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Filling the «decency gap»? Donors' reaction to the US policy on international family planning aid

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Abstract

I study the reaction of donors to the US allocation of family planning aid. Family planning offers an interesting case to understand donor interactions. First, projects are relatively similar from one donor to another, easing substitution between donors. Second, one donor, the US, dominates the sector but its foreign policy on family planning has undergone several changes, related to domestic debates on abortion. European donors clearly express their position against these changes and pledge to substitute the US. Exploiting the timing of the Mexico City Policy to instrument the US allocation, I find that, on average, other donors do not react to the US. Donors only react in countries where abortion is on request suggesting that budget constraints do not allow donors to compensate for the US withdrawal in all countries.

Keywords: Family planning, Foreign Aid, Global Gag Rule, Donors coordination

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1 Introduction

According to the United Nations Population Fund (UNFPA), one in two pregnancies in low and middle-income countries are unwanted (Bearak et al., 2020). It leads to a gap between wanted fertility and actual fertility rate; even if 60% of pregnancies result in abortions. Such lack of control over births affects women and child well-being (Chari et al., 2017) and slows fertility transition in some countries, especially in Sub-Saharan Africa. It is no doubt that fertility depends on preferences, women's choices, and household bargaining (Rossi, 2019; Doepke and Tertilt, 2018) but access to family planning programs (FP) may play a key role (Casterline and Sinding, 2000).[1] Different international conferences emphasized the importance of family planning (Cairo, 1994; London, 2012; Nairobi, 2019). In addition, access to safe, voluntary family planning (FP) is one target of the Sustainable Development Goals (SDG 3.7). Numerous studies have demonstrated the effectiveness of family planning on reducing fertility and wanted fertility (Phillips et al., 1982; Robinson and Ross, 2007; Bongaarts, 2020).[2].

Yet, in 2020, an estimated 218 million women who want to avoid pregnancy are not using safe and effective family planning methods. In developing countries, family planning programs rely extensively on foreign assistance. In 2018, international donors contributed an estimated 48 percent, domestic governments 35 percent, and consumers 17 percent. Large disparities exist across countries.[3] However, funds are not always reliable, as they are subject to the whims of donors and their capacity to coordinate and compensate for the withdrawal or decrease in the budget of other donors. In addition, the sector is largely dominated by

[1]The UNFPA provides the following definition of family planning. Family planning is the information, means, and methods that allow people to decide if and when to have children. It includes a wide range of contraceptives – including pills, implants, intrauterine devices, surgical procedures that limit fertility, and barrier methods such as condoms – as well as non-invasive methods such as the calendar method and abstinence. Family planning also includes information about how to become pregnant when it is desirable.

[2]For a systematic review of literature on the effects of family planning on fertility, see Miller and Babiarz (2016)

[3]In 2017, donor contributions represented 10 percent of total family planning expenditure in Bangladesh, 41 percent in Myanmar and 61 percent in Kenya. Source: `http://progress.familyplanning2020.org/finance`.

one donor, the United States. Since 1990, the US has represented about 49 percent of disbursements. Over the same period, the second-largest donor, the United Kingdom, provided only 10% of family planning aid. As a primary funder of FP and HIV activities worldwide, the US policy agenda and funding levels are highly influential in driving global sexual and reproductive health (SRH) activities. As the dominant donor, it is more likely that their allocation to particular countries affects aid flows from other donors.

The family planning sector seems to be a good case study of donor coordination. First, there is a wide consensus among donors and international organizations on the negative consequences of unmet family planning needs. Second, a major component of these programs - providing access to a contraceptive method - is common to all projects whatever the funders, reducing preference heterogeneity between donors. Those two aspects should favour coordination in this sector between donors, as emphasized by the 2005 Better Aid Agenda. Here, an effective way to coordinate seems to perform division of labour to avoid duplications and to ensure better coverage of access to contraceptives. In addition, we know that the identity and the size of the donor tend to matter (Kilby, 2005; Steinwand, 2015; Humphrey and Michaelowa, 2019).[4] However, we know from the literature, that coordination is far from reality (Nunnenkamp et al., 2013, 2016).[5] Building on the literature on donor coordination and on the competitive use of development finance, my paper analyses how other donors adjust their allocation of family planning aid in reaction to the US allocation. This question is critical as "the US foreign policy on family planning has undergone several important changes over the last 40 years" (van der Meulen Rodgers, 2018) inducing large variation in their family planning aid. Hence, the way donors cooperate/interact with the US will

[4]The literature on individual charitable giving is also interesting to understand why donors may react differently to different donors. Andreoni (2006) highlights the importance of leadership gifts - a large donation made by one single person - because it provides a legitimation effect. The leader is sending a signal about the recipient, which later givers will follow. The credibility of the signal depends on the size of the gift. Andreoni (1990) underlines the role of social pressure on giving. This aspect could be relevant in the case of institutional donors, where diplomatic positions can affect the decision of other donors.

[5]Both theoretical and empirical studies show how a lack of coordination leading to aid fragmentation deters aid effectiveness and has negative political consequences (Bigsten and Tengstam, 2015; Knack and Rahman, 2007).

critically affect the possibility to limit family planning aid volatility for recipient countries and the detrimental effect of a lack of funds for women.[6]

While previous empirical literature finds positive reactions between donors either by competition or information and signal effect (Frot and Santiso, 2011; Davies and Klasen, 2019; Zeitz, 2020; Ferrière, 2021), the theoretical literature provides both rationales for substitution because of free-riding (Bourguignon and Platteau, 2015) or complementarity through competition (Annen and Moers, 2016). In our case, an additional mechanism may affect how donors react to the US allocation. Indeed, the changes in US allocation are related to US domestic debates on abortion. As a result, the US motivated their decrease in funds as a way not to finance abortion abroad. An argument that other donors, especially European donors, tend to condemn. In opposition they call to fill the "decency gap" (Assembly, C.E.P., 2004). Such reactions should lead to a substitution effect between other donors and the US if this concern is strong enough to compensate for the traditional herding effect. In conclusion, the actual reaction of other donors to the US family planning allocation is an open question.

To identify whether and how other donors react to the US allocation of family planning, I employ an instrumental strategy using two sources of variations, following the empirical literature on aid (Nunn and Qian, 2014; Dreher et al., forthcoming). First, I exploit exogenous time variation induced by US domestic debates on abortion between Democrats and Republicans that are unrelated to international concerns or recipient-related considerations. The US foreign policy on family planning has been driven over the last 40 years by the successive rescinding and restatement of the Global Gag Rule (also named the Mexico City Policy). The Global Gag Rule was first enacted by President Reagan in 1984. It directs US agencies, including the USAID, to withhold funds from non-US non-governmental organizations (NGOs) that provide abortion-related services. Since 1984, the policy has been a symbol of the Republican Party and is only active during Republican Administrations. Sec-

[6]It has been shown that for development aid, aid volatility tends to be growth-reducing in recipient countries (Arellano et al., 2009) or induce internal conflict (Nielsen et al., 2011).

ond, I exploit cross-sectional variation in a country's vulnerability to these changes, which is measured by the proportion of years a country receives family planning aid from the US, when the Global Gag Rule is not active, interacted with the share of family planning aid channelled by non-US NGOs, the one affected by the policy.

The baseline estimates suggest that donors do not complement nor substitute the allocation of the US. It means that donors do not compensate for the Global Gag Rule in developing countries. Those results are inconsistent with international calls done by donors.[7] Those results are also not consistent with the hypothesis of altruistic donors who would free-ride on the US allocation. Finally, it provides new evidence that donors' reactions not only depend on the type of aid but also the identity of the donor. To better understand the mechanisms behind this absence of reaction, I provide several additional results. First I investigate bilateral reactions to investigate the possibility of a reallocation among donors. Second, I show that donors do not react differently to a rescinding and a reinstatement of the Global Gag Rule. Finally, I investigate heterogeneous reactions depending on the characteristics of the recipients. Donors seem to compensate for the loss of funds from the US in recipient countries where abortion is allowed without restrictions. I interpret it as a way for donors to deal with a lack of funding to fully compensate for the US allocation in all recipient countries. Hence donors need to react only in countries where the Global Gag Rule would affect access to safe and legal abortion.

My findings contribute to several literatures. Those results complement the empirical literature on donor interactions providing the first evidence of no herding behaviour between the dominant and traditional donors. It gives new evidence that statements on aid harmonization, donor cooperation and coordination should first look at how, at the sectoral level, aid from a given donor depends on the allocation decisions of other donors. Indeed, how other donors interact affects drastically the interest donors take in donor coordination,

[7] If it was the case, we should observe substitution effects.

alignment, and specialization (Mascarenhas and Sandler, 2006). Second, it shows that aid is not only determined by the strategic and economic needs of donor countries (Alesina and Dollar, 2000; Fuchs et al., 2015) but also by domestic politics and party ideologies (Tingley, 2010; Brech and Potrafke, 2014; Dreher et al., 2015; Greene and Licht, 2018). It emphasizes the potential for donors' policies to undermine the aid effectiveness. Finally, it questions aid allocation at the sectoral level, providing evidence of specific determinants for aid provision (Lewis, 2003; Kuhlgatz et al., 2010; Fink and Redaelli, 2011).

The remainder of the paper is organized as follows. Section 2 presents the data and descriptive statistics on family planning aid. Section 2 details the empirical strategy. Section 4 discusses the results and provides robustness analysis. Section 5 discuss some potential mechanisms. Finally section 6 concludes.

2 Data

2.1 Development Health Database

The Institute for Health Metrics and Evaluation database(IHME, 2020) provides estimates of health spending from four sources - government, out-of-pocket- prepaid private, and Development Assistance Health (DAH) - for 195 countries from 1990 through 2020. They defined DAH as the financial and in-kind contributions from major development agencies to low- and middle-income countries to maintain or improve population health. They relied on annual reports, budget documents, and project disbursement records reported by different international development agencies like OECD-CRS, the World Bank, the Global Fund, and large philanthropic entities. They also tracked the agencies responsible for disbursing the funds. Aid is allocated to the family planning sector if the project description contained at least one of those words: fertility, family planning, FP, birth control, family size, IPPF,

planned parenthood, abortion, birth spacing, condom, IUD, vasectomy or tubular ligation.[8] These data provide better period coverage than the CRS-OECD data, for which sectoral aid is only available after 2000 and often considered as reliable after 2005. In addition, the definition of family planning is narrow than the corresponding code for the CRS data (code 13030) and fits better the definition used by the US.[9]

An observation is an aid flow from one donor to a recipient country in a given year through a determined channel (bilateral, various multilateral organizations, NGO, international NGO). I construct a panel of 25 donors (excluding the US) and 105 recipients, running from 1990 to 2019, with the time period driven by the availability of family planning aid data.[10] It includes all recipients and donors who receive or give, at least one year, family planning aid. Aid is measured in thousand of constant 2020 US dollars.

2.2 US Family Planning Aid

In 1961, the Foreign Assistance Act specified that the US should assist developing countries in the control of population growth.[11] Family planning was part of the types of activities USAID could pursue. Starting in the mid-1960, the budget for population activities was multiplied by 10 relative to the beginning of 1960. At that time, voluntary family planning was perceived as a way to "improve health, family stability, greater individual opportunity, economic development." USAID's strategy for delivering family planning relied mainly on private organizations, especially NGOs, particularly in countries with no bilateral assistance programs.[12] During the 1970s, the USAID budget devoted to population programs increased.

[8]For additional details on database construction and allocation to each sector, the IHME provides an annual review and an online appendix (http://www.healthdata.org/policy-report/financing-global-health-2019-tracking-health-spending-time-crisis).

[9]Results remain similar when using CRS-OECD data.

[10]The list of donors and recipients is provided in online appendix. Data starts in 1990 but is not fully recorded in 1990 for some donors.

[11]This section draws upon Blanchfield (2020) to describe the main evolution of abortion and family panning-related provisions in US foreign assistance policy.

[12]More than other components of population programs, family planning service projects draw upon the private sector (United States Congress House, 1986).

Since, the US has been consistently one of the largest donors of international population assistance worldwide. In 1973, 47% of its funds were spent on contraceptives and delivery of family planning services (Fox, 1985). Still today, the US is by far the largest donor in family planning programs. Starting in 1990, according to IHME, they provided 49% of total aid allocated to the sector. On average, they provide family planning aid to 67 recipient countries every year. For the recipient country, the average amount allocated is about 28,770 USD per year.

The most important change in family planning assistance policy from the US occurred during the UN Population Conference in August 1984 with the adoption of the Global Gag Rule, also called Mexico City Policy (hereinafter GGR or MCP). President Reagan issued an executive order restricting family planning funding (The White House Office of Policy Development, 1984).

It required that recipients of US funds cease all abortion activities – abortion, promotion of abortion, or lobbying for a change in abortion legislation – even if such activities are conducted with non-US funds. The policy required organizations receiving US family planning aid to certify in writing that they did not, and would not during the time of the funding agreement, perform or actively promote abortion as a method of family planning. The GGR makes no distinctions for countries where abortion is legal. The policy only applied to foreign NGOs and funds provided by USAID.

This policy was not retroactive; hence, the full impacts on current disbursements could be delayed by some years. Until the election of Bill Clinton, the GGR was active. On January 22, 1993, the newly president rescinded the GGR allowing the USAID to fund organizations performing abortion-related activities with other funds. The GGR began a clear distinction between Democrat and Republican parties as it was reinstated by all Republican presidents and rescinded by all Democratic presidents afterwards.[13]

[13]It also induces large debate in the Congress, especially when the Congress was not aligned with the

The repercussions of the GGR have been documented quickly after its first adoption. Camp (1987) provided a first qualitative analysis of the impact of the GGR. In 1987, despite a small number of large organizations affected, the GGR negatively impacted organizations and family planning activities. Population Action International documented the effect of the reinstatement of the policy by the Bush Administration. By 2002, the Global Gag Rule had ended shipments of USAID-donated contraceptives to 16 developing countries. Leading family planning agencies in another 13 countries are unable to receive USAID contraceptives because they refused to abide by the restrictions (PAI, 2005).

Nevertheless, one could argue that the US only decided to change how to channel family planning aid and to focus only on governmental channels or that a majority of foreign NGOs agree to the terms of the policy. However, figure 1 provides evidence of a decrease in family planning aid when the GGR was active (period in grey). The most obvious effect of the Global Gag Rule occurred just after the election of G.W. Bush in 2000. Indeed, between 2001 and 2004 we observe a sharp decrease in family planning aid. Starting in 2005, aid for family planning increased again. It was mostly due to the creation of the President's Emergency Plan for AIDS Relief (PEPFAR) in 2003. This fund focuses mostly on HIV/AID fighting but a part of its action is devoted to family planning activities. Figures A.1 and A.2 in appendix A show that the decrease is not driven by a decrease in total US development aid. Indeed, even when we look at the share of US aid devoted to family planning projects, the pattern observed in amounts remains similar.[14] In addition, the number of recipients is lower (53) when the GGR is active relative to the periods the GGR is not implemented (83).

I next investigate the determinants of US family planning aid by running a regression including a dummy equal to one when the Global Gag Rule is active. Table 1 provides the results. The US allocates less family planning aid when the GGR is active. However, aid is

President. For instance, for nine months, family planning funds were blocked in 1995 and the GGR was reinstated legislatively for one year from October 1999 to September 2000.

[14] As expected, the pattern is more pronounced for commitments than for disbursements.

also partly driven by needs related to reproductive and sexual activities. Indeed the higher the prevalence of HIV is, the larger the amount of US aid is. I also observe a nonlinear relationship between fertility rate and US aid allocation.

2.3 Other donors family planning programs

Figure 1 also shows the evolution of family planning disbursements by other donors, taken all together. The pattern is relatively similar to the US pattern. Four donors - the UK, Germany, the Netherlands, and the Bill and Melinda Gates Foundation (BMGF) - are relatively important in the family planning sector as each contributes by more than 5% between 1990 and 2020.[15] Those donors provide aid to fewer countries than the US (from 14 on average for the Netherlands to 66 for the BMGF). Projects are also smaller than US projects. The average amount allocated by year to recipient countries is between 5,500 and 19,700 USD for the four largest donors. However, their involvement is quite different over time. While the UK and the Netherlands were constant providers of family planning aid, Germany decreased its overall budget devoted to family planning after 2000. On the contrary, the BMGF, created in 2000, has increased its participation over time. For smaller donors, the average number of recipients is about 7 and the average amount of aid allocated to a country per year is about 2,000 USD.

However, some donors compare officially their funds to the allocation of the US, mostly in reaction to the Global Gag Rule. With the policy reinstatement in 2001, some donors tried to step up. Nevertheless, according to a report from the European Parliamentary Assembly, they were not able to bridge the entire gap. The report stresses the leading role of Nordic European countries, Germany and the Netherlands. Poul Nielson, the European Union Commissioner for Humanitarian and Development Aid, summarised the spirit of European donors' reaction to the reinstatement by the Bush administration of the Global Gag Rule in his phrase that Europe should fill the "decency gap" (Assembly, C.E.P., 2004). The

[15] Each other donor represents less than 3% of total family planning aid.

report also underlined that the UNFPA also experienced an increase in European donor funding in 2002 in reaction to the decrease from the US. The report concluded that "the continuing challenge is, however, to build on this goodwill and not just to sustain but to continue to increase this support". The extension of the Global Gag rule in 2017 induces larger reactions from other donors. The European Commission explicitly states that it will "remain alert on this issue and if it finds that there is a funding gap, it will look into possibilities for stepping-up the assistance to health and gender-based violence projects provided that sufficient funding is available" (European Commission, 2017). Sweden decides to stop providing support to reproductive and sexual health programs run by groups that comply with the rule (Reuters, 2017). The Netherlands decides to create a new fund to replace the money that the Global Gag Rule would cost family planning organizations. Twenty countries immediately expressed an interest in contributing to the fund.

3 Empirical Strategy

3.1 OLS specification

Building on the descriptive statistics and history of family planning aid allocation, I now analyse the causal effects of US family planning aid on the allocation of other donors. I estimate the following regression equation for all recipients that receive at least once between 1990 and 2019 US aid :

$$FPA_{drt} = \beta_1 FPA_{USrt-1} + \beta_2 X_{drt-1} + \beta_3 X_{rt-1} + \lambda_{d,reg(r)t} + \lambda_{dr} + \lambda_{reg(r)t} + \epsilon_{drt} \quad (1)$$

where FPA_{drt} is the allocation of family planning aid from donor d to recipient r in year t. FPA_{USrt-1} is the US allocation of family planning aid to recipient r in year $t-1$. X_{rt-1} represents recipient characteristics affecting family planning allocation. X_{drt-1} represents donor-recipient characteristics that affect aid allocation. The control variables are drawn

from the existing body of literature and described below. η_{dt} and λ_{dr} represent donor-year- and donor-recipient fixed effects. $\lambda_{reg,t}$ represents region-year fixed effects. It flexibly controls for all region-specific changes over time and therefore accounts for any global or even region-specific changes in demography that could affect allocation. Standard errors are clustered at the recipient and donor levels.

The dependent variable FPA_{drt} is the logarithm of bilateral disbursed family planning aid from donor d to country r at time t. To deal with values reported equal to zero, I apply the sine hyperbolic transformation. Aid is measured in thousand of constant 2020 US dollars. IHME database disaggregated reproductive and maternal health by family planning, other maternal health, and human resources... I use the most restrictive definition of family planning aid. FPA_{USrt-1} is the log of bilateral disbursed family planning aid from the US to the country r at time $t-1$, with the same sine hyperbolic transformation. I expect that donors need some time to adjust to the actual disbursement of a donor. For instance, after the reinstatement in January 2017, the international summit "She Decides" was launched in April but obtained funds until October 2017 and funded new projects often starting in 2018. In addition, donors need to observe the actual allocation to adjust their allocation. Nevertheless, I also look at different timing to ensure the robustness of the results.

For the recipient country, I include GDP per capita$_{rt-1}$ and population$_{rt-1}$ (in log) to control for wealth and size. Following Asiedu et al. (2013) who investigate the determinants of family planning aid, I control for female fertility rate and its square as one objective of family planning aid is to reduce fertility rate. I also include the adolescent fertility rate because some donors may focus more on reducing early pregnancies. The UNFPA advocates that family planning could reduce poverty, the spread of HIV/AIDS disease, and maternal mortality. Hence I also control for poverty rate, female life expectancy, the incidence of HIV in the 15-49 population age, the prevalence of HIV in the same population, and maternal

mortality rate. These data come from the World Development Indicators.[16]

In addition to these variables, as aid allocation tends to depend on the recipient's political situation (Burnside and Dollar, 2000), I include a democracy index (Polity IV database). Finally, to measure political ties, I include the voting alignment between donor and recipient at the UN General Assembly, a widely used indicator. It is measured as the absolute difference of their ideal points, calculated by Bailey et al. (2017).

I allow time effects to differ across donors and regions of recipient countries with donor-region of recipient year fixed-effects, $\lambda_{d,reg(r)t}$. It accounts for donor-specific trends in family planning aid budget or for electoral cycles that can affect the allocation of aid (Tingley, 2010) but allowing thus trends to spread differently across regions. λ_{dr} is the donor-recipient pair fixed effects that catch time-invariant specificity such as colonial links, distance, or sharing a common language. $\lambda_{reg(r)t}$ captures changes in the needs for family planning that may occur at the regional level (economic crisis, spread of specific diseases such as Zika...).

The coefficient of interest, β_1, is the estimated effect of the FP allocation by the US in country r one year before on the FP allocation of donor d in country r. A positive coefficient indicates that, on average, if the US increases its family planning aid to a specific country r, it increases the amount of family planning aid from donor d to the recipient country in the following year. By contrast, a negative coefficient suggests that other donors compensate and step in. A non-significant estimate indicates that I cannot reject the hypothesis that on average, other donors do not react to the US allocation.

FPA_{USrt} is endogenous. First, donors may react to shocks for which I do not have reliable data or I do not observe at all. For instance, in 1994, the Cairo International Conference on Population and Development emphasized the integral linkages between population and development and focused on meeting the needs of individual women and men, rather than on

[16]For maternal mortality rate and poverty rate, data before 2001 come from the official MDG Indicators website. Linear extrapolation is performed for missing years.

achieving demographic targets. As a consequence, " family-planning promotion has dropped steadily down the list of international development priorities" according to Cleland et al. (2006). I cannot also control carefully for all changes in recipient policies regarding population controls, abortion, or reproductive health that should affect donor's allocation either to support these policies or on the contrary to withdraw their support. Depending on the reactions, the OLS will be down- or upward-biased.

Second, there is a problem of reverse causality. One could argue that using the previous allocation by the EU (FPA_{USrt-1}) solves the problem of endogeneity. However FPA_{USrt-1} could be still endogenous in case of "dynamics among the unobservables" as pointed by Bellemare et al. (2017), meaning that if FPA_{USrt-1} is correlated with the error term ϵ_{drt-1} and that shocks are auto-correlated, FPA_{USrt-1} is still correlated with ϵ_{drt}.

3.2 Instrumentation strategy

To provide causal evidence of donors' interactions, I develop an instrument of the US allocation based on a natural experiment, which is the rescinding and reinstatement of the Global Gag Rule, described above. Indeed, the changes induced by the policy are driven by domestic debates on abortion and are not related to any changes in needs from recipient countries or to any changes in foreign policy from other donors.

I use this exogenous time variation – from the point of view of other donors and recipients – in the US allocation as an instrument of the family planning aid allocated by the US. To identify a causal effect, I need to introduce cross-country variation. I use the fact that the policy does not affect all recipient countries uniformly.

Indeed, all recipients do not suffer the same loss in terms of funding because of two effects. First, like all donors, the US tends to allocate larger grants of aid to countries receiving often FP aid. I compute FP_r as the percentage of years when the GGR is not active a

country receives US FP aid. Figure 2 represents the annual total amount of aid allocated to high exposed countries and low exposed countries. I used the median average probability of receiving family planning aid during the Clinton and Obama Administrations to measure exposure because the measure was inactive during these years.[17] It represents how much a country potentially had to lose under the policy. The pattern is similar between high- and low-exposed recipient countries. Only the level of aid is different. During the Bush Administration, the effect of the GGR tends to be relatively more pronounced for low-exposed countries but the change in absolute amounts allocated is larger for high-exposed countries.

Second, in some countries, US family planning aid is mainly channelled through official governments while in other countries the US relies more on non-US NGOs. These countries should be more affected by the policy than other countries as the GGR only prohibits funding aid to non-US NGOs performing abortion-related activities. I compute $shareNGO_r$ the share of US FP aid channelled by NGOs during the Obama term. I do not include the Clinton Administration because of less reliable data on channels before 2000.[18] The difference in pattern between periods of active/inactive policy seems to be more important in high-exposed countries, in line with how the policy should affect aid allocation (figure highlowNGO). I make use of this over-time and cross-section heterogeneity in the supply of and recipients of US family planning aid.

Hence the reform should affect more, in absolute terms, countries that have received often family planning aid when the policy is not active. In addition, the policy should also affect

[17] The median is equal to 0.53.

[18] Ideally one would compute those two indicators before any implementations of the GGR. However, data are not available before 1984. The second best option would have been to compute both indicators before each reinstatement. For instance, using the probability of receiving FP aid from the US and the share channelled by non-US NGOs during the Clinton mandate for the Bush and Obama period and compute the same indicators during the Obama period for the Trump and Biden mandates. However, the channel is not well recorded before the 2000s and when the information is not known, data records the bilateral channel. The best option seems to compute the channel share during the Obama period and the probability of receiving FP aid overall rescinding periods.

more countries for which aid is often channelled by non-US NGOs. Figure 4 shows the evolution of US FP aid for high and low-exposed countries for the indicator of vulnerability.

Given the timing of the reform and its heterogeneous impact, I estimate the following first-stage:

$$FPA_{USrt-1} = \gamma_1 GGR_{t-1} * FP_r * shareNGO_r + \beta_2 X_{rt-1} + \beta_3 X_{rt-1} * FP_r * shareNGO_r + \eta_{t-1} + \lambda_r + \lambda_{reg,t-1} + \epsilon_{rt-1} \tag{2}$$

I expect a negative coefficient. Aid to countries that often receive family planning aid from the US through non-US NGOs will be disproportionally decreased when the Global Gag Rule is reinstated.

An obvious concern is that this instrument violates the exclusion restriction because the probability of receiving US family planning may directly affect the amount of aid allocated by other donors because of specific linkages between recipient and donor countries. However, the second stage regression controls for the effect of the probability of receiving US family planning aid through the inclusion of recipient-donor-pair-fixed effects. Given that I control for the effects of the probability of receiving US family planning aid through fixed effect, its interaction with exogenous variable results in an exogenous instrument under the assumption of parallel trends (Bun and Harrison, 2019; Goldsmith-Pinkham et al., 2020).

The identifying assumption is that aid allocation from other donors in countries with differing probabilities of receiving US family planning aid by non-US NGOs will not be affected differently by changes induced by the change in foreign policy from the US, other than via the impact of US aid allocation, controlling for recipient-donor- and donor-region-year-fixed effects. Causal inference using the interacted instrumental variable relies on the assumption that conditional on the controls, the interaction between lagged US policy activation and a country's tendency to receive US family planning aid through non-US NGOs only affects

allocation from other donors through the provision of US family planning aid. It means that I rely on a conditionally exogenous treatment and parallel trends across groups. For different trends to affect the results, these trends across countries within a region with different probability of receiving US family planning aid through non-US NGOs would have varied in tandem with US changes in administrations for all other donors, which is unlikely. Nevertheless, I also interact all control variables with the vulnerability indicator to capture such potential effects in the first and second stages.

Another concern with this assumption is that a change in GGR reinstatement or rescinding may affect allocation from other donors through its influence on more global US foreign policy. In practice, this is not a serious problem for our estimates for several reasons. First, the region-year fixed effects in our baseline equation flexibly control for all region-specific changes over time and therefore account for any global or even region-specific changes in US foreign policy. To violate the exclusion restriction, these changes would need to have systematically different effects on family planning aid allocation from other donors within regions and in a manner that was correlated with a country's tendency to receive family planning aid from the United States. In addition, in such a case we should expect donors to react in other sectors of aid. To investigate this potential problem, I run the same identification strategy but using aid devoted to non-communicable diseases, malaria, and tuberculosis. Using OECD-CRS data, I also look at the education and agricultural sector.

One can argue that the Democrat administration (or other donors) may anticipate the reinstatement of the GGR and artificially increase it a year before the US election their funds for family planning projects. Between 1990 and 2019, two Republican presidents were elected. Both times the expected result was the election of the Democrat incumbent which reduces the likelihood of strategic behaviour a year before the election.

4 Results

4.1 Baseline results

Table 2 presents the main results on how donors react to the US aid allocation for family planning using IHME data. Column (1) only controls for fixed effects. Columns (2) to (5) include successively different control variables. The sample is kept constant to avoid any selection effect to truly investigate the impact of additional control variables.

Part A provides OLS estimates. I observe a positive correlation between the past US allocation of family planning or/and the allocation from other donors. An increase of one percent in the previous year of US family planning aid is associated with an increase of between 0.013 to 0.021 percent of other donors' aid allocation. Nevertheless, as already pointed out, these estimates are more likely to be biased due to endogeneity.

Therefore, I turn to the IV strategy presented previously. Part B presents the reduced form. Part C shows the second-stage estimates, and part D the first-stage estimates. The first-stage estimates show the expected negative sign. All estimates are significant. When the Global Gag Rule is active, countries that are regular recipients of US FP aid and for which aid is more often channelled through non-US NGOs received disproportionately less US FP aid than other countries. The K.-P. stat ensures that our instrument is strong enough. $FP_r * shareONG_r$ varies between 0 and 0.62 with an average equal to 0.23. For the average recipient country, when the GGR is active, it reduces by 74% the amount of family planning aid allocated by the US.

The key results are shown in part C. Thus, I estimate the average treatment effect on the complier population, here the countries for which the US family planning aid is affected by the Global Gag Rule. It shows that for those recipient countries, donors tend not to react significantly to the US FP allocation at a 10 percent level.[19] Hence, for countries where the

[19]Given the data, the minimal detectable effect at a 5% level and a power of 80% is 0.08. I also compute

GGR affects the US family planning aid, other donors do not reinforce the supply effect of the GGR but neither compensate. It induces a non-negligible loss in terms of family planning funds for women in those countries.

This reaction is not in line with official announcements following the reinstatement of the GGR. It suggests that, despite international announcements, donors do not fill the decency gap. The absence of reaction is new compared to studies looking at donors' interactions. Previous studies show that, on average, donors adjust their behaviour by reinforcing the choice made by the other donors. However, in my study, null results could suggest that the US is "herding" these donors away from increasing FP allocation. Donors aren't completely herded into reducing their allocation, but the null result could be their concession to US pressure. This non-testable hypothesis is reinforced by Ravaoarisoa et al. (2020) showing that NGOs devoted large amounts of time and effort to find new sources of funding. They also document that a majority of NGOs struggled to find replacement funding from alternative donors, notably after declining to certify the policy. In Kenya, Ushie et al. (2020) explain that a majority of NGOs claimed that "nobody wants to come with us; it's us who are trying to reach out". Such evidence suggests that the absence of reaction is not due to a demand effect from the NGOs but to a supply effect from donors, with this idea that other donors do not want to oppose the US.

4.2 Robustness Analysis

Table 3 shows how the estimates evolve with the timing of the reaction of donors. I change the timing of the US aid allocation from a immediate to a three years after reaction. In analogy, I change the timing of the instrument: if I investigate how donors react to the US allocation in $t-2$, the instrument is also lagged by two years. The estimates are always positive but never significant. I observe an inverse-U shape on the magnitude of the effect as

the post hoc statistical power with some simplification assumptions following Aberson (2019). The estimated statistical power is equal to 0.62, a low but acceptable level relative to the findings of Arel-Bundock et al. (2022).

if donors need time to adjust their allocation and the effect fade with time. As a placebo test, I also look at the impact of future US disbursements on other donors' current disbursements. As expected, the effect is not significant.

I explore robustness to outliers. I replicate the regressions, excluding each time one donor and one recipient. Thus, I run 3888 additional regressions. I plot the estimates obtained in figure 5. The vertical line represents the estimates of baseline results. The histogram shows that the estimate is not really sensitive to the inclusion of some donors or recipients.

The PEPFAR fund launched in 2003 targeted 15 countries.[20] Those countries received large US aid to fight HIV and AIDS. It could have affected the allocation of family planning differently. To rule out the possibility that results are driven by that specific sample of recipients, I estimate the equation excluding those countries. Results remain null and the order of magnitude is the same. The results are shown in column (1) of table 4.

I next look at a broader definition of family planning aid in column (2). To do so, I investigate the reaction of other donors but for all reproductive and maternal health sector (RMH). As expected the K.-P. F.-Stat is lower than before. The estimate is larger but remains non-significant. This result suggests that the Global Gag Rule may not only affect the allocation of family planning aid but also, due to a definition of family planning which is not perfectly stated, the allocation of reproductive and maternal health in general. This could be explained by the fact projects on family planning and maternal health are generally implemented together by the same implementing agencies.

In the IHME database, nonzero values under $500 are indicated by dashes. Thus we do not know the actual amount allocated if the flow is lower than $500. In baseline regressions, I used values rounded to the thousands place, those flows are rounded to zero. To investigate the sensitivity of the results, I replace those flows with a flow equal to $500. Columns (3)

[20]Those countries are: South Africa, Bostwana, Côte d'Ivoire, Ethiopia, Guyana, Haïti, Kenya, Mozambique, Namibia, Nigeria, Uganda, Rwanda, Tanzania, Vietnam, and Zambia.

and (4) investigate the robustness when I only replace US FP aid and when both US and other donors' aid are replaced. Results remain similar and non-significant.

I use OECD-CRS data from 2000 to 2019 to investigate the robustness to the choice of a specific database. I focus on disbursements. I first focus only on family planning (purpose code 13020 and 13030) in column (7) and next on reproductive health and population policy (sector code 130) in column (8). The estimates are positive but not significant at a 10 percent level.

4.3 Placebo Tests

Under the hypothesis that the GGR does not affect other US aid budgets through a balancing effect, I expect that allocations from other donors, in sectors not related to reproductive health, are not affected by the US allocation of family planning aid. I first investigate whether donors adjust their allocation for non-communicable disease aid (NCD) and malaria (MAL) in reaction to the evolution of the US FP aid. Results are provided in table 4 in columns (5) to (6). As expected donors do not react significantly. In columns (9) and (10) I run additional placebo tests by looking at reactions for education and agriculture aid, still using OECD-CRS data. Both estimates are non-significant.

Finally, to assess the strenght of the instrument, I look at changes in administration rather than the GGR history. We may observe reactions after an election even if it does not affect the status of the Global Gag Rule. As both Presidents G.W. Bush and Obama were reelected, I can run two placebo tests. I redefined the GGR to be equal to one during the second mandate and run the regressions during the whole period of the presidency. Hence I run two regressions, one for President Bush and one for President Obama. Table 5 show the results. As expected, the estimate is not significant and the IV strategy is not relevant (the K.-P. F-Stat is really low).[21]

[21] A better placebo test would have been to look at a false rescinding of the GGR in 1989 when there is

5 Potential mechanisms

5.1 Reinstatement Versus Rescinding?

The null result may hide heterogeneous donor reactions depending on whether the US rescinds or reinstates the GGR. Indeed it is not sure that donors would react the same to the withdrawal or entry of the dominant player. First documentation on how other donors react to the rescinding of the Global Gag Rule is almost null. The media coverage is often lower when the US rescinds the policy. Second, donors, who decided to substitute to the US, developed a partnership with NGOs and implemented new programs inducing some fixed costs. Hence their likelihood to stop funding projects could be lower and thus they would react to a reinstatement but not to a rescinding. Finally, donors may want to publicize the fact they substitute the US after their withdrawal but hide that they also substitute the US when the US provides again funding. Thus we should distinguish reactions to on/off policy. In addition, international condemnations from European donors were larger for the reinstatement by the Trump administration. It could be the case that donors only react to the US allocation when the decrease in aid is perceived as critical. Table 6 provides the estimates for each change in administration. The first column focuses on the reinstatement in 2000 (Clinton to G.W. Bush), the second on the rescinding in 2008 (G.W. Bush to Obama), and the last column on the reinstatement in 2016 (Obama to Trump). Again, donors do not react significantly to the US allocation. No specific pattern emerges between reinstatement and rescinding.

5.2 Bilateral reactions

Nordic European countries were more engaged in the condemnation of the Global Gag Rule than other countries. On the opposite, countries close to the US may be more reluctant to

a change in President (Reagan to Bush) but the President remained a Republican and the GGR remained active. Unfortunately, data are not available before 1990.

allocate their aid against the US policy which would have sent a negative signal to their diplomatic relationship. Hence the average positive reactions I observe may hide heterogeneous reactions from different donors. Some donors can complement the US allocation, while others may compensate the US. It is thus necessary to investigate bilateral reactions to the US foreign policy on family planning aid.

Bilateral results are provided in table 7. Only two donors, Australia and Germany, react significantly at 10% to the US allocation by complementing the US allocation. Both countries are among the ones with the most restrictive laws in the sample.[22] For the other donors, I cannot reject the null hypothesis. Interestingly, the estimated reaction of Nordic donors is negative but non-significant. Next, I look at the correlation between the estimated coefficient and a proxy of geopolitical alignment with the US based on the minimum share of votes at the UN General Assembly for which the donor and the US vote similarly. Indeed, more aligned governments could be reluctant to allocate family planning aid to countries affected by a decrease in US allocation. The correlation is equal to 0.43 and significant at a 5% level. It suggests that proximity to the US lowers the ethical mechanisms in favour of herding behaviour.

5.3 Shifting channels

The launch of specific trust funds and reports from the European Commission on commitments from European countries suggest that donors may change their behaviour not necessarily on the amount provided to family planning projects but on the channel through which aid is allocated. It is a way for donors to signal their commitments against the GGR but without increasing their budget and thus not directly opposing the US. If the signal effect occurs, I expect the reaction to be negative when focusing on the allocation of aid channelled by multilateral and NGO but positive for aid provided directly to the recipient

[22] In Germany, abortion is still illegal but not punishable up to 12 weeks. In Australia, laws changed during the 2000s. Abortion is now mostly on request with some variation across states.

government.

To investigate this mechanism, I run a similar estimation but focusing first on strictly bilateral aid and second on aid channelled by multilateral agencies and NGOs. I find no different reactions for aid channelled bilaterally or through other channels (see table 8).

5.4 Abortion laws in recipient countries

Given the difference in budget size and number of recipients, donors should have double their budget devoted to family planning to compensate for the withdrawal of the US. It represents non-negligible amounts of aid. Hence it could be possible that donors are budget constrained and thus can only increase slightly their budget. In that case, they may decide to react only to specific countries. The effect of the GGR in terms of impact on women should be more salient in countries where abortion is on request (or with a really low level of restrictions). As the GGR is perceived as an anti-abortion policy, donors may decide to compensate for the decrease in the US allocation only in countries where abortion-related activities are allowed. To investigate with mechanism, I use the index produced by the for Reproductive Rights (2020) on abortion law in 2020. The index goes from 1 (totally prohibited) to 5 (on request). I construct a dummy equal to 1 when abortion is on request or allowed for broad social and economic grounds. It is the case for 22% of recipient countries.

Results are provided in table 8. The estimate of the interaction term suggests that this mechanism is at play. The estimate is negative and significant at the 10% level meaning that for those countries, donors compensate from the decrease in family planning aid from the US. This finding reinforces the idea that budgets from other donors are too scarce to entirely fill the decency gap and that donors need to choose where they want to substitute the US.

6 Conclusion

The family planning sector offers a good opportunity to better understand donor interactions and, especially, how donors react to the dominant player, here the US. Projects implemented in this sector are more similar from one donor to another than in other sectors. In addition, the US foreign policy on family planning provides large variations on US funds and has been scrutinized by other donors. Those donors officially state they will react.

Exploiting the variations induced by the Global Gag Rule to causally infer how other donors react to the US allocation, I find a null reaction. This absence of reaction, robust to different specifications, can be explained by two different arguments. First, the traditional herding behaviour is cancelled out by the specific moral effect induced by a policy from the US perceived as an anti-abortion policy and condemned by numerous donors in Europe. I also find that geopolitical proximity with the US tends to attenuate more the potential compensation effect. However, another explanation seems to play a role and is partly confirmed by the data. The difference in budget size between the US and other donors is too large to allow any donor to compensate for the US allocation. Hence other donors need to limit their reaction to specific countries where their action is relevant and more efficient. To do so, they only compensate the US allocation in countries where abortion is on request or allowed for broad social and economic grounds. In the end, it means that women in the country prohibiting or restricting abortion are even more harmful by the reinstatement of the Global Gag Rule. Indeed access to contraception is likely reduced because of a lack of funds and they don't have access to safe abortion.

The absence of reaction from donors to the US allocation also underlines the potential negative consequences of relying globally mostly on one donor. If this donor changes drastically its policy, it could induce volatility and large losses of funds for recipient countries not covered by other donors. In 2017, the Trump Administration extended the Global Gag Rule to the fight against HIV/AIDS where the US is an even more dominant player than for family

planning aid. If donors are not able to compensate for this withdrawal, it could have negative implications on the spread of HIV/AIDS. For policymakers in recipient countries, the take-away message is in favour of reducing the dependency on a dominant donor by sector.

References

C. L. Aberson. *Applied power analysis for the behavioral sciences*. Routledge, 2019.

A. Alesina and D. Dollar. Who gives foreign aid to whom and why? *Journal of economic growth*, 5(1):33–63, 2000.

J. Andreoni. Impure altruism and donations to public goods: A theory of warm-glow giving. *The economic journal*, 100(401):464–477, 1990.

J. Andreoni. Leadership giving in charitable fund-raising. *Journal of Public Economic Theory*, 8(1):1–22, 2006.

K. Annen and L. Moers. Donor competition for aid impact, and aid fragmentation. *The World Bank Economic Review*, 2016. doi: 10.1093/wber/lhw019.

V. Arel-Bundock, R. Briggs, H. Doucouliagos, M. M. Aviña, and T. Stanley. Quantitative political science research is greatly underpowered. 2022.

C. Arellano, A. Bulíř, T. Lane, and L. Lipschitz. The dynamic implications of foreign aid and its variability. *Journal of Development Economics*, 88(1):87–102, 2009.

E. Asiedu, M. Nanivazo, and M. Nkusu. Determinants of Foreign Aid in Family Planning: How Relevant is the Mexico City Policy? WIDER Working Paper Series 118, World Institute for Development Economic Research (UNU-WIDER), 2013. URL `https://ideas.repec.org/p/unu/wpaper/wp2013-118.html`.

Assembly, C.E.P. *Documents: Working Papers 2003 Ordinary Session (fourth Part) 25 September - 2 October 2003, Vol. 8: Documents 9886-9952*. 2003 ordinary Session Series. Council of Europe, 2004. ISBN 9789287153531. URL `https://books.google.fr/books?id=o1OG8GvdBwEC`.

M. A. Bailey, A. Strezhnev, and E. Voeten. Estimating dynamic state preferences from united nations voting data. *Journal of Conflict Resolution*, 61(2):430–456, 2017.

J. Bearak, A. Popinchalk, B. Ganatra, A.-B. Moller, Ö. Tunçalp, C. Beavin, L. Kwok, and L. Alkema. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. *The Lancet Global Health*, 8(9):e1152–e1161, 2020.

M. F. Bellemare, T. Masaki, and T. B. Pepinsky. Lagged explanatory variables and the estimation of causal effect. *The Journal of Politics*, 79(3):949–963, 2017.

A. Bigsten and S. Tengstam. International coordination and the effectiveness of aid. *World Development*, 69:75–85, 2015.

L. Blanchfield. Abortion and family planning-related provisions in us foreign assistance law and policy. Congressional Research Service, Library of Congress, 2020.

J. Bongaarts. Trends in fertility and fertility preferences in sub-saharan africa: the roles of education and family planning programs. *Genus*, 76(1):1–15, 2020.

F. Bourguignon and J.-P. Platteau. The Hard Challenge of Aid Coordination. *World Development*, 69:86 – 97, 2015. ISSN 0305-750X. Aid Policy and the Macroeconomic Management of Aid.

V. Brech and N. Potrafke. Donor ideology and types of foreign aid. *Journal of Comparative Economics*, 42(1):61–75, 2014.

M. J. Bun and T. D. Harrison. Ols and iv estimation of regression models including endogenous interaction terms. *Econometric Reviews*, 38(7):814–827, 2019.

C. Burnside and D. Dollar. Aid, Policies, and Growth. *American Economic Review*, 90(4): 847–868, September 2000.

S. Camp. The impact of the mexico city policy on women and health care in developing countries. *NYUJ Int'l L. & Pol.*, 20:35, 1987.

J. B. Casterline and S. W. Sinding. Unmet need for family planning in developing countries and implications for population policy. *Population and development review*, 26(4):691–723, 2000.

A. Chari, R. Heath, A. Maertens, and F. Fatima. The causal effect of maternal age at marriage on child wellbeing: Evidence from india. *Journal of Development Economics*, 127:42–55, 2017.

P. Christian and C. B. Barrett. Spurious regressions and panel iv estimation: Revisiting the causes of conflict. Technical report, 2021.

J. Cleland, S. Bernstein, A. Ezeh, A. Faundes, A. Glasier, and J. Innis. Family planning: the unfinished agenda. *The lancet*, 368(9549):1810–1827, 2006.

R. B. Davies and S. Klasen. Darlings and orphans: Interactions across donors in international aid. *The Scandinavian Journal of Economics*, 121(1):243–277, 2019.

M. Doepke and M. Tertilt. Women's empowerment, the gender gap in desired fertility, and fertility outcomes in developing countries. In *AEA Papers and Proceedings*, volume 108, pages 358–62, 2018.

A. Dreher, P. Nunnenkamp, and M. Schmaljohann. The allocation of german aid: Self-interest and government ideology. *Economics & Politics*, 27(1):160–184, 2015.

A. Dreher, A. Fuchs, B. Parks, A. Strange, and M. J. Tierney. Aid, china, and growth: Evidence from a new global development finance dataset. *American Economic Journal: Economic Policy*, forthcoming.

European Commission. E-000405/2017: Answer given by vice-president mogherinion behalf of the commission, April 2017. https://www.europarl.europa.eu/doceo/document/E-8-2017-000404-ASW˙EN.pdf.

N. Ferrière. To give or not to give? how do other donors react to european food aid allocation? *The European Journal of Development Research*, pages 1–25, 2021.

G. Fink and S. Redaelli. Determinants of international emergency aid—humanitarian need only? *World Development*, 39(5):741–757, 2011.

C. for Reproductive Rights. The world's abortion laws, 2020.

G. H. Fox. American population policy abroad: The mexico city abortion funding restrictions. *NYUJ Int'l L. & Pol.*, 18:609, 1985.

E. Frot and J. Santiso. Herding in Aid Allocation. *Kyklos*, 64(1):54–74, 2011.

A. Fuchs, P. Nunnenkamp, and H. Öhler. Why Donors of Foreign Aid Do Not Coordinate: The Role of Competition for Export Markets and Political Support. *The World Economy*, 38(2):255–285, 02 2015.

P. Goldsmith-Pinkham, I. Sorkin, and H. Swift. Bartik instruments: What, when, why, and how. *American Economic Review*, 110(8):2586–2624, 2020.

Z. D. Greene and A. A. Licht. Domestic politics and changes in foreign aid allocation: The role of party preferences. *Political Research Quarterly*, 71(2):284–301, 2018.

C. Humphrey and K. Michaelowa. China in africa: Competition for traditional development finance institutions? *World Development*, 120:15–28, 2019. ISSN 0305-750X. doi: https://doi.org/10.1016/j.worlddev.2019.03.014. URL `https://www.sciencedirect.com/science/article/pii/S0305750X19300725`.

IHME. Development assistance for health database 1990-2019. *Institute for Health Metrics and Evaluation*, 2020. doi: https://doi.org/10.6069/ANR1-9S72.

C. Kilby. World bank lending and regulation. *Economic Systems*, 29(4):384–407, 2005.

S. Knack and A. Rahman. Donor fragmentation and bureaucratic quality in aid recipients. *Journal of Development Economics*, 83(1):176–197, 2007.

C. Kuhlgatz, A. Abdulai, and C. B. Barrett. Food Aid Allocation Policies: Coordination and Responsiveness to Recipient Country Needs. *Agricultural Economics*, 41(3-4):319–327, 05 2010.

T. L. Lewis. Environmental aid: Driven by recipient need or donor interests? *Social Science Quarterly*, 84(1):144–161, 2003.

R. Mascarenhas and T. Sandler. Do donors cooperatively fund foreign aid? *The Review of International Organizations*, 1(4):337–357, 2006.

G. Miller and K. S. Babiarz. Family planning program effects: Evidence from microdata. *Population and Development Review*, pages 7–26, 2016.

R. A. Nielsen, M. G. Findley, Z. S. Davis, T. Candland, and D. L. Nielson. Foreign aid shocks as a cause of violent armed conflict. *American Journal of Political Science*, 55(2): 219–232, 2011.

N. Nunn and N. Qian. US Food Aid and Civil Conflict. *The American Economic Review*, 104(6):1630–1666, 2014.

P. Nunnenkamp, H. Öhler, and R. Thiele. Donor coordination and specialization: did the paris declaration make a difference? *Review of World Economics*, 149(3):537–563, 2013.

P. Nunnenkamp, M. Rank, and R. Thiele. Aid fragmentation and donor coordination in uganda: A district-level analysis. In *The Fragmentation of Aid*, pages 153–164. Springer, 2016.

PAI. The global gag rule and contraceptive supplies. Technical report, Access Denied – Population Action International, 2005.

J. F. Phillips, W. S. Stinson, S. Bhatia, M. Rahman, and J. Chakraborty. The demographic impact of the family planning–health services project in matlab, bangladesh. *Studies in family planning*, pages 131–140, 1982.

L. Ravaoarisoa, M. J. J. Razafimahatratra, M. A. Rakotondratsara, N. Gaspard, M. R. Ratsimbazafy, J. F. Rafamantanantsoa, V. Ramanantsoa, M. Schaaf, A.-C. Midy, and S. E. Casey. Slowing progress: the us global gag rule undermines access to contraception in madagascar. *Sexual and Reproductive Health Matters*, 28(3):39–53, 2020.

Reuters. Swedish aid agency to halt funds for supporters of u.s. anti-abortion 'gag rule', July 2017. https://www.reuters.com/article/us-sweden-aid-idUSKBN19W1T9.

W. C. Robinson and J. A. Ross. *The global family planning revolution: three decades of population policies and programs*. World Bank Publications, 2007.

P. Rossi. Strategic choices in polygamous households: Theory and evidence from senegal. *The Review of Economic Studies*, 86(3):1332–1370, 2019.

M. C. Steinwand. Compete or coordinate? aid fragmentation and lead donorship. *International Organization*, pages 443–472, 2015.

The White House Office of Policy Development. Us policy statement for the international conference on population. *Population and Development Review*, 10(3):574–579, 1984. ISSN 00987921, 17284457.

D. Tingley. Donors and Domestic Politics: Political Influences on Foreign Aid Effort. *The Quarterly Review of Economics and Finance*, 50(1):40 – 49, 2010. Special Section: Foreign Aid.

United States Congress House. *Foreign Assistance and Related Programs Appropriations for 1987: Justification of budget estimates*. Foreign Assistance and Related Programs Appropriations for 1987: Hearings Before a Subcommittee of the Committee on Appropriations,

House of Representatives, Ninety-ninth Congress, Second Session. U.S. Government Printing Office, committee on appropriations. subcommittee on foreign operations and related programs edition, 1986. URL https://books.google.fr/books?id=Uam2AAAAIAAJ.

B. A. Ushie, K. Juma, G. Kimemia, M. Magee, E. Maistrellis, T. McGovern, and S. E. Casey. Foreign assistance or attack? impact of the expanded global gag rule on sexual and reproductive health and rights in kenya. *Sexual and Reproductive Health Matters*, 28 (3):23–38, 2020.

Y. van der Meulen Rodgers. *The Global Gag Rule and Women's Reproductive Health: Rhetoric versus Reality*. Oxford University Press, 2018.

A. Zeitz. Emulation or differentiation? china's development finance and traditional donor aid in developing countries. *Review of International Organizations*, 2020.

Data Availability

The data underlying this article are available in Harvard Dataverse,

at https://doi.org/10.7910/DVN/4PWQ9X,

Figures and Tables

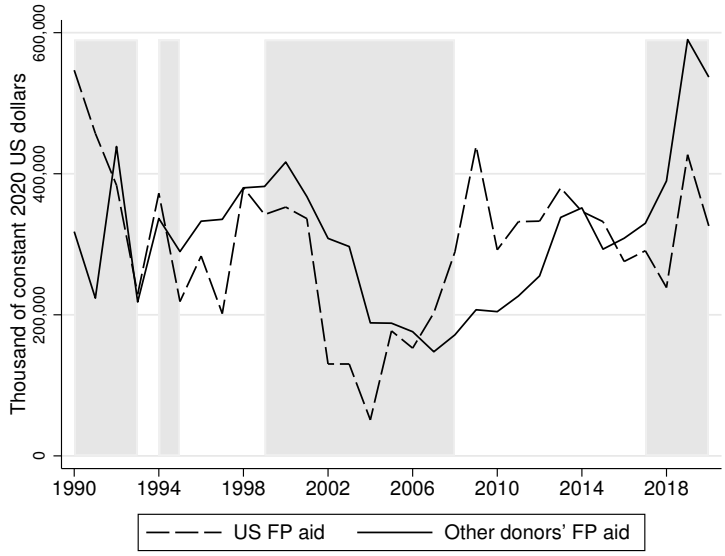

Figure 1: Aid disbursement for family planning from the US and other donors (1990-2020)
Note: Grey period corresponds to years when the Global Gag Rule is active.

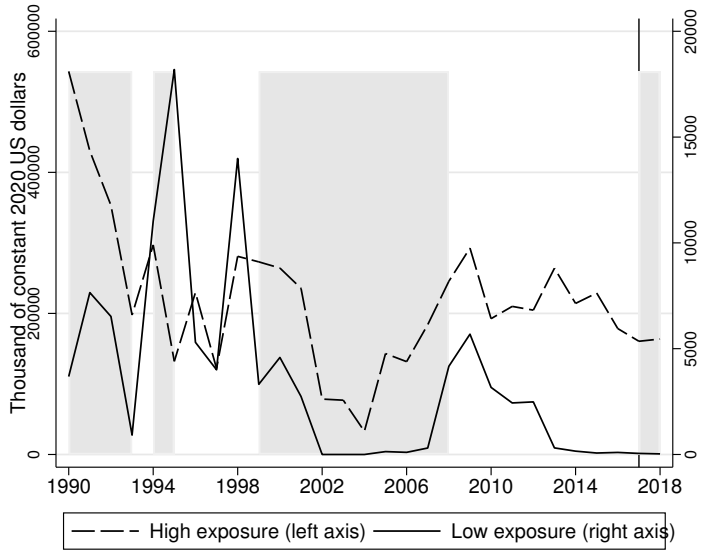

Figure 2: US FP aid disbursement: high and low-exposed recipients
Note: A high-exposed recipient is a recipient whose probability of receiving FP aid when the Global Gag Rule is inactive is above the median sample (0.53).

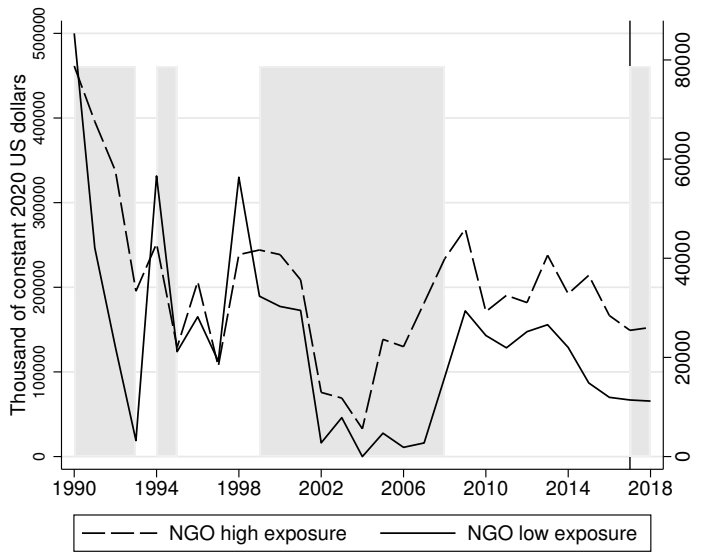

Figure 3: US FP aid disbursement: NGO high and low-exposed recipients

Note: A NGO high-exposed recipient is a recipient for whom the share of FP aid channelled by non-US NGOs during Obama administration is above the median sample (0.5).

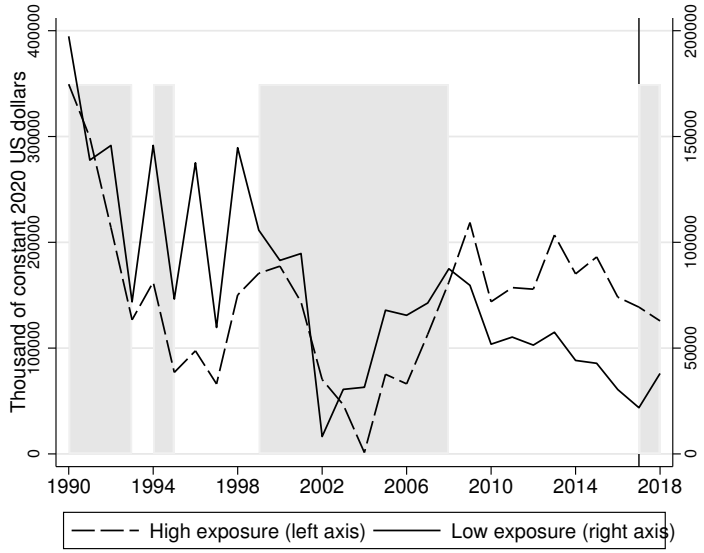

Figure 4: US FP aid disbursement: vulnerability to the GGR

Note: A high exposed recipient is a recipient for whom the vulnerability index (construct as the interaction of the probability of receiving US FP when the GGR is not active and the share of aid channelled by non-US NGOs) is above 0.48.

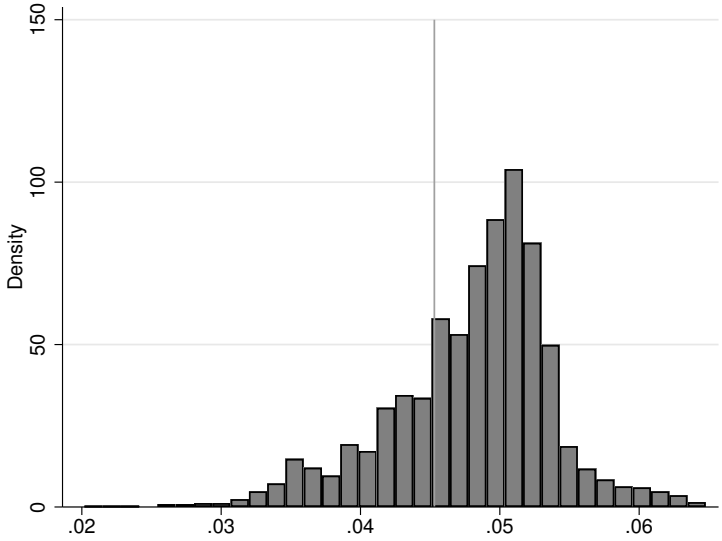

Figure 5: Estimates of baseline equation excluding a donor and a recipient

Note: An observation is the estimate of the coefficient of interest of baseline regression excluding a donor and a recipient.

	Dep. Var: US Family planning aid				
Global Gag Rule is active	-1.692***	-1.723***	-1.726***	-1.733***	-1.742***
	(0.129)	(0.133)	(0.133)	(0.131)	(0.133)
$\ln(\text{GDP per capita})_{rt-1}$		0.0933	-0.0253	0.191	0.181
		(0.331)	(0.376)	(0.333)	(0.338)
$\ln(\text{Population})_{rt-1}$		0.898*	0.439	-2.278**	-2.398**
		(0.501)	(0.764)	(1.015)	(1.003)
$\text{Democratic Index}_{rt-1}$			0.0465	0.0357	0.0294
			(0.0330)	(0.0301)	(0.0313)
$\text{Female life expectancy}_{rt-1}$			0.0146	-0.0224	-0.0135
			(0.0389)	(0.0377)	(0.0368)
$\text{Poverty ratio}_{rt-1}$			-0.00197	0.00161	0.00230
			(0.0115)	(0.0112)	(0.0116)
$\text{HIV incidence (15-49)}_{rt-1}$				0.0189	0.0190
				(0.0174)	(0.0165)
$\text{HIV prevalence (15-49)}_{rt-1}$				0.129***	0.135***
				(0.0435)	(0.0432)
$\text{Fertility rate}_{rt-1}$				1.111**	1.112**
				(0.528)	(0.527)
$\text{Fertility rate}^2_{rt-1}$				-0.215***	-0.211***
				(0.0669)	(0.0661)
$\text{Adolescent fertility rate}_{rt-1}$				0.00485	0.00510
				(0.0112)	(0.0114)
$\text{Maternal mortality rate}_{rt-1}$				-0.00215*	-0.00201
				(0.00129)	(0.00126)
$\text{UN vote similarity}_{drt-1}$					-0.594**
					(0.275)
Obs.	2940	2940	2940	2940	2940
Recipient	105	105	105	105	105

Notes: One observation is a recipient and a year. A hyperbolic sine transformation is applied to US FP aid. Coefficients are reported with standard errors clustered at the recipient level. Aid data come from IHME database.

$***\ p < 0.01$, $**\ p < 0.05$, $*\ p < 0.1$

Table 1: Determinants of US family planning aid allocation

	(1)	(2)	(3)	(4)	(5)
	A: OLS Estimates - Dep. Var: Family planning aid from d				
US FP aid_{rt-1}	0.0205**	0.0176**	0.0160**	0.0126*	0.0131**
	(0.00807)	(0.00793)	(0.00703)	(0.00635)	(0.00630)
	B: Reduced Form - Dep. Var : Family planning aid from d				
MCP_{t-1} * FP_r * shareNGO_r	-0.272**	-0.237**	-0.215**	-0.185	-0.147
	(0.111)	(0.114)	(0.109)	(0.116)	(0.110)
	C: 2SLS - Dep. Var : Family planning aid from d				
US FP aid_{rt-1}	0.0745**	0.0727*	0.0666*	0.0584	0.0453
	(0.0304)	(0.0362)	(0.0351)	(0.0373)	(0.0343)
	D: First-stage - Dep. Var : US Family planning aid				
MCP_{t-1} * FP_r * shareNGO_r	-3.648***	-3.258***	-3.226***	-3.173***	-3.251***
	(0.535)	(0.466)	(0.477)	(0.479)	(0.492)
Obs.	59426	59426	59426	59426	59426
Donor-recipient pair	6902	6902	6902	6902	6902
Recipient	105	105	105	105	105
K-P. F-Stat	46.58	48.80	45.70	43.90	43.67
Donor-Recipient FE	Yes	Yes	Yes	Yes	Yes
Donor-Year FE	Yes	Yes	Yes	Yes	Yes
$\ln(\text{GDP per capita})_{rt-1}$	No	Yes	Yes	Yes	Yes
$\ln(\text{Population})_{rt-1}$	No	Yes	Yes	Yes	Yes
$\text{Democratic Index}_{rt-1}$	No	No	Yes	Yes	Yes
$\text{Female life expectancy}_{rt-1}$	No	No	Yes	Yes	Yes
$\text{Poverty ratio}_{rt-1}$	No	No	Yes	Yes	Yes
$\text{HIV incidence (15-49)}_{rt-1}$	No	No	No	Yes	Yes
$\text{HIV prevalence (15-49)}_{rt-1}$	No	No	No	Yes	Yes
$\text{Fertility rate}_{rt-1}$	No	No	No	Yes	Yes
$\text{Maternal mortality rate}_{rt-1}$	No	No	No	Yes	Yes
$\text{Adolescent fertility rate}_{rt-1}$	No	No	No	No	Yes
$\text{UN vote similarity}_{drt-1}$	No	No	No	No	Yes

Notes: One observation is a pair donor-recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. A hyperbolic sine transformation is applied to US FP aid and the dependent variable.

$***\ p < 0.01$, $**\ p < 0.05$, $*\ p < 0.1$

Table 2: Donors reaction to US FP aid allocation (1990-2019) - Baseline results

	Dep. Var: Family planning aid from d					
ln of US FP aid$_{rt-4}$	0.0188					
	(0.0459)					
ln of US FP aid$_{rt-3}$		0.0609				
		(0.0452)				
ln of US FP aid$_{rt-2}$			0.0628			
			(0.0429)			
Baseline result				0.0453		
				(0.0343)		
ln of US FP aid$_{rt}$					0.0334	
					(0.0358)	
ln of US FP aid$_{rt+1}$						0.0354
						(0.0260)
Obs.	54652	56276	57930	59426	59426	59426
Donor-recipient pair	6505	6639	6775	6902	6902	6902
Recipient	105	105	105	105	105	105
K-P. F-Stat	29.76	32.59	31.37	43.67	54.23	64.05
Donor-Recipient FE	Yes	Yes	Yes	Yes	Yes	Yes
Donor-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls as (5) of table 2	Yes	Yes	Yes	Yes	Yes	Yes

Notes: One observation is a pair donor-recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. A hyperbolic sine transformation is applied to US FP aid and the dependent variable. Similar table for OLS estimates is provided in online appendix (Table XXX).

$***$ $p < 0.01$, $**$ $p < 0.05$, $*$ $p < 0.1$

Table 3: Timing of donors' reaction (1990-2019): IV estimates

	(1) PEPFAR	(2) $FPAid_{drt}$	(3) $FPAid_{drt}$	(4) $BFPAid_{drt}$	(5) NCD_{drt}	(6) MAL_{drt}	(7) CRS13020	(8) CRS130	(9) Commit.	(10) Educ.	(11) Agri.
US FP aid_{rt-1}	0.033				0.002	-0.046	0.026	0.161		0.067	0.050
	(0.032)				(0.041)	(0.103)	(0.087)	(0.117)		(0.112)	(0.108)
US RMH aid_{rt-1}		0.077									
		(0.062)									
Bound US FP aid_{rt-1}			0.049	0.046							
			(0.037)	(0.036)							
US FP $commitment_{rt-1}$									0.033		
									(0.089)		
Obs.	50236	59426	59426	59426	59426	59426	24975	24975	24975	24975	24975
Donor-recipient pair	6542	6902	6902	6902	6902	6902	1848	1848	1848	1848	1848
Recipient	90	105	105	105	105	105	58	58	58	58	58
K-P. F-Stat	58.95	15.07	39.84	39.84	43.67	43.67	2.061	2.061	1.068	2.061	2.061
Donor-Recipient FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Donor-Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls as (5) of table 2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: One observation is a pair donor-recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. PEPFAR exclude 15 recipients that benefited from the PEPFAR programs starting 2003. NCDAid and MALAid represent respectively aid allocated against tuberculosis, non-communicable disease and malaria. Bound Aid is aid for which flows lower than \$500 are registered as equal to \$500. CRS corresponds to flow labelled by purpose code 13020 or 13030, CRS 130 corresponds to aid flows labelled "reproductive health and population policy". A hyperbolic sine transformation is applied all aid variables.

$***\ p < 0.01$, $**\ p < 0.05$, $*\ p < 0.1$

Table 4: Donors reaction to US FP aid allocation (1990-2019) - Robustness

	(1) Bush	(2) Obama
US FP aid$_{rt-1}$	-0.050	3.215
	(0.049)	(30.728)
Obs.	14966	15025
Donor-recipient pair	3371	3371
Recipient	92	92
K-P. F-Stat	2.750	0.0109
Donor-Recipient FE	Yes	Yes
Donor-Year FE	Yes	Yes
Controls as (5) of table 2	Yes	Yes

Notes: One observation is a pair donor-recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. For Bush, the GGR is falsely rescinded in 2005. For Obama, the GGR is falsely reinstated in 2013. A hyperbolic sine transformation is applied to US FP aid and the dependent variable.

$***$ $p < 0.01$, $**$ $p < 0.05$, $*$ $p < 0.1$

Table 5: Placebo tests

	Dep. Var: Family planning aid from d		
	1993-2008	2001-2016	2009-2018
Log of US FP aid$_{rt-1}$	0.0464	0.0103	0.0604
	(0.0889)	(0.0442)	(0.0919)
Obs.	32939	37250	23331
Donor-recipient pair	4954	5137	4091
Recipient	103	105	103
K-P. F-Stat	7.780	24.44	22.82
Donor-Recipient FE	Yes	Yes	Yes
Donor-Year FE	Yes	Yes	Yes
Controls as (5) of table 2	Yes	Yes	Yes

Notes: One observation is a pair donor-recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. Similar table for OLS estimates is provided in online appendix (table XXX). A hyperbolic sine transformation is applied to US FP aid and the dependent variable.

$***$ $p < 0.01$, $**$ $p < 0.05$, $*$ $p < 0.1$

Table 6: Reactions to a change on administration: IV estimates

	Australia	Austria	Belgium	Canada	Denmark
US FP aid$_{rt-1}$	0.221*	0.003	-0.049	0.020	-0.040
	(0.113)	(0.042)	(0.069)	(0.125)	(0.043)
Obs.	2397.000	2568.000	2681.000	2741.000	2663.000
	Finland	France	Germany	Greece	Ireland
US FP aid$_{rt-1}$	-0.066	0.121	0.367*	-0.039	-0.040
	(0.065)	(0.107)	(0.221)	(0.039)	(0.037)
Obs.	2720.000	2749.000	2709.000	2105.000	2454.000
	Italy	Japan	Korea	Luxembourg	
US FP aid$_{rt-1}$	0.009	0.103	0.078	0.005	
	(0.065)	(0.068)	(0.063)	(0.023)	
Obs.	2727.000	2552.000	2042.000	2348.000	
	Netherlands	New Zealand	Norway	Portugal	
US FP aid$_{rt-1}$	0.152	0.013	0.083	-0.015	
	(0.101)	(0.023)	(0.060)	(0.027)	
Obs.	2760.000	1893.000	2756.000	2605.000	
	Spain	Sweden	Switzerland	UK	BMGF
US FP aid$_{rt-1}$	-0.045	-0.026	0.063	0.195	-0.052
	(0.082)	(0.072)	(0.042)	(0.140)	(0.100)
Obs.	2412.000	2766.000	2532.000	2644.000	1975.000

Notes: One observation is a recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. OLS estimates are provided in online appendix (table XXX). A hyperbolic sine transformation is applied to US FP aid and the dependent variable.

$***\ p < 0.01$, $**\ p < 0.05$, $*\ p < 0.1$

Table 7: Bilateral reactions : IV estimates

	(1)	(2)	(3)
	Non bilateral aid	Bilateral Aid	All FP aid
US FP aid$_{rt-1}$	0.0499	0.0190	0.0584
	(0.0361)	(0.0206)	(0.0383)
X allowed abortion			-0.0530*
			(0.0271)
Obs.	59426	59426	59426
Donor-recipient pair	6902	6902	6902
Recipient	105	105	105
K-P. F-Stat	43.67	43.67	21.77
Donor-Recipient FE	Yes	Yes	Yes
Donor-Year FE	Yes	Yes	Yes
Controls as (5) of table 2	Yes	Yes	Yes

Notes: One observation is a recipient and a year. Coefficients are reported with standard errors clustered at the recipient and donor level. Aid data come from IHME database. A hyperbolic sine transformation is applied to US FP aid and the dependent variable.

$***$ $p < 0.01$, $**$ $p < 0.05$, $*$ $p < 0.1$

Table 8: Mechanisms

A US family planning aid and US aid

Figures A.1 and A.2 show the share of US aid devoted to family planning over total US aid, respectively for commitments and disbursements over the period 2000-2019. Before 2005, for disbursements, the sector is less often recorded in CRS data explaining the low share of US aid devoted to family planning Usually, the sectoral allocation is perceived as reliable after 2005.

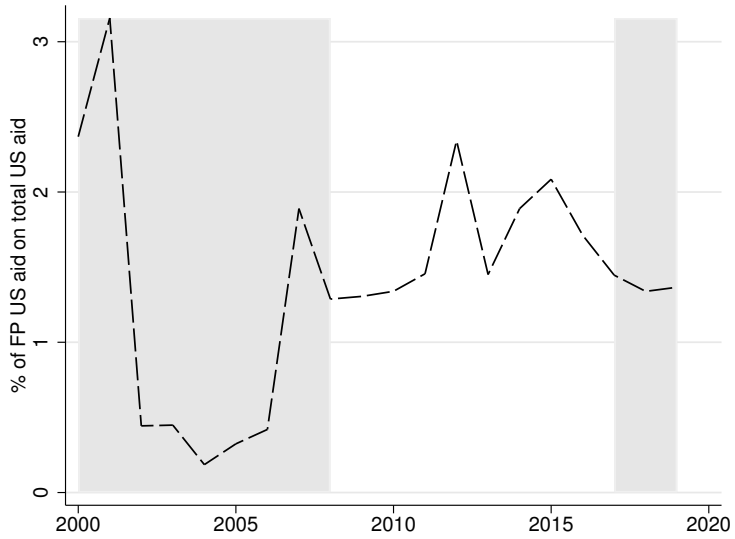

Figure A.1: Share of US family planning commitments on total US aid (2000-2019)
Note: CRS-OECD data on commitments. Family planning refers to purpose code 13030 and 13020 in CRS data. Grey period corresponds to years when the Global Gag Rule is active. Total aid includes all sectors of development aid.

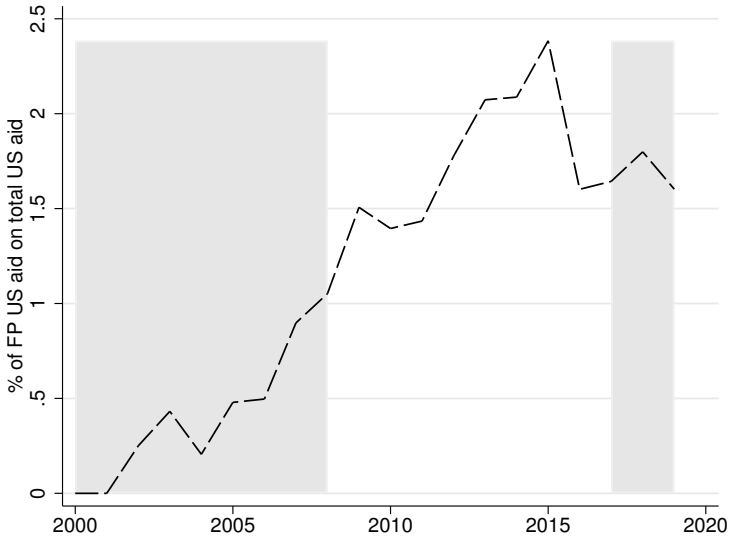

Figure A.2: Share of US family planning disbursements on total US aid (2000-2019)
Note: CRS-OECD data on disbursements. Family planning refers to purpose code 13030 and 13020 in CRS data. Grey period corresponds to years when the Global Gag Rule is active. Total aid includes all sectors of development aid.

B Christian and Barrett (2021) placebo test

Finally, I run the randomization placebo test introduced by Christian and Barrett (2021) even if I find null effects. Indeed even if the 2SLS estimates are not significant, as for (Nunn and Qian, 2014) they are higher than the OLS estimates. This test introduces randomness into the endogenous explanatory variable of interest (here the US family planning receipts in a given year) while holding constant cross-sectional exposure (here $FP_r * shareONG_r$) and the instrument (here the timing of the GGR). It should eliminate the estimated causal relationship if indeed exogenous implementation of the GGR drives the reaction from other donors. Hence, within a given year, I hold constant the following variables: the identity of the countries that receive any family planning aid, the identity of the countries that receive such aid at least partly through non-US NGOs, observable fixed and time-varying characteristics of countries and the aggregate distribution of family planning aid across all countries each year. But I randomly reallocate the quantity of family planning aid delivered to a particular country. In practice, I thus perform permutations of aid among recipients of US family planning aid. The resulting pseudo-data set should preserve the two sources of endogeneity someone may worry about – time trends and endogenous selection into being a regular family planning aid recipient. In this placebo test, the only reason why the quantity of family planning aid from the US would be positively related to other donors' allocation would be that countries that regularly receive other donors' aid are also the countries that regularly receive US FP aid through non-US NGOs and the years the GGR is not active happen to be years in which other donors' aid is elevated.

Figure B.1 shows the distribution of coefficient estimates generated by 999 randomizations of family planning aid allocations and then (re-)estimating the baseline 2SLS model. If the true causal relationship between US FP aid allocations and other donors' FP aid is positive and the identification is otherwise unaffected by selection bias and spurious time trends, the distribution of coefficients would shift left relative to the baseline coefficient estimate because

the randomization of US FP allocations would attenuate the estimated relationship between US aid and aid from other donors. I observe the left shift.

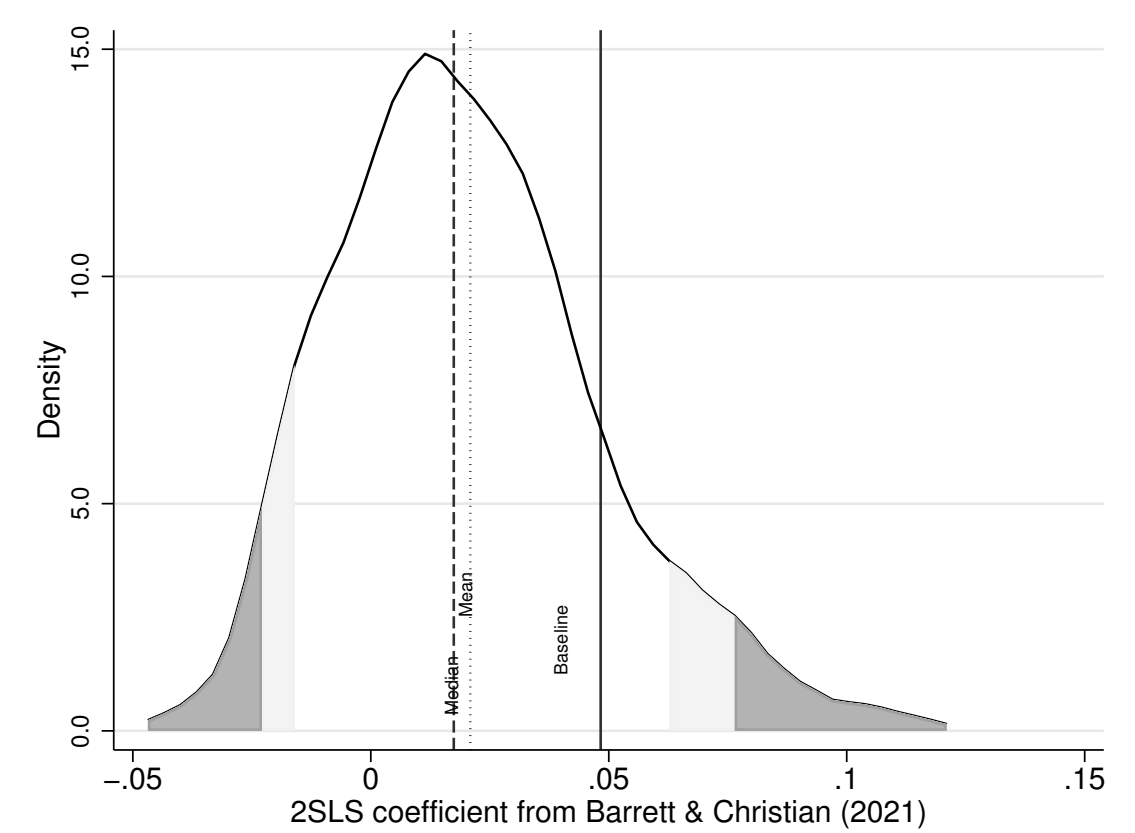

Figure B.1: Distribution of the 2SLS coefficient estimates using Christian and Barrett (2021) randomization placebo test.

Note: The density plot depicts the distribution of 2SLS coefficient estimates using the set of baseline controls with 999 draws of randomized allocations of US FP aid and randomized share of aid channelled through foreign NGOs among actual recipients in a given year. First and last percentile are excluded. The dark shaded area indicates the bottom and top 5% of draws. The light shaded area shows the top and bottom 10%.