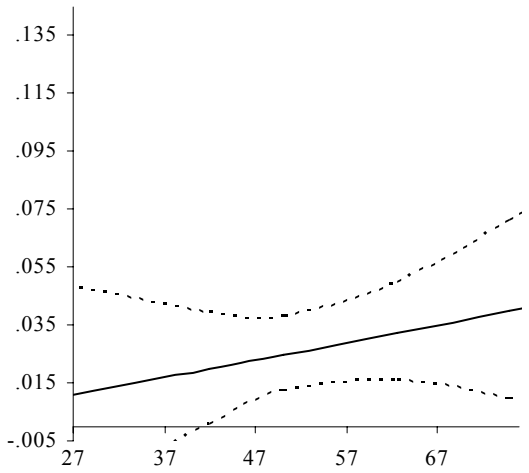
We show these patterns in graph form in **Figure 6**. It can be seen in all three graphs that the effect of USAID DG assistance has a steadily increasing influence on democracy from the lowest to highest levels of political culture. The slope of this line is steepest, however, for the Social Engagement dimension, reflecting the stronger effect of this interaction term. For example, when Social Engagement is at its lowest level (14.11 for El Salvador), the impact of USAID DG is predicted to be -.014, which is statistically indistinguishable from zero. The effect of USAID DG begins to be positive at the Social Engagement value of 20.5 (roughly at the level of Guyana and Brazil), and begins to be both positive and statistically significant at the level of 27.2 (roughly at the level of Nigeria and Albania). This is also approximately the median level on this dimension for all 82 valid countries, so in this model USAID DG is exerting a potentially statistically significant impact for about half of the countries in the analysis. The highest observed levels of Social Engagement among eligible countries are for Thailand, Cape Verde and Kenya, all with values over 60 and a concomitant USAID DG effect of approximately .09, nearly three times its level in the baseline model for all eligible countries reported in **Table 4a** previously.

The evidence, of course, is tentative due to the missing data, but the results are suggestive that culture, especially in the form of social trust and engagement, can be a potentially important mediator of the impact of foreign democracy assistance. We also note that two culture dimensions, Personal Satisfaction and Social Engagement, have a significant impact on the slope of countries' democratic growth trajectories as well. That is, countries with higher levels on these dimensions increase more rapidly on the Freedom House index during the 1990-2004 period, irrespective of the impact of democracy assistance. In this regard, culture appears to play a generally facilitative role in the development of democracy, as well as providing a more receptive environment for USAID DG assistance in particular to succeed.

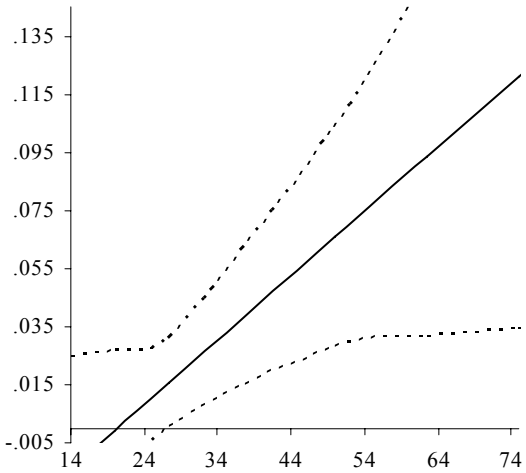
Figure 6. Coefficient for USAID DG, Conditional on Cultural Characteristics



Institutional Trust



Satisfaction



Social Engagement

Lines indicate the size of the USAID DG coefficient (the vertical axis) at different levels of the intervening variables (horizontal axes). Range for intervening variables reflects the observed distribution. Dotted lines indicate 95% confidence intervals (based on Tables 17-19).

Conclusions

The United States Agency for International Development's Strategic and Operational Research Agenda (SORA) project took a bold risk when it commissioned the research on which this paper and its companion piece are based. With a total of $8.5 billion spent between 1990 and 2005, there was always the risk that the study would have shown that the funds on average had no positive impact, regardless of evidence about the success of individual projects in particular countries in particular years. The results could also have found a systematic negative effect, such that U.S. efforts to promote democracy actually slowed progress toward democracy in some countries and/or "caused" reversals in others. Certainly the limited research that existed prior to our effort suggested exactly those kinds of no-impact, negative impact, giving support to those who have been critical of U.S. foreign assistance in general, or democracy assistance in particular.

The findings from the first report suggested that U.S. democracy assistance in the period 1990-2003 had a positive impact on national levels of democracy, even after controlling for all other plausible impacts. It also found that in several subsectors of democracy (e.g., elections, civil rights), funding targeted in those subsectors produced results in precisely those areas, though the findings were ambivalent regarding other sub or sub-subsectors (governance) and negative in another (human rights)

The current research project extended the first by covering the period up through 2004. The revised study includes several new variables, including the percentage of funds invested in particular sub-sectors, the volatility of USAID DG investment, and the trend in such investment. The study also includes other forms of foreign assistance added as controls variables, including total investment in other (non-DG) programs, non-USAID assistance (including funds from the National Endowment for Democracy, NED), total U.S. development assistance not channeled through USAID or NED, bilateral non-US foreign assistance and military assistance. This new effort found results that were very similar to those reported in the first study, once the huge impact of spending in Iraq in 2004 was controlled. Thus, with a larger data base covering a longer time frame, we find that when USAID provides funds to promote democracy, on average, the effort achieves the same degree of impact as we showed previously. Specifically, the positive impact is such that $10 million of USAID DG funding would produce an increase of more than one-quarter of a point (.29 units) on the 13-point Freedom House democracy index in a given year -- or about a five-fold increase in the amount of democratic change that the average country would be expected to achieve, *ceteris paribus*, in any given year.

The extended analysis also showed that the impact of USAID democracy assistance cumulates over time and, under certain reasonable statistical assumptions, it may endure after funding has been withdrawn. The new study worked even harder to uncover possible "endogeneity effects," such that it is not that U.S. aid fosters democracy, but that growth in democracy spurs more aid. In fact, in applying what we believe to be the most thorough, reasonable and plausible statistical tests to study this possible flaw in our analysis, we find no evidence to support it.

The revised study looked at regional effects, suggesting that the contribution of democracy assistance is statistically similar across regions, with the exception of Africa, where USAID DG investment has had a larger impact. Certain limitations in the data for regional analysis underscored the need to collect data on democracy assistance for the 1980s and the importance of compiling comparable time series into the future.

In addition, it looked at the impact of country context on democracy assistance, and concluded that countries that needed the assistance the most had the greatest impact from it. That is, countries with lower levels of human development, greater levels of ethnic fractionalization, and experiencing contemporaneous failure of state institutions, appear to benefit the most in terms of overall democratization from a given amount of USAID DG assistance.

Democracy assistance, however, is *less* effective when the U.S. provides larger amounts of military assistance. Our model suggests that, as countries receive larger amounts of US military aid, the impact of USAID democracy assistance matters less and less, and among the few countries that receive larger than 1.1% of US military outlays, the effect of USAID DG assistance is statistically indistinguishable from zero. This pattern warrants further investigation, as countries with larger military investments from the United States sometimes receive significant amounts of USAID DG assistance as well. Thus, substantial amounts of USAID DG outlays appear to be targeted toward countries where their effects are more limited.

This process, moreover, appears to explain fully the "Iraq 2004 Effect," whereby the attenuated effect of USAID DG assistance that we originally found in the 1990-2004 analysis was caused solely by the addition of Iraq in 2004 to the data set. Because Iraq represented a foreign policy priority mainly for security reasons in 2004 (e.g., it received 23 percent of all security assistance in 2004, vis-à-vis 0.6 percent for the average eligible country) and it was also the largest recipient of democracy assistance (31 percent of all funds spent in 2004), the overall impact of USAID DG was depressed when compared to a model including data for 1990-2003.

We investigated the impact of different funding strategies by USAID in terms of the consistency or volatility of democracy investment over time, and in terms of a general positive or negative linear trend in such investment during the 1990-2004 time period. We found limited evidence for an effect of investment *trend*, but suggestive evidence that *volatility* in investment does have a negative impact on overall democracy. That is, a given amount of USAID DG investment showed more impact on Freedom House scores when the overall investment pattern was consistent over time than when investment changed considerably from one year to the next. This suggests that investment decisions need to be considered over the relatively long-term so as to avoid the negative impact of large-scale year-to-year changes in the outlays for a given country.

We also added variables to measure the underlying political culture of recipient countries. Although we are missing data on about half of our sample, we found that culture exerts a *positive facilitative* effect for USAID DG assistance; as a country's political culture is more democratic, the impact of U.S. democracy assistance has

stronger effects on the country's Freedom House score. What appears to matter the most for facilitating democracy assistance is not the level of institutional trust in a country, nor levels of optimism or life satisfaction, but rather the degree to which the country's citizens are trusting of one another, are psychologically engaged with politics, and are less strongly nationalistic in their political orientations.

The new study was unable to explain or "wash out" the only important negative effect of aid on democracy, namely, the impact in the human rights area. We continue to find that spending in this area worsens human rights. We remain concerned about difficulties in measuring human rights abuses, given the extreme sensitivity in this area. Yet, we take note of the fact that human rights spending has been limited in terms of dollars spent (the average investment per year in human rights programs among the USAID DG recipient countries was $130,000), and has also been restricted to 72 of the 165 countries in our study. This counter-intuitive finding remains an unanswered puzzle for us, having resisted all our efforts to explain it.

We conclude by noting that the evidence supporting a positive impact of USAID on democracy is clear. This does not mean, of course, that in the future this will continue to be the case. Shifts in where, when and how USAID spends its democracy assistance, and shifting trends in democracy world-wide could make the assistance more or less effective in the future. Yet, we feel that the 14 years of data we have analyzed here provide a robust basis for drawing the conclusion that USAID DG assistance in the post-Cold War period has worked.

Appendices

Appendix 1 – Countries Included in the Study

1.1. Countries that Received USAID DG Assistance during 1990-2004

Africa: Angola ($43.1 million in 10 years), Benin ($19.4 million in 10 years), Botswana ($0.1 million in 3 years), Burkina Faso ($0.5 million in 4 years), Burundi ($26.2 million in 11 years), Cameroon ($0.1 million in 2 years), Cape Verde ($0.03 million in 1 year), Central African Republic ($0.2 million in 2 years), Congo, DR (Zaire) ($35.2 million in 10 years), Congo, Republic of ($1.0 million in 2 years), Djibouti ($0.4 million in 1 year), Eritrea ($4.7 million in 9 years), Ethiopia ($41.3 million in 13 years), Gambia ($7.8 million in 6 years), Ghana ($25.2 million in 11 years), Guinea-Bissau ($7.7 million in 6 years), Guinea ($20.2 million in 12 years), Ivory Coast ($4.9 million in 10 years), Kenya ($36.1 million in 10 years), Lesotho ($0.7 million in 4 years), Liberia ($45.6 million in 11 years), Madagascar ($13.5 million in 12 years), Malawi ($23.0 million in 12 years), Mali ($27.4 million in 12 years), Mauritania ($0.2 million in 2 years), Mozambique ($55.6 million in 14 years), Namibia ($11.8 million in 13 years), Niger ($1.7 million in 4 years), Nigeria ($81.6 million in 12 years), Rwanda ($42.6 million in 11 years), Sao Tome and Principe ($0.3 million in 1 year), Senegal ($21.8 million in 13 years), Sierra Leone ($31.0 million in 10 years), Somalia ($15.6 million in 8 years), South Africa ($273.9 million in 15 years), Sudan ($31.8 million in 4 years), Swaziland ($0.4 million in 2 years), Tanzania ($21.5 million in 12 years), Togo ($0.9 million in 4 years), Uganda ($16.8 million in 11 years), Zambia ($25.8 million in 13 years), Zimbabwe ($30.4 million in 10 years).

Asia: Afghanistan ($214.9 million in 7 years), Bangladesh ($40.1 million in 15 years), Cambodia ($97.6 million in 14 years), China ($12.9 million in 3 years), East Timor ($44.8 million in 4 years), India ($20.1 million in 8 years), Indonesia ($224.2 million in 15 years), Korea, Republic of ($0.8 million in 2 years), Malaysia ($0.3 million in 1 year), Mongolia ($28.0 million in 9 years), Myanmar (Burma) ($27.5 million in 7 years), Nepal ($23.3 million in 13 years), Pakistan ($21.5 million in 8 years), Philippines ($56.9 million in 15 years), Sri Lanka ($20.8 million in 15 years), Thailand ($4.6 million in 8 years), Vietnam ($0.2 million in 1 year).

Eurasia: Armenia ($91.6 million in 13 years), Azerbaijan ($70.4 million in 13 years), Belarus ($31.8 million in 13 years), Georgia ($92.8 million in 13 years), Kazakhstan ($98.9 million in 13 years), Kyrgyzstan ($70.4 million in 13 years), Moldova ($25.5 million in 13 years), Russian Federation ($346.7 million in 13 years), Tajikistan ($31.3 million in 13 years), Turkmenistan ($11.6 million in 13 years), Ukraine ($238.3 million in 13 years), Uzbekistan ($46.2 million in 13 years).

Europe: Albania ($95.7 million in 14 years), Bosnia-Herzegovina ($164.0 million in 12 years), Bulgaria ($113.2 million in 15 years), Croatia ($85.7 million in 13 years), Czech Republic ($2.9 million in 4 years), Czechoslovakia ($4.8 million in 3 years), Estonia ($3.2 million in 5 years), Hungary ($20.8 million in 9 years), Latvia ($6.2 million in 7 years), Lithuania ($9.7 million in 9 years), Macedonia ($73.8 million in 13 years), Poland ($79.3 million in 10 years), Romania ($78.8 million in 15 years), Serbia and Montenegro

($372.5 million in 11 years), Slovakia ($28.2 million in 9 years), Slovenia ($0.9 million in 4 years).

Latin America and the Caribbean: Belize ($1.5 million in 4 years), Bolivia ($78.6 million in 15 years), Brazil ($6.5 million in 9 years), Chile ($4.5 million in 6 years), Colombia ($101.8 million in 11 years), Costa Rica ($10.5 million in 7 years), Cuba ($29.0 million in 5 years), Dominican Republic ($55.3 million in 14 years), Ecuador ($57.1 million in 15 years), El Salvador ($188.2 million in 15 years), Guatemala ($76.0 million in 15 years), Guyana ($18.2 million in 14 years), Haiti ($237.9 million in 15 years), Honduras ($62.2 million in 15 years), Jamaica ($9.7 million in 11 years), Mexico ($50.9 million in 10 years), Nicaragua ($100.0 million in 15 years), Panama ($76.4 million in 15 years), Paraguay ($38.2 million in 10 years), Peru ($100.0 million in 15 years), Uruguay ($1.2 million in 1 year), Venezuela ($1.5 million in 2 years).

Middle East and the Mediterranean: Algeria ($3.7 million in 8 years), Bahrain ($1.3 million in 2 years), Egypt ($334.3 million in 14 years), Iraq ($523.6 million in 3 years), Jordan ($28.3 million in 5 years), Lebanon ($28.5 million in 11 years), Morocco ($3.6 million in 7 years), Oman ($0.6 million in 2 years), Qatar ($0.8 million in 1 year), Saudi Arabia ($0.4 million in 1 year), Tunisia ($11.2 million in 5 years), Turkey ($0.9 million in 4 years), West Bank and Gaza ($155.4 million in 11 years), Yemen ($6.6 million in 8 years).

Oceania: Papua New Guinea ($0.2 million in 1 year).

In addition, programs covering multiple countries involved $982.3 million in 1990-2004.

1.2. Countries in the Sample that Did Not Receive USAID DG Assistance

Africa: Chad, Comoros, Equatorial Guinea, Gabon, Mauritius, Seychelles.

Asia: Bhutan, Brunei Darussalam, Iran, Korea, DPR (N), Laos, Maldives, Singapore, Taiwan.

Europe: Portugal

Latin America and the Caribbean: Antigua and Barbuda, Argentina, Dominica, Grenada, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago.

Middle East and the Mediterranean: Cyprus, Israel, Kuwait, Libya, Syria, United Arab Emirates.

Oceania: Fiji, Kiribati, Marshall Islands, Micronesia, Federated States, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu.

1.3. Countries Not Included in the Sample

Asia: Japan. **Europe:** Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Holy See (Vatican City State), Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, San Marino, Spain, Sweden, Switzerland, United Kingdom. **Latin America and the Caribbean:** Bahamas, Barbados **North America:** Canada (and the U.S., by definition). **Oceania:** Australia, New Zealand.

Appendix 2 – Democratic Performance Indices

The creation of the indices followed three steps: 1) we minimized missing values by conducting EM imputation among the components; 2) we performed an exploratory factor analysis; 3) for presentation purposes we re-calibrated the score (to have a mean of 50, standard deviation of 10). The following table presents the factor loadings, the communalities for the component items, and Cronbach's alpha for the unweighted items.

Item	Loadings	Communalities
1. Free and Fair Elections		
Index of Competition (Vanhanen)	.902	.814
Legislative Index Electoral Competitiveness (DPI)	.845	.715
Women's Political Rights (CIRI)	.608	.370
Competitiveness of Participation (Polity)	.927	.859
Accountability (ICRG)	.889	.790
Total variance explained (%)		80.0
Cronbach's alpha (standardized, non-imputed items)		.890
2. Respect for Human Integrity		
Political and Extrajudicial Killings (CIRI)	.856	.732
Disappearances (CIRI)	.771	.595
Torture (CIRI)	.787	.620
Political Imprisonment (CIRI)	.761	.579
Political Terror Scale (Gibney)	-.906	.822
Total variance explained (%)		66.9
Cronbach's alpha (standardized, non-imputed items)		.850
3. Conditions for Civil Society		
Restrictions on Organization of Minorities (MAR)	-.550	.302
Freedom of Assembly and Association (CIRI)	.828	.686
Freedom of Religion (CIRI)	.766	.587
Worker Rights (CIRI)	.755	.570
Freedom of Movement (CIRI)	.772	.596
Women's Economic Rights (CIRI)	.606	.368
Total variance explained (%)		51.8
Cronbach's alpha (standardized, non-imputed items)		.768
4. Free Media		
Freedom of the Press (FH, Ordinal)	.934	.872
Freedom of the Press (FH, Interval, inverted)	.960	.922
Freedom of Speech & Press (CIRI)	.880	.775
Freedom of Expression for Minorities (MAR, inverted)	.643	.413
Total variance explained (%)		74.5
Cronbach's alpha (standardized, non-imputed items)		.845
5. Good Governance		
Corruption Perceptions Index (TI)	.931	.866
Investment Conditions (ICRG)	.645	.416
Corruption (ICRG)	.838	.702
Bureaucracy Quality (ICRG)	.897	.805
Total variance explained (%)		69.7
Cronbach's alpha (standardized, non-imputed items)		.851

Appendix 3 – Exploratory Analysis of Culture Variables

Item	Institutional Trust	Personal Satisfaction	Social Engagement
Interpersonal Trust	.165	.158	**-.884**
Support for Democracy	.401	.055	.370
Satisfaction with Democracy	.578	**.705**	.106
Interest in Politics	.292	-.264	**-.509**
Nationalism	.253	.398	**.760**
Life Satisfaction	-.112	**.940**	-.022
Happiness	.157	**.696**	.493
Trust in Government	**.854**	.096	-.070
Trust in Justice	**.777**	.065	-.088
Trust in Parliament	**.945**	-.016	.017

Note: This analysis represents a varimax rotation of the factor analysis solution. These analyses were, restricted to only the 43 countries that had non-missing values on all 10 culture indicators. The eigenvalues and percentage of variance explained for the three culture factors were, respectively, 3.39 (33.9%), 2.41 (24.1%), and 1.29 (12.9%). We take note of the distributed loadings present for some of the variables. For example, Happiness loaded most strongly on "Personal Satisfaction," but also loaded moderately high on what we call "Social Engagement." We also note a similar problem with the Satisfaction with Democracy item (loading on both "Personal Satisfaction" and "Institutional Trust." These distributed loadings indicate that some of items that comprise a dimension of the culture variables share some of their variance with other items, a common finding in most factor analysis of public opinion data. Since, however, we incorporate each of items into one of our three factors, the analysis we perform on them in our regressions is sensitive to the impact of each of these variables. We did not include the "Support for Democracy" item in any of the three dimensions since its loading fell below the threshold we set (.5) and because of its weak contribution to the "Institutional Trust" dimension on which it loaded the highest.

Appendix 4 – Imputation Models

4.1. Imputation for Measurement Models

Item	% Missing	EM Predictors
1. Free and Fair Elections		
Index of Competition (Vanhanen)	17.1	Index of Competition (EL02)
Index Electoral Competitiveness (DPI)	11.7	Electoral Competitiveness (EL04)
Women's Political Rights (CIRI)	17.8	Women's Political Rights (EL08)
Competitiveness of Participation (Polity)	22.7	Competitive Participation (EL12)
Accountability (ICRG)	30.7	Accountability (DG07)
		Political Rights (EL01)
		Sub-regional dummies
2. Respect for Human Integrity		
Political and Extrajudicial Killings (CIRI)	17.8	Political-Extrajudicial Killings (RL08)
Disappearances (CIRI)	17.6	Disappearances (RL09)
Torture (CIRI)	17.6	Torture (RL10)
Political Imprisonment (CIRI)	17.6	Political Imprisonment (RL11)
Political Terror Scale (Gibney)	10.3	Political Terror Scale (RL12)
		Freedom House Index (DG02)
		Sub-regional dummies
3. Conditions for Civil Society		
Restrictions Organization (MAR)	46.0	Restrictions Org. Minorities (CS01)
Freedom Assembly-Association (CIRI)	15.4	Freedom of Association (CS02)
Freedom of Religion (CIRI)	17.4	Freedom of Religion (CS04)
Worker Rights (CIRI)	17.5	Worker Rights (CS05)
Freedom of Movement (CIRI)	17.4	Freedom of Movement (CS06)
Women's Economic Rights (CIRI)	18.4	Women's Economic Rights (CS07)
		Freedom House Index (DG02)
		Sub-regional dummies
4. Free Media		
Freedom of the Press (FH, Ordinal)	11.1	Freedom of the Press (RL02)
Freedom of the Press (FH, Interval)	28.4	Freedom of the Press, 3-point (RL03)
Freedom of Speech & Press (CIRI)	17.4	Freedom of Speech & Press (RL04)
Freedom Expression Minorities (MAR)	46.2	Freedom Expression Minorities (RL14)
		Freedom House Index (DG02)
		Sub-regional dummies
5. Good Governance		
Corruption Perceptions Index (TI)	69.2	Corruption Perceptions Index (GV01)
Investment Conditions (ICRG)	30.7	Investment Conditions (GV13)
Corruption (ICRG)	30.7	Corruption (GV14)
Bureaucracy Quality (ICRG)	30.7	Bureaucracy Quality (GV15)
		Country means for World Bank's:
		Government Effectiveness (GV07)
		Regulatory Quality (GV08)
		Control of Corruption (GV09)
		Sub-regional dummies

4.2. Imputation for Causal Models

Item	% Missing	EM Predictors
Polity Index	18.5	Polity IV Score (DG01)
Freedom House Index	1.1	Freedom House Index (DG02)
GDP Growth	9.8	Coups d'état (POL01) T
Income Inequality	34.4	Number of Legislative Elections (POL02)
		Religious Fragmentation (SOC09)
		Ethnolinguistic Fractionalization (SOC10)
		GDP, current U.S. dollars (DEV01) T
		GDP per capita, 2000 U.S. dollars (DEV03) T
		GDP per capita (sub-regional mean DEV03)
		GDP per capita, 1996 U.S. dollars (PWT) S
		GDP per capita, PPP (DEV04) T
		GDP, PPP (sub-regional mean DEV04)
		Telephone Lines PTI (DEV05) T
		Growth in GDP Per Capita (PRF01)
		Growth (yearly sub-regional mean PRF01)
		Annual Growth in GDP Per Capita (PWT) S
		Inflation, Consumer Prices (PRF02) T
		Inflation, based on GDP Deflator (PRF04) T
		Inflation (yearly sub-regional mean PRF04)
		Income Distribution, Share of top 20% (SOC06) T
		Unemployment (SOC07) T
		Unemployment (sub-regional mean SOC07)
		Merchandise Exports (DEP01) T
		Exports/ GDP (sub-regional mean, DEP02)
		Population (SOC01)
		Non-US Assistance (ODA03)
		Democracy in International System (DIF01)
		Democracy in the Region (DIF02)
		Application for EU Membership (DIF03)
		FH among neighboring countries (DIF04)
		Polity among neighboring countries (DIF05)
		Diffusion - Brinks-Coppedge (DIF06)
		Diffusion - Spatial lags, FH (DIF07)
		Diffusion - Spatial lags, Polity (DIF08)
		Time trend (YEARNUM)

T Transformed during imputation to correct for truncation; S Substitutive data from Penn World Tables

Appendix 5 – Fixed Effects and First Differences Models

Controlling for Omitted Variables: Fixed Effects and First Difference Models

	5(a) Fixed Effects		5(b) First Difference	
	Coefficient	**St. Error**	**Coefficient**	**St. Error**
Democracy and Other Assistance				
USAID DG	**0.031****	0.007	**0.021****	0.007
USAID Non-DG	0.000	0.001	0.001	0.001
National Endowment for Democracy	0.065	0.185	0.192	0.179
US Assistance other than USAID or NED	-0.000	0.001	-0.000	0.001
Regional-Subregional DG	-0.196	0.146	-0.035	0.149
Regional-Subregional Non-DG	0.007	0.016	**-0.038****	0.018
Other Donor Assistance on DG	**0.001***	0.001	-0.000	0.001
Other Donor Assistance on Non DG	-0.000	0.000	-0.000	0.000
Economic and Political Factors				
Annual Growth in GDP per Capita	**0.007****	0.003	**0.011****	0.003
US Military Assistance Priority	-0.016	0.024	-0.017	0.023
Democratic Diffusion	0.065	0.126	0.040	0.116
Social and Political Conflict	**-0.001***	0.000	-0.000	0.000
State Failure Indicator	**-0.797****	0.093	**-0.605****	0.089
Iraq 2004	**-4.769****	1.590	**-3.835****	1.500
Constant	7.530	4.27E11	**0.044****	0.021
N	2251		2086	
R-squared (within)	0.0868		0.0665	

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Appendix 6 – Models of Sub-Sectoral Effects

Table A6.1
Effects for Elections

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	**0.092***	0.047
Rule of Law	0.056	0.047
Civil Society	0.037	0.030
Governance	**0.060****	0.028
Other Assistance		
USAID Non-DG	**0.003***	0.001
National Endowment for Democracy	-0.659	0.418
US Assistance other than USAID or NED	-0.001	0.001
Regional-Subregional DG	-0.143	0.329
Regional-Subregional Non-DG	-0.037	0.031
Other Donor Assistance on DG	-0.001	0.002
Other Donor Assistance on Non-DG	0.000	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	0.001	0.007
US Military Assistance Priority	0.016	0.049
Democratic Diffusion	**0.945****	0.212
Social and Political Conflict	**-0.003****	0.001
State Failure Indicator	**-1.138****	0.217
Iraq 2004	**-15.193****	4.704
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**46.300****	0.564
Prior Democracy	**0.588****	0.115
Income Inequality	0.019	0.075
Ethnic Fractionalization	-0.760	2.551
Size in Square Km	-7E-005	0.0003
Human Development Index	**18.952****	4.343
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**0.257****	0.038
Prior Democracy	-0.008	0.007
Income Inequality	-0.002	0.005
Ethnic Fractionalization	**0.453****	0.161
Size in Square Km	-4E-006	0.000
Human Development Index	**-0.617****	0.274
Model Statistics and Variance Parameters		
Random Variance (Intercept)	38.723**	4.851
Random Variance (Slope)	0.121**	0.018
Autocorrelation (rho)	0.678**	0.016
Model Deviance/AIC	11509.827	11545.827

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.2
Effects for Human Rights

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	**0.152***	0.088
Rule of Law: Human Rights	**-0.664****	0.231
Rule of Law: Non Human Rights	0.139	0.099
Civil Society	0.020	0.059
Governance	0.037	0.062
Other Assistance		
USAID Non-DG	-0.003	0.003
National Endowment for Democracy	-0.969	0.738
US Assistance other than USAID or NED	0.003	0.003
Regional-Subregional DG	-0.390	0.649
Regional-Subregional Non-DG	0.024	0.048
Other Donor Assistance on DG	**0.005***	0.003
Other Donor Assistance on Non-DG	-1E-005	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.039****	0.015
US Military Assistance Priority	-0.007	0.098
Democratic Diffusion	0.410	0.332
Social and Political Conflict	**-0.005****	0.002
State Failure Indicator	**-5.266****	0.430
Iraq 2004	-9.880	9.876
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.689****	0.620
Prior Democracy	**0.205***	0.120
Income Inequality	0.011	0.078
Ethnic Fractionalization	-3.195	2.631
Size in Square Km	**-0.001****	0.000
Human Development Index	**15.853****	4.563
Effect on (Level-1) Trend		
Average Slope for Growth Curve	-0.061	0.046
Prior Democracy	**-0.015****	0.007
Income Inequality	**0.015****	0.005
Ethnic Fractionalization	0.043	0.158
Size in Square Km	**-4E-005***	2.0E-005
Human Development Index	0.183	0.276
Model Statistics and Variance Parameters		
Random Variance (Intercept)	39.245**	5.340
Random Variance (Slope)	0.049	0.023
Autocorrelation (rho)	0.397**	0.034
Model Deviance/AIC	14299.190	14307.190

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.3
Effects for Civil Society

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	0.047	0.078
Rule of Law	-0.007	0.083
Civil Society	**0.292****	0.055
Governance	**0.098***	0.055
Other Assistance		
USAID Non-DG	**-0.004***	0.002
National Endowment for Democracy	-0.024	0.672
US Assistance other than USAID or NED	-0.004	0.003
Regional-Subregional DG	-0.163	0.583
Regional-Subregional Non-DG	-0.023	0.043
Other Donor Assistance on DG	-0.004	0.003
Other Donor Assistance on Non-DG	9.3E-005	0.0004
Economic and Political Factors		
Annual Growth in GDP per Capita	-0.001	0.012
US Military Assistance Priority	0.019	0.090
Democratic Diffusion	**1.630****	0.310
Social and Political Conflict	-0.002	0.002
State Failure Indicator	**-1.754****	0.382
Iraq 2004	-4.291	8.408
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.714****	0.643
Prior Democracy	**0.661****	0.126
Income Inequality	0.067	0.082
Ethnic Fractionalization	2.322	2.774
Size in Square Km	**-0.001****	0.000
Human Development Index	4.140	4.783
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**-0.167****	0.044
Prior Democracy	**-0.015****	0.007
Income Inequality	**0.013****	0.005
Ethnic Fractionalization	-0.024	0.154
Size in Square Km	1.5E-006	2.0E-005
Human Development Index	0.309	0.270
Model Statistics and Variance Parameters		
Random Variance (Intercept)	43.399**	5.581
Random Variance (Slope)	0.027	0.020
Autocorrelation (rho)	0.551**	0.029
Model Deviance/AIC	13589.299	13606.299

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.4
Effects for Free Media

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	**0.185****	0.060
Rule of Law	0.021	0.059
Civil Society: Media	**0.573****	0.228
Civil Society: Non-Media	**0.151****	0.042
Governance	0.048	0.037
Other Assistance		
USAID Non-DG	**-0.004***	0.002
National Endowment for Democracy	-0.251	0.545
US Assistance other than USAID or NED	0.002	0.002
Regional-Subregional DG	-0.701	0.427
Regional-Subregional Non-DG	0.004	0.039
Other Donor Assistance on DG	0.003	0.002
Other Donor Assistance on Non-DG	-7E-005	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	-0.000	0.009
US Military Assistance Priority	-0.001	0.068
Democratic Diffusion	**1.066****	0.266
Social and Political Conflict	-0.002	0.001
State Failure Indicator	**-1.650****	0.279
Iraq 2004	-10.323	6.322
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.234****	0.572
Prior Democracy	**0.693****	0.114
Income Inequality	**0.190****	0.074
Ethnic Fractionalization	1.566	2.517
Size in Square Km	-0.0003	0.000
Human Development Index	**11.620****	4.318
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**-0.115****	0.041
Prior Democracy	-0.009	0.007
Income Inequality	0.002	0.005
Ethnic Fractionalization	0.051	0.159
Size in Square Km	**-5E-005****	2.0E-005
Human Development Index	0.240	0.273
Model Statistics and Variance Parameters		
Random Variance (Intercept)	37.504**	5.003
Random Variance (Slope)	0.089**	0.021
Autocorrelation (rho)	0.506**	0.030
Model Deviance/AIC	12301.284	12337.284

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.5
Effects for Governance

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	-0.014	0.037
Rule of Law	-0.013	0.039
Civil Society	0.042	0.029
Governance	**0.070****	0.025
Other Assistance		
USAID Non-DG	-0.001	0.001
National Endowment for Democracy	**-1.062****	0.334
US Assistance other than USAID or NED	-0.000	0.001
Regional-Subregional DG	-0.123	0.272
Regional-Subregional Non-DG	-0.014	0.022
Other Donor Assistance on DG	0.001	0.001
Other Donor Assistance on Non-DG	-4E-005	0.0002
Economic and Political Factors		
Annual Growth in GDP per Capita	0.003	0.005
US Military Assistance Priority	-0.004	0.045
Democratic Diffusion	0.137	0.159
Social and Political Conflict	**-0.003****	0.001
State Failure Indicator	-0.122	0.176
Iraq 2004	**-9.568****	3.687
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**46.573****	0.519
Prior Democracy	**0.194***	0.104
Income Inequality	0.014	0.068
Ethnic Fractionalization	0.896	2.316
Size in Square Km	0.000	0.000
Human Development Index	**20.490****	3.941
Effect on (Level-1) Trend		
Average Slope for Growth Curve	0.030	0.035
Prior Democracy	-0.004	0.006
Income Inequality	0.002	0.004
Ethnic Fractionalization	-0.010	0.143
Size in Square Km	**-4E-005****	1.8E-005
Human Development Index	**0.550****	0.245
Model Statistics and Variance Parameters		
Random Variance (Intercept)	11.994	6.523
Autocorrelation (rho)	0.941**	0.015
Model Deviance/AIC	10031.374	10037.374

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.6
Effects for Elections According to Portfolio Patterns

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	0.068	0.049
Percentage invested in Elections	-0.001	0.003
Rule of Law	0.020	0.052
Civil Society	0.019	0.036
Governance	0.038	0.031
Other Assistance		
USAID Non-DG	**0.004****	0.002
National Endowment for Democracy	**-0.959****	0.467
US Assistance other than USAID or NED	-0.001	0.001
Regional-Subregional DG	0.001	0.362
Regional-Subregional Non-DG	-0.051	0.034
Other Donor Assistance on DG	-0.000	0.002
Other Donor Assistance on Non-DG	0.000	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	-0.003	0.007
US Military Assistance Priority	0.033	0.057
Democratic Diffusion	**0.837****	0.229
Social and Political Conflict	**-0.003****	0.001
State Failure Indicator	**-1.388****	0.231
Iraq 2004	**-13.581****	4.711
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**46.361****	0.676
Prior Democracy	**0.592****	0.136
Income Inequality	0.032	0.089
Ethnic Fractionalization	-0.001	3.026
Size in Square Km	2.0E-005	0.000
Human Development Index	**19.657****	5.152
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**0.256****	0.044
Prior Democracy	-0.008	0.008
Income Inequality	-0.004	0.005
Ethnic Fractionalization	**0.383****	0.176
Size in Square Km	-3E-006	2.2E-005
Human Development Index	**-0.630****	0.301
Model Statistics and Variance Parameters		
Random Variance (Intercept)	41.676**	6.796
Random Variance (Slope)	0.029	0.026
Autocorrelation (rho)	0.844**	0.020
Model Deviance/AIC	11379.681	11415.681

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.7
Effects for Human Rights According to Portfolio Patterns

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	**0.155***	0.089
Rule of Law: Human Rights	**-0.747****	0.278
Rule of Law: Non Human Rights	0.143	0.099
Percentage invested in Human Rights	0.009	0.017
Civil Society	0.022	0.059
Governance	0.037	0.062
Other Assistance		
USAID Non-DG	-0.004	0.003
National Endowment for Democracy	-0.957	0.738
US Assistance other than USAID or NED	0.003	0.003
Regional-Subregional DG	-0.377	0.649
Regional-Subregional Non-DG	0.024	0.048
Other Donor Assistance on DG	**0.005***	0.003
Other Donor Assistance on Non-DG	-7E-006	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	**0.039****	0.015
US Military Assistance Priority	-0.006	0.098
Democratic Diffusion	0.405	0.332
Social and Political Conflict	**-0.004****	0.002
State Failure Indicator	**-5.263****	0.430
Iraq 2004	-10.101	9.881
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.663****	0.622
Prior Democracy	**0.202***	0.120
Income Inequality	0.009	0.078
Ethnic Fractionalization	-3.230	2.637
Size in Square Km	**-0.001****	0.000
Human Development Index	**15.828****	4.571
Effect on (Level-1) Trend		
Average Slope for Growth Curve	-0.060	0.046
Prior Democracy	**-0.014****	0.007
Income Inequality	**0.015****	0.005
Ethnic Fractionalization	0.046	0.158
Size in Square Km	**-4E-005***	0.000
Human Development Index	0.189	0.277
Model Statistics and Variance Parameters		
Random Variance (Intercept)	39.476**	5.395
Random Variance (Slope)	0.050	0.024
Autocorrelation (rho)	0.396**	0.034
Model Deviance/AIC	14305.208	14313.208

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.8
Effects for Civil Society According to Portfolio Patterns

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	0.076	0.080
Rule of Law	-0.018	0.073
Civil Society	**0.296****	0.054
Percentage invested in Civil Society	0.001	0.004
Governance	**0.157****	0.052
Other Assistance		
USAID Non-DG	**-0.006****	0.002
National Endowment for Democracy	-0.142	0.656
US Assistance other than USAID or NED	-0.003	0.002
Regional-Subregional DG	0.400	0.548
Regional-Subregional Non-DG	-0.006	0.047
Other Donor Assistance on DG	-0.004	0.003
Other Donor Assistance on Non-DG	0.000	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	0.000	0.011
US Military Assistance Priority	0.013	0.088
Democratic Diffusion	**1.241****	0.306
Social and Political Conflict	-0.001	0.002
State Failure Indicator	**-1.387****	0.351
Iraq 2004	**-15.702***	9.521
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.359****	0.665
Prior Democracy	**0.700****	0.133
Income Inequality	0.053	0.086
Ethnic Fractionalization	1.107	2.931
Size in Square Km	**-0.001****	0.000
Human Development Index	2.326	5.022
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**-0.077***	0.043
Prior Democracy	**-0.016****	0.007
Income Inequality	**0.016****	0.005
Ethnic Fractionalization	0.096	0.162
Size in Square Km	-2E-006	2.0E-005
Human Development Index	**0.570****	0.279
Model Statistics and Variance Parameters		
Random Variance (Intercept)	49.485**	6.322
Random Variance (Slope)	0.033	0.023
Autocorrelation (rho)	0.524**	0.028
Model Deviance/AIC	13424.785	13460.785

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.9
Effects for Free Media According to Portfolio Patterns

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	**0.186****	0.060
Rule of Law	0.021	0.059
Civil Society: Media	**0.559****	0.237
Civil Society: Non-Media	**0.152****	0.042
Percentage invested in Free Media	0.002	0.010
DG Governance	0.049	0.037
Other Assistance		
USAID Non-DG	**-0.004***	0.002
National Endowment for Democracy	-0.252	0.545
US Assistance other than USAID or NED	0.002	0.002
Regional-Subregional DG	-0.689	0.430
Regional-Subregional Non-DG	0.004	0.039
Other Donor Assistance on DG	0.003	0.002
Other Donor Assistance on Non-DG	-7E-005	0.000
Economic and Political Factors		
Annual Growth in GDP per Capita	-0.000	0.009
US Military Assistance Priority	-0.002	0.068
Democratic Diffusion	**1.062****	0.267
Social and Political Conflict	-0.002	0.001
State Failure Indicator	**-1.648****	0.279
Iraq 2004	-10.371	6.326
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**49.220****	0.574
Prior Democracy	**0.694****	0.114
Income Inequality	**0.191****	0.074
Ethnic Fractionalization	1.557	2.516
Size in Square Km	-0.000	0.000
Human Development Index	**11.599****	4.317
Effect on (Level-1) Trend		
Average Slope for Growth Curve	**-0.114****	0.041
Prior Democracy	-0.009	0.007
Income Inequality	0.002	0.005
Ethnic Fractionalization	0.051	0.159
Size in Square Km	**-5E-005****	2.0E-005
Human Development Index	0.242	0.273
Model Statistics and Variance Parameters		
Random Variance (Intercept)	37.446**	5.004
Random Variance (Slope)	0.089**	0.022
Autocorrelation (rho)	0.506**	0.030
Model Deviance/AIC	12308.668	12344.668

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Table A6.10
Effects for Governance According to Portfolio Patterns

	Coefficient	S. Error
Level 1		
Sub-Sector USAID Democracy Assistance		
Elections	-0.016	0.037
Rule of Law	-0.013	0.039
Civil Society	0.037	0.030
Governance	**0.081****	0.028
Percentage invested in Governance	-0.003	0.003
Other Assistance		
USAID Non-DG	-0.001	0.001
National Endowment for Democracy	**-1.075****	0.334
US Assistance other than USAID or NED	-0.001	0.001
Regional-Subregional DG	-0.095	0.274
Regional-Subregional Non-DG	-0.014	0.022
Other Donor Assistance on DG	0.001	0.001
Other Donor Assistance on Non-DG	-4E-005	0.0002
Economic and Political Factors		
Annual Growth in GDP per Capita	0.003	0.005
US Military Assistance Priority	-0.006	0.045
Democratic Diffusion	0.132	0.160
Social and Political Conflict	**-0.003****	0.001
State Failure Indicator	-0.121	0.176
Iraq 2004	**-10.493****	3.814
Level 2		
Effect on (Level-1) Intercept		
Average Intercept	**46.579****	0.519
Prior Democracy	**0.193***	0.104
Income Inequality	0.015	0.068
Ethnic Fractionalization	0.889	2.316
Size in Square Km	0.000	0.000
Human Development Index	**20.531****	3.942
Effect on (Level-1) Trend		
Average Slope for Growth Curve	0.033	0.036
Prior Democracy	-0.004	0.006
Income Inequality	0.002	0.004
Ethnic Fractionalization	-0.007	0.143
Size in Square Km	**-4E-005****	1.8E-005
Human Development Index	**0.544****	0.246
Model Statistics and Variance Parameters		
Random Variance (Intercept)	11.718	6.631
Autocorrelation (rho)	0.941**	0.015
Model Deviance/AIC	10040.377	10046.377

Note: **significant at p<.05; *significant at p<.10 (two tailed)

Appendix 7 – Understanding the Impact of Human Rights Assistance

As we have noted in this and previous reports, the most unanticipated result in the extensive analyses of the initial study of the effects of U.S. foreign assistance on democracy building in the period 1990-2003 is the negative impact of receiving rule of law funding directed at the improvement of human rights on the performance of nations in protecting or abusing the personal integrity rights of their populations. The finding persists through the models reported above.

Candidate Explanations

Our plan for investigating this anomalous and troubling finding called for an investigation of alternative hypotheses that might demonstrate the spuriousness of the anomalous relationship between democracy assistance in the human rights area and human integrity abuse:[41]

1. reexamining the "reverse causality" explanation
2. reexamining the "measurement error" explanation
3. investigating the effects of potential omitted independent variables
4. exploring theory and analysis that might explain a "genuine relationship"

Reverse Causality

This hypothesis suggests the possibility that the relationship between development assistance devoted to improving human rights and respect for human integrity is the result of reverse causation—assistance is directed to countries with problematic records on respect for personal integrity precisely because of their suspect records—continues to receive little support in our analyses. We estimated endogeneity models similar to those in Table 6 above, and found little change in the estimated negative impact of USAID DG human rights assistance on our measure of countries' respect for human integrity. Recall that these models employ variables of USAID DG Human Rights assistance that are lagged by at least *two years* as proxies for current HR outlays, or employ variables such as the State Department foreign policy priority measure that are assumed to be unrelated to the indicator of respect for human integrity, once other variables in the model are controlled. However, the models do not pass the relevant tests for the exogeneity of the instrument set, and, thus, we can't be certain that we have good instruments to serve as proxies for the HR AID allocation. So the possibility of endogeneity in the process remains, even though all of our efforts to control for this have yielded essentially similar results as presented previously.

[41] We should note that, while we continue to use the Respect for Human Integrity Index (RL15 in our codebook) as our dependent variable, replications of these models with the most frequently used measure of personal integrity rights abuse, the Political Terror Scale, produce nearly identical results.

Measurement Error

The *measurement or reporting error explanation* contends that "more democracy assistance in the human rights area leads to higher levels of revealed human rights abuses, but not necessarily higher levels of actual abuse." If this explanation were true, it could mean that USAID DG Rule of Law - Human Rights and other democracy assistance were achieving an important goal, increasing sensitivity to and reporting of human rights abuses. In the short run, such success would manifest itself in apparent – but not real -- increase in abuses. In the longer run, increasing sensitivity to and promoting more vigorous reporting of human rights abuses could lead to reduction in actual abuse.

Directly assessing the validity of the measurement error explanation would require information on the reliability of reporting/non-reporting of human rights abuses that does not exist. We know of no valid method to directly distinguish between reporting of abuses and the unknown undercounting of occurrences of abuses. It is thus not only necessary but perhaps preferable to seek proxy measures that plausibly could create the conditions under which increased reporting would take place.

Press Freedom

Through what mechanism could increases or improvements in reporting of rights abuses take place? One possibility is that increased abuse reporting would accompany increased press freedom and initiative. If increases in human rights USAID DG funding are associated with increases in press freedom, it may be that the increases in the latter enable better reporting of human rights abuses and thus apparent increases in abuses. Our cross country, cross time dataset includes several measures of press freedom. These are summarized in an Index of Freedom of the Press (RL16) created by factor analyzing Freedom House's ordinal and interval measures of press freedom (RL02 RL03), Cingranelli and Richards' measure of freedom of speech and press (RL04), and the freedom of expression indicator from the Minorities at Risk Project (RL14). We use this Index of Freedom of Press to operationalize changing press freedom across our sample of countries and years for subsequent analyses of the impact of USAID DG human rights assistance on respect for human rights.

Organizational Growth

Another possible mechanism through which increased reporting of human rights abuses could occur would be through the growth of international or nongovernmental organizations (IGOs, NGOs) concerned with human rights issues. If increased USAID DG for human rights promotes IGO/NGO growth and if those IGOs/NGOs then do a better job of reporting human rights abuse that been occurring all along but going unreported, USAID DG could appear to be responsible for an increase in human right abuses.

Sadly, finding adequate *annual* indicators of the number or membership of IGOs/NGOs across all countries has proved to be an insurmountable obstacle, and we are

quite confident that there is no effective way to generate such data. Nevertheless, important work on human rights abuses by Landman (2005; 2006) reports on measures of the number of intergovernmental organizations (IGOs) of which countries are members, as well as the number of international nongovernmental organizations (INGOs) with a registered office in each country. These data series were generated from the statistical yearbooks published by the Union of International Associations (UIA).[42] Unfortunately, these data are not generated annually by UIA. The INGO data are reported every few years; the IGO data less systematically. Because he needed annual data for his analyses, Landman imputed scores for the missing years by linear interpolation (2005, 177-180) and created two relevant variables, measuring national IGO memberships and the number of international NGO registered within a country. These data are available on Landman's web site and cover the period through 2000.

Initially, we were optimistic about the use of the Landman data. However, the fact that Landman's data, when annualized, exhibit more than 80% of their values imputed was a cause for serious concern. This very large proportion of imputed values grew even larger when we imputed values for the end years of the series, 2001-2004, to make it match our time period.[43] Nevertheless, since (1) Landman's interpolated series appear to be the best measures of IGO/NGO activity available and (2) measuring IGO/INGO activity is so important to assessing the measurement/reporting error alternative hypothesis, we decided to use the two Landman series and have incorporated them in the models we report below. Yet, we urge strong caution in the interpretation of these data.

Omitted Variables

A major part of our plan to investigate the anomalous relationship between human rights assistance and human integrity abuse focuses on identifying, measuring, and assessing the effects of *variables that had previously been omitted* from our explanatory models. We posited indicators of constitutional structure, including formal and actual judicial independence, as omitted variables that were worthy of exploration.

Omitted Variable: Constitutional Protections for Rights

Beginning around 1990, the initial year of our period of analysis, there was a major increase in efforts by nations to create new constitutions or to revise existing ones to provide greater formal protection for human rights. The publically stated justifications for these constitution writing exercises were clear enough, but the motivations underlying them were no doubt more complex.

Some constitution creators and rulers may have acted in good faith, if perhaps also with some naiveté, believing that writing down formal rules to protect human rights would make it so. Others may have created constitutional protections to give the

[42] The IGO data were generated initially and supplied to Landman by Bruce Russett of Yale University and were used in Russett and O'Neal (2001). Landman's data are available at http://privatewww.essex.ac.uk/~todd/

[43] Since the series had no end year toward which to interpolate, we incremented last year's value by the average of the four year to year increases to create the values for 2001-2004.

impression they were doing something serious to protect human rights -- perhaps to divert international pressure to improve their human rights performance, for example, but with no intention of acting on or obeying the formal rules thus created. Less cynically, constitutional protections might tend to be adopted disproportionately by nations with serious human rights problems in the hope that adopting formal provisions would help improve their human rights situation. It is easy to see that in these circumstances, such hopes, no matter how sincere, could easily prove futile, so that poor human rights performance came to be associated with efforts to add constitutional protections to produce good human rights performance.

How efforts to provide formal constitutional protections for human rights are related to grants of democracy assistance also could be complicated. There has been since the 1970s a Congressional mandate that the granting of foreign assistance be based in part on a country's human rights record – this is indeed the reason the Department of State began the publication of its annual Human Rights Reports. If constitutional provisions to protect rights are seen as evidence of acceptable human rights performance when they are not, assistance could end up being negatively related to actual human rights performance. We will thus include measures of formal constitutional provisions designed to protect rights in our model of respect for human rights.

As a result of work on another project, *we have available for use in our analysis full data for 1990-2005 on constitutional provisions related to basic freedoms, judicial independence, and regulation of states of emergency of the constitutions of all the world's nations for the entire period of our analysis*. Our analyses will not be naïve about the likelihood that purely formal measures of government such as constitutional provisions will have an impact on human integrity abuse or mediate the relationship between assistance and such abuse. But we do believe that the fact that nations spend considerable time and resources creating the constitutions that include such provisions makes their potential effects worthy of the investigation we will conduct. Furthermore, preliminary analyses of the relationships between the constitutional right provisions and available measures that purport to be more empirically grounded (drawn from the Cingranelli and Richards dataset) support the conclusion that the constitutional measures are in fact valid measures of rights protection.

Our data on constitutional provisions are those collected by Keith and Tate (see Keith 2002; Keith and Poe 2004; Keith, Tate, and Poe 2007). They include ten measures of the extent to which constitutions protect basic political freedoms and rights (namely, the freedoms of speech, association, assembly, press, religion, the freedom to strike, and the rights to a fair and a public trial, to the writ of *habeas corpus*, and to be free from torture or cruel and unusual punishment), nine protections for judicial independence (guaranteed terms for judges, the provisions that judges' decisions are final, that judges have exclusive authority to decide issues of their own competence, that there are no exceptional courts, financial autonomy for the judiciary, a separate judicial branch, established qualifications for judges, a hierarchical judicial system, and for the power of judicial review), and four provisions to regulate the declaration and exercise of emergency powers in a state of emergency (a provision for legislative declaration of a state of emergency, limitations on the duration of states of emergency, a provision that

the executive cannot dissolved the legislature, and a provision identifying non-derogable rights during states of emergency).[44]

Omitted Variable: Judicial Independence

USAID's concerns with the rule of law are broader than the human rights dimension that is our principal focus in this section.[45] Another indicator of rule of law that is of considerable interest to USAID is judicial independence. Judicial independence would thus join human rights performance as another important indicator of rule of law; we will analyze its existence and determinants separately.

However, judicial independence is also important as a possible intervening variable that may modify or mitigate the discovered negative relationships between democracy aid and human rights. It is possible that countries that already have well-established traditions and systems of judicial independence would disproportionately be countries that did not receive high levels of USAID DG human rights assistance. If that were so, and if judicial independence did indeed promote respect for human rights, as one would expect it to do, then USAID DG human rights assistance might end up going disproportionately to countries with lesser judicial independence and, consequently, less respect for human rights. Thus we need to include measures of judicial independence in our revised model of human rights respect.

Judicial independence is almost always insisted upon as essential for the promotion of stable and effective democracy and the protection of human rights.[46] Unfortunately, it is a difficult concept to operationalize and measure on a reliable, valid, and cross-national basis. There have been efforts to tackle the concept empirically. Because of the difficulty of measuring actual judicial independence, these efforts have heretofore concentrated on *formal legal or constitutional* provisions intended to promote or guarantee judicial independence. None, so far as we know, has succeeded in producing a face valid cross-national measure of actual judicial independence that exists across a long period of time.

One of the most significant of the efforts to generate formal indicators of judicial independence is in the work done by Keith and Tate, described above. As we noted, Keith and Tate coded the presence or absence of nine discrete provisions designed to promote judicial independence in the texts of the world's constitutions. These indicators exist for the period 1976-2005 and we shall use them in our analysis.

As it is trite to note, formal or constitutional provisions are not the same as actual behavior. So to strengthen our analysis, we use a new measure intended to operationalize

[44] For full details on these measures, see the codebook.
[45] "Judicial independence lies at the heart of a well functioning judiciary and is the cornerstone of a democratic, market-based society based on the rule of law" (Gail Lecce, "USAID Preface" in USAID 2002)
[46] "In democratic, market-based societies, independent and impartial judiciaries contribute to the equitable and stable balance of power within the government. They protect individual rights and preserve the security of person and property" (USAID 2002, 6).

actual levels of judicial independence. The measure is coded from the U.S. State Department's annual Country Reports on Human Rights. Since the 1980s, the raw materials for generating this measure of judicial independence have appeared in the Country Reports. Near the beginning of each report there is now a brief summary judgment assessing the actual state of judicial independence in that country for that year. Before the current project had begun, Tate and Keith had initiated the work necessary to produce from these judgment paragraphs a standards based measure[47] of actual judicial independence that is directly analogous to the Political Terror Scale measures that are a staple of empirical studies of personal integrity rights abuse, including this one.[48] That work is now completed and an "actual judicial independence" measure has been integrated into our dataset.

Descriptive analysis of the distribution of our discrete measure of judicial independence over time shows a pattern of decline across the period 1990-2005. (**Figure A7.1** graphs our judicial independence measure over time.)

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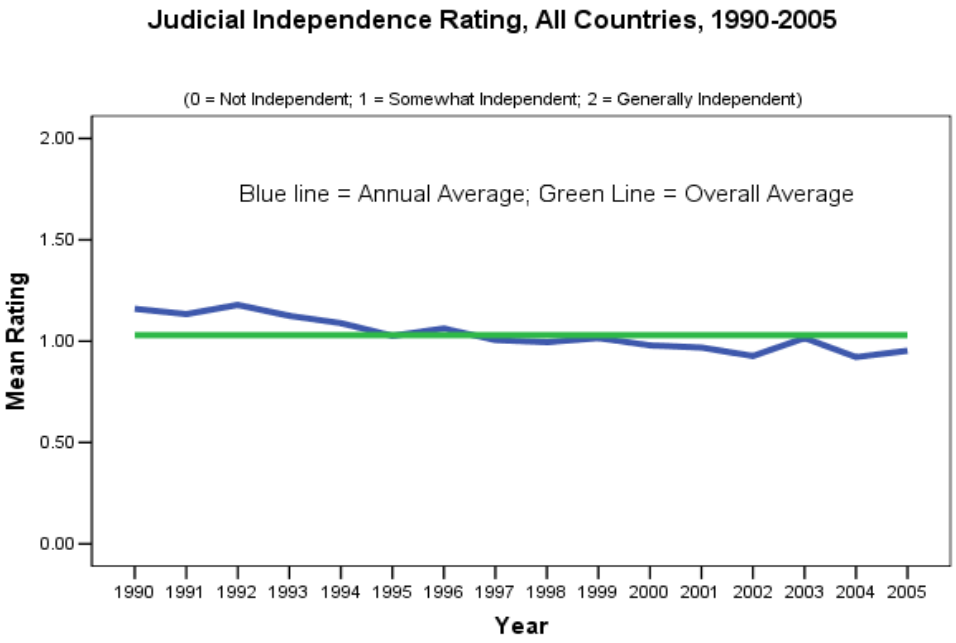
[47] Standards-based measures are derived by coding the content of standard textual materials describing a particular phenomenon (judicial independence in this case) into the categories of a rigorous classification scheme. Coders are extensively trained for their tasks. Such measures can be demonstrated to have considerable face validity and reliability.

[48] David Cingranelli of the University of Binghamton and David Richards of Memphis State University have also coded but not yet completed or released a judicial independence measure from the material in these paragraphs over time. Cingranelli and Richards kindly shared a preliminary version of their measure with us. Analyses of the two measures showed that, when completed, the Cingranelli and Richards indicator is likely to correlate moderately highly with the Tate-Keith measure. This is reassuring evidence of the measure's validity, since the coding rules for the Cingranelli and Richards measure are significantly different from those used to create the Tate-Keith measure.

Figure A7.1



SOURCE: Coded from U.S. Department of State Human Rights Reports

Genuine Relationship

The *genuine relationship explanation* posits that leaders who find themselves under pressure to improve their human rights performance actually respond by becoming more repressive because they feel their grip on power to be threatened.

Threat Perception

Our analysis plan called for confronting this explanation more directly by including into our full statistical models of human integrity performance empirical indicators of events or circumstances that would be perceived as threatening by potentially repressive leaders. *We have collected and cleaned for the period 1990-2004 comprehensive data on four threat indicators: Organized Nonviolent Protest, Organized Nonviolent Rebellion, Organized Violent Rebellion,* and *Civil War.* The analysis explores whether these indicators—taken individually or collectively—serving as proxies for leaders' perceptions of threats to their continuation in power, perceptions that then cause them to abuse rights more as they perceive themselves to be more threatened.

In discussing these four interpretations of the negative relationship between human rights assistance and human rights protection, it is important to remember that they are not mutually exclusive. Indeed, all four could be partial explanations for the relationship.

The analysis we perform attempts insofar as possible to identify the extent to which each is valid.

The Model

We begin with the baseline model for human rights that underlies Table 13 (see Tables A6.2 and A6.7), which reports a negative coefficient of -.664 for the impact of USAID DG Rule of Law/Human Rights Aid on the Respect for Human Rights Index. To the baseline model, we add the several variables discussed above that are intended to test the measurement/reporting error, omitted variables, and genuine relationships alternative hypotheses. To recapitulate, these new variables added to our model are:

1. The Freedom of Press Index
2. Landman's indicators of International Governmental Organization (IGO) membership and the number of International Non-Governmental Organizations (INGOs) registered in each country.
3. The 23 formal indicators of constitutional provisions created by Tate and Keith to measure protections for rights and freedoms. Preliminary analyses using these measures tested their impacts individually. This model was, not unexpectedly, cumbersome and confusing, with 23 separate constitutional provisions impact coefficients to interpret. It also provided little evidence that any particular indicator had an impact that required representing in the model. Consequently, as we have done with many other variables represented by multiple indicators, we factor analyzed the three subsets of variables operationalizing guarantees of rights and liberties, promoting judicial independence, and limiting declarations of emergency rule. A few indicators did not load to any substantial degree on the first principal components representing rights and freedoms, formal judicial independence, and limiting emergency rule. To allow for the possibility that these maverick indicators could have different effects, we retained them in our multivariate model, using them along with the indexes derived from the factor analyses.
4. The indicator of actual (behavioral) judicial independence derived from the Tate-Keith coding of the U.S. State Department reports.
5. The four indicators of domestic unrest intended to serve as proxies for leader's perceptions of threat, namely organized nonviolent protest, organized nonviolent rebellion, organized violent rebellion, and civil war.

Table A7.1 gives the results of the mixed models analysis for the expanded model that includes these variables in addition to the base model indicators. They document considerable success for some of the measures we are using to test the alternate hypotheses we are considering as possible mediating variables that would explain away or at least reduce the negative relationship between USAID DG human rights assistance and human rights performance (respect for human rights index, RL 15).

Table A7.1: Final Multivariate Human Rights Model

	Coefficient	S. Error	Sig.
Level 1			
Sub-Sector USAID Democracy Assistance			
Elections	.019	.090	.830
Rule of Law: Human Rights	-.589**	.226	.009
Rule of Law: Non-Human Rights	.164*	.092	.077
Civil Society	-.133**	.065	.041
Governance	.015	.056	.788
Other Assistance			
USAID	.000	.002	.929
National Endowment for Democracy	-.195	.776	.801
US Assistance other than USAID or NED	.005**	.003	.050
Regional-Subregional DG	-.004	.659	.996
Regional-Subregional Non-DG	-.051	.055	.351
Other Donor Assistance on DG	.004	.003	.191
Other Donor Assitance on Non-DG	.000	.000	.809
Economic and Political Factors			
Annual Growth GDP Per Capita	.010	.015	.498
US Military Assistance Priority	-.047	.091	.603
Democratic Diffusion	-.225	.384	.558
Social and Political Conflict	-.002	.002	.411
State Failure Indicator	-3.633**	.450	1.42E-015
Iraq2004	-2.156	9.072	.812

Table A7.1: Final Multivariate Human Rights Model (Continued)

ALTERNATE HYPOTHESES			
Real Effects: Threat Indicators			
Threat/Protest Index	-.476**	.106	7.54E-006
Civil War	-4.369**	.529	3.19E-016
Omitted Variables: Constitutional Provisions Indicators			
Five Freedoms Index	.255	.367	.488
Freedom to Strike	-.037	.611	.951
Fair Procedure Index	.092	.390	.814
Formal Judicial Independence Index	-.124	.591	.834
Courts have Exclusive Competence	-.381	.583	.514
No Special, Military Courts	-.153	.433	.724
State of Emergency Varimax scores Factor 1	.359	.357	.315
State of Emergency Varimax scores Factor 2	.513	.337	.128
Omitted Variables Actual Judicial Independence			
Actual Judicial Independence	.545**	.216	.012
Measurement/Reporting Error			
Intergovernmental Organizations Membership	-.043**	.016	.007

International Nongovernmental organizations count	-.274	.437	.531
Index of Freedom of Press	.231**	.030	2.57E-014
Level 2			
Effect on (Level-1) Intercept			
Average Intercept	49.077**	.927	7.41E-165
Prior Democracy	-.033	.111	.764
Income per Capita	-.035	.072	.628
Ethnic Fractionalization	-3.405	2.502	.175
Size in Square Km	-.001**	.000	.012
Human Development Index	13.406**	4.311	.002
Effect on (Level 1) Trend			
Average Slope for Growth Curve	.058	.052	.268
Prior Democracy	-.010	.007	.142
Income per Capita	.012**	.005	.020
Ethnic Fractionalization	-.053	.168	.754
Size in Square Km	-2.01E-005	2.08E-005	.335
Human Development Index	.055	.287	.849
Model Statistics and Variance Parameters			
Random Variance (Intercept)	27.787	4.523	
Random Variance (Slope)	.0562	.022	
Autocorrelation. (rho)	.338	.034	
Model Deviance/AIC	12155.49	12191.49	

Note: **significant at p<.05; *significant at p<.10 (two tailed). Dependent Variable: RL 15 - Respect for Human Integrity

Measurement Error/Reporting Increase Results

Two of the three indicators we used to test the possibility that the negative relationship between USAID DG Human Rights aid and human rights performance were due to measurement error have relationships with our dependent variable that are statistically significant beyond p = .01. However, they run in different directions. Increases in press freedom produce increases in respect for integrity rights. This is not an illogical or necessarily unexpected relationship. Indeed, proponents of human rights would not doubt be gratified to see that greater freedom of the press, something that they would probably regard as a good thing in and of itself, also produces increases in respect for personal integrity. But this positive relationship is *not* consistent with the measurement error hypothesis, which posits that greater press freedom would lead to more reporting of human rights abuses, even if the increases were not in fact occurring, and thus produce a negative effect on respect for human rights. Thus the good news is that increasing press freedom does reduce human rights abuse while the bad news is that it does not ameliorate the anomalous negative impact of USAID DG human rights aid on human rights performance.

Increases in intergovernmental organization memberships, in contrast, produce decreases in human rights performance, an effect that *is* consistent with the measurement error hypothesis. The greater the number of intergovernmental organization memberships a country has, the greater the ability to discover and report rights abuses and, thus, plausibly, the less its apparent tendency to respect human rights, even if there were no actual increases in human rights abuse.

The organizational membership results would provide greater support for the measurement error/reporting hypothesis if the relationship for international non-governmental registrations were also in the expected negative direction and statistically significant. In fact, the relationship for the *logged* version of international non-governmental registrations is in the expected negative direction, but is not statistically significant. Following Landman, we logged this variable because its frequency distribution was skewed to the right, while its logged distribution naturally was not.[49] In fact, in an alternative version of the model reported in Table A7.1, the coefficient for the raw (unlogged) version of the international non-governmental memberships variable was not only negative but highly statistically significant. Since our decision to use the logged version of nongovernmental memberships is something of a judgment call, the relationships for the IGO/NGO variables provide consistent support for the hypothesis that measurement error due to more effective reporting of rights abuses is part of the explanation for the negative relationship between human rights aid and human rights performance.[50]

Omitted Variables

The results for the indicators we included in the model to test the hypothesis that omitted variables might be partially responsible suggest that there is indeed one omitted variable that significantly affects human rights abuse. Judicial independence is positively indeed related to respect for human rights and its coefficient is statistically significant beyond the .01 level. This is, once again, a gratifying result for proponents of both human rights and judicial independence, and is consistent with the speculation that if human rights specific assistance goes disproportionately to countries with weak traditions of judicial independence, it might appear to promote abuse of human rights. These results are further gratifying because of the uncertainty surrounding the validity of a measure of actual judicial independence based on the narrative summaries of judicial independence in the State Department Human Rights reports.[51]

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[49] This was not the case for the intergovernmental organizations membership measure. Its frequency distribution was quite normal and its logged distribution strongly peaked and compressed.

[50] We should stress again, however, the fragile nature of the IGO/NGO variables: A very substantial portion of their scores have been imputed by linear interpolation and thus represent presumed and unnaturally smoothed, rather than measured, patterns of change.

[51] We don't want to push this too far. It is still possible, for example, that assessments of judicial independence are colored by assessments of human rights performance and vice versa.

The predictive success of actual judicial independence does not extend to the formal constitutional provisions measures, however, including the formal measures of judicial independence. None of the factor analysis-based indexes or the individual provisions retained in Table A7.1 is accompanied by a coefficient that comes even remotely close to being statistically significant. We obtained the same non-result no matter how we configured the constitutional provisions measures: their coefficients were insignificant when calculated for their 23 individual indicators or for various combinations of the indexes we created to summarize them into more manageable categories. Thus, whatever their utility in other contexts, the constitutional provisions (see Keith, Tate, and Poe 2007, for example), play no role in explaining respect for human rights in the context of our mixed model for the period 1990-2004.

Genuine Relationship

Our attempt to get at the possibility that the relationship between USAID DG human rights assistance and respect for human rights reflects a real relationship, posits that assistance leads to greater activity promoting human rights which is seen as threatening by leaders, who then resort to greater rights abuse to try to secure their hold on power. To test this insight, we operationalized and tested the effects of four varieties of domestic protest or opposition to leaders on human rights abuse. The three less threatening varieties of protest/opposition, Nonviolent Protest, Nonviolent Rebellion, Violent Rebellion, were well-summarized by the first principal component of a factor analysis of the four items, but the fourth item, Civil War, was not. Thus our model includes a Threat/Protest index based on the protest/rebellion items and civil war as a separate independence variable.

Both threat indicators are strongly negatively related to respect for human rights and are statistically significant beyond the .001 level. There is clear evidence, based on these indicators, at least, that the anomalous negative relationship that concerns us in this section may reflect a real abusive reaction by leaders who are threatened by the human rights assistance their countries receive.

AID Assistance and Other Relationships

Five Level 1 and three Level 2 variables in Table A7.1 that were in our base model demonstrate coefficients that are statistically significant at or beyond any conventional level. Four of the Level 1 variables are for various measures of USAID DG and other assistance, including the principal one of concern to us here, that between USAID DG Human Rights assistance and respect for human rights. We will return to these measures below.

Non-AID DG related variable effects

The fourth Level 1 (and only non-assistance related) variable is the "State Failure" indicator, which has a highly statistically significant negative impact on respect for human rights. It seems logical and obvious that state failure would create conditions

under which human rights abuse would increase. We included the state failure indicator because it has been in our base models all along. However, we realized, on second thought, there is also a measurement problem with the state failure indicator as we have operationalized it. State failure is operationalized as having occurred in states that experience ethnic wars or "genocide and politicide" events, among other events. Clearly the latter and probably the former must overlap significantly with human rights abuse and thus are not independent of our dependent variable.[52]

As in our base model, two Level 2 variables, Country Size (in sq. km) and the Human Development Index demonstrate statistically significant effects on the Level 1 intercept and one, Income per capita, affects the level one trend. Country Size decreases and the Human Development Index increases respect for human rights (by increasing the Level 1 intercept). Per capita income also increases respect for human rights by increasing the slope of the Level 1 trend. All these effects were present in our base model.

Assistance related variable effects

There is, perhaps, some irony in the fact that USAID DG Rule of Law Non-Human Rights assistance has a positive impact on human rights performance (significant at .08) while Rule of Law Human Rights assistance continues to exhibit its negative impact, even after controlling for indicators intended to operationalize various alternate hypotheses. The irony lessens when one realizes that most of the funding in this category is related to promoting judicial development. Our model has demonstrated that a previously omitted variable, actual judicial independence, promoted respect for human rights. That the same is true for expenditures intended to promote judicial development is not just consistent with this finding, but also would be gratifying to proponents of rule of law more generally.[53]

The negative impact of USAID DG Civil Society assistance (significant at .05) shows up in our current model for the first time. In previous base line analyses, its relationship with respect for human rights was not significant. That the negative relationship shows up in a model in which we have tried explicitly to represent the effect of organizational growth (through the IGO/INGO variables, however weakly measured) is important, as USAID DG Civil Society assistance is granted for the purpose of supporting "non-governmental associations (including civic groups, professional associations, and labor unions)."

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[52] "Social and Political Conflict" had a statistically significant negative coefficient for its effect on respect for human rights in our base model, but does not have such an effect here, no doubt because we have included more directly relevant measures of threat and protest.

[53] The positive impact of Rule of Law Non-Human Rights assistance is also exhibited by total Non-AID or NED United States development assistance (the grand mean centered version of variable AID_2). We view this as a positive result. Beyond that, it is difficult to know what beyond that to make of this relationship since AID_2 is a residual variable that our codebook notes is "Estimated as the difference between total Economic Assistance (loans and grants reported by the Greenbook) and the AID and AIDNED variables."

All the measures intended to capture as directly as possible the effects of associational/organizational support and growth are depicted by their coefficients as promoting human rights abuse, rather than respect for human integrity. Perhaps they all fit into our conception that decreases in respect for human rights may reflect better reporting of abuses made possible by stronger and more numerous organizations, both non-governmental and governmental but international. On the other hand, we can also easily conceptualize increasing financial support for and growth of such organizations as linking to greater perceived threat by governmental leaders who are uneasy about retaining their positions and inclined to respond to such threats with greater repression.

Bottom Line

We are left with a bottom line that leaves USAID DG Rule of Law assistance for Human Rights (and to a lesser extent, assistance for Civil society) producing *less*, rather than as one would expect and hope, *more* respect for human integrity. Our efforts to untangle the web of relationships that may underlie these distressing and presumptively anomalous relationships and to model them statistically have led to some important findings. But it has been largely unsuccessful in its basic purpose. We are left with the conclusion that, as least as measured in our data or as administered across the period 1990-2004, USAID DG assistance in support of human rights is associated with effects opposite to those for which it is presumably given.

Certainly this is not the end of this story. Our perception of the anomalous nature of the negative relationship that has been our focus in this section is so strong that we find it very difficult to simply accept it. Even less do we find it comfortable to recommend that human rights aid from USAID Rule of Law programs be re-examined or even terminated, especially given (1) the positive link between respect for human integrity and Rule of Law assistance directed not at promotion of human rights specifically but more generally at development of judicial independence, (2) the strong positive impact of judicial independence itself on respect for rights, and (3) the otherwise quite positive statistical demonstrations that USAID democracy assistance is generally successful in producing more democracy.

An appropriate further step to take in examining the effects of human rights aid would be to design and execute a set of country specific studies employing both qualitative and quantitative techniques to focus on the giving, receiving, administration, and putative effects of that aid. Such research might produce insights into how such an anomalous effect results might be produced or, possibly, into what other mediating or intervening variables need to be taken into consideration to account for the relationship that persists at the end of this study.

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