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The HIPC Initiative and China's Emergence as a Lender: *post hoc* or *propter hoc*?

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The HIPC Initiative and China's Emergence as a Lender: *post hoc* or *propter hoc*?*

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ABSTRACT: Twenty years after the Heavily Indebted Poor Countries (HIPC) debt relief initiative, debt levels in low-income countries are rising again, renewing sustainability concerns. The prevailing view suggests that China and other emerging lenders exploited the HIPC initiative to expand lending. Using a synthetic control method to generate a counterfactual, we find that, contrary to this narrative, China and other emerging lenders reduced net lending after debt relief; only multilateral creditors increased it. Furthermore, we find no support for the claim that debt relief encouraged lending to political allies.

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> More galling for other foreign lenders is what they see as China's free-riding. Some African governments can afford fresh loans from China only because the AfDB, the IMF, and the World Bank recently forgave their sour ones.
>
> *The Economist*, *May 17, 2007*

1 Introduction

Developing countries' indebtedness increased significantly in the last decade. The ratio of external public debt to GDP rose from below 20 percent in the early 2010s to above 30 percent in 2022 (Figure 1, panel A). While the Armageddon the development finance (DF) community has been warning about (UNCTAD, 2019; Atingi-Ego *et al.*, 2021) has not (yet?) materialized, the Covid crisis and the rise in global interest rates have aggravated an already dire situation. Developing countries are experiencing a prolonged period of debt accumulation (Kose *et al.*, 2022) and a sharp increase in debt service, which went back (as a share of government revenue) to levels not seen since the late 1990s before the debt relief provided under the Heavily Indebted Poor Countries (HIPC) and the Multilateral Debt Relief Initiatives (MDRI, Figure 1, panel B).

True, a few short-term measures have been undertaken to create additional fiscal space in the developing world—think, for instance, at the Debt Service Suspension Initiative (DSSI), which contributed to easing financing constraints through additional liquidity provision (Lang *et al.*, 2023), or the liberal use of IMF Rapid Credit Facilities (RCF) and Rapid Financing Instruments (RFI) as opposed to standard arrangements. However, as of September 2024, more than half of DSSI-eligible countries are either in or at high risk of debt distress,[1] and developing countries' advocates are calling on the international community to find solutions.[2]

To address this daunting task, the DF community developed a novel approach to debt restructuring, reflecting a new landscape where China and other non-traditional donors play an increasingly important role (Horn *et al.*, 2021) (Figure 1, panel C). This new approach, codified in the G20-based Common Framework, recognizes the need to overcome the Paris Club constructions.[3]

While the Common Framework is a good starting point, some obstacles may hold back the emergence of a new consensual approach to prevent debt crises. Among these are the blurry line between commercial and official Chinese lending, the balance of powers in the Bretton Woods Institutions, and the perception of international aid as a tool to control natural resources and exert geopolitical influence (Alfaro and Kanczuk, 2022; Gelpern *et al.*, 2022; Cormier, 2023; Ballard-Rosa *et al.*, 2005; Ferry and Zeitz, 2024). Hence, any debt relief initiative can change the relationship between donors and aid recipients and the balance of powers between different donors competing for geopolitical influence.

[1] According to the debt sustainability analysis carried out jointly by the IMF and the World Bank

[2] Pope Francis in his June 5, 2024, speech, argued that "To break the debt-financing cycle, it is necessary to create a multinational mechanism, based on solidarity and harmony among peoples."

[3] See the Club De Paris note on the G20 Common Framework and the discussion in Cassimon *et al.* (2024).

According to the World Bank Senior Managing Director van Trotsenburg, this happened with the HIPC initiative, which forgave a large share of the poorest countries' debt in early 2000. At the 2023 World Economic Forum, he claimed that "the countries that were hitherto in debt found new life following the relief they got from the HIPC. The [...] write-offs in the 1990s allowed them to restart their borrowing spree with a temptation to turn to non-traditional creditors as the Paris Club lenders had changed the rules, turned their backs on extensive lending operations, and opted for grants."[4] Bunte (2018) reports similar statements from former French President Sarkozy and German Finance Minister Steinbruck.[5]

The common wisdom within the DF community is that debt relief was plagued by new creditors taking advantage of debt relief from traditional ones. More precisely, after the HIPC Initiative, Paris Club and multilateral creditors reduced their financial assistance to HIPCs, consistent with the presence of "aid fatigue" (Erixon and Sally, 2006). Because of the new "debt space," China became interested in lending to such countries. If this story holds, any new debt relief initiative should anticipate the free-rider problems associated with debt dilution (see, among others, Sachs, 1990; Hatchondo *et al.*, 2016). Furthermore, if debt relief ends up being a geopolitical game (Hameiri and Jones, 2024), one should be skeptical about the emergence of consensual solutions.

To understand what one can expect from any new debt relief initiative, we look at the past to answer the following critical question: *Has the HIPC/MDRI debt relief led to a change in the volume and the composition of external resources available to developing countries, reducing the share of traditional creditors and increasing that of non-traditional ones?*

A first look at the data shows that multilateral creditors reduced their net flows to developing countries around the 1996 HIPC initiative announcement, hovered at about 1 percent of GDP after the MDRI, and started increasing again only in the mid-2010s. By contrast, Chinese net flows were small (around 0.1 percent of the borrower's GDP) and constant until the MDRI's announcement in 2005; since then, they accelerated sharply for about a decade, increasing to about 1 percent of GDP (Figure 2, panel A). Does this mean that *because* of the HIPC initiative IFIs such as the IMF, the World Bank, and other multilateral development banks withdrew from lending to developing countries, and China took their place?

As much as such a narrative sounds compelling, we get a different picture when contrasting the flows directed to HIPCs with those directed to a comparator LIC group. Throughout the paper, our comparator group includes those non-HIPC-eligible countries that qualified for the Debt Service Suspension Initiative (DSSI) launched by the G20 in May 2020 to assist with temporary debt moratoria during the COVID-19 pandemic. When we compare Chinese net flows to HIPC and non-HIPC DSSI-eligible countries, both groups experienced similar trends until 2005. After 2005, the increase in Chinese net flows was twice as large for non-HIPCs than for HIPCs, the opposite of what one would expect from the "free-riding" hypothesis (Figure 2, panel B). Multilateral lending, instead, did not

[4] This quote is reported in Business Today. The full panel is available at the World Economic Forum website.

[5] "During a visit to the Democratic Republic of Congo in 2009, French President Sarkozy stated that it would be unacceptable for China to extend new loans to Congo, which had just received debt relief from France. Similarly, former German Finance Minister Peer Steinbruck argued that Chinese loans undermine Western creditors' efforts to help developing countries achieve a sustainable level of debt."(Bunte, 2018, p. 318).

differ much across HIPC and non-HIPCs (Figure 2, panel C). Also, from Figure 2, it is difficult to find evidence of the donors' fatigue that, according to the common wisdom, should have affected multilateral lending in the aftermath of the HIPC/MDRI.

The evidence presented in Figure 2 is purely descriptive, as it compares two groups of countries that may differ substantially. To address this problem, we use the Synthetic Control (SC) methodology to construct a counterfactual (the synthetic control) for each HIPC (the treated unit), considering a "donor pool" made by countries at a similar level of development (non-HIPC DSSI-eligible). We then compare gross and net inflows to HIPCs before and after debt relief with those to their SCs.

Doing so, we find that while gross flows to HIPCs decline (relative to their SCs)—suggesting a break in defensive lending— net flows after debt relief are resilient and, on average, positive. This average result masks quite a large variation across countries, and it could hide different behaviors across creditors. As a second step, we study the evolution of net inflows coming from *specific creditors* (multilaterals, Paris Club, China, and other emerging donors, bondholders, and private creditors) and assess whether the HIPC initiative allowed countries to turn to non-traditional creditors. Our main finding is that, contrary to the popular narrative, the HIPC initiative led to increased multilateral (but not traditional bilateral creditors) flows to HIPCs and reduced net flow from China and other emerging lenders.

Thus, our main result points to a lack of *free riding* from China and an increase in multilateral lending post-HIPC/MDRI. To understand the drivers of the result, we look at whether such behavior could have reflected geopolitical motivations, that is, HIPCs being politically closer to the West and non-HIPCs to China. The data do not support such evidence and hint at the lack of relevance of excessive debt and debt relief as a driver of credit flows. This seems to hold for all creditors, except for multilaterals, whose lending, we argue, may be bounded by their own rules and debt sustainability analyses.

2 The HIPC Initiative and Developing Country Debt: a Brief Review

The concept of debt overhang and the idea that debt write-offs may increase efficiency gained limelight in the 1980s when Sachs (1989) and Krugman (1988) applied Myers (1977) corporate finance insights to sovereign lending showing that a heavy debt burden acts as an implicit tax on the resources generated by the country so that debt relief could boost investment, encourage better policies, and enhance efficiency.

The success of the Brady plan for resolving the 1980s emerging market crisis validated the debt overhang view. Hence, the international community followed a similar approach when faced with the 1990s low-income countries' (LICs) debt crisis. In 1996, the IMF and World Bank launched the HIPC Initiative to reduce debt burdens to sustainable levels.

To be considered for HIPC debt relief, a country had to meet specific criteria: be eligible to borrow from the World Bank and IMF lending facilities for LICs; face an unsustainable debt burden after the application of traditional debt relief mechanisms; demonstrate a track record of sound policies supported by the IMF and World Bank; and develop a Poverty Reduction Strategy Paper (PRSP). The

Executive Boards of the World Bank and IMF assessed the fulfillment of such criteria, triggering the international community's commitment to reducing debt to a sustainable level. This stage is called the "decision point" (DP). Once a country reaches it, it obtains interim debt relief.

To receive full debt relief, a country must establish a further track record of good performance under IMF- and World Bank-supported programs, implement key reforms agreed to at DP, and adopt and implement its PRSP for at least one year. A country that meets these criteria reaches its "completion point" (CP), which allows it to receive full debt relief. Of the 39 countries eligible or potentially eligible for HIPC Initiative assistance, 37 have reached their CP and received full debt relief.[6]

The HIPC initiative and the subsequent MDRI resulted from a robust civil society campaign under the Jubilee 2000 umbrella, including prominent figures like Bono, Muhammad Ali, and the Pope. If, under the HIPC initiative, bilateral and multilateral creditors were expected to provide debt relief in proportion to their exposure, the MDRI called for the cancellation of the entire claims of three multilateral institutions—the IMF, the International Development Association (IDA) of the World Bank, and the African Development Fund—on countries that had either already reached or were expected to reach the completion point.

If the HIPC and MDRI led to a substantial reduction in debt ratios (Ando *et al.*, 2024) and were seen as a success by the Jubilee 2000 campaigners, the academic community had contrasting views on whether debt relief would work for the HIPCs the same way it did for Brady countries. Some observers questioned whether HIPCs' debt servicing significantly impacted investment and reform incentives, while others were skeptical about the nexus between debt forgiveness and increased private capital flows.

Easterly (2002) notes that countries with high debts and repayment challenges may have higher discount rates and, thus a lower willingness to invest so that debt relief is granted to countries less inclined to make productive investments. Radelet (2005) warns that debt relief may trigger a harmful cycle of lending and forgiving and cautioned against the possibility of non-concessional lenders taking advantage of debt relief and aid hampering debt sustainability.

Arslanalp and Henry (2005) argue that the influence of debt relief on HIPCs is limited because they often lack the infrastructure and institutions needed to attract private foreign investment. Asiedu (2003) shows that only countries with sufficiently high discount factors/institutional quality can commit to repayment and attract foreign investment. Although debt relief increases a country's repayment capacity and eases access to global capital markets, more is needed for HIPCs to secure external financing. Cordella and Missale (2013) show that choosing debt relief (*vis-à-vis* aid) can offer donors helpful information on the creditworthiness of the aid recipients.

Ferry and Raffinot (2019) provide a comprehensive review of the economic literature on measuring the effect of debt relief and point out the lack of robust empirical evidence due to the "difficulty of identifying the causal effects of these programs." Among the early studies, Depetris Chauvin and Kraay (2005), Presbitero (2009), and Johansson (2010) find no significant association between debt forgiveness and investment or growth in HIPCs.

While most of the recent literature looks at the effects of debt relief on growth and other devel-

[6] See the IMF and World Bank websites and Arnone and Presbitero (2011) for details.

opment goals (Essers and Cassimon, 2022), it does so without answering the preliminary question of the impact of debt relief on credit flows. The few studies that address the issue directly (Dömeland and Kharas, 2009; Claessens *et al.*, 2009) are too close to the HIPC initiative to catch its longer-term effect. More recently, Ferry *et al.* (2021) look at the impact of the debt relief initiative on private credit flows and show an increase in private lending in a standard difference-in-difference setting.

Regarding the effects of the changes in the international finance landscape, Chuku *et al.* (2023) find that "debt vulnerabilities in LICs today remain substantially less alarming than in the mid-1990s" (p. 27). However, the change in debt composition—which has shifted away from traditional Paris Club creditors towards commercial and non-Paris Club creditors—may make it more difficult to take preemptive actions to avoid a new debt crisis. The emergence of China as the leading bilateral donor may have added to the contentiousness of any further debt relief initiative. However, Bunte (2018) find recipients of bilateral debt relief are not more likely to receive credit from non-Western donors. We contribute to this literature exploiting the HIPC initiative for identification and looking at the *volumes* of net flows after the HIPC initiative across creditor type.

3 Our Empirical Approach

To understand the implication of debt relief on aid flows, we should recognize that several country-specific factors affect the amount of resources a country may receive. In such circumstances, when the number of countries is limited, the traditional regression analysis, including its DiD variants, is not suited to evaluating the effect of an aggregate intervention such as debt relief. To address this kind of problem, where a 'treatment' (debt relief in our case) affects only a relatively small number of 'units' (countries) Abadie and Gardeazabal (2003) and Abadie *et al.* (2015) introduce the synthetic control method, which is widely used in the macroeconomic and public finance literature (Campos *et al.*, 2019; Essers and Ide, 2019; Marchesi and Masi, 2020; Lang *et al.*, 2023).

When using SCs to evaluate a policy intervention, the critical decision is selecting the *donor pool*, used to construct a SC for each treated country with a combination of untreated countries. SCs often match the characteristics of treated countries in the pre-intervention period better than single unaffected countries, thereby providing more appropriate counterfactuals. Compared to the DiD design, the SC method does not give all untreated units the same weight, but it generates a weighted average of the untreated countries in the donor pool (often including zero weights for many units). Then, the outcomes for the SCs are projected into the post-treatment period using the same weights.

In our case, countries unaffected by the policy intervention (debt relief) can be used to provide a synthetic comparison for each affected country. However, to limit the donor pool to a group of countries as homogeneous as possible, we exploit the DSSI launched by the G20 in May 2020 taking DSSI-eligible countries as our main sample and, within that group, the HIPCs as the treated sample and the DSSI-eligible non-HIPCs as the donor pool.

We construct the SCs for each treated HIPC country by looking at net flows over GDP, considering either new flows from *all creditors* and net flows from *specific creditors* (multilaterals, Paris Club, China, and other emerging donors, bondholders, and private creditors). Following the notation in Abadie

(2021), the treated country is the first unit ($c = 1$); the donor pool is the set of potential comparisons, $c = 2, \ldots, C+1$. Y_{ct} is the outcome variable, in our case, net flows over GDP. The synthetic control estimator of τ_{1t}, that is, the treatment effect on the treated country ($c = 1$) at time t, is then estimated by:

$$\hat{\tau}_{1t} = Y_{1t} - \sum_{c=2}^{C+1} w_c Y_{ct}. \tag{1}$$

Following Abadie and Gardeazabal (2003) and Abadie *et al.* (2010), the weights, $\mathbf{W} = (w_2, \ldots, w_{C+1})'$, are restricted to sum to one and to be nonnegative. They are chosen to minimize:

$$\|\mathbf{X_1} - \mathbf{X_0}\mathbf{W}\| = \left(\sum_{h=1}^{k} v_h (X_{h1} - w_2 X_{h2} - \cdots - w_{C+1} X_{hC+1})^2 \right)^{1/2}. \tag{2}$$

Minimizing this expression ensures that the synthetic control best resembles the pre-intervention values of the outcome predictors for the treated unit ($\mathbf{X_1}$). The matrix $\mathbf{X_0} = [\mathbf{X_2} \ldots \mathbf{X_{C+1}}]$ collects the values of the predictors for the untreated units. $\mathbf{X}$ may include pre-intervention values of the outcome, Y. The positive constants, $v_1, \ldots, v_k$, reflect the relative importance of the k predictors $X_{11}, \ldots, X_{k1}$ for predicting Y_{1t} (see Abadie, 2021, for details).

We build a synthetic control for 31 (out of 37) countries that participated in HIPC initiative using the entire pool of DSSI-eligible non-HIPCs. The baseline treatment is the official *country-specific* DP under the HIPC Initiative.[7] HIPCs and the donor pool are matched to have similar net debt flows and key macro characteristics in the ten years before the DP.

The primary matching is performed on smoothed (3-year average) overall net flow series (in years -8,-4,-2,-1). Key macro characteristics include current account and external debt to GDP, GDP per capita, and real GDP growth. Our analysis ensures that pre-decision point fits are strong and robust, both to the selection of countries in the donor pool and the macro-characteristics used for matching. We study the post-DP characteristics of net debt flows by comparing HIPCs with their counterparts on a 22-year horizon. Given the volatility of net debt flows, we analyze cumulative post-HIPC trends.

Data on (net and gross) flows by creditors are from the World Bank International Debt Statistics (IDS, December 2022 vintage), complemented with data on IMF lending from the International Monetary Fund. Gross flows (or disbursements) are drawings by the borrower on loan commitments. Net flows (or net lending or net disbursements) are disbursements minus principal repayments. Both variables refer to public and publicly guaranteed (PPG) long-term external debt, and they do not include grants.[8] Additional variables used to construct the SC—real per capita GDP, GDP growth, external debt (% GDP), and the current account balance (% GDP)—are taken from the World Bank's World Development Indicators and the IMF WEO database.

[7] The 31 HIPCs in our sample reached their decision point between 2000 and 2010, the majority by December 2000. We drop Afghanistan, Liberia, Mozambique, and São Tomé and Príncipe because of data availability, and Nicaragua because of a poor fit of the synthetic control. Somalia, the 37th country to reach the HIPC decision point, is also excluded as it reached this milestone in March 2020. See Appendix Table A1 for details.

[8] Adding grants, which are mostly given by multilateral creditors, should, if anything, strengthen our results.

Finally, we report the weights used to construct the SCs for each HIPC and the Fit Index (Adhikari and Alm, 2016)—a goodness-of-fit measure of the constructed counterfactual for each treated country—in Appendix Table A2. This index is computed as the ratio of the pre-treatment normalized root mean squared prediction error (RMSPE) and the variance of net flows over GDP in the pre-treatment period (e.g., the RMSPE of a zero-fit model). The index is close to zero across all countries, suggesting that our SCs perform well in approximating the pre-treatment dynamics of net flows.

4 Main Results

4.1 Net versus Gross Credit Flows

To understand whether the HIPC initiative did change the volume and composition of credit flows creating the space for the entrance of new donors/creditors, we start by looking at net inflows to HIPCs before and after the country-specific DP under the HIPC Initiative, and compare them with those of other DSSI-eligible non-HIPCs.

We want to strengthen the importance of looking at both gross and net flows. Indeed, it is easy to imagine that, after debt relief, gross flows will decrease, as *defensive lending*—the practice of extending new loans to enable borrowers to meet their debt service obligations and avoid default—will also decrease. However, if donors consider aid and debt relief as substitutes, debt relief may not increase the net flow of resources to eligible countries. After debt relief, a country may indeed not have to repay creditors (or repay them less), but, in return, it may receive smaller flows. Looking at net flows is thus essential to understand whether debt relief provided additional resources to a country or just ended the cycle of defensive lending. Notice that, unlike the emerging markets involved in the Brady initiative, virtually all HIPCs received positive net flow before debt relief (Easterly, 2002; Bird and Milne, 2003). Hence, by itself, debt relief does not imply an increase in the availability of resources.

When we compare gross flows before and after debt relief, we find that, as expected, gross flows decreased dramatically in the aftermath of HIPC debt relief: when we compare HIPCs with their SCs, we see an average reduction in gross lending to HIPCs (*vis-à-vis* their SCs) of about 1 percent of GDP per year (Figure 3, panel A). The decline in gross flows is common to most HIPCs, being somewhat larger for the median HIPC country and almost twice as large for the HIPC at the 25th percentile of the distribution. This drop likely reflects that debt forgiveness allowed donor countries to stop the practice of defensive lending.

But what happened to net flows? Against the standard narrative, we do not find evidence of donors' fatigue towards HIPCs. Net flows as a share of recipient countries' GDP declined during the 2000s; however, when we compare the behavior of net flows between HIPCs with their SCs (Figure 3, panel B), we find that post-DP net flows to HIPCs increased both on average and for the median country. However, there is substantial variation across countries, as shown by the interquartile range, which also goes into negative territory.[9] In addition, as this chart pools net flows provided by all

[9] The trend in cumulative flows is positive for the first ten years, but then we witness a partial reversal, stronger for the mean than the median country.

creditors, it could still be the case that this average result is consistent with China's or other creditors' free riding on HIPC/MDRI debt relief. To tackle this issue, we exploit the granularity of the IDS data to look at the evolution of net flows by creditor type.

4.2 Net Flows by Creditor Type

Let us now turn to our main question: Which creditors contributed the most to such a (relative) increase in new flows to HIPCs? Are China and/or the private lenders those who took advantage of the borrowing space created by debt relief, or are they instead multilateral and Paris Club creditors who followed on their pledge of post-HIPC additional support? From what we know, we are the first to answer such a question by looking at long-time trends with a rigorous identification strategy.

Our analysis—based on the comparison between HIPCs and their SCs around the HIPC DP—shows that multilateral donors followed their pledge to provide additional help (Figure 4, panel a). Still, the same is not true for Paris club donors that, on average, kept the net flow constant (Figure 4, panel b). Against the current common wisdom, China reduced its support for HIPCs post-debt relief compared to non-HIPCs (Figure 4, panel c). This does not mean that China withdrew from those countries; China increased its support, but debt relief negatively impacted its lending volumes.[10] The same applies to other non-Paris club bilateral donors' lending (Figure 4, panel d). Hence, if we aggregate China and other bilateral emerging creditors (mostly Gulf states not part of the Paris Club), we observe a sharp and persistent debt reduction in net flows to HIPCs, which gets close to 10 percent of GDP for the median country 20 years after decision point, and close to 15 percent of GDP on average (Figure 4, panel e).

Surprisingly, we also find that private creditors and bondholders did not take advantage of the new borrowing space created by the HIPC initiative (Figure 4, panel f). This, however, may reflect the non-concessional lending clause in the HIPC debt relief initiative that was imposed exactly to deal "with the free rider problem [which] involves both a collective action issue *vis-à-vis* creditors, and moral hazard risks vis-à-vis borrowers" (World Bank, 2016).

4.3 Methodological Considerations and Robustness Analysis

The SC method requires two assumptions to hold (Abadie, 2021). First, *no anticipation*. The variables chosen to construct the SCs should approximate the path of net inflows to HIPCs, but they should not anticipate the provision of debt relief. This means HIPC debt relief should be considered a plausibly exogenous shock concerning the provision of net flows. While this is not the case, we compare net flows from specific creditors, so that the violation of the no anticipation assumption requires that flows from a particular creditor are more likely to predict debt relief than those from others, which is quite unlikely given the extensive HIPC eligibility criteria.

Second, *no interference*. The treatment should not affect the countries in the donor pool used to estimate the synthetic controls. This implies no spillover effects from HIPC debt relief to non-HIPC DSSI-

[10] We do not look at the drivers of Western and Chinese lending volumes. Bode (2024) finds evidence that China and the West's motives for lending to African countries differ, with economic interest being a primary driver for China but not for Western countries.

eligible countries. This assumption will likely hold as HIPC-eligible countries are among the poorest ones and are not systemic, even at the regional level. Moreover, by definition, spillovers within Africa mainly originate from the two largest economies—South Africa and Nigeria (Omoshoro-Jones and Bonga-Bonga, 2022), which were not HIPC-eligible. In addition, the no interference assumption requires no spillovers through the debt relief channel. As HIPC debt relief has no clear-cut effects on growth and investment in recipient countries (Depetris Chauvin and Kraay, 2005; Presbitero, 2009; Johansson, 2010), this bodes against cross-border spillovers due to the HIPC initiative.

We test the validity of our results running an in-space placebo test in which we assign the treatment to 16 DSSI-eligible countries which are not part of the HIPC Initiative. If the relative shift in net flows from emerging to multilateral creditors is the result of a common trend among LICs which is unrelated to debt relief, this falsification test should show results similar to the baseline. Instead, we see that the median and average gaps are very close to zero for the 20-year period post-treatment; while there is some variation across countries in net flows from China, countries are equally split between those with positive and negative gaps, suggesting no evident trends (Appendix Figure A1).

Finally, we test the robustness of our results running: i) a simple version of the SC method where we do not add any macroeconomic variable as additional control and match HIPCs and the donor pool only on lagged values of net flows; and ii) a version of the SC method in which we drop small island states from the donor pool to address the potential concerns that these countries could not be an appropriate counterfactual for HIPCs. The results—reported in Appendix Figures A2 and A3—-align well with our main findings.

5 Discussion

Our main takeaway is that net flows' response to HIPC debt relief has been highly heterogeneous, with total net flows showing some moderate pickup (on average and for the median country) compared to those to similar non-HIPCs. The main driver of this trend is net flows from multilateral lenders, which increased substantially after the HIPC initiative. By contrast, new flows from China and other non-Paris Club creditors to HIPCs have declined compared to non-HIPCs. This means the IFIs' exposure to HIPCs has increased relative to China's and private borrowers'. It also means that, contrary to the current narrative, the HIPC/MDRI did not induce new creditors to "jump in" and "free ride." If anything, the opposite is likely to be the case. Why did this happen? At the moment, we can only offer educated guesses. The first is that net flows reflect geopolitical considerations. The second is that indebtedness or lack thereof is not a significant pull factor for bilateral developmental assistance.

To discuss the geopolitical educated guess, which received much attention in the recent literature,[11] we start with the somehow trivial consideration that HIPCs should have received substantial developmental assistance to qualify for debt relief (otherwise, they would not have accumulated such a debt). And they may have received it because of post-colonial or geopolitical ties that donors find

[11] See, for instance, Dreher *et al.* (2018), who find that foreign policy objectives largely influence Chinese official development assistance, and economic interests less concessional financial flows.

particularly valuable. Once such ties could not be maintained through the debt and defensive lending cycle, new assistance was needed to keep them in the orbits or to attract them into a new orbit. If this is what happened, then one should find that debt relief should have increased geopolitically-motivated lending.

To assess whether this was indeed the case, we look at a measure of geopolitical proximity—the ideal point distance computed by Bailey *et al.* (2017)—in the five years before the decision point, and split the sample of HIPCs along the median of the ideal point distance from China (when looking at Chinese net flows) and from the US (when looking at net flows from multilaterals). We then define as "geopolitically close countries" to China and multilaterals those above the respective median, and "geopolitically distant countries" those below, and look at whether debt relief led to increased aid flows to geopolitical close countries relative to geopolitical distant ones. Our findings are illustrated in Figure 5, which depicts the gap in net flows between HIPCs and their SCs, as in our main analysis reported in Figure 4, but splitting the sample between countries which are geopolitically close or distant to China and the US. Even from a cursory observation of Figure 5, it is evident that neither Chinese nor multilateral net flows to HIPCs after debt relief are associated with geopolitical proximity. Hence, data seem to reject the geopolitical narrative.

The second, more speculative, educated guess is that indebtedness or lack thereof is not a significant pull factor for bilateral developmental assistance. In other words, bilateral donors may not place much weight on the existing level of debt in deciding where to provide aid/credit. This may happen for two reasons. The first is that net flows are almost usually positive, so aid-recipient countries tend to receive more than they have to repay every single year. The incentive of getting more is thus a strong enough incentive to repay and, when not, donors can use other levers to be repaid and/or to keep recipient countries in their sphere of influence (e.g., military assistance). Second, there is evidence that debt levels are irrelevant in LICs with poor governance (Cordella *et al.*, 2010). If a high level of debt does not curtail investment and growth, then debt relief does not make a country more creditworthy either.

The story is a bit different for multilaterals. The amount they can lend is influenced by the Debt Sustainability Analyses (DSAs) that the World Bank and the IMF started conducting in 2005—when the MDRI was adopted—as part of their joint Debt Sustainability Framework for LICs. Though the DSA does not impose strict limits on the amount multilateral institutions can lend, it does influence lending decisions and the conditions under which funds are disbursed. In particular, debt distress levels affect the mix of grants and loans, with more indebted countries receiving more grants and, thus, a lower volume of net flows for any given level of assistance (Cordella and Ulku, 2007). Furthermore, in multilateral organizations, incentives tend to favor high lending volumes (Ravallion, 2016). Hence, when the HIPC/MDRI created space for increasing lending volumes (net flows), multilateral organizations did not miss such an opportunity and increased their lending independently of any geopolitical consideration. In doing so, they also fulfilled their additionality pledge (IDA, 2006), that is, their commitment to ensuring that the debt relief provided under the MDRI would not reduce the overall level of financial assistance to eligible LICs.

6 Conclusions

Whether reasonable people may disagree on how severe the current developing world debt crisis is, there are no doubts that dealing with it presents new challenges. If agreeing on how to split the burden of debt relief has always been difficult, the current international financial architecture is becoming a daunting challenge because of geopolitical rivalries between the major creditors. If the HPIC/MDRI was negotiated between Washington-based institutions and the Paris Club, any new debt restructuring initiative would have to pass through Beijing, adding a layer of complexity.

Aside from the increasing East/West distrust, traditional donors may be reluctant to forgive part of their debt because they fear that China will free-ride, as it allegedly did in the aftermath of the HIPC/MDRI. But did that happen? Sure, China's lending to developing countries increased when these initiatives were implemented, but did it grow because of that?

To answer this critical question, one needs to create a credible counterfactual to assess the effect of debt relief on credit flows. This is what we do in this paper, using the SC method, which allows us to compare the credit flows that each country received after the HIPC/MDRI with the ones that it would have received had debt relief not happened. Contrary to the common wisdom, we find no evidence of China's free riding. Conversely, the debt relief seems to have decreased China's and other emerging lenders' net flows.

This does not mean that history will repeat itself and that Western donors should ignore China. Today's situation is very different from the one in the early 2000s. China's exposure is much larger, and the world is much more polarized. However, our analysis suggests that net flows, not debt stocks, should matter the most in the aid game. The latter appear quite irrelevant regarding geopolitical competition, and thus, they should not be overemphasized.

Of course, one may disagree with these more speculative considerations, which should not be be the main takeaway from this paper. Our main contribution is a positive one, and it belongs to the realm of (recent) economic history. Indeed, we provide a rigorous framework to assess the impact of the HIPC/MDRI on the composition of credit flows, and we let the reader decide whether there is any lesson from the past that may be relevant to the present and the future.

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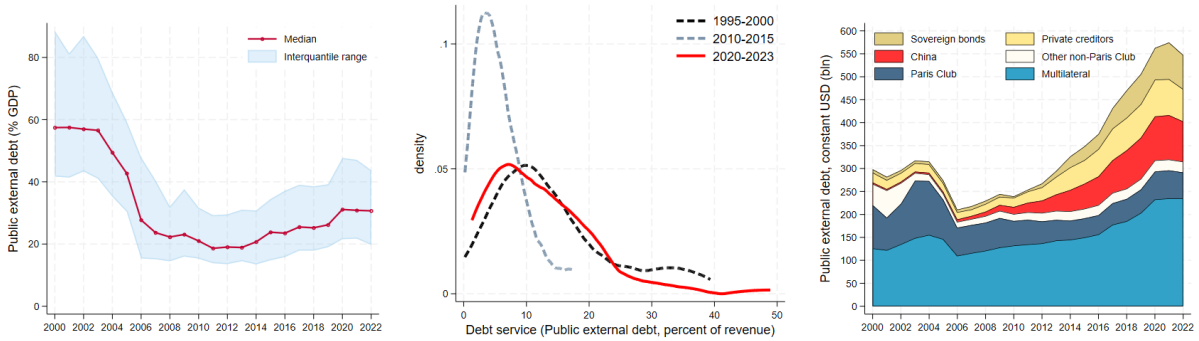
Figures

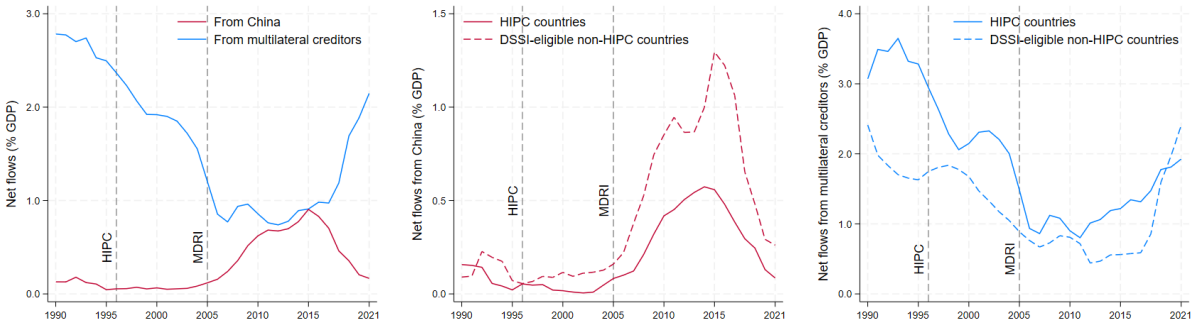
Figure 1: The big picture: Rising debt and change in creditor composition



(a) External public debt over GDP (b) Increasing debt service (c) Rising role of emerging creditors

Notes: Panel A plots the median and interquartile range of the public and publicly guaranteed external debt over GDP ratio. Panel B plots the amount of public and publicly guaranteed external debt (in constant 2017 USD) by creditor type. Panel C plots the distribution of the average of the ratio of debt service on public and publicly guaranteed external debt over revenues (winsorized at the 1st and 99th percentiles) over three periods of time (1995 – 2000; 2010 – 2015; 2020 – 2023) and across the 68 DSSI-eligible countries. Panels A and C are based on a slightly unbalanced sample of 68 DSSI-eligible countries (only three countries—Afghanistan, Kosovo, and Timor-Leste—are not observed for the entire time series of 23 years). The sample for panel B is balanced starting in 2013 and slightly unbalanced earlier.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); World Economic Outlook database (International Monetary Fund); and authors' calculations.

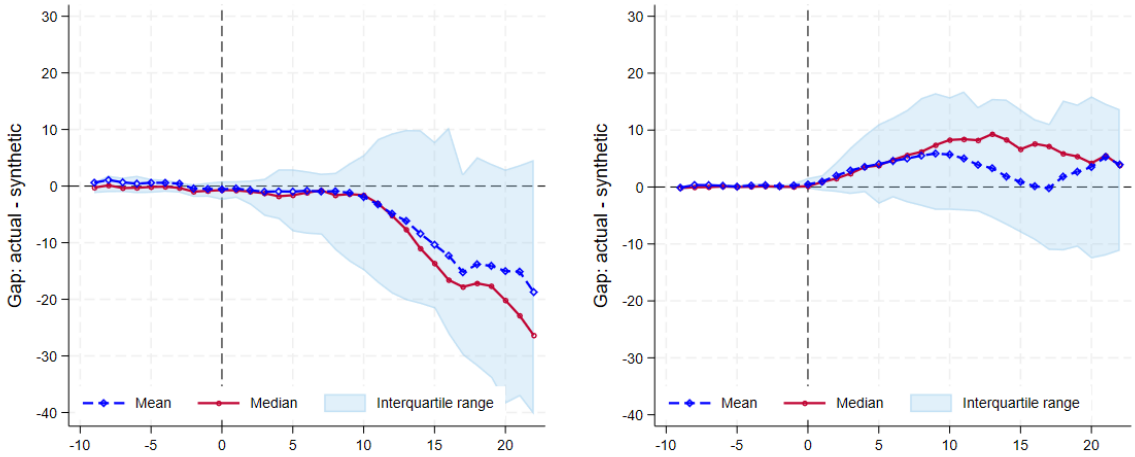
Figure 2: Chinese and multilateral net flows around debt relief initiatives



(a) Net flows (b) Net flows from China (c) Net flows from multilaterals

Notes: Each panel plots the net flows by a specific creditor (China and multilaterals) for the average country, for the whole sample of DSSI-eligible countries (panel A), and separately for HIPC and non-HIPCs (panels B and C). The sample includes all 68 DSSI-eligible countries. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

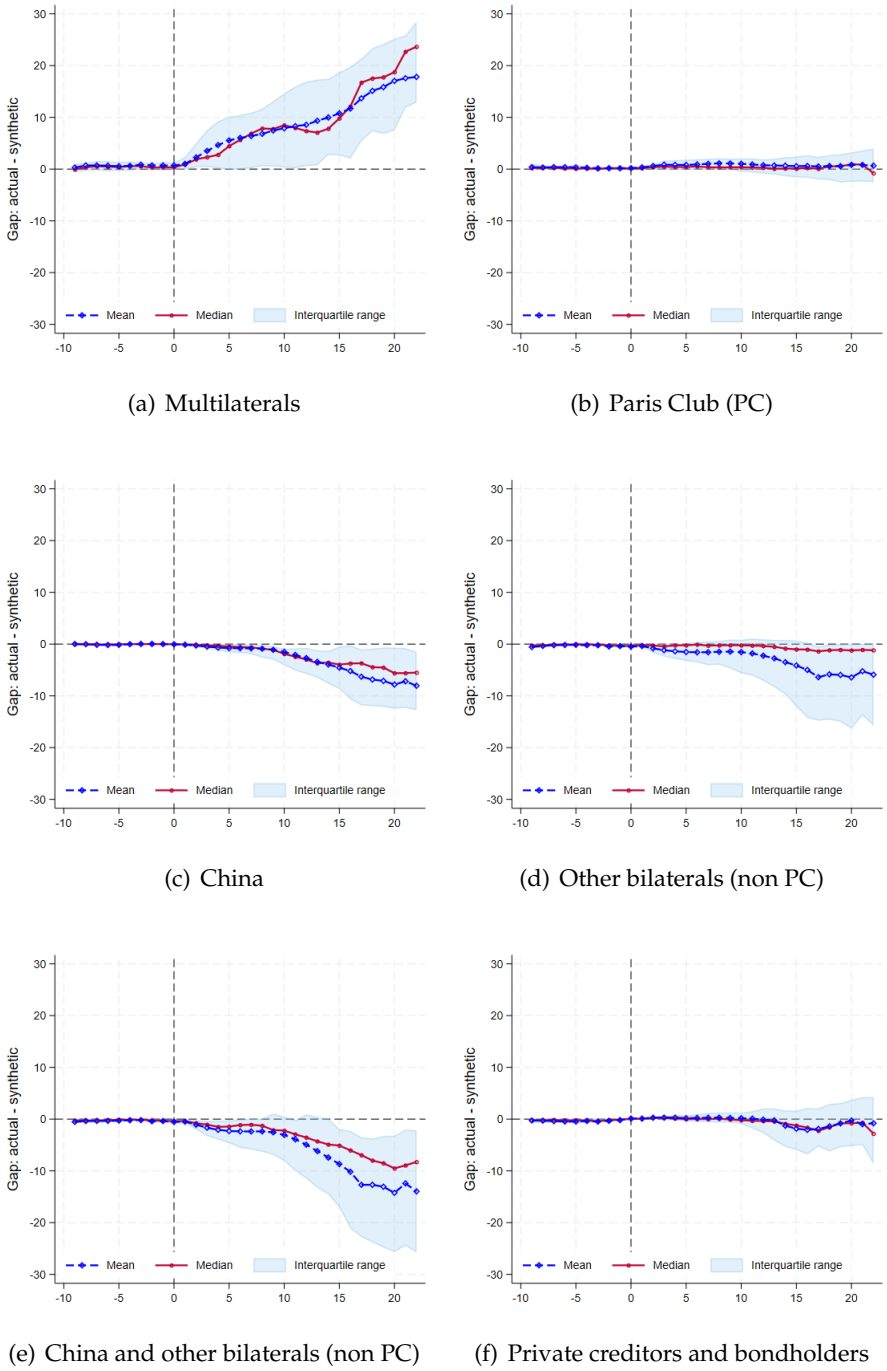
Figure 3: Gross vs net flows



(a) Gross flows (b) Net flows

Notes: Panel A(B) plots the difference between the actual gross (net) flows and those of the respective synthetic control (gap). The synthetic controls are built matching treated countries with those in the donor pool on past net flow and key macro characteristics; see Section 3. The solid line is the median value of the gaps in the sample of HIPCs; the dashed line is the average. The shaded area indicates the interquartile range. The vertical line indicates the country-specific HIPC decision point. Net and gross flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

Figure 4: Net flows post HIPC initiative, by creditor type



(a) Multilaterals

(b) Paris Club (PC)

(c) China

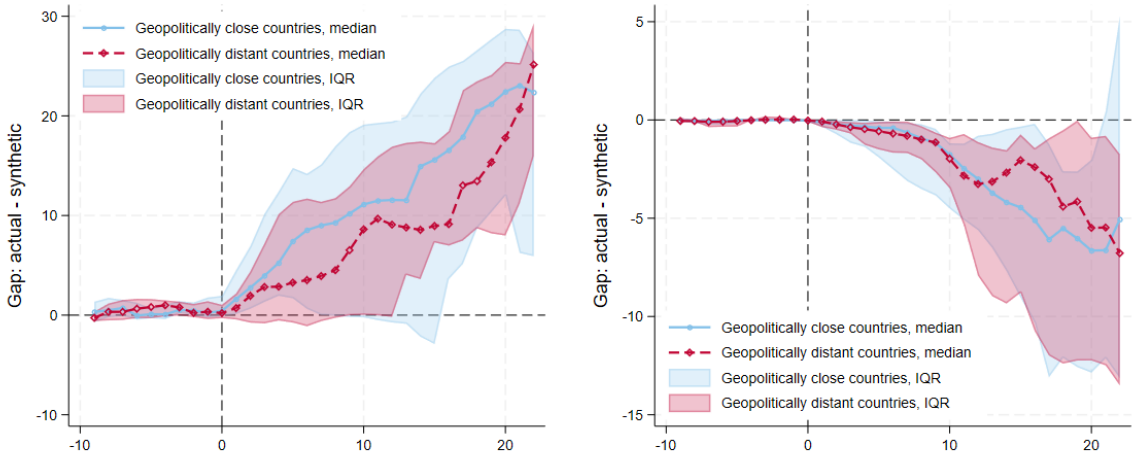
(d) Other bilaterals (non PC)

(e) China and other bilaterals (non PC)

(f) Private creditors and bondholders

Notes: Each panel plot the difference between the actual net flows by a specific creditor and those of the respective synthetic control (gap). The synthetic controls are built matching treated countries with those in the donor pool on past net flow and key macro characteristics, see Section 3. The solid line is the median value of the gaps in the sample of HIPCs; the dashed line is the average. The shaded area indicates the interquartile range. The vertical line indicates the country-specific HIPC decision point. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

Figure 5: Geopolitical Lending



(a) Multilaterals

(b) China

Notes: Each panel plots the difference between the actual net flows by a specific creditor (multilaterals in panel A and China in panel B) and those of the respective synthetic control (gap), separately for geopolitically close and distant countries. Countries geopolitically close (distant) to China and and to multilaterals are those above (below) the median of the Ideal Point Distance from China and the U.S. (computed as average over the five years before the decision point), respectively. The synthetic controls are built matching treated countries with those in the donor pool on past net flow and key macro characteristics, see Section 3. The solid line is the median value of the gaps in the sample of HIPCs; the dashed line is the average. The shaded areas indicate the interquartile range. The vertical line indicates the country-specific HIPC decision point. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); Bailey *et al.* (2017); and authors' calculations.

Appendix: Additional Tables and Figures

Table A1: HIPC and MDRI debt relief: timing and value

Notes: The table reports the list of 36 HIPCs that qualified for HIPC and MDRI debt relief, together with the date of completion and decision points and the amount of debt relief granted, as of September 2019. Countries in *italics* are not included in our sample because of data availability or the poor fit of our synthetic controls (Nicaragua). DP: decision point; CP: completion point. Figures are in million USD.
Source: World Bank (2019).

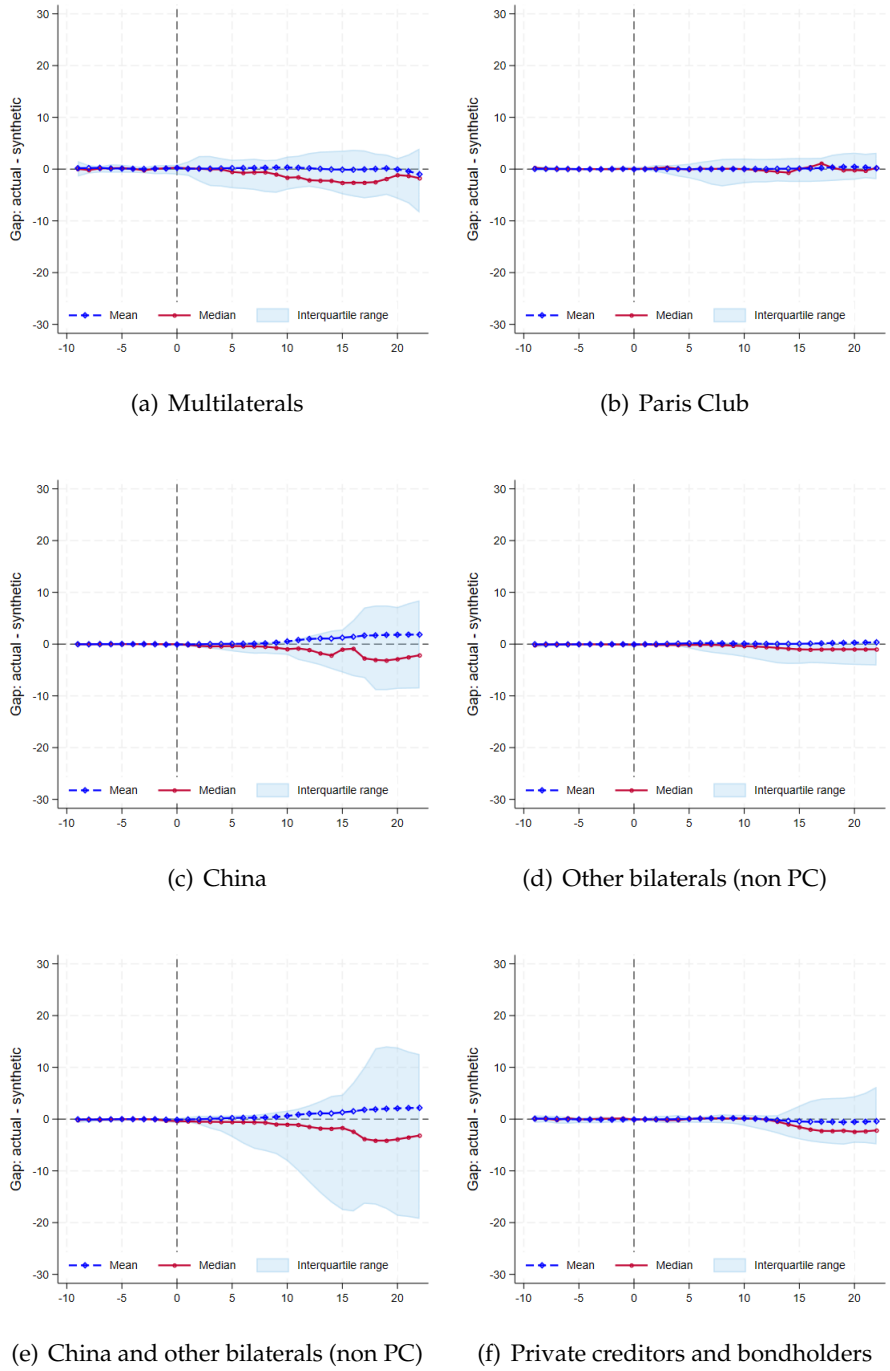
HIPCs	Date		HIPC relief		MDRI relief	Total relief
	DP	CP	PV at DP	Nominal	Nominal	Nominal
Afghanistan	Jul-07	Jan-10	582	1,280	37	1,317
Benin	Jul-00	Mar-03	262	460	1,085	1,545
Bolivia	Feb-00	Jun-01	1,330	2,060	2,771	4,831
Burkina Faso	Jul-00	Apr-02	553	930	1,150	2,080
Burundi	Aug-05	Jan-09	833	1,366	65	1,431
Cameroon	Oct-00	Apr-06	1,267	4,917	1,206	6,123
Central African Republic	Sep-07	Jun-09	578	804	253	1,057
Chad	May-01	Apr-15	170	260	764	1,024
Comoros	Jun-10	Dec-12	146	136	72	208
Congo, Dem. Rep. of the	Jul-03	Jul-10	7,252	15,222	973	16,195
Congo, Rep. of	Mar-06	Jan-10	1,575	1,738	187	1,925
Cote d'Ivoire	Mar-09	Jun-12	1,576	3,415	1,745	5,160
Ethiopia	Nov-01	Apr-04	1,935	3,275	3,136	6,411
Gambia, The	Dec-00	Dec-07	67	112	364	476
Ghana	Feb-02	Jul-04	2,187	3,500	3,735	7,235
Guinea	Dec-00	Sep-12	639	800	916	1,716
Guinea-Bissau	Dec-00	Dec-10	489	790	114	904
Guyana	Nov-00	Dec-03	610	1,354	701	2,054
Haiti	Nov-06	Jun-09	140	213	947	1,160
Honduras	Jun-00	Apr-05	556	1,000	2,677	3,677
Liberia	Mar-08	Jun-10	2,739	4,600	258	4,858
Madagascar	Dec-00	Oct-04	836	1,900	2,305	4,205
Malawi	Dec-00	Aug-06	939	1,628	1,491	3,119
Mali	Sep-00	Mar-03	539	895	1,894	2,789
Mauritania	Feb-00	Jun-02	622	1,100	840	1,940
Mozambique	Apr-00	Sep-01	2,143	4,300	1,964	6,264
Nicaragua	Dec-00	Jan-04	3,308	4,500	1,871	6,371
Niger	Dec-00	Apr-04	644	1,190	1,004	2,194
Rwanda	Dec-00	Apr-05	651	1,316	465	1,781
São Tomé and Príncipe	Dec-00	Mar-07	117	263	58	321
Senegal	Jun-00	Apr-04	488	850	2,374	3,224
Sierra Leone	Mar-02	Dec-06	675	994	633	1,627
Tanzania	Apr-00	Nov-01	2,026	3,000	3,683	6,683
Togo	Nov-08	Dec-10	282	360	683	1,043
Uganda	Feb-00	May-00	1,027	1,950	3,366	5,316
Zambia	Dec-00	Apr-05	2,499	3,900	2,645	6,545
Total				76,378	48,432	124,809

Table A2: Synthetic controls

Notes: The table lists the composition of the synthetic control for each HIPC country. The last two columns report the root mean square prediction error (RMSPE) of the outcome variable in the pre-treatment period (before the country-specific decision point) and the *Fit Index*, i.e., the ratio between the normalized RMSPE and the variance of the outcome variable in the pre-treatment period. The synthetic control estimates refer to those plotted in Figures 3 and 4.

Country	Composition of the Synthetic Control	RMSPE	Fit Index
Burundi	Angola (26%), Buthan (25.5%), Kenya (9.6%), Papua New Guinea (19.3%), Vanuatu (19.6%)	32.4743	0.0045
Benin	Angola (10.1%), Bangladesh (8.1%), Kenya (4.7%), Lao PDR (12.3%), Lesotho (9.7%), Nepal (34.2%), Tonga (15.4%), Samoa (5.5%)	18.9554	0.0048
Burkina Faso	Angola (15.6%), Cabo Verde (21.8%), Lesotho (8.3%), Nepal (54.3%)	69.2033	0.0041
Bolivia	Angola (9.4%), Cabo Verde (2.8%), Kenya (0.1%), Lao PDR (1.9%), Lesotho (35.2%), Solomon Islands (18.5%), Tonga (32.1%)	33.1099	0.0023
Central African Rep.	Angola (3.0%), Kenya (53.8%), Nepal (21.6%), Papua New Guinea (19.8%), Vanuatu (1.7%)	51.0362	0.0025
Cote d'Ivoire	Angola (14.6%), Fiji (23.0%), Nigeria (39.3%), Papua New Guinea (19.9%), Solomon Islands (2.7%), Tonga (0.1%), Vanuatu (0.2%), Samoa (0.1%)	170.2547	0.0030
Cameroon	Angola (5.6%), Bangladesh (17.3%), Cabo Verde (8.0%), Nigeria (2.8%), Papua New Guinea (40.7%), Tonga (9.5%), Samoa (16.1%)	16.4247	0.0038
Congo, Dem. Rep.	Angola (0.4%), Lesotho (10.5%), Nigeria (42.0%), Nepal (3.5%), Papua New Guinea (39.0%), Solomon Islands (4.6%)	76.1745	0.0031
Congo, Rep.	Fiji (25.0%), Nigeria (65.7%), Solomon Islands (9.3%)	72.0744	0.0122
Comoros	Angola (3.7%), Bhutan (7.0%), Nigeria (30.0%), Solomon Islands (59.3%)	18.0869	0.0015
Ethiopia	Angola (4.2%), Bhutan (2.6%), Lesotho (7.5%), Nigeria (34.6%), Nepal (51.2%)	59.1573	0.0040
Ghana	Angola (2.4%), Bhutan (9.3%), Lao PDR (49.7%), Lesotho (19.7%), Nepal (14.3%), Samoa (4.3%)	116.5306	0.0081
Guinea	Angola (12.8%), Bhutan (19.2%), Lao PDR (1.7%), Lesotho (26.2%), Nigeria (4.9%), Nepal (25.0%), Samoa (10.2%)	11.2432	0.0028
Gambia, The	Bangladesh (11.2%), Fiji (23.3%), Kenya (11.9%), Lao PDR (11.8%), Pakistan (39.8%), Samoa (2.1%)	58.8428	0.0048
Guinea-Bissau	Lao PDR (78.5%), Samoa (21.5%)	27.1566	0.0381
Guyana	Lao PDR (28.2%), Samoa (71.8%)	7.6820	0.0382
Honduras	Angola (3.8%), Bhutan (13.9%), Cabo Verde (24.6%), Fiji (22.1%), Lesotho (0.6%), Nigeria (2.9%), Pakistan (1.0%), Samoa (31.1%)	31.6368	0.0076
Haiti	Angola (5%), Fiji (17.4%), Kenya (7.1%), Lesotho (31.1%), Nepal (33.1%), Tonga (4.9%), Vanuatu (1.4%)	18.9244	0.0027
Madagascar	Angola (12.3%), Bhutan (8.6%), Cabo Verde (20.8%), Lao PDR (15.8%), Nigeria (42.6%)	120.4839	0.0058
Mali	Angola (16.8%), Cabo Verde (14.4%), Lao PDR (14.9%), Lesotho (3.9%), Nigeria (0.9%), Nepal (49.0%)	49.1593	0.0067
Mauritania	Angola (44.2%), Bhutan (4.7%), Cabo Verde (19.0%), Solomon Islands (6.0%), Tonga (26.1%)	16.4284	0.0033
Malawi	Cabo Verde (24.2%), Lesotho (75.8%)	142.0952	0.0182
Niger	Bangladesh (10.8%), Bhutan (9.2%), Cabo Verde (15.9%), Nigeria (12.5%), Nepal (32.1%), Solomon Islands (19.4%	65.3543	0.0017
Rwanda	Angola (6.3%), Bhutan (12.1%), Cabo Verde (42.0%), Lao PDR (4.2%), Nepal (35.3%)	235.3250	0.0051
Senegal	Angola (5.1%), Fiji (16.5%), Lao PDR (1.5%), Lesotho (9.8%), Pakistan (39.4%), Papua New Guinea (9.0%), Solomon Islands (18.8%)	106.8471	0.0024
Sierra Leone	Bhutan (17.7%), Lao PDR (2.6%), Lesotho (79.7%)	84.0669	0.0208
Chad	Lao PDR (22.9%), Lesotho (21.6%), Nepal (55.5%)	265.3347	0.0097
Togo	Kenya (27.3%), Lesotho (14.6%), Nepal (57.1%), Papua New Guinea (1.1%)	37.0785	0.0026
Tanzania	Angola (15.2%), Bhutan (15.1%), Lao PDR (1.5%), Lesotho (27.1%), Nigeria (31.0%), Papua New Guinea (0.3%), Vanuatu (5.3%), Samoa (4.3%)	29.5160	0.0043
Uganda	Angola (13.7%), Lesotho (37.2%), Nepal (35.0%), Samoa (14.1%)	17.6829	0.0074
Zambia	Angola (41.7%), Cabo Verde (47.7%), Nigeria (0.6%), Solomon Islands (10.0%)	55.8872	0.0122

Figure A1: Net flows post HIPC initiative, by creditor type: In-space placebo



(a) Multilaterals

(b) Paris Club

(c) China

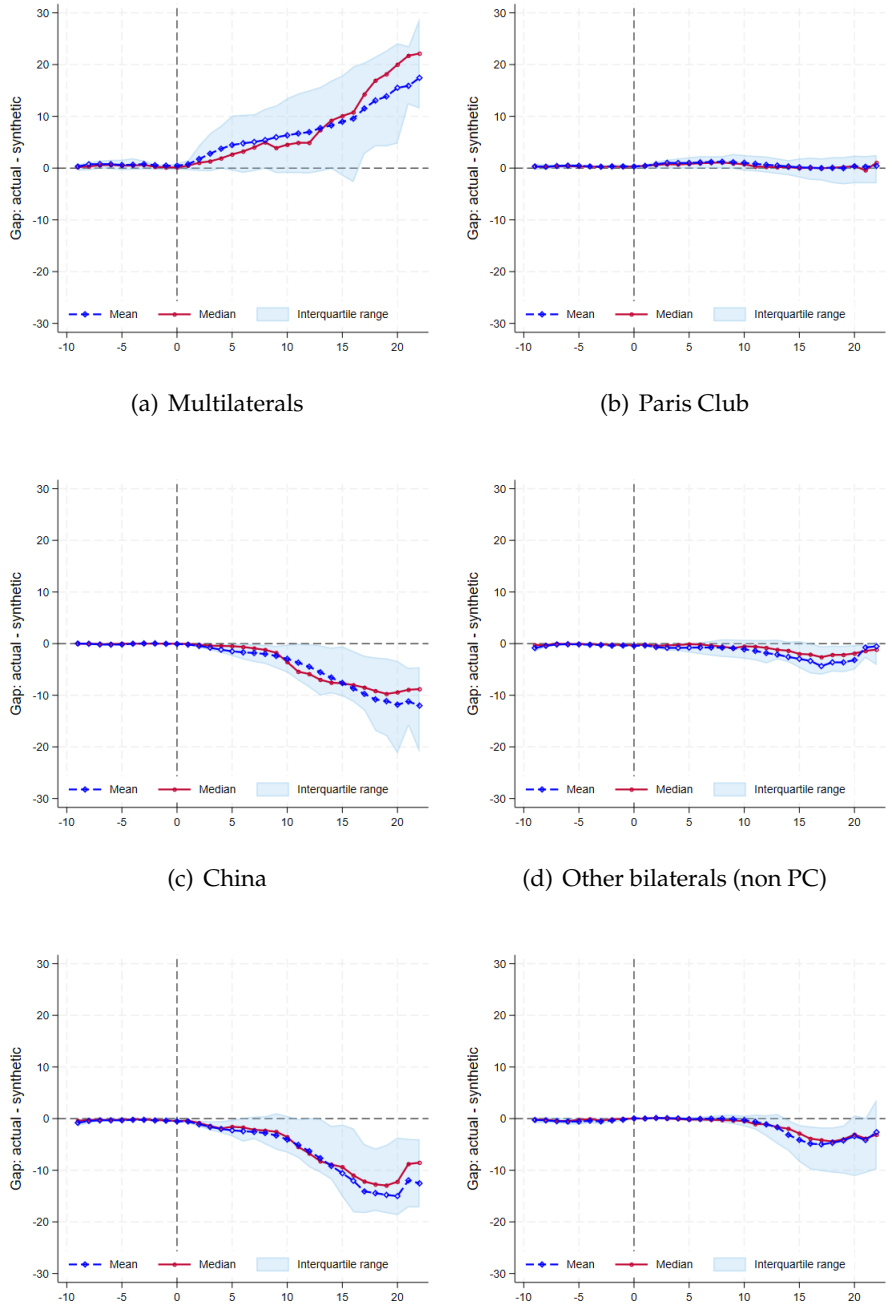
(d) Other bilaterals (non PC)

(e) China and other bilaterals (non PC)

(f) Private creditors and bondholders

Notes: Each panel plots the difference between the actual net flows by a specific creditor and those of the respective synthetic control (gap). The in-space placebo considers as treated the 16 DSSI-eligible countries that are not eligible for the HIPC Initiative: Angola, Bangladesh, Bhutan, Cabo Verde, Fiji, Kenya, Lao PDR, Lesotho, Nepal, Nigeria, Pakistan, Papua New Guinea, Samoa, Solomon Islands, Tonga, and Vanuatu. The synthetic controls are built matching these treated countries with those in the donor pool (i.e. the original donor pool excluding the country which is treated) on past net flow and key macro characteristics, see Section 3. The solid line is the median value of the gaps in the sample; the dashed line is the average. The shaded area indicates the interquartile range. The vertical line corresponds to year 2000, the decision point for most HIPCs. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

Figure A2: Robustness: Net flows post HIPC initiative, by creditor type, dropping macroeconomic controls



(a) Multilaterals

(b) Paris Club

(c) China

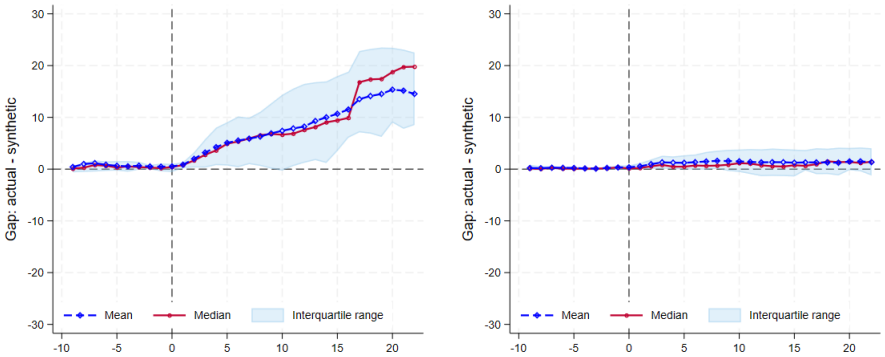
(d) Other bilaterals (non PC)

(e) China and other bilaterals (non PC)

(f) Private creditors and bondholders

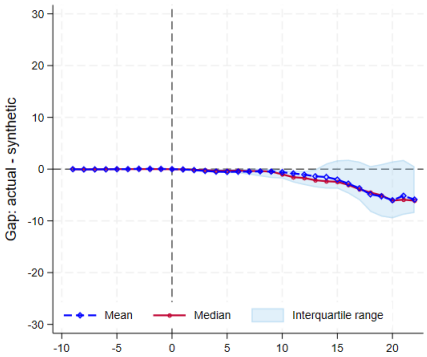
Notes: Each panel plots the difference between the actual net flows by a specific creditor and those of the respective synthetic control (gap). The synthetic controls are built matching treated countries with those in the donor pool only on past net flow, see Section 3. The solid line is the median value of the gaps in the sample of HIPCs; the dashed line is the average. The shaded area indicates the interquartile range. The vertical line indicates the country-specific HIPC decision point. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

Figure A3: Robustness: Net flows post HIPC initiative, by creditor type, dropping small island states from the donor pool

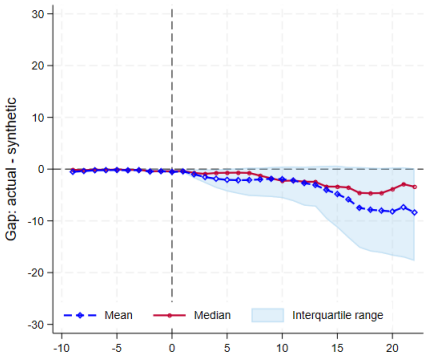


(a) Multilaterals

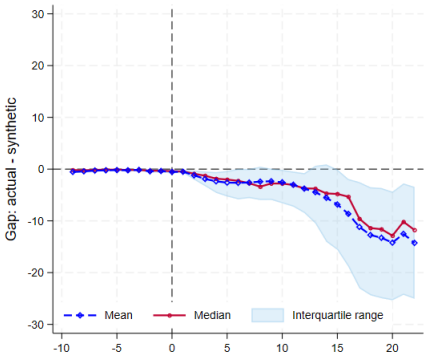
(b) Paris Club



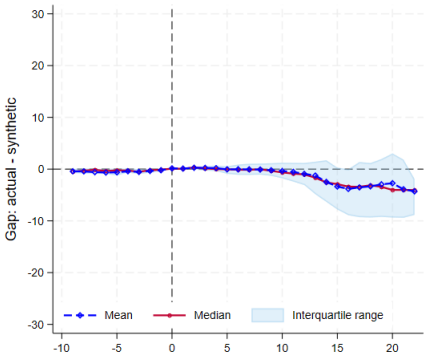
(c) China



(d) Other bilaterals (non PC)



(e) China and other bilaterals (non PC)



(f) Private creditors and bondholders

Notes: Each panel plots the difference between the actual net flows by a specific creditor and those of the respective synthetic control (gap). The synthetic controls are built matching treated countries with those in the donor pool on past net flow and key macro characteristics, see Section 3. The donor pool excludes small island states. The sample of treated countries is made by 29 HIPCs, as the SCs for Burundi and Guinea-Bissau are not available with this sample. The solid line is the median value of the gaps in the sample of HIPCs; the dashed line is the average. The shaded area indicates the interquartile range. The vertical line indicates the country-specific HIPC decision point. Net flows are 3-year moving averages scaled by the recipient country's GDP.
Sources: International Debt Statistics (The World Bank); World Development Indicators (The World Bank); and authors' calculations.

PUBLICATIONS

The HIPC Initiative and China's Emergence as a Lender: *post hoc* or *propter hoc*?

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