REVIEW OF INTERNATIONAL POLITICAL ECONOMY, 2018
https://doi.org/10.1080/09692290.2018.1455600

Routledge
Taylor & Francis Group

Sovereign lending after debt relief

Jonas B. Bunte

School of Economic, Political and Policy Sciences, University of Texas at Dallas, Richardson, TX, USA

ABSTRACT

Debt relief has been controversial due to its potential to reward irresponsible behavior by debtor governments. Recently, however, observers note that debt relief might also induce irresponsible behavior by creditor governments. A collective action problem might exist, where creditor governments target new loans to developing countries that just received debt relief from a different creditor. I investigate if debt relief affects decisions by creditor governments to provide new loans. Additionally, I analyze which types of creditor governments are more likely to lend to recipients of debt relief. I find that China and other emerging creditors are *not* more likely to lend to recipients of debt relief than western creditor governments. Instead, creditor governments of smaller economies are more likely than those of larger economies to free-ride on debt relief provided by other lenders. If states lend to gain influence, larger lenders will typically crowd out smaller creditors. However, if a debtor state just received debt relief and is therefore viewed as a greater risk, small creditors may see an opportunity to gain influence by providing a loan that no other state wants to provide.

KEYWORDS Government-to-government loans; bilateral lending; debt relief; BRICs; collective action problems; free-riding

Introduction

Since 1990, western governments have provided developing countries with US$434 billion in government-to-government loans. However, about a quarter of these loans – US$111 billion – were subsequently cancelled.[1] Moreover, of the 125 governments that received bilateral loans, 112 countries have benefitted from bilateral debt relief, implying that 90% of debtor governments have received debt relief. In contrast to *default*, where a debtor government refuses to repay loans, *debt relief* is a voluntary action controlled by creditor governments. While debtor governments can petition for debt relief, it is at the creditor's discretion if, and how much, debt to cancel. This implies that debt relief is a conscious political act by creditor governments.[2]

Against this background, western governments have been concerned about the rise of new creditors: bilateral lending by China, India, Russia and Brazil (BRICs) has increased significantly since 1990, resulting in a cumulative US$144 billion in government-to-government loans. Western politicians have been concerned with a possible connection between debt relief granted by western governments and new loans

CONTACT Jonas B. Bunte bunte@utdallas.edu
Supplemental data for this article can be accessed at https://doi.org/10.1080/09692290.2018.1455600.

extended by emerging creditors. 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 Steinbrück argued that Chinese loans undermine western creditors' efforts to help developing countries achieve a sustainable level of debt: BRIC creditors looking to increase their influence could step in where western governments have provided debt relief.

In light of these arguments, my research question is straightforward: do creditor governments target loans to recent recipients of debt relief? In other words, does debt relief enter into the decision-making calculus of creditor governments as they are deciding whom to offer loans? Furthermore, are there some creditor governments – such as BRICs – that are more likely to lend to recipients of debt relief?

Existing literature suggests that coordination problems among creditors are possible. Krugman (1988), Williamson (1989) and Cline (1995) identify that private creditors might try to benefit from debt reductions granted by other private creditors. This has spawned a substantial literature on mechanisms preventing such behavior, such as incorporating collective action clauses in bond contracts (Eichengreen & Mody, 2004; Gelpern & Gulati, 2013; Ghosal & Thampanishvong, 2013; Kletzer, 2003). This literature is focused on *private* creditors, while the quotes by Sarkozy and Steinbrück point to the possibility of free-riding by *creditor governments*.

No study, to my knowledge, has examined how debt relief might shape the decisions of creditor governments to provide loans. Existing literature, however, offers three plausible motives explaining why creditor governments might lend to recipients of debt relief. First, China, Russia, India and Brazil might not feel bound by 'western' norms about appropriate behavior in the context of development assistance. We know that BRIC governments pursue a different development philosophy than western creditors (Brautigam, 2011; Mwase & Yang, 2012). If BRICs do not feel bound by western norms of debt sustainability (Kragelund, 2008; Sato, Shiga, Kobayashi, & Kondoh, 2011), it is possible that they have no qualms about targeting new loans to recipients of debt relief. Therefore, I test whether BRIC lenders might be more willing than western creditor governments to exploit debt relief by others. A second possibility points to the argument that creditor governments lend to gain political influence. For example, Bunte and Kinne (2018) show that governments seek influence by lending to strategically important countries, while Kinne and Bunte (in press) find that bilateral loans facilitate military cooperation by debtors with creditor countries. If states lend to gain influence, smaller economies will be crowded out by larger economies. However, if a debtor state just received debt relief and is thus viewed as a greater risk, small creditors may see an opportunity to gain influence by providing a loan that no other state wants to provide. Thus, I test if smaller creditors are more willing to lend to recipients of debt relief than larger creditors. Third, sovereign creditors lending to recipients of debt relief might pursue economic objectives. Bilateral loans have been found to promote trade between creditor and debtor countries (Badinger & Url, 2013; Felbermayr & Yalcin, 2013). Lending to recipients of debt relief might thus boost creditor exports. Accordingly, I test whether governments of countries with strong export sectors might be particularly likely to lend to countries that just received debt relief.

I examine these three hypotheses empirically. The findings do not support the argument that BRIC and western creditor governments differ in their lending to recipients of debt relief. Similarly, I do not find support for the argument that governments of

countries with strong export sectors respond to debt relief. I do find strong evidence, however, that governments of small creditor countries are more likely to provide loans to recipients of debt relief than governments of large nations. Several robustness tests indicate that this finding is likely the result of countries lending for influence.

My findings have important implications. Numerous scholars and policy-makers have noted that debt relief granted by western governments and institutions has not resulted in a significant reduction of developing countries' debt levels (Easterly, 2001, 2002). In explaining this phenomenon, scholars have primarily focused on the demand-side: debtor governments might be plagued by moral hazard problems as they might have the incentive to borrow 'too much' in anticipation of future debt relief (see Bulir, Rodrguez-Delgado, & Romero-Barrutieta, 2011). However, the arguments by the French President and German Finance Minister presented above suggest that the supply-side might also play a role. Debt relief might result in new loans not only because borrowers demand loans, but also because creditors want to provide them. If debt relief is to achieve its intention to improve lives in developing countries, we need to examine not only what debtor governments can do better to serve their populations, but also the ways in which creditor governments can improve their behavior.

Debt relief and new loans

Debtor governments gain economic and political benefits from borrowing. Regarding economic benefits, borrowing can produce a tax-smoothing effect that is more conducive to investment than alternative fiscal policies (Schultz & Weingast, 2003). In addition, borrowing can provide macroeconomic stability, as revenue projections become more predictable (Reinhart, Rogoff, & Savastano, 2003). Regarding political benefits, borrowing allows politicians to lower tax rates and increase spending (McDonald, 2009). Similarly, conditions attached to loans can have positive distributional consequences for core constituencies (Bunte, 2018b). As a result, key voters will be less inclined to oppose government policy. Borrowing thus strengthens the stability of governments (Morrison, 2014) and increases the likelihood of leader survival in office (DiGiuseppe & Shea, 2016). In addition, rulers who do not have to depend on their citizens for tax revenue have a freer hand in enacting policy. For example, Shea (2013, 2016) shows that sovereign credit can be used to increase military power spending.

Creditor governments also receive political and economic benefits from lending. Political benefits include political influence in strategically important countries (Bunte & Kinne, 2018). For instance, bilateral loans can 'purchase' goodwill on part of the recipient country, resulting in increased military cooperation between creditor and debtor countries (Kinne and Bunte, in press). Creditor nations also receive economic benefits. Bilateral loans can promote trade between creditor and debtor countries by providing financing for projects in recipient countries, which subsequently use parts and labor from companies located in creditor nations (Badinger & Url, 2013; Bunte, 2018a; Bunte, Desai, Gbala, Parks, & Runfola, 2018; Felbermayr & Yalcin, 2013).

Debt relief might affect both debtor governments' decision to seek new loans as well as creditor governments' judgment to offer new loans. Regarding debtors, Easterly (2002) argues that moral hazard issues might be at play: debt relief might provide governments with incentives to borrow, expecting that this debt will be forgiven in the future. 'There will be an amount of new borrowing corresponding to the amount of debt relief, until the old ratio of net worth to GDP is restored' (Easterly, 2002, p. 1680).

Subsequent research has largely followed this line of argument. Bulir et al. (2011) show that excessive debt accumulation is consistent with an anticipation of future debt relief. Arslanalp and Henry (2006) argue that debt relief initiatives will fail if the underlying lack of strong institutions constraining 'bad' politicians and preventing irresponsible borrowing choices is not addressed. Chauvin and Kraay (2007) show that the decision on which country gets debt relief is mainly driven by country characteristics. Since debt relief in itself does not change these characteristics, debtors are likely to continue with their previous borrowing patterns. Similarly, Koeda (2008) argues that the development of debt overhang is a result of country characteristics that are not directly addressed with debt relief.

Regarding creditors, scholars point to coordination problems. A large literature suggests that private creditors – bond holders and commercial banks – face free-rider problems (Cline, 1995; Pitchford & Wright, 2012; Williamson, 1989). For example, a country's debt level might be too large to be repaid in full. Such debt overhang can lead to suboptimal decisions by both the country and its creditors. Debtor governments, for example, might have little incentive to make investments that increase growth if creditors are able to extract the bulk of any future increase in revenues. Following Krugman (1988), this problem can be removed if creditors writedown their debt to the level where the country retains enough of the extra income to be persuaded to make the investment, but still leaves creditors with a more valuable settlement. If creditors cannot coordinate in writing down their debts, individual banks and bondholders have an incentive to free ride on the write-downs of other creditors (Cline, 1995). To address this problem, scholars have suggested the use of collective action clauses whereby a qualified majority of bondholders can bind all bondholders to the financial terms of a sovereign debt restructuring. Theoretical work shows that such clauses might result in increased creditor coordination (Ghosal & Thampanishvong, 2013; Kletzer, 2003). However, empirical work questions their effectiveness (Gelpern & Gulati, 2013; Weinschelbaum & Wynne, 2005).

This literature is focused on *private* creditors, while the quotes by Sarkozy and Steinbrück point to the possibility of free-riding by *creditor governments*. While excellent work examines the effect of official debt relief on growth (Arslanalp & Henry, 2006; Johansson, 2010; Reinhart & Trebesch, 2016), to my knowledge, no study has examined how debt relief might shape decisions of creditor governments to provide loans.

How debt relief affects new lending

For debt relief to affect new lending, governments must be aware of debt relief efforts by other creditor countries. There is strong evidence that this is the case. First, some bilateral debt relief is arranged within the Paris Club, often in conjunction with multilateral debt relief initiatives by the World Bank and IMF. If members of the Paris Club agree to provide debt relief to a particular country, these agreements are public knowledge. However, implementing Paris Club agreements still requires individual bilateral debt relief agreements between each member and the recipient country. Having signed an Agreed Minute with the Paris Club, the debtor country negotiates bilateral agreements with each Paris Club creditor government. As individual creditor governments might not follow up on their commitments, governments try to observe if their counterparts have made true on their promises. For example, upon signing an individual debt relief agreement with the government of Sierra Leone (by which the USA fulfilled

its promises to the Paris Club), the US Embassy asked the recipient representatives whether other creditors also met their pledges:

> He said the Government of Sierra Leone has over the last three months concluded similar agreements with the Governments of Austria, Belgium, France, Germany, Italy, and Norway, and was in the process of finalizing debt relief agreements with Japan, the Netherlands and the UK.[3]

In short, creditors are well aware of bilateral debt relief provided in the context of coordinated relief efforts.

Second, creditor governments also provide bilateral debt relief above and beyond commitments made in the Paris Club. Between 1990 and 2013, 112 debtor governments benefitted from bilateral debt relief, while only 35 countries received debt relief in the context of a multilateral debt relief initiative. Anecdotal evidence suggests that creditor governments also observe these instances of debt relief.

However, why should debt relief by other governments provide creditors with the incentive for new lending? I argue that this relates to the non-exclusionary and indivisible nature of benefits that debt relief provides to creditors. First, debt relief provides material benefits to all creditors: debt relief can address the phenomenon of 'debt overhang' (Krugman, 1988). Debt overhang suggests that developing countries do not pursue investment opportunities if the returns from any additional investment are expected to be absorbed by debt service obligations. Empirical analyses confirm an inverse U-shaped relationship: investment opportunities for both domestic and foreign firms expand with increases in debt from low to intermediate levels but decrease thereafter (Arslanalp & Henry, 2005; Deshpande, 1997). By providing debt relief, creditor governments can help create new investment opportunities in the debtor nation, which in turn may result in contracts for private companies from the creditor countries. Note that these benefits of increased investment opportunities, in principle, benefit *all* creditors, be it directly through investment contracts or indirectly via higher global growth.

Second, debt relief also helps contain material losses to creditors. For instance, creditors would like to avoid debt crises, as these are costly for its citizens that own assets and investments in the debtor nation (Copelovitch, 2010). In addition, creditors are concerned about contagion effects that occur when a debt crisis spreads from one country to the next. The more countries are affected, the higher the expected costs of bailout. Creditors may prefer providing debt relief to individual countries ahead of time instead of bailing out multiple debtor governments at a later stage. Examples include debt relief provided to Greece to prevent the contagion to Ireland, Portugal, Spain and Italy (Bouvet, Brady, & King, 2013). Again, note that the benefits of preventing debt crises and subsequent bailouts accrue to *all* creditors.

In sum, the costs of debt relief will be borne only by those creditors providing debt relief. However, the benefits of debt relief – increased investment opportunities and the lack of contagion – accrue to all creditors, irrespective of whether a particular creditor has itself provided debt relief. Therefore, debt relief might be characterized as a public good for creditors. If this is the case, individual creditors may have incentives to free-ride on debt relief provided by other creditors by providing loans to debtor governments that just received bilateral debt relief by other creditors. The quotes by Sarkozy and Steinbrück suggest that this is a possibility. For this reason, it is worth examining which types of creditor governments are most likely to provide loans to recipients of debt relief.

Western versus non-western creditor governments

It is possible that western and emerging creditor governments differ in their likelihood to lend to recipients of debt relief. Specifically, governments of Brazil, Russia, India, and China (BRICs) might be more likely to free-ride on debt relief than western creditors for both normative and institutional reasons.

Western rhetoric suggests a strong norm underpinning debt relief efforts: 'It simply is unjust for rich countries to try to collect on the debts owed to them by countries that are desperately poor' (Chauvin & Kraay, 2005, p. 1). Jeffrey Sachs noted that 'No civilized country should try to collect the debts of people that are dying of hunger and disease and poverty.'[4] Western creditors might feel bound by a mutual humanitarian motive. This shared understanding might be the result of sheer conviction that 'this is the right thing to do;' alternatively, this norm might operate through pressures exerted from domestic constituencies or through a process of socialization of repeated cooperation with other western creditors. Whichever process enforces this norm, its presence might incentivize western governments to not undermine the intended effect of debt relief by providing new loans to recipients of debt relief. In contrast, scholars have argued that BRICs' view of debt sustainability differs from that of western creditors. BRICs tend to focus on the micro-sustainability of individual projects where, for example, a loan to support railway investment would be expected to increase the recipient's ability to repay loans. In contrast, western creditors pay greater attention to long-run debt sustainability by taking into account macroeconomic linkages (Mwase & Yang, 2012; Reisen & Ndoye, 2008). Furthermore, China's loans are less sensitive to poverty conditions as well as resettlement issues, land tenure rights and women's role in production (Brautigam, 2011, p. 761). Similarly, BRICs explicitly tie their loans, which require borrowers to purchase goods and services from Chinese companies. Kragelund (2008) notes that this stands in sharp contrast to principles agreed to by western creditors in the context of the Development Assistance Committee (DAC). For these reasons, the norms of western and BRIC creditors might indeed differ.

Second, western creditor governments are organized within a formal institutional environment. Examples include the DAC working group within the OECD and the Paris Club. They have signed the Paris Declaration and Accra Agenda for Action and thus accept a regular peer review by other DAC members to ensure compliance (Ben-Artzi, 2017). Such institutions facilitate monitoring and enforcement of shared norms. Given these institutional constraints, western creditors might refrain from lending to recipients of debt relief. While all BRICs have endorsed the Paris Declaration, they perceive that their endorsement of the Paris principles is in their capacity as recipients of aid (Chaturvedi, 2008). As a result, they do not submit their actions to regular peer review by the DAC (Ben-Artzi, 2017). Furthermore, BRICs have argued that the current multilateral system does not offer them a voice in the process (Mwase & Yang, 2012, p. 9). Thus, they have not committed themselves to align their aid efforts with the DAC's principles and regulations. The absence of 'collective institutions for self-restraint' provides BRIC creditors with 'a certain level of freedom to pursue their own short-term national interests' (Sato et al., 2011, p. 2097). Lacking shared norms and institutional constraints, non-western creditors might indeed be more likely to lend to governments that just received debt relief.

Hypothesis 1 *BRIC creditor governments are more likely to lend to recipients of debt relief than western creditor governments.*

Lending by governments of small versus large economies

Existing scholarship indicates that governments provide monetary transfers to gain political influence. Such transfers can result in concessions within the recipient country (de Mesquita & Smith, 2007, p. 254). For example, Bunte and Kinne (2018) show that creditor governments target their loans to gain influence in strategically valuable countries. Bilateral loans can also induce the recipient government to cooperate with the creditor on security issues (Kinne and Bunte, in press). In addition, bilateral loans allow creditors to gain influence in international settings. For example, the related literature on foreign aid suggests that such financial transfers can 'buy' votes in the United Nations general assembly. This effect has been identified with both US aid (Carter & Stone, 2015; Kuziemko & Werker, 2006) as well as Chinese aid (Strüver, 2016).

How does debt relief factor into creditors' search for influence? If states lend to gain influence, smaller economies will typically be crowded out by larger economies. However, a debtor state that just received debt relief is likely viewed as a greater risk. After all, while debt relief may not send a signal as negative as an all-out default, there are likely some reputational costs (Tomz & Wright, 2012). In this context, small creditors may see an opportunity to gain influence by providing a loan that no other state wants to provide. In other words, small creditors are more risk-acceptant than larger creditors precisely because their efforts to gain influence are typically thwarted by the larger creditors. Debt relief provides a window of opportunity for these creditors to lend for political influence without interference by larger creditors governments. In addition, the aversion of lending by larger economic states may be exacerbated if they were directly involved in the debt relief negotiations. This is indeed likely, as data suggests that larger creditor governments provide debt relief more often than smaller creditors. Between 2004 and 2013, creditor governments with below-mean GDP provided debt relief in 351 instances, while abovemean creditors provided debt relief in 1156 cases.

Anecdotal evidence suggests that such dynamics may be at play. For example, in the 2000s, Angola received no debt relief, but obtained loans from creditors of different sizes. Angola's list of creditors includes smaller creditors such as Belgium, Italy, Korea and India, as well as larger creditors such as Germany, the UK, the USA and China. During the same time period, neighboring Zambia exhibits a different pattern. In contrast to Angola, Zambia did receive bilateral debt relief from Austria, Canada, France, Germany, Italy, Japan, the UK and the USA. However, it received loans only from small creditors – Belgium, Brazil and India – but no loans from larger creditors. Nigeria might be an even better example as it is similarly oil-rich as Angola. During this time period, Nigeria received debt relief from Belgium, Finland, France, Germany, Italy, Japan, the Netherlands, Switzerland, and the UK – and at the same time received loans from Spain.

Hypothesis 2 *Creditor governments of small countries are more likely to lend to recipients of debt relief than creditor governments of large countries.*

Creditor governments of export-versus import-nations

A third argument focuses on whether a creditor country's industry produces for the domestic or export markets. The German economy, for example, depends on the availability of export markets, while the US economy focuses on the domestic economy. Bilateral loans can help companies from exporter nations to find business abroad. Export Credit Agencies (ECAs) have the explicit mandate to promote exports to recipient countries. ECAs provide loans to developing countries under the condition that the

loans must be used to purchase goods and services from private companies in the creditor country. Loans thus shape trade flows in favor of the creditor (Bunte, 2018a). In fact, ECAs are associated with about 9% of world trade (Badinger & Url, 2013) and have a strong positive effect on exports from creditor countries to debtor countries (Felbermayr & Yalcin, 2013). Recipients of debt relief might be attractive partners for ECAs, as debt relief has renewed their capacity for new borrowing. For example, China recently announced the 'One Belt, One Road' initiative, which provides the Export–Import Bank of China with resources to provide bilateral loans for infrastructure projects in South-East Asia, the Middle East and Central Asia. The intention is to 'help support China's weakening economy,' as 'the majority of foreign construction projects will most likely be undertaken by Chinese companies.'[5]

Hypothesis 3 *Creditor governments of economies dependent on export markets are more likely to lend to recipients of debt relief than creditor governments of inward-oriented economies.*

Method and data

Estimating creditor and debtor decisions simultaneously

I test these hypotheses with data on bilateral loans. However, these data have three challenging characteristics: First, whether I observe a loan is a function of two decisions, that of a creditor and a debtor government. Thus, I need a two-equation approach that captures the fact that participation depends on decisions made both by the creditor and debtor governments. Second, a bilateral loan is only observed if both the creditor wants to lend *and* the debtor wants to borrow. If I do not observe a loan, I do not know whether the creditor, the debtor, or both rejected a loan. If my methodological approach does not account for this partial observability, the analysis might be prone to selection bias. Finally, the two selection decisions by the creditor and debtor governments are likely correlated; after all, bilateral loans are the result of negotiations between the two parties. My modeling approach thus needs to estimate these decisions simultaneously while taking account of cross-correlations across equations.

I estimate a bivariate probit model with partial observability. This model estimates the likelihood of a new loan as a function of two equations (bivariate), one for debtors and one for creditors; it estimates the likelihood of a new loan resulting from the two actors (probit with partial observability); and it allows for the two equations to be correlated. The dependent variable is a binary indicator of whether a loan agreement was signed between a creditor and debtor government. I model this variable as the product of two decisions: d_{it}^{C}, the creditor government's decision to offer a loan, and d_{it}^{D} the debtor government's decision to request a loan. The creditor's motivation to offer a loan is captured by the following latent equation:

$$d_{it}^{C*} = X_{it}^{C}\beta^{C} + \epsilon_{it}^{C} \tag{1}$$

while the debtor government's incentive to request a loan is

$$d_{it}^{D*} = X_{it}^{D}\beta^{D} + \epsilon_{it}^{D} \tag{2}$$

The probability of observing $z = 1$ is the probability that both latent variables are positive, where the disturbance terms ϵ_{it}^{C}. ϵ_{it}^{C} are clustered by creditors, and allowed to correlate across equations with correlation ρ. Assuming that Φ is the bivariate standard normal distribution, then the probability of a new bilateral loan is

$$p_i = \Phi(X_{it}^{C}\beta^{C}, X_{it}^{D}\beta^{D}) \tag{3}$$

Importantly, the model allows for calculating the predicted probability that a creditor wants to extend a loan while simultaneously accounting for debtor behavior. Note that I estimate debt relief and new loans concurrently: The examples above indicate that governments are well aware of impending debt relief and thus can act quickly and without a lag. Similarly, I do not incorporate a selection process, because Freytag and Pehnelt (2009) find that debt relief is not systematically related to level of indebtedness, the degree of poverty, presence of natural resources or governance quality. This is not surprising considering the large number of countries that has received debt relief.

Operationalization of key concepts

I test the hypotheses with data for 97 countries between 2006 and 2013, as data for bilateral loans and bilateral debt relief are available for this period. As we observe $z = 1$ only if $d_{it}^{C} = 1$ *and* $d_{it}^{D} = 1$, the outcome is operationalized as a binary variable indicating a loan agreement signed by both creditor and debtor. I consider lending by 27 OECD governments as well as Brazil, Russia, India and China.

Creditor equation

Identification requires two different sets of variables in the two equations. For the creditor equation, the key independent variable explaining new loans by creditor i is a binary indicator of debt relief granted by any number of other creditors j, except i.[6] Thus, the indicator equals 1 if i has not provided debt relief while at least one of the creditors j has granted relief to a particular recipient, and zero otherwise. As noted in the Introduction, bilateral debt relief between 1990 and 2013 amounts to US$111 billion, while multilateral institutions provided a total of US$27 billion over the same period. Similarly, while 112 debtor governments benefitted from bilateral debt relief, only 35 countries have received multilateral debt relief. Considering these differences in volume and coverage, I focus on the effects of bilateral instead of multilateral debt relief.[7]

I test H1, H2 and H3 by interacting debt relief with three variables. To test H1, I interact debt relief with a binary indicator differentiating between OECD and BRIC creditors. An interaction between debt relief and creditor GDP (constant US$) tests H2. For H3, I interact debt relief with the creditor exports of goods and services as a percentage of GDP. All economic variables come from the World Development Indicators.

I include three sets of control variables accounting for creditors' decision to provide a loan. First, I account for the attractiveness of potential loan recipients. I include a dummy indicating whether the debtor has defaulted and the debt crisis is not yet resolved (Reinhart & Rogoff, 2009). Furthermore, creditors might favor lending to

democracies as their domestic constituency dislikes financial transfers to autocracies (Milner & Tingley, 2013). I consequently include debtors' polity score. Creditor governments are also concerned with the likelihood of repayment (Schultz & Weingast, 2003), which is why I control for the debtors' average sovereign debt rating assigned by the rating agencies Standard and Poor, Moody's and Fitch. Potential borrowers with natural resources might be particularly attractive, which is why I control for debtors' natural resource exports. Chinese lending guided by the need for natural resources may be an example (see Economy & Levi, 2014). The second set of controls accounts for creditor-specific considerations. Domestic constituencies may wonder whether their government should spend resources domestically rather than lending them to foreigners (Milner & Tingley, 2013). Thus, I control for creditors' current account balance as a percentage of GDP to capture whether creditors have resources available for bilateral lending. Following Copelovitch (2010), I include the claims private banks from creditor *i* have in debtor country *k* as *i*'s government might be inclined to lend to *k* in order to bail out its private banks exposed in that country. The data are from the Bank for International Settlements. The third set consists of methodological controls: I follow de Mesquita and Smith (2007, p. 254) and I include the distance between capital cities to account for possible spatial considerations. I also include year-fixed effects.

Debtor equation

From the debtor's perspective, the most prominent explanation for new loans after debt relief concerns moral hazard: governments might borrow in expectation of future debt relief, and thus not have the intention to repay when signing new loan agreements. However, measuring debtors' propensity for moral hazard is challenging, as it is private information unavailable to creditors at the time of the agreement. For this reason, the propensity for moral hazard cannot be captured by debtors' credit ratings.

Instead, I include the value of missed payments on debt due *in the future*. In other words, I proxy for the debtor's propensity for moral hazard with the forward lagged dollar value of arrears on debt due. I assume two types of governments: 'good' governments will start repaying loans after debt relief, while 'bad' governments borrow without regard for future repayment. The debtor knows its type at the time of the loan agreement, but the debtors' type will be revealed to the creditor only in future periods. Controlling for economic conditions, a government falling behind on repaying loans in the future is likely to have been the 'bad' type at the time of the loan agreement. Therefore, I include an interaction between current debt relief and future arrears to account for debtors' propensity for moral hazard.

In addition, I include four sets of control variables that might explain debtors' propensity to seek a loan. First, the debtors' current economic climate might shape the likelihood that a government seeks a bilateral loan. Thus, I control for debtors' GDP growth and its current account balance as a percentage of GDP as countries may be in greater need for new loans during bad economic times (Panizza, Sturzenegger, & Zettelmeyer, 2009, p. 667). Second, before deciding to request a loan, a debtor government is likely to form expectations concerning the potential loan volume and price. Data on the characteristics of potential loan offers are unavailable. However, a creditor's loan offer to a specific debtor will likely resemble loan offers that similar borrowers have accepted from this creditor. Therefore, I estimate two separate regressions explaining loan volume and loan price for each creditor–debtor dyad. The predicted

values from these regressions are included as controls to account for the characteristics of potential loan offers. The third set of controls accounts for domestic politics in the debtor country, which might shape the likelihood of requesting a loan. I include the debtor's polity score as the need for external resources to stabilize the political regime might differ across democracies and autocracies (DiGiuseppe & Shea, 2016; Morrison, 2014). Furthermore, the executive party orientation (right, left, center) matters, as the ideology of leaders likely shapes the expected need for spending. In addition, the margin of majority by which the executive party won the past election determines the ease with which leaders can implement their preferred policies (McDonald, 2009). Finally, I include year-fixed effects.

Findings

I test H1, H2 and H3 with three separate bivariate probit models that differ only in the interaction terms accounting for variation across creditors.[8] I then calculate the predicted probability of a loan offer by a creditor *i* to debtor *k* for two scenarios: in the first, loan recipient *k* has not received any debt relief; in the second, loan recipient *k* has received debt relief from at least one creditor *j* with $j = i$.

Hypothesis 1 suggests that the governments of non-western countries are more likely to lend to recipients of debt relief than western creditor governments. The findings do not support this hypothesis: Figure 1 shows that there is no significant difference in the likelihood of loan offers by western and non-western creditors to recipients of debt relief. Moreover, there is no significant difference between the likelihood of loans to recipients of debt relief and those that did not receive debt relief.

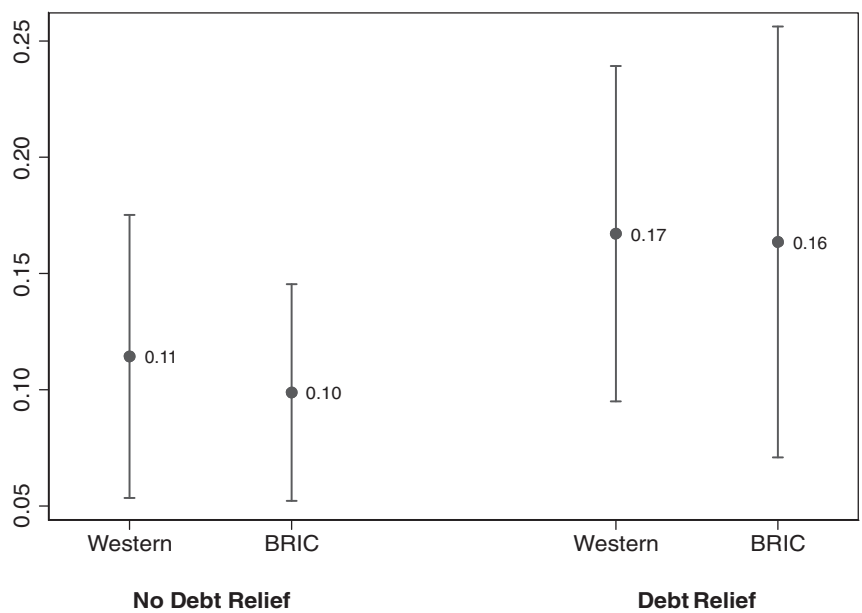

Figure 1. Predicted probability of loans by western and non-western creditors.
Note: The figure shows that there is no significant difference in the likelihood of loan offers by western and non-western creditors to recipients of debt relief.

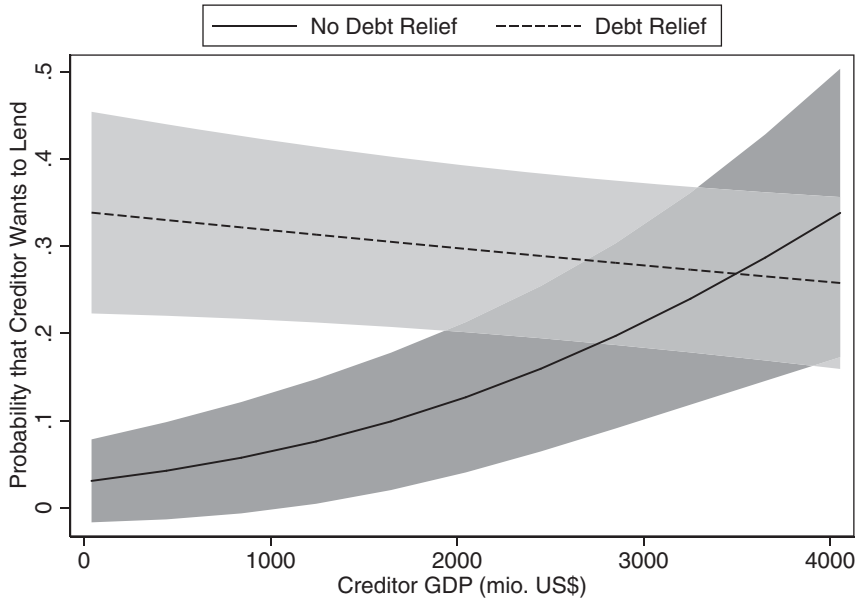

Figure 2. Predicted probability of loans by size of creditors.
Note: The figure illustrates that small creditors are more likely to lend to recipients of debt relief than large creditors.

In contrast, Hypothesis 2 suggests that creditor size might matter. In particular, small creditors might be more inclined to free-ride on debt relief than large creditors. Figure 2 provides strong evidence in support of this hypothesis.[9] Creditor governments of small economies are significantly more likely to lend to a recipient that has received debt relief than to an otherwise identical recipient without debt relief. This difference in predicted probabilities diminishes and eventually becomes statistically insignificant with increasing size of creditor governments. This finding supports Hypothesis 2.

Finally, smaller countries tend to be more economically open, it might be the case that creditor size just proxies for the degree of export activity. Hypothesis 3 thus focuses on governments of countries whose industry is geared primarily towards exports, suggesting that they are more likely to lend to recipients of debt relief to create export opportunities for domestic firms. The findings, however, do not support this hypothesis: Figure 3 shows that the likelihood of lending to a recipient of debt relief does not differ between a creditor government of export-oriented economies and those that are not reliant on exports. In fact, the large confidence intervals for highly export-oriented economies suggest that this independent variable is a poor fit for the data. Moreover, there is no significant difference in the probability to lend to recipients of debt relief versus borrowers that have not received debt relief.

In sum, the findings provide strong evidence in favor of Hypothesis 2, while Hypotheses 1 and 3 obtain little support. This suggests neither creditors' non-western identity nor their dependence on export markets provide incentives for governments to lend to recipients of debt relief. Instead, small countries are likely to free-ride on bilateral debt relief granted by other creditor governments.

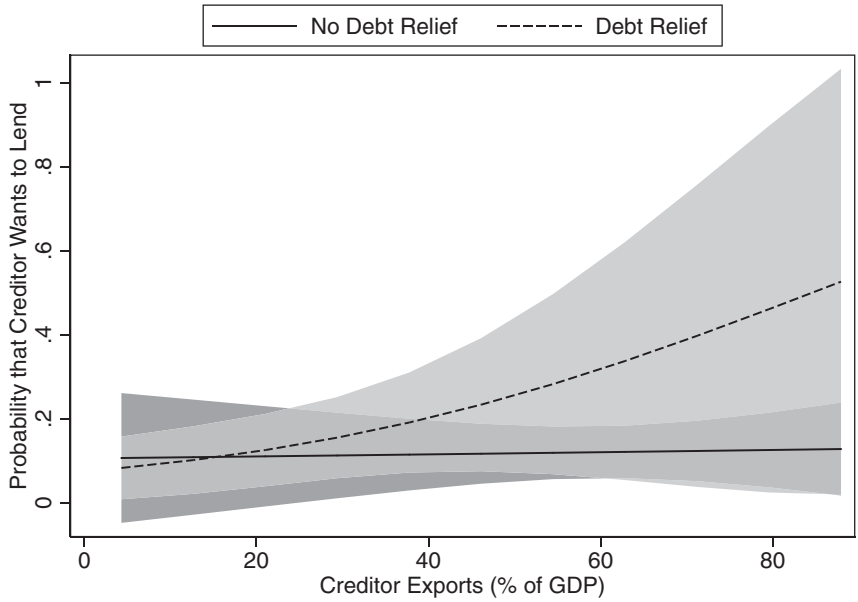

Figure 3. Predicted probability of loans by degree of export dependence.
Note: The figure illustrates that the likelihood of loans to recipients of debt relief does not differ significantly with the creditors' degree of export dependence.

Robustness tests

I conduct several robustness tests to ensure that the interpretation of the findings above is consistent with the hypothesis of creditors lending for influence.

Bilateral versus multilateral debt relief

The analysis so far has focused on the effect of bilateral debt relief provided by other creditor governments on new government-to-government loans. To be sure, bilateral debt relief is at times provided in coordination with multilateral debt relief initiatives. However, bilateral relief exceeds multilateral relief in both the number of debt relief recipients (112 versus 35 countries) and the amount forgiven (US$ 111 billion versus US$ 27 billion).

In contrast to bilateral debt relief, I expect that lending for political influence is not possible after multilateral relief. First, individual creditor governments cannot avoid participating in debt relief in the first place. With bilateral debt relief, creditor i may free-ride by lending to recipients of debt relief provided by creditor $j \neq i$; in contrast, all potential creditor governments are themselves members of the World Bank and IMF and thus co-fund multilateral debt relief. Thus, with multilateral debt relief creditor i would lend to a recipient of debt relief which i, in part, funded itself via its contributions to multilateral institutions. This precludes the possibility of free-riding. Second, consequences of multilateral debt relief should be better monitored given the publicity of such initiatives and the monitoring capacities of the World Bank and IMF. Thus, attempts to free-ride on multilateral debt relief should be easily detected, and are likely to carry heavy reputation costs. Finally, to obtain debt relief via the 'Highly Indebted Poor Country' (HIPC) initiative or the 'Multilateral Debt Relief Initiative'

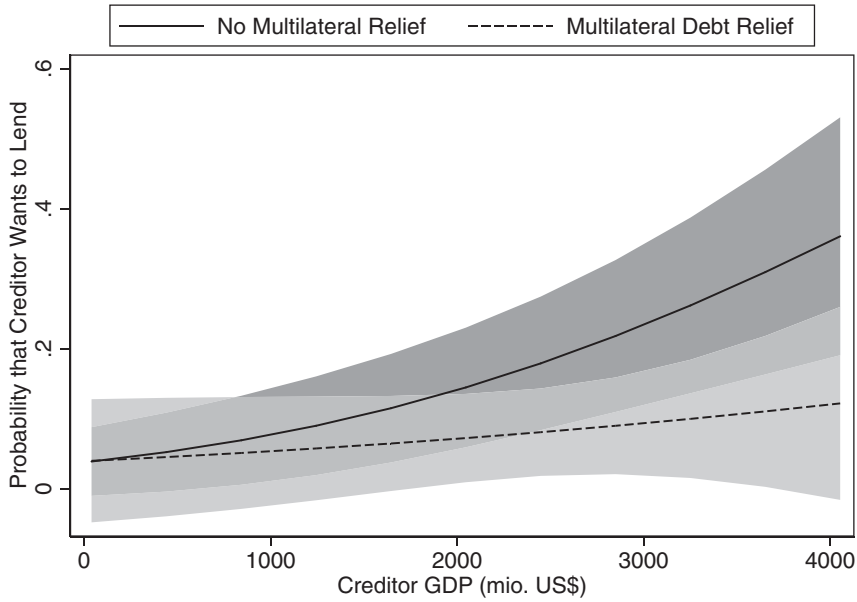

Figure 4. Predicted probability of loans after multilateral debt relief.
Note: The figure displays the predicted probability of loans with and without multilateral debt relief conditional on creditor size. It directly compares to Figure 2 which illustrates the same probabilities after bilateral debt relief. The figure shows that – in contrast to bilateral debt relief – small creditors do not free-ride after multilateral relief.

(MDRI), borrowers must implement significant domestic policy reforms. This implies less room for policy concessions in favor of a single creditor government providing loans after multilateral debt relief. As a result, I do not expect that small creditor governments are more likely than large creditors to provide loans to recipients of multilateral debt relief.

I test this implication by estimating the identical model as above, only with multilateral instead of bilateral debt relief. Figure 4 displays the effects of multilateral debt relief on the likelihood of new loans by creditor size: in comparison to small creditors' free-riding on bilateral debt relief (see Figure 2), small creditors do not free-ride on multilateral debt relief.

Bilateral debt relief versus default

Debt relief and default are related, but distinct, events. According to Tomz and Wright (2012, p. 256), default can be defined in two ways:

> Defined narrowly, default occurs when the debtor violates the legal terms of the debt contract. For example, the debtor might fail to pay interest or principal within the specified grace period. This narrow definition overlooks situations in which the sovereign threatens to default [and then] tenders an exchange offer of new debt with less favorable terms than the original issue.

Bondholders subsequently decide whether to accept the 'haircut.' Thus, the *debtor* initiates default.

In contrast, debt relief is an action controlled by creditor governments: while debtor governments can petition for debt relief, it is at the creditor's discretion if, and how

much, debt to cancel. This implies that debt relief is a conscious political act by creditor governments. Importantly, most of the time, debt relief occurs without the threat of default. For instance, of the 1507 instances of bilateral debt relief granted by creditors between 2004 and 2013, only 126 were provided to recipients in default while 1381 instances of debt relief occurred in the absence of default.[10]

I expect that lending for political influence does not occur after default. Defaulters are not valuable allies to have influence over, for two reasons. First, default typically comes with significant economic costs (Panizza et al., 2009). Cruces and Trebesch (2013) and Trebesch and Zabel (2017) show that defaults are associated with a drop in GDP, significantly higher borrowing costs, and long periods of capital market exclusion. Diminished economic capacities make for unattractive political partners. Second, Bunte and Kinne (2018) show that creditors target their loans to strategically valuable recipients, where their respective value depends, in part, on the evaluation by other creditors. As default comes with heavy reputational costs (Tomz & Wright, 2012), it is unlikely that creditors will perceive these countries as strategically valuable.

I analyze whether creditor governments lend for influence after default by estimating the identical model as above, only with default instead of bilateral debt relief. Figure 5 shows that small creditors do not appear to target their loans to countries in default. It appears, then, that debt relief sends a qualitatively different signal than default: in comparison to small creditors lending to gain influence following bilateral debt relief (see Figure 2), small creditors do not consider defaulters as loan recipients worth having influence over.

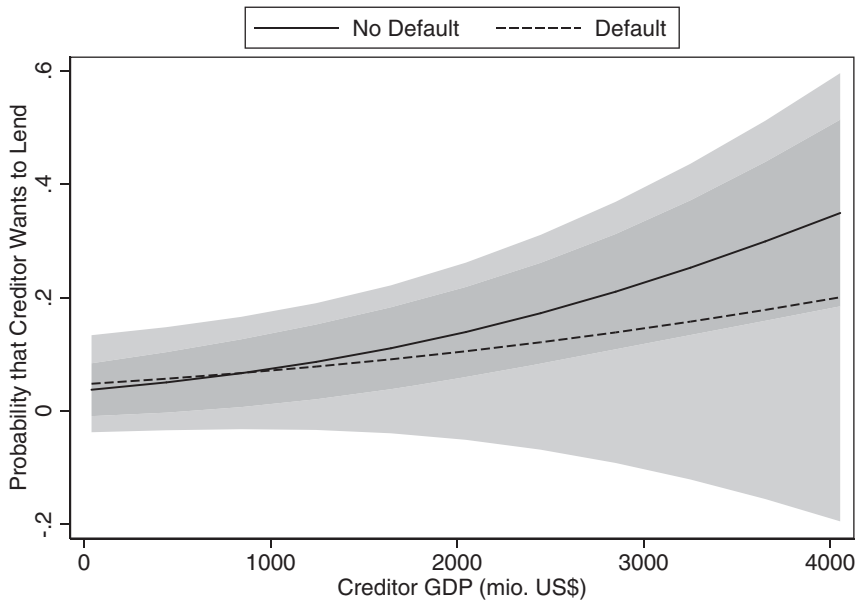

Figure 5. Predicted probability of loans after default.
Note: This figure displays the predicted probability of loans with and without default conditional on creditor size. It directly compares to Figure 2 which illustrates the same probabilities after bilateral debt relief. The figure shows that lending by – in contrast to bilateral debt relief – small creditors do not free-ride after default.

Alternative arguments

Debt relief and solvency

Debt relief is provided with the intention to lower the debt burden of developing countries. I have shown that some creditors lend to recipients of debt relief, seemingly undermining the intention of debt relief. However, it is possible that new loans are not instances of free-riding, but instead actions intended for the benefit of debtors. For example, debt relief might be complemented by new bilateral loans intentionally to restore debtors' solvency: new loans might help to achieve stability by providing liquidity.

If this alternative interpretation of loans to recipients of debt relief is accurate, it would yield three observable implications: First, *all* creditor governments would be expected to participate in lending efforts to developing countries in need of solvency. In fact, we would expect larger creditor governments to be more concerned with international financial stability, resulting in a higher likelihood of lending to recipients of debt relief. However, the evidence provided above contradicts this expectation: creditor governments do not equally participate in new lending; in fact, governments of smaller countries are more likely to lend to recipients of debt relief.

Second, this alternative interpretation of new loans would suggest that both debt relief and new lending are targeted primarily at borrowers burdened with high debt levels. Reinhart and Rogoff (2009) suggest a threshold of 90% of GDP to indicate high debt. If solvency is the motivating force, we would expect that most recipients of debt relief as well as new bilateral lending had external debt ratios larger than this threshold. However, Figure 6 shows that the majority of countries receiving debt relief and new

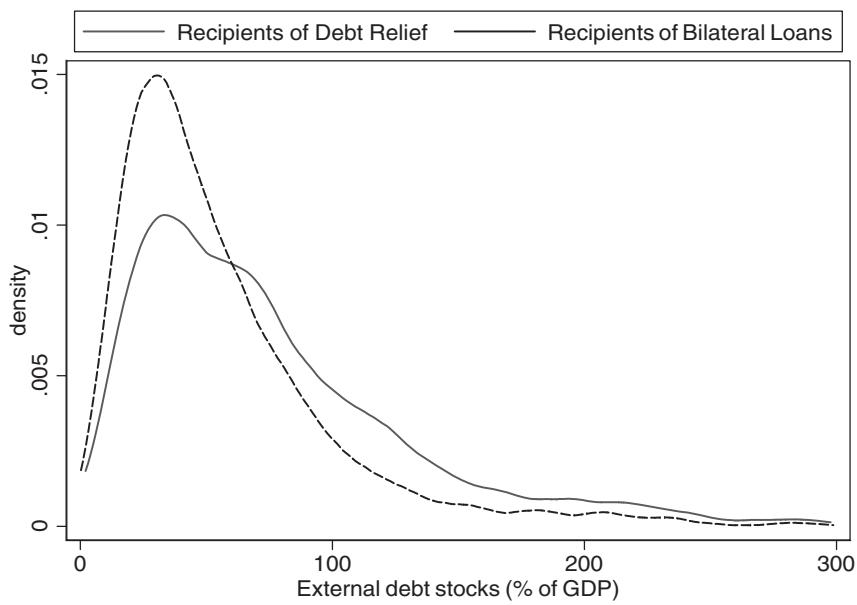

Figure 6. Distribution of debt relief and bilateral loans by level of existing debt.
Note: The figure illustrates that the majority of countries receiving debt relief and bilateral loans are not those with high debt burdens.

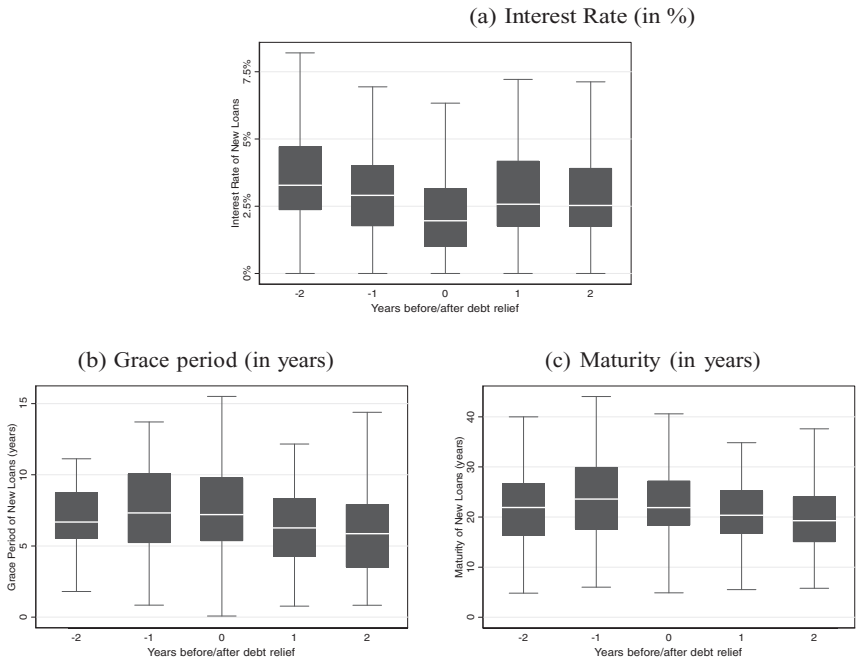

Figure 7. Financial conditions of bilateral loans before and after debt relief.
Note: The figure shows that the financial conditions of bilateral loans do not become significantly cheaper after debt relief.

loans have debt well below this threshold. This would suggest that creditor governments do not target debt relief or new loans to the most needy recipients.

Finally, this alternative interpretation would suggest that new loans provided after debt relief should have very favorable financing conditions to help re-establish the debtor's solvency. In comparison to loans prior to debt relief, loans granted after debt relief should carry lower interest rates as well as longer grace periods and maturities.[11] Figure 7 summarizes the financial conditions of loans before and after debt relief. Interest rates decline slightly (but not significantly) prior to debt relief, but not thereafter. Grace periods (period between signing the loan and first repayment due) and loan maturities (number of years over which the loan must be repaid) slightly decrease after debt relief, suggesting more unfavorable financing conditions for borrowers. These data suggest that creditor governments are *not* providing significantly more favorable loan conditions after debt relief.[12] In sum, the evidence does not support the interpretation that new lending after debt relief is aimed at improving debtors' solvency.

Debt relief and private loans

A second alternative interpretation suggests that an increase in debt following debt relief might not be a negative development, provided that new borrowing comes from private, rather than public, sources. After all, the intention of debt relief might be to re-establish countries' access to the private capital markets. If successful, increasing external debt of debt relief recipients might indicate that credit markets work again.

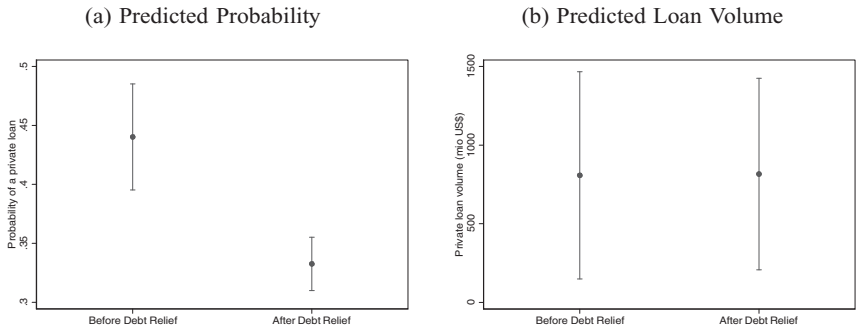

Figure 8. Predicted probability and loan volume of private creditors.
Note: The figure visualizes that recipients of debt relief are no more likely to access the private capital market, or to obtain larger volumes from private creditors, than countries without debt relief.

If this interpretation of debt developments were accurate, we would expect three empirical implications to hold true. First, the probability of obtaining loans from private creditors should increase significantly after debt relief. Consequently, I implement a probit model predicting whether a developing country has obtained loans from private creditors. I compare countries three years before and after their date of debt relief. Figure 8(a) shows that predicted probability of obtaining a private loan before and after debt relief: the probabilities are not significantly different from each other.

Second, if this alternative interpretation were correct, we would expect the loan volume from private creditors to increase significantly after debt relief. Figure 8(b) shows the predicted loan volume of countries that obtained loans from private creditors. It

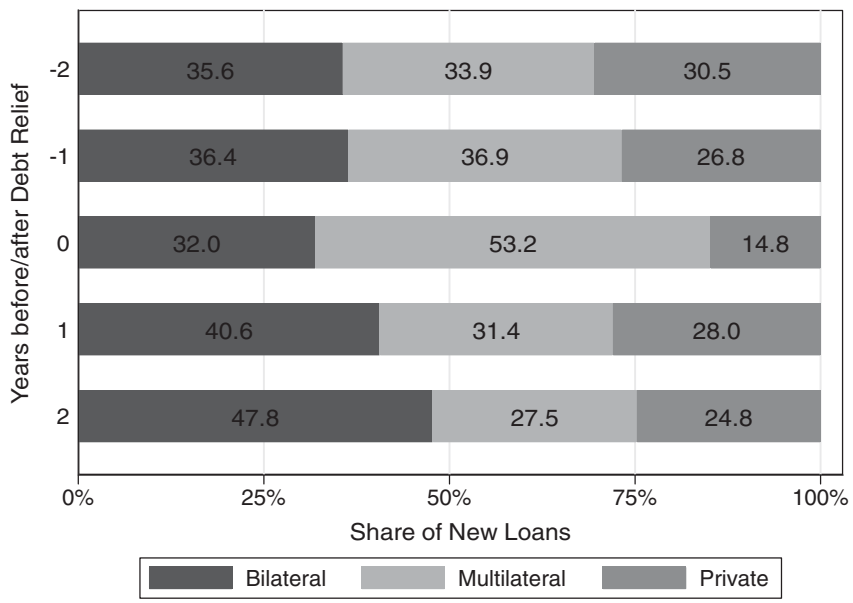

Figure 9. Portfolio of new loans by creditor type.
Note: The figure illustrates the changes in borrowing portfolio in the years before and after debt relief. It shows that private creditors do not become more important sources of loans following debt relief.

shows that the lending volume does not differ significantly before versus after debt relief.[13]

Finally, proponents of this view might argue that debt relief might lower the overall borrowing volume, and with private loans held constant, the relative importance of private creditors in the portfolio of new borrowing will increase. In other words, debt relief would allow its recipients to borrow relatively more from private sources, while relying less on biand multilateral loans. However, the evidence disagrees with this view: Figure 9 displays the share of new loans obtained from different sources from two years prior to two years after debt relief. The data show that the composition of new borrowing hardly changes, and if, it shifts towards official instead of private creditors. In short, the evidence does not support the view that new borrowing after debt relief comes primarily from private sources.

Conclusion

How does debt relief shape new lending? Most analyses have focused on possible moral hazard issues on part of debtors: after receiving debt relief, borrowers might obtain new loans in expectation of future debt relief. I complement this demand-side perspective with an analysis of the supply-side. I show that debt relief might also provide incentives for irresponsible behavior on part of creditors. Some creditor governments target new loans at recipients of debt relief provided by other creditors.

I test whether non-western creditor governments such as China and India free-ride on western debt relief by lending to recipients of debt relief but find no evidence in favor of this argument. I also find no evidence supporting that governments of export-oriented economies use loans to recipients of debt relief to create export opportunities for their private sector but find no evidence for this argument either. I do find, however, that governments of small creditor countries are likely to offer loans to recipients of debt relief. This is consistent with creditors' desire for political influence in the recipient country. If states lend to gain influence, smaller economies will be crowded out by larger economies. However, if a debtor state just received debt relief and is therefore viewed as a greater risk, small creditors may see an opportunity to gain influence by providing a loan that no other state wants to provide. Debt relief provides small creditors with a unique window of opportunity.

I make several contributions to the academic literature. First, while collective action problems among *private* creditors are well studied, this is the first analysis of free-riding among *creditor governments*. Furthermore, most existing work on official debt relief has focused on initiatives by multilateral institutions. In contrast, I analyze bilateral debt relief provided by individual creditor governments, which is more extensive – both in terms of amount of debt forgiven and number of recipients – than multilateral relief. Third, scholars have focused on debtor motivations when analyzing the effects of debt relief on new lending. This work has provided important insights. I complement this demand-side perspective with an analysis of the supply-side and examine the incentives of creditors to lend. My methodological approach, therefore, uses a two-equation approach to model both creditors' and debtors' decision-making process simultaneously.

My findings have important normative implications. Critics of development assistance have been vocal in pointing to the apparent failure to reduce developing countries' debt levels. For example, Easterly (2002, p. 1677) observed that 'New borrowing is

correlated with debt relief so that debt ratios worsen, rather than improve after debt relief.' Undoubtedly, moral hazard issues on part of politicians in the debtor countries are partially responsible. Debt relief might provide governments with incentives to obtain new loans, expecting that this debt will be forgiven in the future. However, the findings reported in this article suggest that creditors also have to share the blame. I show that some creditor governments have the incentive to lend precisely to those countries that received debt relief, thereby undermining the original intention of debt relief. My work might help policy-makers identify actors worthy of closer monitoring.

Notes

1. Bilateral debt relief dwarfs the US$27 billion in multilateral debt relief provided by the World Bank and IMF since 1990. Lending data come from the World Bank's Debtor Reporting System, and data for debt relief from the OECD Development Assistance Committee.
2. To clarify the terminology, 'bilateral debt relief' refers to instances in which creditor governments decide that a loan granted to a different government does not have to be repaid. This is not the same as a debt reduction following a restructuring of bonds related to (actual or threatened) default. Descriptive statistics indicate that 1507 instances of bilateral debt relief occurred between 2004 and 2013. Of these, only 8% were granted to countries currently in default. Furthermore, only 20% of bilateral debt relief recipients had a debt-to-GDP ratio above 90%, indicating high risk of debt crises according to Reinhart and Rogoff (2009). Fewer than 1% of bilateral debt relief was given while debtors were engaged in debt restructuring with bondholders. Only about 50% of bilateral debt relief was provided to low-income countries eligible for multilateral debt relief.
3. 'Sierra Leone Signs Debt Relief Agreement,' *US Embassy in Sierra Leone*, 7 June 2007.
4. Financial Times, 6 July 2004.
5. 'China backs up silk road ambitions with $62bn capital injection,' *Financial Times* 20 April 2015.
6. I use a binary indicator of debt relief because available data on the volume of debt relief does not capture reductions in the present value of debt due to debt forgiveness, but only measures the face value of debt forgiven (see Johansson, 2010; Chauvin & Kraay, 2005).
7. However, see Section for additional analyses with multilateral debt relief.
8. The tables on which these figures are based are available in the Online Appendix.
9. Interaction effects are visualized from the 5th to the 95th percentile of distribution for the interacting variable.
10. However, obviously, this does not capture instances in which debt relief might have been successful in preventing default. I acknowledge that the distinction between debt relief and default is blurred at times. I address this with several robustness tests in the Online Appendix accounting for the reasons why debt relief was provided. The findings reported in the article are robust.
11. I also examine whether debt relief increased the provision of foreign aid, which in turn might have affected the need for new loans. The findings do not support this view. See Online Appendix.
12. These findings for bilateral loan conditions correspond to those of private credit: Cordella and Missale (2013) find 'little evidence that debt relief initiatives have brought about a reduction in the interest rate on new private debt.'
13. This corresponds to findings following multilateral debt relief: Cordella and Missale (2013) report that borrowing from private lenders by recipients of HIPC and MDRI relief was no greater than those of non-recipients.

Acknowledgments

This paper greatly benefited from the comments by Bill Clark, Terry Chapman, Marc Copelovitch, Vito D'Orazio, Julia Gray, Thomas Gray, David Lake, Anushka Limaye, Eric Neumayer, Clint Peinhardt, Gina Yannitell Reinhardt, Todd Sandler, Lauren Santoro-Ratliff, John Taden, Ken Scheve, Jim Vreeland, three anonymous reviewers, as well as conference participants at APSA, MPSA, IPES and Texas Triangle. Any remaining errors are mine.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Jonas B. Bunte (PhD University of Minnesota, 2013) is an assistant professor of political economy at the University of Texas at Dallas. His previous work appeared in the *British Journal of Political Science*, *Journal of Peace Research*, *International Studies Quarterly* and *World Development*.

References

Arslanalp, S., & Henry, P. B. (2005). Is debt relief efficient? *Journal of Finance, 60*(2), 1017–1051.
Arslanalp, S., & Henry, P. B. (2006). Policy watch: Debt relief. *Journal of Economic Perspectives, 20*(1), 207–220.
Badinger, H., & Url, T. (2013). Export credit guarantees and export performance: Evidence from Austrian firm-level data. *The World Economy, 36*(9), 1115–1130.
Ben-Artzi, R. (2017, January 12–14). *IOs and peer pressure: An examination of the development assistance committee (DAC)*. Paper presented at the 11th PEIO, Bern, Switzerland.
Bouvet, F., Brady, R., & King, S. (2013). 'Debt contagion in Europe: A panel-vector autoregressive (VAR) analysis. *Social Sciences, 2*(4), 318–340.
Brautigam, D. (2011). Aid 'with Chinese characteristics': Chinese foreign aid and development finance meet the OECD-DAC aid regime. *Journal of International Development, 23*(5), 752–764.
Bulir, A., Rodrguez-Delgado, J. D., & Romero-Barrutieta, A. (2011). Dynamic implications of debt relief for low-income countries. *IMF Working Paper, 11*(157), 1–27.
Bunte, J. B. (2018a). *Are bilateral loans 'Door-openers' for subsequent foreign direct investment?* Unpublished manuscript, University of Texas at Dallas, Richardson, TX.
Bunte, J. B. (2018b). *Raise the debt: How developing countries choose their creditors*. Unpublished book manuscript, University of Texas at Dallas, Richardson, TX.
Bunte, J. B., & Kinne, B. J. (2018). *The politics of government-to-government loans: Interests, information, and network effects*. Unpublished manuscript, University of Texas at Dallas and University of California, Davis.
Bunte, J. B., Desai, H., Gbala, K., Parks, B., & Runfola, D. M. (2018). Natural resource sector FDI, government policy, and economic growth: Quasi-experimental evidence from Liberia. *World Development, 107*, 151–162.
Carter, D. B., & Stone, R. W. (2015). 'Democracy and multilateralism: The case of vote buying in the UN general assembly. *International Organization, 69*(1), 1–33.
Chaturvedi, S. (2008). Emerging patterns in architecture for management of economic assistance and development cooperation: Implications and challenges for India. *RIS Discussion Papers, 139*, 1–29.
Chauvin, N. D., & Kraay, A. (2005). What has 100 billion dollars worth of debt relief done for low-income countries? Unpublished manuscript, World Bank.
Chauvin, N. D., & Kraay, A. (2007). Who gets debt relief? *Journal of the European Economic Association, 5*(2–3), 333–342.
Cline, W. (1995). *International debt reexamined*. Washington, DC: Peterson Institute for International Economics.
Copelovitch, M. S. (2010). *The international monetary fund in the global economy: Banks, bonds, and bailouts*. Cambridge, UK: Cambridge University Press.
Cordella, T., & Missale, A. (2013). To give or to forgive? Aid versus debt relief. *Journal of International Money and Finance, 37*, 504–528.
Cruces, J. J., & Trebesch, C. (2013). Sovereign defaults: The price of haircuts. *American Economic Journal: Macroeconomics, 5*(3), 85–117.
Deshpande, A. (1997). The debt overhang and the disincentive to invest. *Journal of Development Economics, 52*, 169–187.
de Mesquita, B. B., & Smith, A. (2007). Foreign aid and policy concessions. *Journal of Conflict Resolution, 51*(2), 251–284.

DiGiuseppe, M., & Shea, P. E. (2016). Borrowed time: Sovereign finance, regime type, and leader survival. *Economics & Politics, 28*(3), 342–367.
Easterly, W. (2002). How did heavily indebted poor countries become heavily indebted? Reviewing two decades of debt relief. *World Development, 30*(10), 1677–1696.
Easterly, W. (2001). Debt relief. *Foreign Policy, 127*, 20–26.
Economy, E., & Levi, M. (2014). *By all means necessary: How China's resource quest is changing the world*. New York, NY: Oxford University Press.
Eichengreen, B., & Mody, A. (2004). Do collective action clauses raise borrowing costs? *The Economic Journal, 114*(495), 247–264.
Felbermayr, G. J., & Yalcin, E. (2013). Export credit guarantees and export performance: An empirical analysis for Germany. *The World Economy, 36*(8), 967–999.
Freytag, A., & Pehnelt, G. (2009). Debt relief and governance quality in developing countries. *World Development, 37*(1), 62–80.
Gelpern, A., & Gulati, M. (2013). The wonder-clause. *Journal of Comparative Economics, 41*(2), 367–385.
Ghosal, S., & Thampanishvong, K. (2013). Does strengthening collective action clauses (CACs) help? *Journal of International Economics, 89*(1), 68–78.
Johansson, P. (2010). Debt relief, investment and growth. *World Development, 38*(9), 1204–1216.
Kinne, B. J., & Bunte, J. B. (in press). Guns or money? defense cooperation and bilateral lending as coevolving networks. *British Journal of Political Science*.
Kletzer, K. M. (2003). Sovereign bond restructuring: Collective action clauses and official crisis intervention. *IMF Working Paper, 3*(134), 1–25.
Koeda, J. (2008). A debt overhang model for low-income countries. *IMF Staff Papers, 55*(4), 654–678.
Kragelund, P. (2008). The return of non-DAC donors to Africa: New prospects for African development?' *Development Policy Review, 26*(5), 555–584.
Krugman, P. (1988). Financing vs. forgiving a debt overhang. *Journal of Development Economics, 29*(3), 253–268.
Kuziemko, I., & Werker, E. (2006). How much is a seat on the security council worth? Foreign aid and bribery at the United Nations. *Journal of Political Economy, 114*(5), 905–930.
McDonald, P. J. (2009). *The invisible hand of peace: Capitalism, the war machine, and international relations theory*. New York, NY: Cambridge University Press.
Milner, H. V., & Tingley, D. H. (2013). Public opinion and foreign aid: A review essay. *International Interactions, 39*(3), 389–401.
Morrison, K. M. (2014). *Nontaxation and representation*. New York, NY: Cambridge University Press.
Mwase, N., & Yang, Y. (2012). BRICs' philosophies for development financing and their implications for LICs. *IMF Working Paper, 12*(74), 1–25.
Panizza, U., Sturzenegger, F., & Zettelmeyer, J. (2009). The economics and law of sovereign debt and default. *Journal of Economic Literature, 47*(3), 651–698.
Pitchford, R., & Wright, M. L. J. (2012). Holdouts in sovereign debt restructuring: A theory of negotiation in a weak contractual environment. *Review of Economic Studies, 79*(2), 812–837.
Reinhart, C. M., Rogoff, K. S., & Savastano, M. A. (2003). Debt intolerance. *NBER Working Paper, 9908*, 1–77.
Reinhart, C. M., & Trebesch, C. (2016). Sovereign debt relief and its aftermath. *Journal of the European Economic Association, 14*(1), 215–251.
Reinhart, C., & Rogoff, K. S. (2009). *This time is different: Eight centuries of financial folly*. Princeton, NJ: Princeton University Press.
Reisen, H., & Ndoye, S. (2008). Prudent versus imprudent lending to Africa: From debt relief to emerging lenders. *OECD Working Paper, 268*, 1–56.
Sato, J., Shiga, H., Kobayashi, T., & Kondoh, H. (2011). "Emerging Donors" from a recipient perspective: An institutional analysis of foreign aid in Cambodia. *World Development, 39*(12), 2091–2104.
Schultz, K. A., & Weingast, B. R. (2003). The democratic advantage: Institutional foundations of financial power in international competition. *International Organization, 57*(1), 3–42.
Shea, P. E. (2013). Financing victory. *Journal of Conflict Resolution, 58*(5), 771–795.
Shea, P. E. (2016). Borrowing trouble: Sovereign credit, military regimes, and conflict. *International Interactions, 42*(3), 401–428.
Strüver, G. (2016). What friends are made of: Bilateral linkages and domestic drivers of foreign policy alignment with China. *Foreign Policy Analysis, 12*(2), 170–191.

Tomz, M., & Wright, M. L. J. (2012). Empirical research on sovereign debt and default. *Annual Review of Economics, 5*(1), 247–272.
Trebesch, C., & Zabel, M. (2017). The output costs of hard and soft sovereign default. *European Economic Review, 92*, 416–432.
Weinschelbaum, F., & Wynne, J. (2005). Renegotiation, collective action clauses and sovereign debt markets. *Journal of International Economics, 67*(1), 47–72.
Williamson, J. (1989). *Voluntary approaches to debt relief* (Vol. 25). Washington, DC: Institute for International Economics.