REWARDING GOOD POLITICAL BEHAVIOR:

US AID, DEMOCRACY AND HUMAN RIGHTS

European Journal of Political Economy August 2021, online first

Abstract

We investigate whether the allocation of US aid is influenced by a recipient's democracy and

human rights record. The analysis is done in two ways. First, a comprehensive meta-analysis of

290 estimates from 58 studies. Studies report a wide range of results, but the meta-analysis

concludes that both human rights and democracy are clear motives for giving aid, with

democracy being relatively more important. Second, a new primary study of the data confirms

the share of Democrats in the House of Representatives is the strongest variable explaining the

importance of democracy and human rights in recipient countries.

Keywords: democracy; human rights; aid allocations; domestic politics; ideology

JEL: F35, O19

Number of words: 9,276

1 Introduction

Total development aid disbursed has been about \$US 160 billion in 2017–2019. These transfers involve nearly every nation, either as donor or as recipient. The flows are analyzed by a literature of about 600 papers, with a wide range of results reported. This paper deals with the aid allocation literature, the AAL, which looks at three main motives: recipient economic development, recipient behavior, especially human rights/democracy, and donor interests. A particularly rich part of the literature study the aid motives of the USA – the largest donor country giving about 18% of total aid.

The three motives interact and they are difficult to untangle empirically, but evidence has been found that all three motives count. They are contradictory: The poorest countries have little democracy, and a low level of human rights protection. Thus, if you want development in the poorest countries, you have to be lenient as to human rights and vice versa.

Donor interests are particularly relevant for the USA, which as a superpower is a main political player in the world. In addition, the USA is a country of immigrants, which includes groups that have retained some emotional stake in their old country. In most of the conflicts in the world, at least one of the sides and their US 'lobby' wants the US to do something. In addition, people around the world often have strong positive or negative feelings toward the US. Even if the US gave aid out of pure altruism, many people would still think that the aid was due to self-interests so we are dealing with a complex and controversial field.

A recurrent theme in the literature is that the two political parties in the US may support different mixtures of the three aid giving motives. While it is easy to theorize about the preferred mixture, it is less easy to find a clear empirical pattern. The difference between the individual administrations may be larger than the difference between the two parties. In addition, the international political situation is ever changing, notably during the realignment of countries after the Cold War, and during the War on Terrorism. Furthermore, most recipient countries have mixed political systems that allow different assessments of their level of democracy. This allows US-decision makers some leeway of judgment that enables partisan preferences to play a role.

One case is the US aid to the continent of Latin America, where substantial economic volatility has been driven by populism fueled by nationalism that often see 'Gringo Imperialism' as a main problem. This has led to the claim that the USA supports right-wing dictators in Latin

¹ From the ODA (Official Development Aid) statistics of the OECD.

² The main causal relation divides the studies in two almost equal groups. The AAL is the aid allocation literature, and the AEL is the aid effectiveness literature. This paper deals with the AAL. The AEL has been analyzed elsewhere; see Doucouliagos and Paldam (2009 and 2015).

America.³ At the same time, the Hispanic population in the USA has grown to 60 million.⁴ Thus, it is emotional and politically important what motivates US-aid to Latin America, and researchers do find different results.

Another equally controversial, but different, case is the war-ridden region of the Middle East, where the USA has fought several wars, and been close to others fought between regional combatants. Aid to this region has often been used to buy peace, with some, but not great, success. Here the US seems to reward peace more than democracy and human rights.⁵

Our literature search identified 58 empirical studies with 290 estimates of the importance for US aid of democracy or human rights (see details below). The reported results scatter over a wide range. The models used to untangle the motives are also rather different, and so is the econometric sophistication applied. Meta-analysis is well-suited to making sense of this heterogeneity in reported findings. The following section surveys and discusses the models. Sections 3 and 4 present the meta-analysis that asks two questions: First, has the literature found a robust result, confirming that democracy and human rights matter? Second, how much does the choice of the econometric model matter for the results? To corroborate and dig deeper into aid motives, Section 5 reports our own panel data analysis that confirms the meta-analysis results. Section 6 concludes.

2. Aid and Political Rights

Several factors introduce recipient behavior into the aid allocation process. These often work in the opposite direction, so that it is not obvious whether we should expect to find a negative, positive, or indeed any association between democracy, human rights, and aid. Hence, the matter is entirely an empirical one.

2.1 A tangle of policies

Promoting democracy became a formal objective of US aid in 1961 with the Foreign Assistance Act (Brown 2005). Many in development think that aid allocation should be kept isolated from other policies, but this is unlikely to happen (see, for example, Huntington 1971). In practice, aid policy, foreign policy, and trade policy are difficult to isolate from each other, and they are all

³ The Monroe Doctrine from 1823 was meant to support the recent independence of Latin American countries. However, when the USA became an increasingly important power during the 20th century, the Doctrine became a symbol for the claim that the USA wanted to keep Latin America as its sphere of influence.

⁴ See https://www.census.gov/quickfacts/fact/table/US/PST045219.

⁵ The large US-aid program to Egypt after the Camp David peace accord between Egypt and Israel in 1978, is the most well-known case.

three formed by political decision processes in the donor countries, which tend to be dominated by domestic politics (Tarnoff and Lawson 2016). Thus, aid allocations are one part of a policy tangle. This means that resources meant for development or crises alleviation might instead be channeled to satisfy donor domestic political goals. In particular, aid can become another tool of diplomacy, as was the case during the Cold War.

The association between aid and democracy will depend on the objectives pursued. It will be positive if aid is allocated to countries as a reward for moving towards democracy and negative if it is allocated to autocracies that are of strategic importance. In this later case, aid may be seen as rewarding bad behavior. The correlation will also be negative if aid is given as reform encouragement to nations with low democracy as discussed in the next section.

In many cases, the domestic policies of political parties are strongly influenced by the need to woo the median voter, so they are much more centrist than the policies they would like to pursue. Consequently, they might like to aid countries that actually pursue the policies they would have liked to implement. This may cause political parties and movements to seek ideologically like-minded 'friends' abroad, so that aid programs go disproportionally to countries with similar ideologies. This may apply particularly to the aid from countries with large social democratic/labor parties that pursue moderate centrist policies, as found in North-Western Europe. To the extent that ideology match between donor and recipient counts, it may even displace the other goals of aid.

A related issue is the fragmentation of decision-makers. Brigety and Dewan (2009) note that foreign aid in the USA is administered via five institutions, with resources spread over 24 agencies, offices, and departments. They note that these are "neither centrally coordinated nor guided by clear goals or national strategy". The net effect of coordination failure on the aid-democracy association is unclear. For example, central governments might want to reward a recipient's good behavior, but aid agencies might pursue a different agenda.

2.2 Reward policy versus the help-to-improve policy

Political change is driven by domestic and international factors. The international goal of improving the level of democracy and human rights in poor countries may be pursued by two policy strategies: A *reward* policy or a *help-to-improve* policy

If donors pursue a reward policy, this should present as a positive causal relation from

¹⁰

⁶ USAID is aligned with the State Department and hence part to US foreign policy (https://www.state.gov/s/d/rm/index.htm#mission). While allocating funds for democracy may enhance security in some instances, these objectives may clash on others.

democracy and human rights to the aid share. The policy is made by the donor in order to generate dynamic effects: If countries with low levels of democracy and human rights improve their record, they will receive more aid. This reinforces the positive correlation between democracy and human rights and the aid share, though it actually is an effect of the policy on the democracy and human rights record. If policy effectiveness is low in this field, the democracy and human rights variables can be taken as the explanatory ones.

If donors pursue a help-to-improve policy it is less clear what should be observed. The prerequisite of the policy is that a less developed country wants to improve, but is somehow stuck in a *status quo* equilibrium. If aid is able to break the deadlock, aid may have a large effect.

2.3 On means and ends

Democracy, human rights, and income are surely goals in their own right, but empirically they are strongly related. In large cross-country datasets the various democracy indices all have correlations to income around 0.6. Thus, we are discussing confluent variables. A large literature discusses if a main direction of causality can be established between these variables, and hence what are the means and what are the ends.

If the main causal direction is from development to democracy then effective aid for economic development will eventually lead to democracy, but it may take some time. However, if the main causal direction is from democracy to development then effective aid to democracy is a means to more development as well.

The large literature on economic growth, does not point to the political system as a main factor of development, though it suggests that regime type may effect the accumulation and allocation of some of factors of production, notably human capital. Such effects are likely to be small, and of a long-run nature, but still, more than 200 papers study if democracy leads to growth. Two meta studies summarize this literature: Doucouliagos and Ulubaşoglŭ (2008) cover the first 80 studies that show very little effect on growth, and Colagrossi *et al.* (2020) cover about 200 papers and show that the newer papers do find some effect. However, another literature concludes that the effect of income on democracy is much stronger in the longer run; see Paldam (2021).

In micro studies of aid projects it has often been shown that individual projects fail

⁷ A large literature deals with aid effectiveness on growth; see Doucouliagos and Paldam (2009, 2015). It does find that aid effectiveness is modest, so perhaps the means vs ends discussion in this section is of little empirical relevance. A smaller literature deals with aid effectiveness on democracy, see Knack (2004); it also finds low effectiveness.

⁸ Many authors argue that the relation is more complex, e.g. Burnside and Dollar (2000) argue that aid is more effective conditional on good economic policies, but this result has not fared well in replications.

because the institutions running the projects after they have been handed over to the recipient country are too weak for the task (see Gisselquist 2014). Aid practitioners typically argue that institution building, fighting corruption, and improving democracy and human rights, might all assist growth and development in the end. Moreover, if governments are a key player in development, it is possible that democracy might further development. Hence, by encouraging and rewarding these reforms, donors might indirectly be fighting poverty in the long run. Indeed, this is one of the stated objectives of the UN Millennium Challenge Initiative and USAID. This should give a positive association between democracy, human rights and aid allocations.

2.4 Domestic politics and ideological conflict

Several studies link party ideology to aid allocations. For example, Brech and Potrafke (2014) find that leftist governments give more aid. Milner and Tingley (2010) find that legislators are more likely to vote for aid in left leaning districts. This line of thought extends to democracy as a motive for aid. Ideology enters aid allocation if the US assigns aid based on recipient's democracy and human rights as part of promotion of American values. It can also emerge as a response to domestic politics, reflecting political contests between liberals and conservatives and in response to domestic voter preferences.

Ideological conflict may be reflected in the evolution of policies over time. For example, the Cold War created conflict between security and humanitarian concerns (Taffet 2007). Accordingly, political concerns may have become less important in the post-Cold War period, with humanitarian concerns now more important. On the other hand, US foreign policy often links democratization with US security interests. Hence, arguably, democracy and human rights have become more important to the US in the post-Cold War period, especially with respect to aid to transitional economies and nations that were formerly part of the USSR.

Ideological conflict can also be reflected in differences between administrations. For example, the Carter administration emphasized human rights, with Presidential Directive 30 tying US aid to a recipient's human rights. However, aid under Carter averaged only slightly higher than under Ford and slightly lower than Nixon as seen from Table 1.

Table 1. Total US Aid and Aid for Democracy and Human Rights, by US Administration

(1)	(2)	(3)	(4)	(5)
President	Average aid	Democrat	Aid for	Aid for
	annual	House share	democracy	human rights
Nixon	14,872	0.569	0.079	0
Ford	14,212	0.631	0.156	0.076
Carter	14,763	0.654	0.194	0.115
Reagan	17,250	0.587	0.170	0.090
Bush I	16,817	0.606	0.219	0.139
Clinton	12,637	0.506	0.165	0.085
Bush II	23,702	0.489	0.194	0.114
Obama	31,872	0.497	0.240	0.160

Notes: Column (2) is in \$US2014. Column (3) reports the share of the House held by Democrats. Columns (4) and (5) are estimated from the MRA coefficients from Column (4), Table 2. These cells entries are partial correlations.

The Reagan administration used aid as an instrument to combat the USSR; ⁹ aid increased to \$17,250 US million, on average. Nevertheless, the question addressed here is how responsive aid is to democracy and human rights, and not the total amounts of aid. Ideological conflict can also manifest as conflict between the administration and Congress regarding foreign policy and the level of aid and the role of aid in promoting democracy; see Varnis (1990) for an example with regard to aid to Ethiopia, and Taffet (2007) on conflict over the Alliance for Progress project in Latin America. Congress has enacted several acts that use aid to promote democracy, e.g. the Freedom for Russia and Emerging Eurasian Democracies and Open Markets Support Act of 1992, and the Iran Freedom Support Act of 2006.

3. Methods and data for the meta-study

The data for a meta study is the set of primary papers that reports estimates of the effect analyzed.

3.1 *Models in the primary papers*

Empirical studies estimate some variant of a generic aid allocation model that often consists of two linked sub-models explaining the aid flows, h. These are the recipients' characteristics R-model, []_R, which includes the democracy and/or human rights variables, and the donor-recipient relationship DR-model, []_{DR}:

⁹ Most American governments used aid as a tool during the Cold War. An example is US aid to neighbors of countries with US/USSR-client wars, such as Thailand during the Vietnam War (Jackson and Mungkandi, 1987).

¹⁰ Some studies adopt a two-step process, where the first step involves analysis of the choice of which countries to aid and the second step involves choices of the amount of aid to allocate to the chosen countries. The analysis deals exclusively with the amount of aid allocated, rather than the choice of countries to aid.

(1)
$$h_{it}^{j} = [\alpha_{1}H_{it}^{j} + \alpha_{2}D_{it}^{j} + \alpha_{1}y_{it}^{j}...]_{R} + [b_{1}X_{it}^{j} + b_{2}S_{it}^{j} + b_{3}C_{it}^{j}...]_{DR} + \varepsilon_{it}^{j}$$

The three indices are j for donor, i for recipient, and t for time. Often one sub-model is missing from empirical studies. The R-model in the $[]_R$ -bracket in Eqn. (1) uses data for the recipient country such as a human rights index, H, a democracy index D, and economic variables such as income (y). The DR-model in the $[]_{DR}$ -bracket includes characteristics of donor-recipient relations such as trade between donor and recipient (X), the importance of the recipient for the foreign policy (S) of the donor, and the historical relations between the countries (C).

Here we use meta-regression analysis, MRA, to: (a) identify whether recipient behavior is an important factor for aid allocations; and (b) identify whether domestic politics is a determinant of the heterogeneity of the reported estimates. Our MRA involves regressing a measure of the effect of good recipient behavior on aid allocations against a range of study characteristics:

$$(2) r_{ij} = \beta_0 + \beta_x \mathbf{x}_{ij} + \nu_{ij}$$

where r_{ij} denotes the effect of recipient behavior on aid allocations from estimate i reported in study j, \mathbf{x} is a vector of study characteristics, such as data, specification, and estimation differences, and the v are random errors. The vector \mathbf{x} explores heterogeneity in the underlying reported estimates, and the differences in the way studies are conducted. For example, the responsiveness of aid allocated with respect to recipient behavior may vary over time as a result of changes in policy and ideology of ruling parties. These can be considered to be real differences (that is, differences in the actual effect of democracy or human rights on aid), and these magnitudes can be quantified by the MRA coefficients. On the other hand, some of the reported differences may be an artifact of the way an empirical study was conducted. For example, misspecification by omitting relevant factors in the estimating equation (1) is likely to lead to biased estimates.

Estimates of meta-regression Eqn. (2) are used to evaluate and assess the evidence base. Typically, research studies of aid report several estimates, which may not be statistically independent. Standard errors that correct for clustering of observations within studies are therefore used. Eqn. (2) is estimated using weighted least squares, using inverse variance weights (Stanley

 $^{^{11}}$ Most studies treat H and D as exogenous. Several studies have found that aid does not contribute to democratization (e.g. Knack 2004).

¹² The r are derived from estimates of α_1 and α_2 from Eqn. (1). As discussed below, estimates of α_1 and α_2 are transformed into partial correlations to ensure comparability of estimates *between* diverse studies.

and Doucouliagos, 2012; 2017). That is, each estimate is weighted by its estimated precision, giving more weight to the more accurate results. This is established practice in meta-analysis, and the Gauss-Markov Theorem proves that inverse-variance weighting provides minimum variance estimation, i.e., BLUE (Stanley and Doucouliagos, 2017). The robustness analysis also considers sample size weights, assigning more weight to larger studies. Inverse variance (and sample size) weights are objective in the sense that they do not rely upon researcher judgement about the relative importance of various studies. This means that we do not assign greater weight to statistically significant results, more recent results, nor results from the leading researchers in the field. Such choices are not recommended as they might induce bias into the meta-analysis results (see Stanley and Doucouliagos 2012).

3.2 Data for the meta-study: the primary studies

The basis for the meta-study was a systematic and comprehensive search for all relevant empirical studies that report estimates of the importance of democracy and human rights to US aid allocations. The search involved numerous databases, literature reviews, as well as following up on references cited in the empirical studies. ¹³ Databases included Scopus, Econlit, and Google Scholar. The search was designed to be comprehensive. The search involved the following terms: democracy, human rights, democratic change, political liberalization, Polity, Freedom House, transition, good behavior, governance, institutions, institutional quality, rewarding, punishing, motives, donor interests, recipient needs, aid allocations, foreign aid allocation, determinants of aid, aid delivery, aid commitments, aid disbursements, donor motives, foreign aid, development aid, US aid, bilateral aid, and multilateral aid.

The search was not limited to only US studies; we sought to find any study that explored aid allocations. However, this meta-analysis investigates only estimates that specifically relate to US aid allocations. The search for studies ended March 2019 and includes all studies that met our below selection criteria published between the years 1975 and 2015 inclusive.

Our search for studies and meta-analysis follows best practice by the MAER-Net guidelines for meta-analysis; see Havranek *et al.* (2020). The search produced a set of 140 empirical studies. Of these, 58 studies with 290 estimates relate specifically to the USA. The 58 studies report 176 estimates of the effect of democracy on aid allocations and 127 estimates of the effect of human rights on aid allocations. The papers are listed in the online Appendix Table A1. Three different coders, including two of the authors, independently checked all coded data. Two criteria

¹³ All the data used in this article will be made publicly available for replication and extension.

were used for study inclusion/exclusion.

One is content: Studies should report estimates of the effects of democracy and/or human rights for US aid. Therefore, the following types of studies were excluded: Estimates that pooled aid allocations from the US with aid allocations from other donors. Studies of aid to specific sectors such as military, disaster, food, health, environmental. Also, aid to the process of democracy were excluded. Most of these components of aid are driven by different considerations. ¹⁴ In addition, studies that focus on aid *volatility* are excluded. Our search included terms relating to governance and institutional quality in order to ensure that relevant studies were included. However, estimates relating to governance (e.g. corruption) are excluded.

The second is suitability for meta-analysis: All studies report regression coefficients, but the majority of these are not directly comparable, due to scale and measurement differences. ¹⁵ Thus, the regression coefficients are converted into partial correlations. Studies had to provide enough information to calculate a partial correlation and its standard error. Partial correlations measure the strength and the direction of an association between aid and democracy (or human rights), after controlling for the effects of other moderating variables. ¹⁶ Calculation of the partial correlation enables the investigation and synthesis of a much larger pool of studies, compared studies that report an elasticity, for example. Hence, the analysis includes only studies that report a regression estimate of the effect of democracy or human rights on aid allocations, after controlling for other factors that might shape aid allocations. This means that we exclude studies that only report zero-order (or bivariate) correlations. A small number of estimates that involve interaction terms are excluded, as these are quite difficult to convert into partial correlations and their standard errors. However, we did include unpublished working papers and doctoral dissertations when found. ¹⁷

3.3 The distribution of the estimates, looking at the funnel

The partial correlations are illustrated in Figure 1 in the form of a funnel, which is the scatter of the estimates over their precision, i.e. the inverse of the standard error of the partial correlation. The funnel illustrates the heterogeneity in the literature, with many statistically and practically

¹⁴ The evidence base for this and other components of aid is thin. It is not particularly meaningful to apply metaanalysis to the handful of studies that have explored these components of total aid. Hence, the focus on total aid.

¹⁵ Some authors use larger scores to denote a greater degree of democracy (or better human rights), while others use the same scores to denote less democracy (or worse human rights). The sign on the reported coefficients were adjusted to match the direction of the indices, so that all estimates are comparable.

¹⁶ The standard errors of the partial correlations provide measures of precision and inverse variance weights.

¹⁷ When an unpublished study is later published, the estimates reported in the published version are used. If a study is published but reports no estimates for democracy (or human rights), we use estimates from the unpublished version when it exists.

insignificant results reported. Meta-regression analysis is used to understand the key factors behind this heterogeneity.

However, overall, the distribution appears to be largely symmetrical, though there appears to be a slightly longer tail suggesting that positive correlations are more likely to be reported in the literature. If all estimates made are reported the funnel will be symmetrical (Stanley and Doucouliagos 2012). Empirical research is often afflicted with publication selection bias (e.g., Gerber *et al.*, 2001; Ioannidis *et al.*, 2017). ¹⁸ Selection bias is most likely in literatures where there are strong theoretical, personal, or ideological priors in favor of a certain findings or theories.

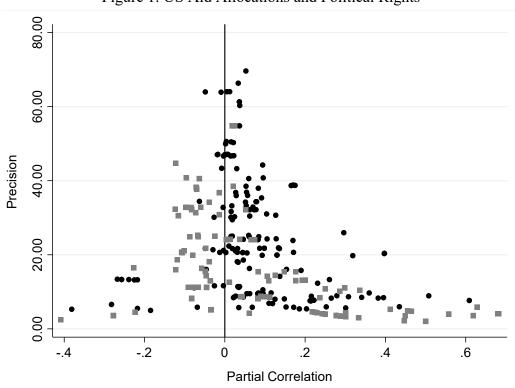


Figure 1. US Aid Allocations and Political Rights

Note: democracy and human rights estimates denoted by circles and squares, respectively.

In the aid allocation literature, a wide range of results is theoretically plausible; the aid and democracy correlation can theoretically be negative, positive, or non-existent. ¹⁹ Hence, *net*

¹⁸ Such bias arises when certain results are difficult to publish or undesired by the researchers, referees and editors.

Hence, some findings remain unreported, unavailable to the public and missing from the research record. Such truncation of publicly available information can distort any summary or inference drawn from the research record. ¹⁹ Some critics may prefer findings that show a small or no correlation between US aid and democracy. In contrast,

some supporters of the USA may prefer to report larger effects. Hence, the net effect is an empirical matter.

systematic selection bias is less likely to be an issue for this literature. Furthermore, many of the estimates from equation (1) collected are ancillary to the study's main focus and, hence, are less likely to be selected only if they are statistically significant. The formal test for publication bias reported below detect little evidence of such bias.

Taking all estimates together, gives a small positive correlation between aid and democracy (r = 0.041, t-statistic = 4.32) and a small negative correlation between aid and human rights (r = -0.026, t-statistic = -1.59). These meta-averages are unconditional estimates of the mean of the distribution of reported effects that may not be representative of the underlying aid relation and possibly biased if there is large heterogeneity in a literature. Figure 1 shows wide variation in reported estimates, and, as shown below, much of this variation can be explained by research design choices. Hence, we prefer to place greater importance on conditional averages as discussed in the following section.

3.4 Moderator variables (variable names are in italics)

In addition to the partial correlations, we also coded a range of study characteristics to use in the MRA to explain heterogeneity in the reported estimates. All the specified moderator variables are drawn from theoretical discussions within the literature itself. Measurement differences are an important potential source of heterogeneity. Recipient behavior is measured either as human rights or democracy. Democracy is the Polity index or the two Freedom House indices.

SE standard error of estimate. If the coefficient on **SE** is significant it indicates publication bias.

Publication year fixed effects are included to control for any unobservable time varying factors that impact on studies, and which might produce omitted variable bias if left out of the meta-regressions. Such factors may include innovation in methods, the presentation of results, robustness checks, and the availability of data for replication that gives referees more confidence in the reported estimates.

Unpublished is coded as 1 if a study is not yet published. Unpublished studies may use newer datasets and, hence, might reflect more recent trends in aid allocations. However, they might include estimates that may change by the time the journal review process is completed.

Per Capita aid, Aid Share, and Aid-to-GDP are used to indicate if studies use the dollar value of aid, the per capita value of aid allocated, or the aid share (the share of total aid allocated to each recipient), or aid as a share of GDP. The total dollar value of aid as the base.

Disbursed is a binary variable indicating if aid is measured as a commitment or as the amount disbursed. Commitments are often the preferred measure, especially when disbursements

are affected by the recipients' capacity to administer aid.

Polity is a binary variable taking the value of 1 if the Polity-index is used.

Human rights is a binary variable indicating differences in the human rights and democracy variable. Both of these two measures are often included in empirical studies, and authors often use these variables to capture different dimensions of the behavior of a recipient nation towards its citizens. Including these two measures increases the statistical power of the meta-regressions.

Average year variable is used by studies to explore whether the responsiveness of aid allocations to recipients' democracy and human rights scores changes over time.

Panel is coded as 1 if a study used panel data and 0 if cross-sectional data was used. ²⁰

Commercial interests is a binary variable for the inclusion of a variable in the primary empirical study that reflects donor interests in fostering and strengthening their own commercial ties with recipients; typically captured by including a trade or investment related variable in the aid allocation model.

Strategic interests is a binary variable for a broad group of donor political interests, including aid to former colonies, aid to countries that are close to international conflict, countries with military ties and alliances, and countries with similar United Nations voting patterns.

Humanitarian needs was for a long time the primary aim of aid. This variable reflects measures of poverty in recipient countries. It should be included in a well-specified aid allocation model.

Inertia is a binary variable for studies that include a lagged dependent variable in order to capture the autoregressive nature of aid allocations.

Recipient effects and **Time effects** denote the inclusion of country fixed effects or time period fixed effects to capture unobservable country and time effects, respectively.

These meta-regression independent variables capture the key specification differences between aid allocation studies. *A priori*, it is not clear whether any of these specification differences will make a noticeable or quantifiable difference on the reported results. Failing to control for these variables in a primary study (e.g., one of the 58 studies included in the MRA) might result in misspecification bias; our MRA quantifies the size of this bias should it exist.

To investigate whether political ideology matters for the distribution of aid we control for ideological orientation by including the Democratic Party's share of House seats:

•

²⁰ Studies that use cross-sectional data report estimates of how aid respond to recipient characteristics. Studies that use panel data and recipient fixed effects report estimates of how aid allocations respond to changes in these characteristics within recipient nations. The meta-analysis estimate both these effects and explore their differences.

House Democrats is constructed by calculating the average share of house seats for the same years used to derive estimates. If, for example, a study uses data from 1990 to 2003, the Democratic Party's average proportion of House seats over this same period $(0 \le House Democrats \le 1)$ is calculated.

Focus on democracy reflects whether democracy or human rights was the focus of the analysis, as opposed to the inclusion of democracy (or human rights) as a control variable in the aid allocation model for studies that are primary investigating a different phenomenon. Arguably, studies that are specifically interested in the democracy and human rights might provide more accurate estimates of the underlying association.

Two-step reflects that some studies adopt a two-step modelling approach that involves estimation the selection of which countries to allocate aid to in the first stage and the amount of aid allocated in the second stage.

Admin dummies are a set of dummies for each president. 21

The above 20 variables are employed to estimate Eqn. (2). This allows the effects of political behavior on aid allocations to vary over time and between donors, to quantify and explain the distribution of reported results, and to estimate conditional averages for donors and recipients. Some of the variables reflect underlying differences in the aid-democracy and human rights correlation (e.g., *Human rights* and *House Democrats*), while others reflect differences in research design (e.g., *Per capita aid*, *Humanitarian needs*, *Commercial interests*, and *SE*). Descriptive statistics for the moderator variables are presented in the appendix, Table A2.

Versions of Eqn. (2) are estimated using unrestricted weighted least squares with inverse variance weights (Hedges and Olkin, 1985). There are no issues of reverse causality with these covariates, so no special treatment is necessary for identification.

4. Results of the meta-analysis

Table 2 presents the meta-regression estimates. Column (1) reports the baseline estimates. Publication year fixed effects are included in Column (2).²² In Column (3) we replace the

²¹ We code as 1 if a study included data from the period of a given administration. Hence, the administration dummies are not mutually exclusive, as an estimate can include data from several administrations.

²² All estimations use fixed effect weights. Random-effects weights have been shown to be more biased, especially in the presence of publication selection and heterogeneity (Stanley and Doucouliagos 2017). The terms fixed and random-effects relate to the weights used and not to the panel structure of data. Many studies do not provide sufficient information to identify the recipient countries. Hence, recipient country dummies cannot be included in the MRA. The inclusion of study fixed effects is not recommended in our context, as we are not interested in the within study estimates. Rather, we are interested in the between study differences. Moreover, we do not have sufficient observations and variation in the moderator variables for each study for within study analysis.

publication year fixed effects with administration dummies. Column (4) reports the results of a simplified, or 'stripped down' model that uses a general-to-specific modelling strategy, as recommended by Stanley and Doucouliagos (2012) for meta-regression models to avoid the fog of multicollinearity from obscuring actual patterns in the research record. These are our preferred results. In Column (5) we replace inverse variance weights with sample size weights, i.e. larger samples are given more weight. In Column (6) we add administration dummies to the specific model. The meta-regressions explain nearly 52% of the variation in reported aid and democracy correlations, which is comparable to other meta-regression analyses.

The coefficient on the standard error measures the degree of publication selection bias. The coefficient varies depending on the specification, and it is not statistically significant when publication year fixed effects are included. We conclude that, on average, the literature has little publication selection bias, after other aspects of research design are controlled. This is consistent with visual inspection of the funnel graph (Figure 1). Unpublished studies report slightly smaller effects, but the coefficient is small and insignificant.

The results suggest that the correlation between aid and human rights is consistently smaller (by 0.08) than the correlation of aid and democracy; less aid is given for human rights than for democracy. One reason for a larger effect for democracy might be that it is easier to demonstrate progress towards democracy. For example, national elections are major and highly visible public events, e.g., television footage of people voting. In contrast, gross violations of human rights are often documented, but smaller violations may remain unreported. For example, the UN has documented numerous instances of the use of chemical weapons by Assad against Syrian civilians. Nevertheless, many commentators and some Congress members question the existence of human rights violations and who might be culpable. This makes it harder for the public to pressure Congress to take action (e.g. impose sanctions, cut aid, etc.). Elections on the other hand are much easier to validate.

The measure of aid is important. Compared to the total value of aid (the base), the use of per capita aid results in larger correlations, whilst measuring aid allocations as aid shares (the share of total aid to a given country) produces slightly smaller correlations (though this is not statistically significant).

The positive coefficient on *Average Year* indicates that the importance of the recipients' democracy to aid allocations is increasing over time. Specifically, the partial correlation rises by 0.06 over the course of a decade. This is a small but notable effect, especially as this signal is above and beyond the publication-year fixed effects.

Table 2. US Aid and Recipient Behavior (Dependent variable = partial correlations)

	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Baseline	Publication	With	Specific	Specific	Specific
		fixed effects	admin.	inverse var	sample size	with admin.
SE	1.162 (3.9)	0.378 (0.7)	0.687 (1.8)			
Unpublished	-0.018 (-0.7)	-0.003 (-0.1)	-0.021 (-0.8)			
Per capita aid	0.027 (1.3)	0.082 (4.0)	0.052 (1.7)	0.084 (3.8)	0.082 (3.7)	0.072 (2.9)
Aid share	-0.020 (-0.7)	-0.056 (-1.7)	-0.020 (-0.7)			
Aid-to-GDP	-0.009 (-0.2)	-0.026 (-1.2)	0.013 (0.5)			
Disbursements	0.009 (0.6)	0.033 (1.7)	0.011 (0.7)	0.044 (2.5)	0.042 (2.4)	0.012 (0.5)
Polity	-0.046 (-1.5)	-0.037 (-1.5)	-0.042 (-1.3)			
Human rights	-0.120 (-4.2)	-0.112 (-4.5)	-0.119 (-4.1)	-0.080 (-3.3)	-0.080 (-3.4)	-0.080 (-3.2)
Average year	0.001 (0.6)	0.004 (2.5)	0.000(0.1)	0.006 (6.4)	0.005 (6.4)	0.008 (4.8)
Panel	0.061 (1.3)	0.108 (3.8)	0.065 (1.3)	0.079 (3.2)	0.075 (3.0)	0.070 (2.3)
Commercial interests	-0.026 (-1.0)	-0.036 (-1.9)	-0.043 (-1.8)	-0.030 (-2.0)	-0.030 (-2.0)	-0.058 (-2.7)
Strategic interests	0.002 (0.1)	-0.005 (-0.3)	0.018 (1.1)			
Humanitarian needs	0.050 (1.3)	0.040 (1.4)	0.063 (1.9)			
Inertia	-0.017 (-1.0)	-0.004 (-0.2)	-0.032 (-1.5)			
Recipient effects	0.004 (0.3)	0.015 (1.2)	0.010 (0.7)			
Time effects	-0.019 (-0.9)	-0.015 (-0.7)	-0.003 (-0.2)			
House Democrats	0.468 (1.8)	0.595 (2.1)	0.786 (2.4)	0.869 (4.3)	0.870 (4.4)	0.756 (2.6)
Focus democracy	-0.009 (-0.3)	0.028(0.9)	-0.020 (-0.8)			
Two-step	0.004 (0.2)	0.059 (2.0)	-0.009 (-0.4)	0.037 (2.5)	0.034 (1.9)	0.016 (1.1)
Constant	-0.287 (-1.9)	-0.359 (-1.9)	-0.404 (-2.1)	-0.481 (-3.7)	-0.481 (-3.7)	-0.337 (-1.8)
Admin dummies	No	No	Yes	No	No	Yes
Publication year	No	Yes	No	Yes	Yes	Yes
fixed effects	110	1 05	110	1 C5	1 C5	103
Observations	285	285	285	287	287	287
\mathbb{R}^2	0.320	0.535	0.379	0.516	0.507	0.542

Notes: All models estimated with WLS using inverse variance (or sample size) weights. Figures in round brackets report *t*-statistics using standard errors corrected for clustering of estimates within studies. Columns (2), (4), and (5) include publication year fixed effects. Column (3) includes administration fixed effects. Column (6) includes both publication year and administration fixed effects.

The use of panel data leads to larger correlations compared to cross-sectional data. However, controlling for recipient or time fixed effects does not appear to make a noticeable difference to reported estimates. This does not mean that it is not important to control for these effects in the aid allocation models; simply that their inclusion does not notably alter democracy's effect. This also means that the importance of democracy for aid allocations is similar between and within recipient nations.

The specification of the econometric model is also important. Studies that do not control for donor commercial interests report larger correlations. That is, excluding donor commercial interests in the primary regression results in misspecification bias that increases the reported the aid and democracy correlation by 0.03, on average. Studies that control for humanitarian needs

tend to report larger correlations and studies that control for inertia in aid allocations tend to report smaller correlations, though these effects are not statistically significant. Controlling for strategic and military interests does not appear to impact on the reported aid and democracy correlations.

A key finding relates to the importance of ideological conflict. The share of House seats held by the Democratic Party is statistically significant in all models and the size of the effect is of practical significance. The positive coefficient on this variable indicates that for every 10% of seats under Democratic control, the correlation between aid and democracy increases by 0.09.

Studies that specifically focus on the relationship between aid allocation and democracy report effects that are similar to studies that include these variables as controls.

The MRA coefficients can be used to derive conditional meta-averages. For this task, the coefficients from Column (4) are used to evaluate the partial correlation for per capita aid committed, assuming that a 'best-practice' estimate will use panel data, control for donor commercial interests, and use a two-step framework. Table 1 then compares some of the key associations by US administration. Column (1) presents the average annual dollar amount in aid committed, while Column (2) presents the average Democrat share of the House during each administration. The estimated total aid for democracy correlation is reported in Column (4) and the aid for human rights correlation in Column (5), respectively. Per capita aid allocations have fluctuated over time, but increased significantly since Bush II, whilst the Democrat share of the House has weakened. Democracy as a motive for aid has increased slightly in the post-Cold War period (average correlation of 0.20) compared to the Cold War period (average correlation of 0.15).

Importantly, the magnitude of the estimated correlations are modest but important. According to Cohen's (1988) guidelines, the absolute value of a correlation is small if it is 0.10, 0.30 is a medium effect, and 0.50 is large. Hence, we conclude that there is an overall small to medium effect of democracy on aid allocations.

One debate in the literature is whether aid allocations differ between different US administrations (e.g. Apodaca and Stohl 1999). Our analysis confirms that correlations were larger under Carter than Reagan; however the difference is small. The total aid for democracy motive was strongest under Bush I and Obama, although the results for the latter are drawn from a smaller sample base. The main finding, however, is that regardless of the administration, there is a positive aid and democracy correlation; all US administrations appear to allocate aid, more or less, on the basis of the recipients' behavior. What is particularly influential is the share of House seats held by Democrats.

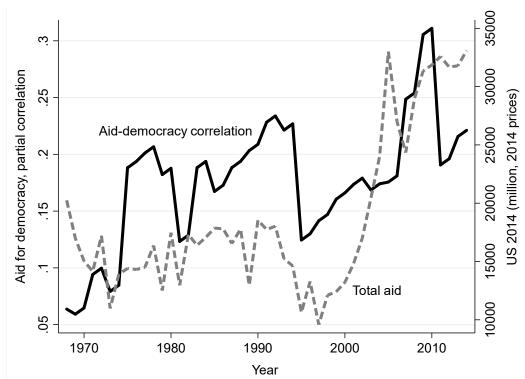


Figure 2. Aid and Democracy Correlations and Total US Aid, 1968-2014

Note: The continuous blue line illustrates the aid for democracy correlation estimated from the MRA coefficients reported in Table 2, Column (4). US total aid data (red dashed line) from OECD.

Figure 2 illustrates the predicted aid and democracy partial correlations from 1968 to 2014, using the actual share of House seats held by the Democratic Party. The MRA predicts that over time, democracy has become a stronger motive for US aid allocations. Actual US aid allocations (in constant 2014 dollars) are also presented in the figure; read from the right hand side of the figure.

The online appendix reports several other robustness checks: replacing the Democrat share of House seats with a Congress ideological score; using author ids to correct for data clustering; removing any estimate of a negative correlation between aid and democracy; and employing Bayesian model averaging (BMA). These support our findings.

5. Results from our new study

This section presents original estimates of the determinants of US aid flows. The aim of this analysis is to verify the findings from the MRA that domestic politics matter. Moreover, we explore whether these effects differ by recipient. We were unable to explore this dimension in the MRA because there are too few estimates for specific countries or regions and many studies do not provide sufficient information on the countries included in their samples.

Aid is measured as the real 2014-dollar value of US aid commitments. The model is parsimonious controlling for the recipient's income, growth, population level, trade as a share of GDP, democracy (measured by the *Polity2* series), the share of House seats under Democrat control, and the interaction between the recipient's democracy and Democrat House seats.²³ Country fixed effects are included but not reported.

Table 3 reports estimates for various groups of recipient countries for the period 1966 to 2015. Separately estimates for Latin America, Africa, the Middle East, ²⁴ and Asia, are reported because responses could differ across these regions. For example, US political motives might be stronger for Latin America and the Middle East than they are for Africa. Panel (a) reports results using the fixed effects model. ²⁵

Table 3. Determinants of US Aid Flows, 1966-2015 (explaining real US per capita aid)

		(1)	(2)	(3)	(4)	(5)			
		Latin America	Africa	Middle East	Asia	All			
		Fixed effects model							
(1)	Income	-0.004 (-3.7)	0.0004 (1.6)	-0.0003 (-0.4)	0.0002 (0.6)	-0.0011 (-2.0)			
(2)	Growth	0.39 (1.5)	-0.09 (-1.6)	0.40 (1.2)	0.04 (0.4)	0.08 (1.0)			
(3)	Population	0.0026 (2.5)	0.0013 (1.1)	-0.0017 (-0.8)	-0.0013 (-0.5)	0.0001 (2.0)			
(4)	Trade/GDP	-0.128 (-1.0)	0.076 (2.7)	-0.220 (-1.1)	0.005(0.5)	-0.002 (-0.1)			
(5)	% Democrat	55.94 (2.7)	22.45 (2.7)	-6.91 (-0.2)	13.72 (2.3)	38.37 (4.6)			
(6)	Democracy	-3.04 (-2.4)	0.22 (0.3)	6.35 (2.1)	-0.98 (-2.0)	-1.32 (-1.7)			
(7)	(5) x (6)	6.60 (2.7)	0.08(0.0)	-10.32 (-2.2)	1.79 (2.0)	2.94 (2.0)			
(8)	No. countries	23	40	13	21	110			
(9)	[Sample size]	[983]	[1,685]	[366]	[678]	[3,944]			
	Marginal effect:								
(10)	- % Democrat	54.74 (2.6)	22.33 (3.1)	55.83 (1.9)	9.93 (2.2)	35.93 (4.6)			
(11)	- Democracy	0.659 (1.5)	0.264 (3.1)	0.577 (1.3)	0.0149 (0.4)	0.3157 (2.8)			
				LDV model					
(12)	Marginal effect:								
(13)	- % Democrat	43.68 (2.6)	19.97 (2.0)	47.14 (0.8)	4.06 (0.6)	36.12 (2.9)			
	- Democracy	0.581 (2.2)	0.479 (3.3)	0.544 (1.0)	0.152 (1.7)	0.398 (2.1)			

Notes: The full sample consists of 110 recipients of US aid. Marginal effect measures the impact of Democrat House share evaluated at the mean of Polity index and the impact of Democracy evaluated at the mean of Democrat House share, respectively. Figures in brackets report *t*-statistics using standard errors adjusted for clustering within recipients. Panel (a) is a fixed effects model; recipient country fixed effects included but not reported. Panel (b) includes a lagged dependent variable without fixed effects. Sample size is reduced to a maximum of 3,730 observations for panel (b).

²⁴ Aid to Israel is excluded from all regressions.

²³ Aid commitments data are from the OECD. Democracy data is from the Polity IV project. Data for the other variables are from the World Development Indicators. Income is measured as per capita GDP in 2010 US dollars.

²⁴ Aid to Israel is evolved from all repressions.

²⁵ The OECD data contains many blank cells for many countries and years. These blank (valueless) cells are obviously excluded from the results presented in Table 3. For the sake of robustness, the online Appendix Table A4 reports results where all blank cells are assigned a zero dollar value and the model estimated using Tobit regression with random effects.

Results for Latin America and all countries combined, Columns (1) and (5) respectively, show that less US aid is given for more developed recipients, confirming the presence of a humanitarian motive. For Africa, more aid is given for recipients with trading links with the USA. The results also highlight the importance of domestic politics; the share of the House held by Democrats has a positive coefficient, except for the Middle East sample. Democracy itself has a negative coefficient for Latin America, Asia, and all recipients combined. However, it has a positive coefficient for the Middle East. Moreover, the interaction between Democrat share of the House and democracy is positive except for the Middle East, where it is negative.

The marginal effect of Democrat share of the House is positive for all regions when it is evaluated at sample means for democracy. This is also positive for the Middle East, though it is weakly statistically significant. When evaluated at sample means of the percent of the House controlled by Democrats, the marginal effect of democracy is positive in all cases. However, this is statistically significant only for Africa and when all countries combined; lack of statistically significance might be due to low statistical power due to the relatively small number of observations for some of these regional estimates.

The share of House seats held by Democrats has a positive effect on the level of aid allocated. Moreover, confirming the results of the MRA, the interaction between the Democrat share of House seats and democracy is positive, i.e., the aid on democracy association increases with the strength of the Democrats in the House. In terms of magnitude, this appears to be most important for aid to the Middle East and Latin America. It is less important in Asia.

Following the advice of Angrist and Pischke (2010), we re-estimated the models from Table 3 with the inclusion of lagged aid but *without* the country fixed effects; the inclusion of these fixed effects leads to Nickell bias (Angrist and Pischke 2010). Panel (b) of Table 3 reports the associated marginal effects from this model. These are broadly similar to those from the fixed effects model.

6. Conclusion

Motives for giving aid are varied and often complex and contradictory. Donors need to choose which countries will receive aid, the amounts allocated, and the projects and programs to be funded. These decisions are often driven by politics. Empirical studies have tried to isolate and identify the various motives, with varying degree and success. This article explores one of these motives: the links between aid allocations and the behavior of recipient countries as measured by the indices for democracy and human rights.

Our meta-analysis and primary data analysis show clear positive links between recipient political behavior and aid. On average, the USA allocates more aid to recipients that are more democratic and those that have better human rights, with democracy being more important than human rights. The evidence is consistent with one of USAID's goal, the stated policies of various administrations, and the preferences of domestic constituencies; aid does flow to democracies. Supporting democracy promotes American values and is often tied with various others motives. However, strategic and military motives are also important in aid allocations (Easterly 2014). Hence, there are limits to which aid and democracy can be coupled. The article also explore one conditioning factor: party ideology. We find that the Democratic Party influences how much US aid is allocated according to the recipient's democratic record.

Donor and recipient interests often clash. Whether developing countries are tempted to become more democratic to attract more US aid will depend, in part, on whether ruling elites will gain more from the aid than the loss of power arising from greater democracy. This potentially provides incentives for strategic behavior. For example, in order to attract more US aid, recipient nations may introduce visible signs of democracy, such as elections, but without genuine democratic reform in terms of respect for human rights and civil liberties. If the human rights motive were stronger, then recipients might have greater incentives to implement genuine democratic reform.

Our analysis also provides guidance on modelling aid allocations. The significance of the democracy and human rights variables suggests that aid allocation studies will be misspecified if they fail to include these variables. Our analysis also confirms the importance of modelling domestic politics; ideology matters and changes in political party electoral support influence aid allocations. Congress has significant power in shaping foreign policy, with US aid for democracy and human rights increasing with the Democratic Party's share of House seats. Aid allocations are very bureaucratic, agencies compete (see Arel-Bundock *et al.*, 2015), and Congress plays an influential role. An important question then arises if the process of aid allocation should be simplified.

References

- Angrist, J.D., Pischke, J-S., 2010. The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con Out of Econometrics. *Journal of Economic Perspectives* 24(2), 3–30.
- Apodaca, C., Stohl, M., 1999. United States Human Rights Policy and Foreign Assistance. *International Studies Quarterly* 43(1), 185–98.
- Arel-Bundock, V., Atkinson, J., Potter, R.A. 2015. The Limits of Foreign Aid Diplomacy: How Bureaucratic Shapes Aid Distribution. *International Studies Quarterly* 59, 544–56.
- Brech, V., Potrafke, N., 2014. Donor Ideology and Types of Foreign Aid. *Journal of Comparative Economics* 42, 61–75.
- Brigety, R., B., Dewan, S., 2009. A National Strategy for Global Development: Protecting America and our World Through Sustainable Security. Center for American Progress. May 2009.
- Brown, S., 2005. Foreign Aid and Democracy Promotion: Lessons from Africa. *The European Journal of Development Research* 17(2), 179–98.
- Burnside, C., Dollar, D., 2000. Aid, policies and growth. American Economic Review 90, 847-68
- Cohen, J. 1988. Statistical Power Analysis in the Behavioral Sciences. 2nd ed.: Erlbaum, Hillsdale
- Colagrossi, M., Rossignoli, D., Maggioni, M.A., 2020. Does democracy cause growth? A meta-analysis of 2000 regressions. *European Journal of Political Economy* 61 (101824)
- Doucouliagos, H., Paldam, M., 2009. The aid effectiveness literature. The sad result of 40 years of research. *Journal of Economic Surveys* 23, 433-61.
- Doucouliagos, H., Paldam, M., 2015. Finally a breakthrough? The recent rise in the size of the estimates of aid effectiveness. Chapter 20, pp 325-49 in Arvin, M., Lew, B., eds., 2015. *Handbook on the Economics of Foreign Aid*. Edward Elgar.
- Doucouliagos, H., Ulubasoglu, M., 2008. Democracy and Growth: A meta-analysis. *American Journal of Political Science* 52, 61–83.
- Easterly, W., 2014. Stop Sending Aid to Dictatorships. *Time*, March 13, 2014. http://time.com/23075/william-easterly-stop-sending-aid-to-dictators/. Accessed January 8 2018.
- Gerber, A.S., Green, D.P., Nickerson, D., 2001. Testing for Publication Bias in Political Science. *Political Analysis* 9(4), 385–92.
- Gisselquist, R.M., 2014. Aid and Institution-Building in Fragile States: What Do We Know? What Can Comparative Analysis Add? *The annals of the American academy of political and social science* 656, 6-21 (introduction to special issue).
- Hedges, L.V., Olkin, I., 1985. Statistical Methods for Meta-Analysis. Academic Press, Orlando
- Huntington, S.P., 1971. Foreign Aid for What and for Whom. *Foreign Policy* Part I in issue 1 Winter 1970-1971, 161-89, and Part II in issue 2 Spring 1971, 114–34.
- Ioannidis, J., Stanley, T.D., Doucouliagos, H., 2017. The Power of Bias in Economics Research. *The Economic Journal* 127, F236–F265.
- Jackson, K.D., Mungkandi, W.. 1987. United States-Thailand Relations. Berkeley: Institute of East Asian Studies.
- Knack, S., 2004. Does Foreign Aid Promote Democracy? International Studies Quarterly 48, 251-66.
- Lipset, S.M., 1959. Some social requisites of democracy: Economic development and political legitimacy.

- American Political Science Review 53, 69-105
- Milner, H.V., Tingley, D.H., 2010. The Political Economy of US Foreign Aid: American Legislators and the Domestic Politics of Aid. *Economics and Politics* 22(2), 200–32.
- Paldam, M., 2021. The Grand Pattern of Development and the Transition of Institutions. Cambridge U.P., N.Y.
- Stanley, T.D., Doucouliagos, H., 2012. *Meta-Regression Analysis in Economics and Business*. Routledge, Oxford 2012.
- Stanley, T.D., Doucouliagos, H., 2017. Neither Fixed nor Random: Weighted Least Squares Meta-Regression Analysis. *Research Synthesis Methods* 8(1), 19–42.
- Stanley, T.D., Doucouliagos, H., Giles, M., et al. 2013. Meta-Analysis of Economics Research Reporting Guidelines. *Journal of Economic Surveys* 27(2), 390–94.
- Taffet, J.F. 2007. Foreign Aid as Foreign Policy: The alliance for progress in Latin America. Routledge, N. Y.
- Tarnoff, C., Lawson. M.L., 2016. Foreign Aid: An introduction to U.S. Programs and Policy. Congressional Research Service.
- Therein, J-P., Noel. A., 2000. Political Parties and Foreign Aid. *American Political Science Review* 94(1), 151–62.
- Tingley, D.T., 2010. Donors and Domestic Politics: Political Influences on Foreign Aid Effort. *The Quarterly Review of Economics and Finance* 50, 40–9.
- Varnis, S.L., 1990. Reluctant Aid or Aiding the Reluctant? U.S. Food Aid Policy and Ethiopian Famine Relief.

 Transaction Publishers, New Brunswick
- WDI. World Development Indicators: http://ddp-ext.worldbank.org.