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How do earmarked funds change the geographical allocation of multilateral assistance?

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How do earmarked funds change the geographical allocation of multilateral assistance?

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Abstract

Almost nonexistent in the early 90s, bilateral development assistance disbursed through earmarked funds co-managed by multilateral donors is playing an increasing role in the aid landscape. While the importance and popularity of these new instruments among traditional donors have increased, their management, their objectives and their implementation remain largely under-documented. Furthermore, the question of the geographical allocation of earmarked funds is becoming more and more important for many stakeholders. We look at the geographic allocation of earmarked multilateral Official Development Assistance (ODA) with regard to “performance”, the traditional criterion for aid allocation in most Multilateral Development Banks (MDBs). Our results show that the multiplication of trust funds tend to undermine the role of performance as a core allocation criterion. We also present evidence that recipient executed trust funds at the World Bank over the period 2009-2013 have favored low income and fragile countries despite their low performance. For some countries the share of total aid received from the World Bank beyond the performance based allocation (PBA) is far from negligible.

Keywords: foreign aid, Multilateral Development Banks, trust funds, aid allocation, performance, multi-bi aid

JEL classification: F35, F53, O19

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I. Geographical allocation of trust funds: Where do we stand?

The third international conference on development finance organized by the United Nations was held in Addis Ababa in July 2015. The objective for the international community was to redefine the framework of development finance that was adopted in 2002 in Monterrey and adjusted in Doha in 2008. The multiplication of actors, types of financing instruments and development issues since Monterrey have been important evolutions. Among these evolutions stands the fast growing role of earmarked funds and multi-bi aid.

Traditionally, foreign development assistance has fallen into two distinct categories, bilateral and multilateral official development assistance (ODA). However, for the last 10 years, bilateral donors have increasingly opted for a new third category which is a loose combination of the former two and is generally called “multi-bi” aid. This new form of aid allows bilateral donors to channel funds directly through multilateral agencies without providing them with the authority to spend these funds at their own discretion. It is this direct control of bilateral donors over multilateral activities characterized by a strong earmarking to specific sectors, regions or countries in which the funds may be used that makes multi-bi aid radically different for multilateral institutions compared to their traditional core activities.

Furthermore, the multiplication of earmarked funds is not without its problems, especially in terms of consistency and effectiveness of aid, but also in terms of coordination among actors and their actions, or in terms of geographical and sectoral allocation of resources.

Almost nonexistent in the early 90s, bilateral development assistance disbursed through earmarked funds co-managed by multilateral donors is playing an increasingly important role in the complex landscape of aid. Indeed, these new instruments represent today more than 20% of bilateral aid and 60% of multilateral aid according to Reinsberg et al. (2015). Therefore, under the guise of an apparent effectiveness illustrated by some successes in health in particular, these new instruments are increasingly used as a response to well-known issues related to efficiency, targeting and consistency of traditional aid policies.

While the importance and popularity of these new instruments among traditional donors have increased, their management, their global objectives and their implementation remain largely under-documented. Similarly, their impact and effectiveness in many non-traditional sectors remain to be cautiously assessed.

In addition to these important issues, the combination of multi-bi aid with conventional financing instruments needs to be analyzed. Indeed, the main multilateral donors, including multilateral development banks base the geographic allocation of their concessional assistance on a great principle which is performance. The origin of the performance-based allocation (PBA) can be traced back to the late 70s when it was implemented at the World Bank for the first time for the allocation of its concessional fund, the International Development Association (IDA).

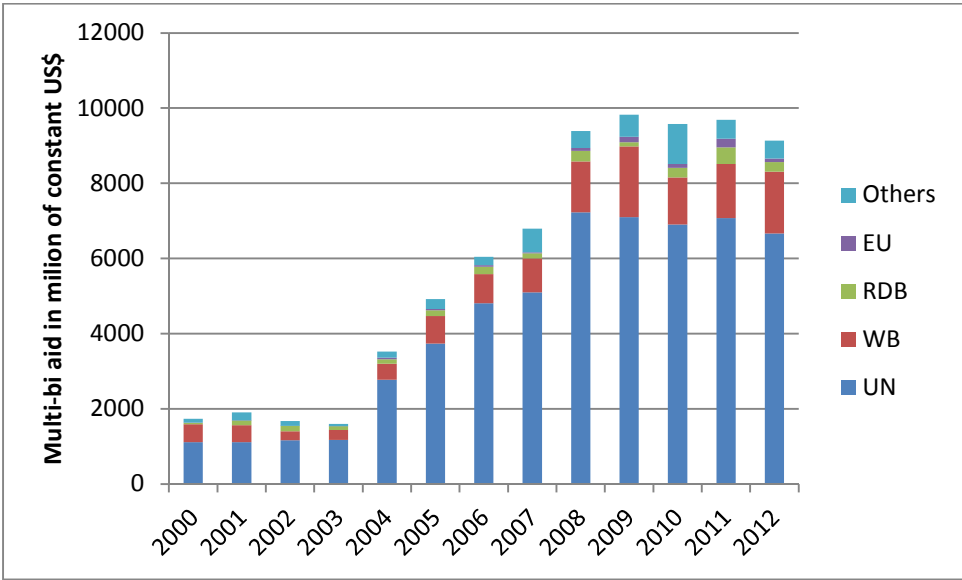
While the debate on the merits of the use of PBA is again in focus (Chervalier, 2015), the question of the geographical allocation of earmarked funds is becoming more and more important to many stakeholders.

In a first section, we review the current trends in trust funds disbursements by donors and recipients, focusing particularly on sector allocable multi-bi aid. In the second section, we assess the determinants of the geographic allocation of multi-bi aid through the lens of the PBA. More particularly we investigate the complementarity between traditional concessional finance and multi-bi-aid at the World Bank.

1.1 Total of multi-bi aid

Figures derived from Eichenauer and Reinsberg’s (2015) data show clearly that the behavior of bilateral donors and international financial institutions has changed during the last 10 years. While still marginal in the early 2000s, multi-bi aid is now a major cooperation instrument for many donors. As can be seen from figure 1, the bulk of country allocable multi-bi aid transits today through the United Nations and its many agencies. The World Bank Group (IDA, IBRD, IFC and MIGA) is the second main multilateral institution hosting earmarked funds. While the growth rate of multi-bi aid seems to have slowed down since 2008, it is more than likely that this instrument will still play an important role in many International Financial Institutions (IFIs). Indeed the share of multi-bi to total multilateral aid keeps growing rapidly according to Reinsberg et al. (2015) from around 10% in 2002 to almost 60% in 2012.

Figure 1: Multi-bi aid by multilateral donors between 2000 and 2012

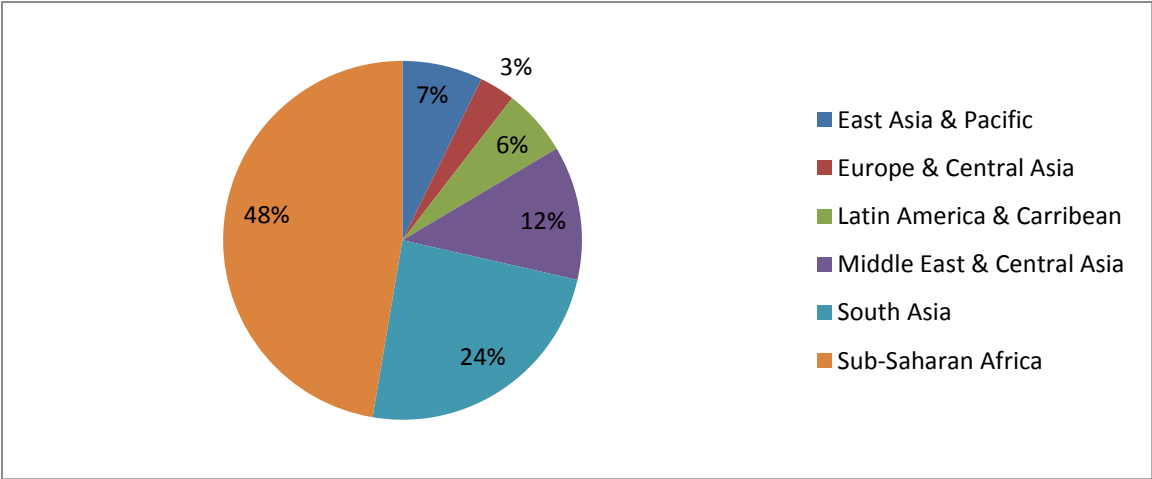


Source: Author’s calculation based on Eichenauer and Reinsberg (2015) data

Note: EU=European Union; RDB = Regional development Banks; WB = The World Bank Group; UN = United nations agencies. Figure 1 only includes country allocable multi-bi aid, excluding regional allocations.

This role may be even more important for some countries and regions where most of the multi-bi aid has been disbursed over the last decade. As can be seen in figure 2, disbursements in Sub-saharan Africa (48%) and South Asia (24%) represents almost three quarters of total disbursements between 2008 and 2012. This global geographic allocation is interestingly very close of the geographic allocation of concessional funds such as IDA.

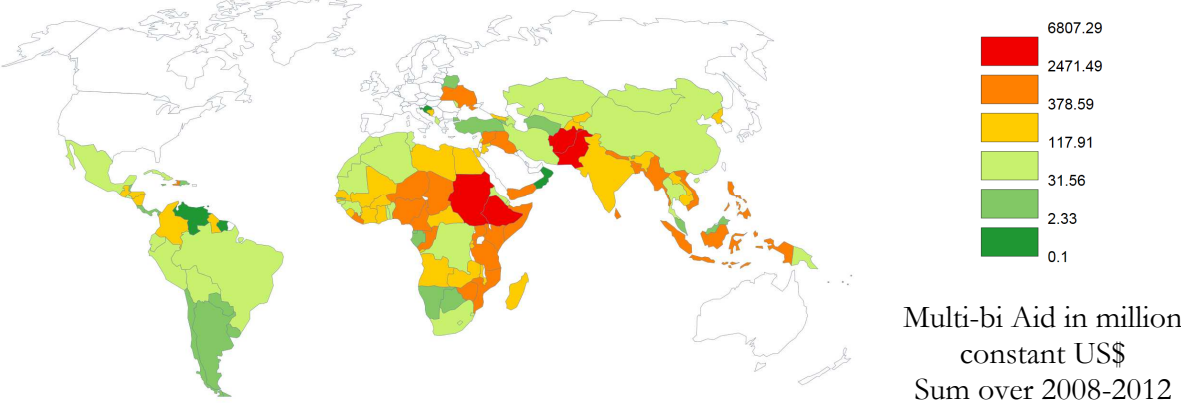
Figure 2: Geographic allocation of multi-bi aid over 2008-2012



Source : Author's calculation based on Eichenauer and Reinsberg (2015) data

However, while the regional allocation appears to be very close to the current view of major donors regarding aid effectiveness, country level disbursements tell clearly a different story (see figure 3). In fact, only a few countries concentrate the main part of multi-bi aid. This is for example the case for Afghanistan where 14% of total multi-bi aid was disbursed over the period 2008-2012. Likewise, 12 countries combined receive more than 60% of total multi-bi aid. (Afghanistan, Sudan, Ethiopia, West Bank and Gaza, Pakistan, Congo Republic, Somalia, Kenya, Bangladesh, Iraq, Haiti, Zimbabwe). From this list it seems that multi-bi aid tends to go in priority toward conflicts or disasters afflicted countries.

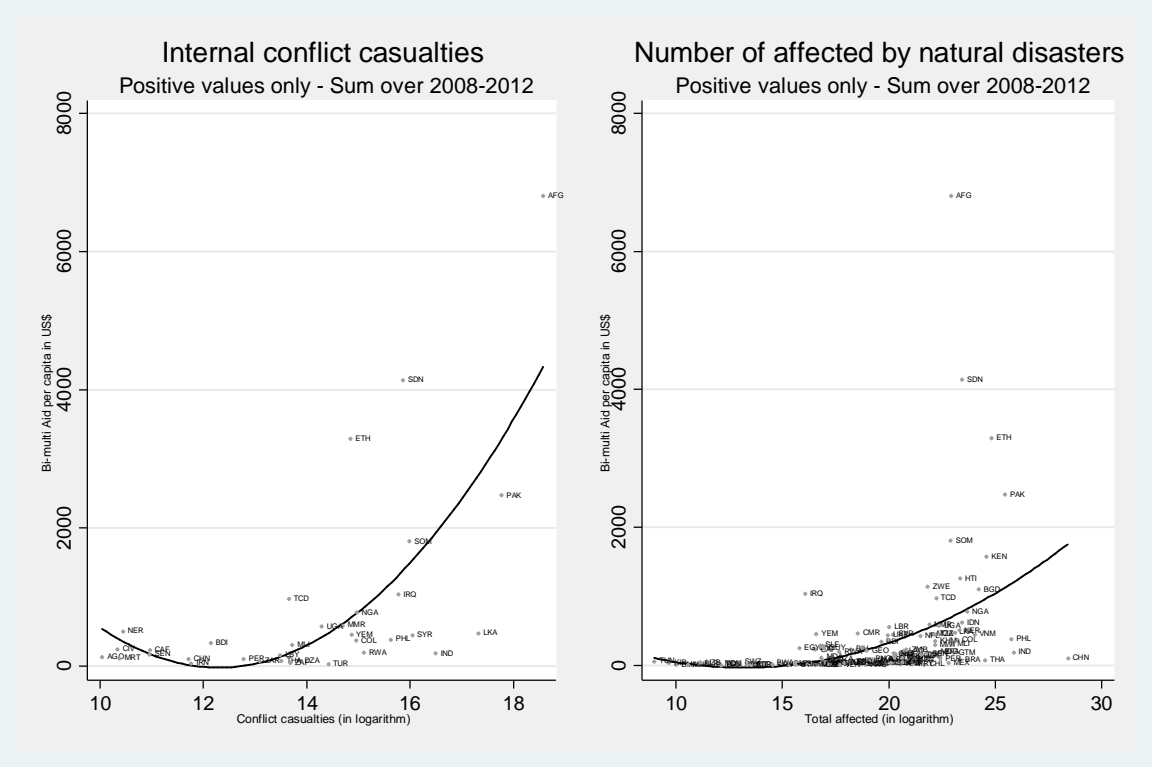
Figure 3: Geographic allocation of multi-bi aid over 2008-2012



Source : Author's calculation based on Eichenauer and Reinsberg (2015) data

This hypothesis is confirmed by the next two figures. First, figure 4 shows a significant correlation between the amounts of multi-bi aid disbursed over the period 2008-2012 and either the number of casualties due to internal conflicts or the number of people affected by natural disasters. Most of the countries cited earlier such as Afghanistan, Bangladesh, Sudan, Somalia or Ethiopia appears clearly on the right hand side of both figures and the correlation is highly significant.

Figure 4: Correlates of the geographical allocation of multi-bi aid over 2008-2012



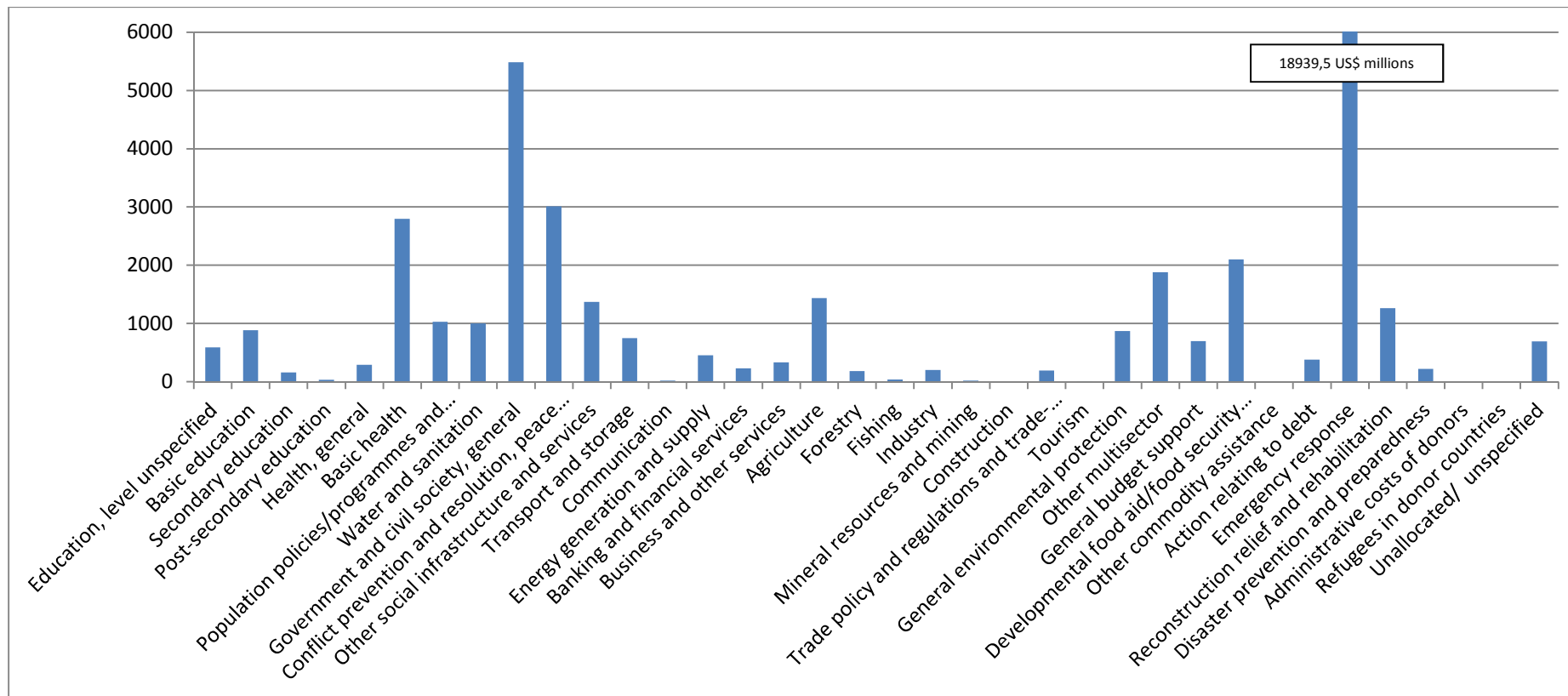
Notes: West Bank Gaza and Republic of Congo were dropped for clarity sakes

Source : Author’s calculation based on Eichenauer and Reinsberg (2015) data, Prio and EM-DAT

Second, from figure 5, it appears that there are two aspects of multi-bi that needing to be disentangled to understand its allocation, namely sector-allocable aid that addresses the same issues and follows likely the same channels as classic multilateral aid and non-sector allocable aid dominated by emergency response. Emergency response accounted for 40% of total multi-bi aid over the period 2008-2012. In the context of global coordinated emergency response in the wakes of conflicts or natural disasters, bilateral donors seem to have turned extensively to multilateral organizations to spearhead efforts of the international community. This fact has been evidenced in Eichenauer and Reinsberg (2015) who show that post-conflict and fragile states are major beneficiaries of the increases in earmarked funding. This trend is likely to remain strong as trust funds have recently become an important instrument to address the migrant crisis.

Interestingly, social infrastructures like government and civil society and conflict prevention represent the main sector in sector allocable multi-bi aid. This result is also indicative of the role of multi-bi aid, as the bulk of aid disbursed in this sector isn't directed toward governments in developing countries but rather toward the civil society and NGOs hence bypassing central government. This type of intervention is particularly useful in countries where the dialogue with central governments is difficult, namely where performance is low. More particularly, important trusts funds, notably at the UN, disbursed in those sectors are used to pay either directly or indirectly wages of civil servants and military personnel in fragile states.

Figure 5: Multi-bi aid by sector between 2008 and 2012 (in millions of constant US\$)



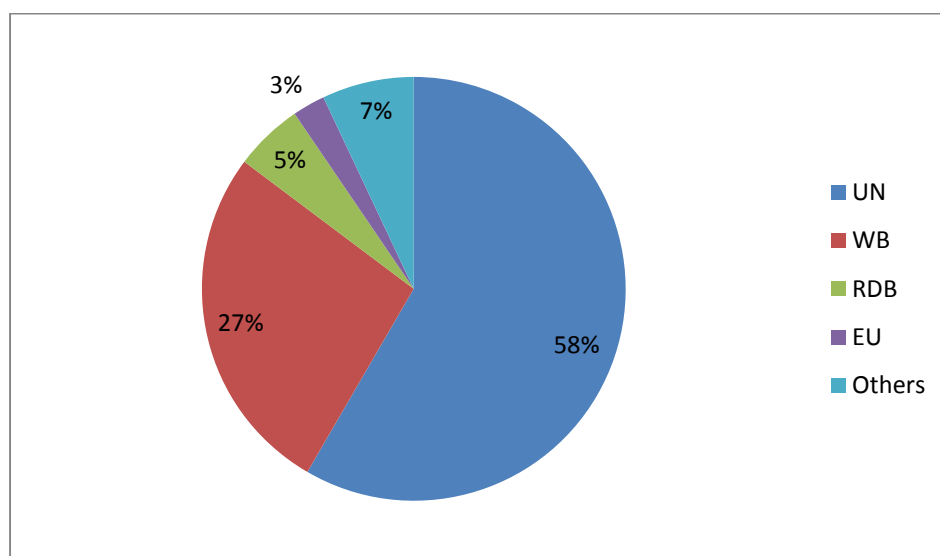
Note: The figure has been cropped for clarity.

Source: Author's calculation based on Eichenauer and Reinsberg (2015) data

1.2.1 Sector allocable multi-bi aid

While allocations rules for non-sector allocable multi-bi aid in many organization is certainly dominated by emergency response mostly disregarding classic aid allocation criteria, the same shouldn't apply to sector allocable multi-bi aid. In this section, we chose to focus particularly on sector allocable aid as it is more likely to be predictable and should follow some kind of allocation rules still remaining to be identified.

Figure 6: Multi-bi sector allocable aid passing through multilateral donors between 2008 and 2012



Source : Author's calculation based on Eichenauer and Reinsberg (2015) data

As for total multi-bi aid, the UN and its many agencies represent the largest share of sector allocable multi-bi according to figure, the UNDP and the UNICEF being the largest sector-allocable multi-bi providing agencies. Compared to total multi-bi, the role of the World Bank in sector-allocable multi-bi aid has to be highlighted. The World Bank Group represents here more than 25% of total sector allocable multi-bi and this share is expanding rapidly. Since 2000 sector allocable multi-bi aid has grown very fast and it represents today more than 5 times what it was 10 years ago (see figure 7). This growth has been particularly impressive for the World Bank. Over this period the trends in regional disbursement shares shifted away from East Asia and Pacific and South Asia Regions to Africa Region (see figure 8) but the concentration in a small group of countries still remains important (see figure 9). Nevertheless, the geographical allocation of sector allocable multi-bi aid appears to be more diversified across countries and regions. Furthermore this geographic allocation appears to be homogenous among the main multilateral organizations (see figure A1 & A2 in appendix for the UNDP and the World Bank) However, from this last set of figures it is rather difficult to detect clear factors explaining the global geographic allocation of sector allocable multi-bi aid. In fact, contrary to what was displayed in figure 4, once non sector allocable aid is removed from multi-bi aid, correlations with number of deaths from internal conflicts and number of people affected by natural disasters are no longer significant.

Figure 7: Evolution of Multi-bi sector allocable aid between 2000 and 2012

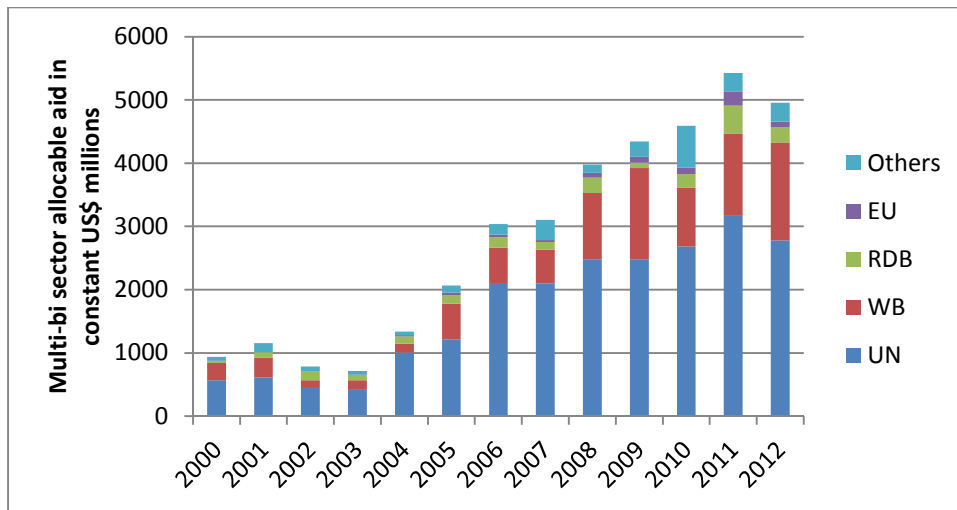


Figure 8: Geographic allocation of sector allocable multi-bi aid over 2008-2012

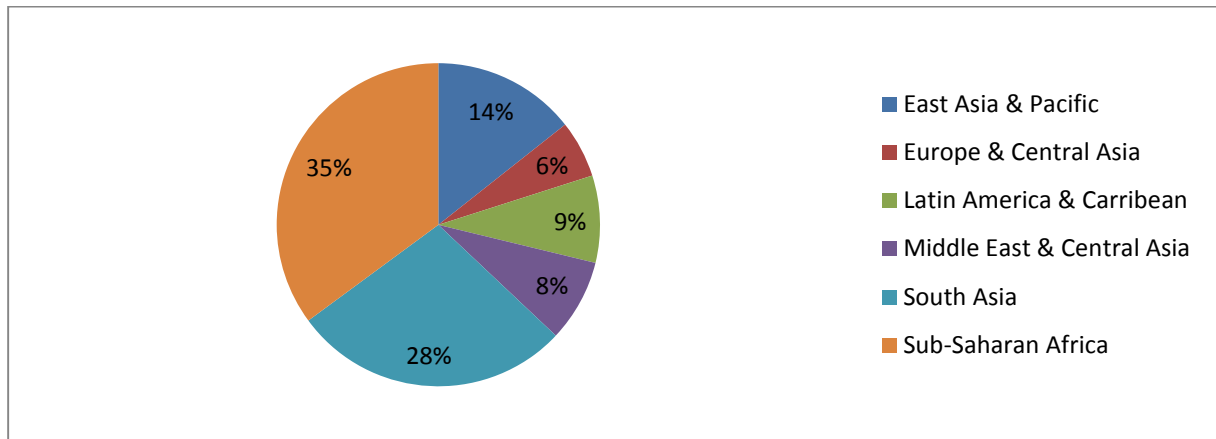
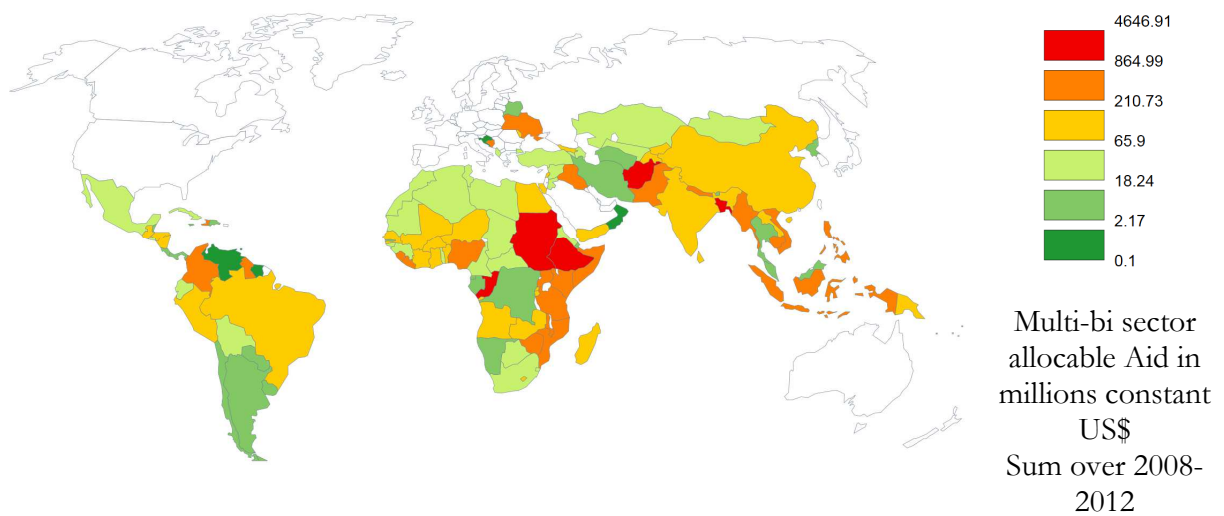


Figure 9: Geographic allocation of sector allocable multi-bi aid over 2008-2012



Source : Author's calculation based on Eichenauer and Reinsberg (2015) data

What is more troubling is the apparent lack of correlation between sector allocable multi-bi aid and two traditional measures of performance, the Country Policy and Institutional Assessment (CPIA) and the Worldwide Governance Indicators (WGI).

The Country Policy and Institutional Assessment (CPIA) of the World Bank has been designed and used specially for IDA's aid performance based allocation (PBA). The Country Policy and Institutional Assessment rates IDA countries, on a 1-6 scale increasing with the quality of governance, against a set of 16 criteria[†] grouped in four clusters: (a) economic management; (b) structural policies; (c) policies for social inclusion and equity; and (d) public sector management and institutions. However, CPIA ratings are available for 2006 onward and cover only countries member of IDA. In order to expand data coverage we turn to a second indicator, again developed by the World Bank, highly correlated with some components of the CPIA but reflecting institutional quality rather than the quality of public policies.

The Worldwide Governance Indicators (WGI) defines governance as “the set of traditions and institutions by which authority in a country is exercised” (Kaufmann et al., 2010). The WGI is used for the geographical allocation of the European Development Fund of the European Commission. This indicator captures six dimensions of governance since 1996 for 212 countries and territories. Coverage by country and over time is then broader than for the CPIA. Moreover, in WGI the focus is more on institutions and less on policies and the rating on “political stability and absence of violence” does not seem to have an equivalent in the CPIA. Like the CPIA, WGI is primarily based on subjective information. However, while the CPIA rating is based only on the judgements of World Bank's staff, the WGI consists in the aggregation of various governance ratings (including the CPIA). The country scores are based on several variables, drawn from about 30 separate databases reflecting subjective perceptions of a wide range of issues. Each one of the 6 indicators[‡] is a weighted average of underlying variables with each indicator so that scores are centered around zero and fall in the range [-2.5; 2.5]. Higher scores

[†] The 4 clusters and 16 criteria of the CPIA:

A. Economic Management: 1, Macroeconomic Management, 2, Fiscal Policy, 3, Debt Policy

B. Structural Policies: 4, Trade; 5, Financial Sector, 6, Business Regulatory Environment

C. Policies for Social Inclusion/Equity: 7, Gender Equality, 8, Equity of Public Resource Use, 9, Building Human Resources, 10, Social Protection and Labor, 11, Policies and Institutions for Environmental Sustainability.

D. Public Sector Management and Institutions: 12, Property Rights and Rule-based Governance, 13, Quality of Budgetary and Financial Management, 14, Efficiency of Revenue Mobilization, 15, Quality of Public Administration, 16, Transparency, Accountability, and Corruption in the Public Sector

Source: Country Policy and Institutional Assessments, 2009 Assessment Questionnaire, The World Bank Operations Policy and Country Services, September 2009.

[‡] 1. Voice and accountability (VA): « the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media »

2. Political stability and absence of violence (PS): « perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism »

3. Government effectiveness (GE): « the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies »

4. Regulatory quality (RQ): « the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development »

5. Rule of law (RL): « the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence »

6. Control of corruption (CC): « the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests »

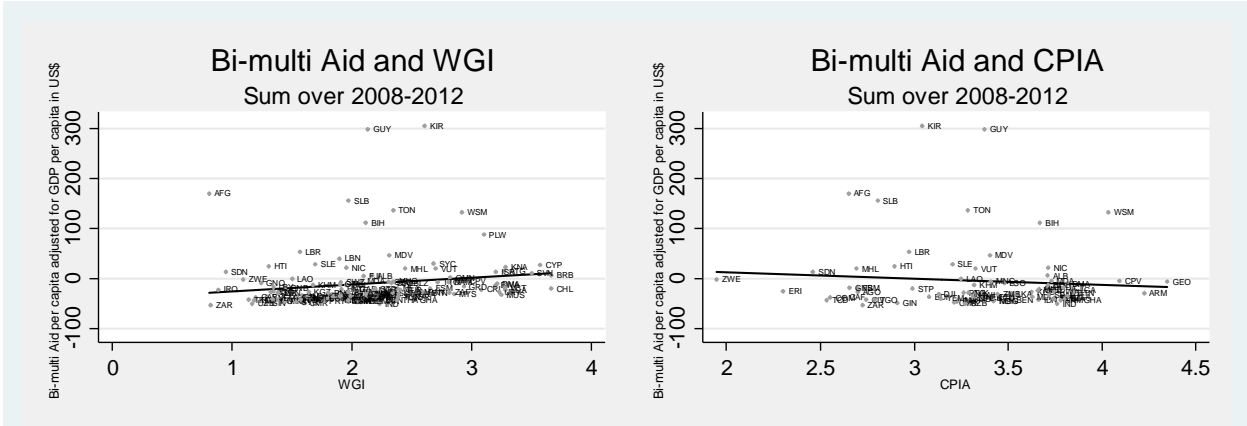
Source: Kaufmann et al (2010).

indicate better governance ratings. We use the simple average of the 6 indicators as our alternative performance indicator.

As can be seen in figure 10, the correlation between the amount of sector allocable multi-bi aid disbursed in each country doesn't seem to be significant with either the CPIA or the WGI. This result holds even if focusing only on the largest multi-bi aid providing institutions such as the World Bank or the UNDP. This crude estimates could indicate that performance isn't the main factor or at least a factor explaining multi-bi aid allocation. This relationship between governance and the geographic allocation of multi-bi aid has been analyzed in several studies with different results. Eichenauer and Reinsberg (2016) provide mixed evidence of the fact that earmarked funds on average are more likely to be directed toward post-conflict and fragile states where governance is weak. However, in their study on the allocation of earmarked aid at the World Bank, Eichenauer and Knack (2016) do not find statistical evidence that World Bank trust funds systematically disburse more aid to disaster-affected, post-conflict or fragile states. They argue that World Bank trust fund allocations are similar to IDA in terms of their policy- and poverty-selectivity.

From a policy perspective, the question of the role of performance for multilateral aid allocation is of particular relevance. We investigate further this issue in the second part of the paper.

Figure 10: Correlates of the geographical allocation of multi-bi sector allocable aid over 2008-2012



Source: Author's calculation based on Eichenauer and Reinsberg (2015) data

II. Geographical allocation explained: how the allocation models differ?

2.1 Multi-bi aid at Multilateral Development Banks

For the main Multilateral Development Banks (MDBs) the principles determining the allocation of aid among eligible countries are governed by a formula, called “Performance Based Allocation” (PBA). This formula which has been used since 1977 by the World Bank for the International Development Association (IDA) has been modified several times. It is also used by the main Multilateral Development Banks, namely African Development Bank (AfDF), Asian Development Bank (AsDB), Inter-American Development Bank (IDB), Caribbean Development Bank (CDB), and also by the International Fund for Agricultural Development (IFAD), with minor differences in application between the institutions (see Guillaumont et al., 2010, for an extended discussion). The PBA formula is intended to determine the amount of aid to be received by a country according to two main indicators, income per capita and performance and where roughly the amount of aid allocated to a country i is

$$A_i = f(\text{Performance, income per capita, population})$$

Performance has an overwhelming weight.

With the rise of multi-bi aid and the wide range of activities financed through trust funds, one major concern for institutions belonging to the PBA club is the relationship between trust fund geographic allocation with regard to performance and how trust funds may complement or distort the PBA. While we expect to find that performance, income per capita and population explain to some extent the distribution of multi-bi aid notably in Multilateral Banks that rely on the PBA, the key issue is to understand how strictly this rule is applied to trust funds. A loose application of the rule could be illustrated by a weak explaining power of those three variables on the geographic allocation of trust funds. Furthermore, focusing on explaining power of the PBA implies that we are more interested by the correlates of the geographical allocation of trust funds than by its determinant in terms of causality. For example, while governance is a core indicator explaining aid allocation it might not turn out significant once country fixed effects are included because of the path dependent nature and slow movements of the performance variables. We test for this particular effect by including and excluding alternatively country fixed effects. We also don't attempt to replicate the results of more comprehensive studies (see Acht et al., 2015; Dietrich, 2016 and Eichenauer and Reinsberg, 2016) of the determinants both for the donor side and the recipient side of multi-bi aid allocation to focus only on the PBA.

We test empirically whether performance, income per capita and population size correlate with the geographic distribution of multi-bi aid using Eichenauer and Reinsberg's (2015) disbursements data and how it compares to the results using pure multilateral aid and bilateral aid using OECD CRS disbursements data.

As it is standard for aid allocation we use indicators lagged by two years. GDP per capita and population data come from the World Development Indicators. Performance is approximated alternatively by the CPIA and the WGI described above.

We estimate the following equation:

$$\ln Aid_{ijdkt} = \ln Pop_{it} + \ln GDPpc_{it} + \ln Performance_{it} + \gamma_i + \mu_t + \varepsilon_{idt} \quad (1)$$

With Aid representing alternatively the total multilateral, multi-bi and bilateral aid disbursed or committed in recipient country i (in millions of constant US\$), in year t . Population is the total population of recipient country i in year t and GDPpc is the GDP per capita of recipient country i in year t . All variables are expressed in logarithm. The remaining variables are a set of dummy variables controlling respectively for specific characteristics of recipients countries and years.

Table 1 gives the results of the estimation of equation (1) for pure multilateral ODA as well as pure bilateral ODA. As expected, column 1 shows that the three variables composing the PBA formula are strongly significant factors explaining the geographical allocation of multilateral ODA. Furthermore, with a R^2 of 0,78, the PBA formula explains almost 80% of the variance of the geographical allocation of multilateral ODA.

Table 1: The geographic allocation of pure multilateral and pure bilateral aid, OLS & Fixed Effects, 2005-2014, OECD CRS disbursements data.

	Pure Multilateral ODA				Pure Bilateral ODA			
	CPIA		WGI		CPIA		WGI	
	OLS (1)	FE (2)	OLS (3)	FE (4)	OLS (5)	FE (6)	OLS (7)	FE (8)
Performance	1.500*** (0.217)	0.830 (0.682)	0.761*** (0.134)	0.573* (0.315)	1.153*** (0.280)	1.295** (0.493)	0.831*** (0.163)	-0.038 (0.417)
GDP per capita	-0.135*** (0.050)	-0.107 (0.376)	-0.778*** (0.039)	-0.315 (0.348)	-0.077 (0.059)	0.013 (0.321)	-0.424*** (0.034)	-0.169 (0.246)
Population	0.598*** (0.021)	-0.955 (1.124)	0.452*** (0.020)	-0.651 (0.839)	0.578*** (0.021)	0.328 (1.322)	0.559*** (0.017)	0.276 (0.816)
Observations	600	600	1051	1051	600	600	1051	1051
Countries	80	80	136	136	80	80	136	136
Adjusted-R2	0.784	0.236	0.616	0.126	0.633	0.079	0.617	0.030

Notes: Each specification includes a set of year dummy variables.

Alternatively, when country Fixed Effects (FE) are introduced in column 2, no variable turns out significant. This can be easily explained by the fact that performance, GDP per capita and population are only slowly moving over time but also because each multilateral institution has a specific mandate targeting specific countries and sectors. While most of the results obtained with fixed effects show insignificant coefficient for performance, coefficients themselves don't change much compared to OLS results. Results remain the same when using alternatively the CPIA or the WGI as indicators of performance. Looking at bilateral donors, the correlation between PBA indicators and the geographical allocation of aid is still significant. Performance is positively associated with more bilateral ODA. However, it is interesting to note that the R^2 is lower. Column (3) illustrates the fact that performance based allocation isn't only the dominant framework for multilateral ODA but has also been adopted by many bilateral donors. From table 1, it is rather clear that the PBA plays a major role in explaining the allocation of multilateral as well as bilateral ODA.

Table 2: The geographic allocation of multi-bi aid, OLS & Fixed Effects, 2005-2012, Eichenauer and Reinsberg' s (2015) disbursements data

	All multi-bi				Sector allocable only			
	CPIA		WGI		CPIA		WGI	
	OLS (1)	FE (2)	OLS (3)	FE (4)	OLS (5)	FE (6)	OLS (7)	FE (8)
Performance	-	2.748	-	-1.039	-0.689	1.220	-	-1.086
	1.718*** (0.463)	(2.215)	1.580*** (0.281)	(0.729)	(0.487)	(3.267)	0.898*** (0.271)	(0.862)
GDP per capita	-0.280** (0.117)	-0.946 (1.199)	- (0.066)	- (0.910)	-0.144 (0.116)	-0.066 (1.685)	- (0.068)	-1.195 (0.977)
Population	0.748*** (0.060)	-0.472 (4.506)	0.550*** (0.037)	-5.785* (2.929)	0.719*** (0.057)	-2.201 (4.647)	0.530*** (0.039)	- (2.788)
Observations	442	442	816	816	438	438	797	797
Countries	78	78	122	122	78	78	122	122
Adjusted-R2	0.517	0.129	0.513	0.205	0.458	0.410	0.421	0.216

Notes: Each specification includes a set of year dummy variables.

Turning to the results displayed in table 2, the same doesn't seem to apply to multi-bi aid[§]. As suggested by the figure 10 above, OLS results point toward a negative relationship between performance and the geographical allocation of multi-bi aid on average. However, the other two variables namely GDP per capita and population size are significant and display the expected signs. Alternatively, once emergency aid and other non-sector-specific ODA is removed, coefficient related to performance while still negative don't turn out significant. Finally, R² are lower than those of table 1 and the three variables composing the PBA formula explain only 50% of the variance of multi-bi aid according to estimates of column 1. The Comparison of column 1 and 2 gives us some interesting insights of the mechanisms at play in explaining those results. While only significant at 15%, performance measured by the CPIA is positively correlated with aid allocation once country fixed effects are taken into account.

[§] The same results are obtained by using OECD CRS multi-bi data as displayed in Table A2 in appendix.

Table 3: The geographic allocation of multi-bi aid at the World Bank and in other RDBs, OLS & Fixed Effects, 2005-2012, Eichenauer and Reinsberg's (2015) disbursements data

	All multi-bi							
	The World Bank Group				Other RDBs			
	CPIA		WGI		CPIA		WGI	
	OLS (1)	FE (2)	OLS (3)	FE (4)	OLS (5)	FE (6)	OLS (7)	FE (8)
Performance	-0.684 (1.209)	-0.901 (5.462)	-1.373** (0.604)	1.029 (1.566)	-0.608 (1.106)	3.291 (3.252)	-0.100 (0.628)	4.352 (3.100)
GDP per capita	-0.262 (0.202)	2.699 (2.060)	-0.458*** (0.121)	0.070 (1.356)	-1.355*** (0.498)	-0.946 (4.911)	-1.099*** (0.242)	-3.098 (3.082)
Population	0.350*** (0.094)	7.118 (5.244)	0.192*** (0.051)	6.208 (5.021)	0.011 (0.112)	2.829 (20.742)	0.080 (0.066)	-4.836 (12.119)
Observations	262	262	407	407	96	96	151	151
Countries	68	68	98	98	37	37	56	56
Adjusted-R2	0.115	0.051	0.144	0.041	0.241	0.071	0.261	0.105

	Sector allocable only							
	The World Bank Group				Other RDBs			
	CPIA		WGI		CPIA		WGI	
	OLS (9)	FE (10)	OLS (11)	FE (12)	OLS (13)	FE (14)	OLS (15)	FE (16)
Performance	-1.493* (0.899)	-5.099 (3.534)	-1.727*** (0.417)	0.729 (1.338)	-0.820 (1.178)	3.866 (3.484)	-0.284 (0.647)	5.303* (3.159)
GDP per capita	-0.059 (0.192)	2.396 (2.005)	0.383*** (0.115)	0.459 (1.192)	-1.440*** (0.498)	-0.409 (4.592)	-1.022*** (0.246)	-3.098 (3.075)
Population	0.375*** (0.085)	11.183** (5.224)	0.199*** (0.052)	6.591+ (4.044)	-0.019 (0.114)	10.403 (27.126)	0.068 (0.070)	-2.529 (14.702)
Observations	246	246	384	384	92	92	144	144
Countries	64	64	93	93	36	36	55	55
Adjusted-R2	0.131	0.094	0.168	0.074	0.241	0.102	0.232	0.108

Notes: Each specification includes a set of year dummy variables.

Even more puzzling are the results displayed in table 3 where we focus on the Regional Development Banks as well as the World Bank Group all of which are implementing performance based allocation for their concessional resources. As for table 2, performance doesn't seem to be significantly correlated with the allocation of trust funds. Furthermore, we observe the instability in the coefficient once we introduce country fixed effects in the specifications. From those results, it appears clearly that the relationship between the allocation of trust funds, notably in multilateral development banks, and performance is more complex and intricate than the one implied by the PBA. More particularly, those results seem to tell us two different stories that need further exploring. First, the simple correlation between performance and multi-bi aid allocation seems to hold even by controlling for GDP per capita and population size. Second, it appears to be a set of underlying factors that once taken into account reveals alternatively a rather weak but positive relationship between performance and multi-bi aid.

In order to further disentangle the relationship between performance and the geographic allocation of multi-bi aid, we estimate an alternative to equation (1) where we use the bilateral dimension of multi-bi aid data. Eichenauer and Reinsberg's (2015) disbursements data allows to identify in addition to recipients and multilateral institutions through which multi-bi aid is processed, bilateral donors from which multi-bi ODA originates from.

Using this additional dimension of the data allows us to take into account the direct influence of the earmarking process and through it the whole influence of historical, economic, political and strategic ties between donors and recipients. Performance as it appears above may not turn out as a positive and significant factor because the allocation decision, or at least an important part of it, is taken outside of the current framework of MDBs, at the bilateral donor level.

In order to test this hypothesis, we estimate equation (2) as follows:

$$\ln Aid_{ijkt} = \ln Pop_{it} + \ln GDPpc_{it} + \ln Performance_{it} + \gamma_{ij} + \pi_k + \mu_t + \varepsilon_{ijkt} \quad (2)$$

With Aid the total multi-bi aid disbursed in recipient country i (in millions of constant US\$), from bilateral donor j , transiting through the multilateral institution k , in year t . Population is the total population of recipient country i in year t and $GDPpc$ is the GDP per capita of recipient country i in year t . All variables are expressed in logarithm. The remaining variables are a set of dummy variables controlling respectively for specific characteristics of recipient countries - bilateral donors dyadic relationships, multilateral institutions and years.

Table 4 gives the results of equation for 3 samples, all multilateral institutions, multi-bi ODA transiting through the World Bank Group and multi-bi ODA transiting through other RDBs. The results using either the CPIA or the WGI as indicators of governance are displayed as well as results for total and sector allocable multi-bi aid.

As shown in column (1), once the influence of bilateral donors is taken into account, the negative relationship between country allocations and performance disappears and is replaced by a positive a mostly significant relationship. This effect remains the same once considering only sector allocable multi-bi aid. While not always significant across all the specifications reported in table 4, it appears clearly that the components of the PBA influence as expected the allocation of multi-bi aid, on average but also in specific institutions like the World Bank. It also seems that the lack of direct correlation between allocations and performance originates mostly from the influence of bilateral donors and once removed the more performance based approach is still enforced at the multilateral level. Such contradictory objectives might explain our prior results but also may point to the fact that the PBA account only for a small part of the overall allocation process.

However, from those broad estimates it appears very difficult to assess to what extent the PBA influences the allocation of Mutli-bi aid. As reported by the tables in this section, the relationship between performance and multi-bi aid allocation isn't straightforward as the multiplicity of stakeholders, sectors and interventions once averaged might provide a very mixed picture of the rules guiding the allocation of trust funds. In order to understand how the fast development of multi-bi aid influences the allocation of aid transiting through MDBs, we turn to the specific analysis of IDA in the next section.

Table 4: The geographic allocation of multi-bi aid at the World Bank and in other RDBs, OLS & Fixed Effects, 2005-2012, Eichenauer and Reinsberg' s (2015) disbursements data – controlling for multilateral donor characteristics and recipient- bilateral donor dyadic interactions

	All multi-bi ODA					
	All multi -bi aid		The World Bank Group		Other RDBs	
	CPIA (1)	WGI (2)	CPIA (3)	WGI (4)	CPIA (5)	WGI (6)
Performance	1.115** (0.441)	-0.280 (0.316)	1.130 (2.915)	1.961 (1.624)	11.713+ (7.923)	8.476+ (5.290)
GDP per capita	-0.760** (0.359)	-0.943*** (0.280)	-1.846 (2.699)	-1.715 (2.023)	-2.868 (7.699)	-5.146 (5.684)
Population	0.784 (1.284)	0.889 (0.974)	12.127+ (8.044)	7.979 (6.305)	-18.622 (20.657)	-19.928** (9.500)
Observations	11565	15744	791	1032	167	245
Adjusted-R2	0.503	0.521	0.531	0.566	0.837	0.854

	Sector allocable only					
	All multi -bi aid		The World Bank Group		Other RDBs	
	CPIA (7)	WGI (8)	CPIA (9)	WGI (10)	CPIA (11)	WGI (12)
Performance	2.099*** (0.572)	0.545 (0.396)	-1.122 (3.544)	2.905 (2.420)	7.786 (8.933)	6.326 (5.844)
GDP per capita	-0.170 (0.440)	-0.434 (0.343)	-2.608 (3.305)	-2.235 (2.502)	-3.545 (7.870)	-6.223 (5.465)
Population	-0.478 (1.662)	0.720 (1.220)	16.631* (9.713)	9.057 (7.391)	-15.303 (23.693)	-13.796 (10.765)
Observations	7037	9912	680	901	148	217
Adjusted-R2	0.550	0.559	0.538	0.582	0.835	0.853

Notes: Each specification includes a set of dummy variables controlling respectively for specific characteristics of recipient countries - bilateral donors dyadic relationships, multilateral institutions and years.

2.2. IDA trust funds vs IDA PBA

In response to the challenges raised by the fast growing role of its trust fund portfolio, the World Bank developed a new framework in 2007 setting out internal controls and management processes. This framework divides World Bank administered trusts funds in three categories: Financial Intermediary Funds (FIFs), Bank Executed Trust Funds (BETFs) and Recipient Executed Trust Funds (RETFs). FIFs are customized funds for which the Bank provides specified administrative, financial, or operational services but does not have authority over the use of funds, such as the Global Fund for AIDS, Tuberculosis and Malaria, the Global Environment Facility or the Heavily Indebted Poor Countries Initiative. Trust funds that do not follow the full set of Bank policies and procedures are classified as FIFs. FIFs commitments represent the largest share of total trust fund activities at the World Bank. According to IEG (2011), over the period 2002-2010, FIFs accounted for about 50% of trust fund grants. BETFs

are funds that support the Bank’s own work program, providing analytic and advisory supporting services. BETFs are growing in size and now account for over a quarter of total bank budget. Finally, RETFs are funds that the Bank passes on to a third party and for which the Bank plays an operational role in appraising and supervising funded activities. They are administered under the operational policies and procedures that apply to IBRD and IDA financing. RETFs are becoming increasingly important as a source of finance and relevant to Bank operations. Focusing on IDA countries RETFs commitments accounted for 18% of total IDA commitments for FY09 and represent today more than a quarter of total IDA commitments. The specific case of IDA allows us to investigate the new role of trust funds in the nature of activities of multilateral development agencies in developing countries. Furthermore, the question of articulation between new trust funds financing flows and the more classic operation processes – through the Performance Based Allocation (PBA) at the World Bank is clearly a rising issue.

The core message of the PBA has remained the same for almost 40 years. The goal of the PBA is to reward well performing countries by allocating a larger amount of aid, according to a Country Policy and Institutional Assessment (CPIA) which represents the alleged quality of their public policy or in other words their commitment to development. Performance is measured from the CPIA and its components.

The CPIA (Country Policy and Institutional Assessment Index) as describe above is composed of sixteen indicators grouped into four clusters :- A) macroeconomic management, B) structural policies, C) social policies, D) public sector management and institutions (D refers to the concept of governance). One component of the CPR takes into account clusters A, B & C, while another one, which is given a higher weight, takes into account cluster D. Besides the two components related to the CPIA, the CPR also includes a rating for each country’s implementation performance based on the World Bank’s Annual Report on Portfolio Performance (ARPP). The level of the CPIA components is assessed by an internal evaluation process within the World Bank.

The performance-based allocation formula used by the World Bank for IDA during the IDA15 and IDA16 periods (2008-2014) was the following** :

$$PBA_i = (CPR_i)^5 * (GNI / P)^{-0,125} * P_i$$

PBA_i is the share of country i allocation based on performance, GNI/P the gross national income per capita (in U.S. dollars), P_i the population. The evaluation of the Country Performance Rating (CPR_i) is itself the sum of three indicators:

$$CPR = 0.24 CPIA_{AtoC} + 0.68 CPIA_D + 0.08 ARPP$$

The heterogeneous situations faced by IDA members made the strict implementation of the PBA not feasible and MDBs such as the World Bank quickly had to implement a series of exceptions and special procedures to adapt the PBA and make it workable (see Guillaumont and Wagner, 2015).

** The exponent of CPR for IDA17 has been lowered from 5 to 4.

The main difficulty in the implementation of the PBA came from the special need of assistance to fragile states. The PBA allocates more aid to better performing countries, while fragile states are poor performers. More precisely the PBA allocates more aid to countries where the CPIA, and in particular its governance components are higher, while the fragile states are most often identified by low CPIA, and by bad governance. So the strict application of the PBA would lead to fragile states being left behind, and marginalization of countries with low quality governance. Fragile states are countries that have a big need for external support but where the quality of governance because of chaos or civil conflict or deep state weakness prevents them from getting it

To make the PBA consistent with the special need of fragile states MDBs and notably IDA had to set up various special funds and procedures to allow aid to flow into these countries, which were called by various and changing names: for instance at IDA, “low income countries under stress (LICUS)”, fragile states, post-conflict and re-engaging countries, fragile and conflict affected, and now turnaround countries. However, while the PBA formula is somewhat transparent, those procedures are not. They involve a more or less arbitrary decision to consider a country as eligible for fragile state treatment. At the same time they introduce non-linearity in the allocation. More importantly they reflect only a curative approach to state fragility, when a preventive approach could prevent countries close to the eligibility threshold falling and experiencing dire internal turmoil. For instance Mali was not considered as a fragile state until the 2011 conflict erupted.

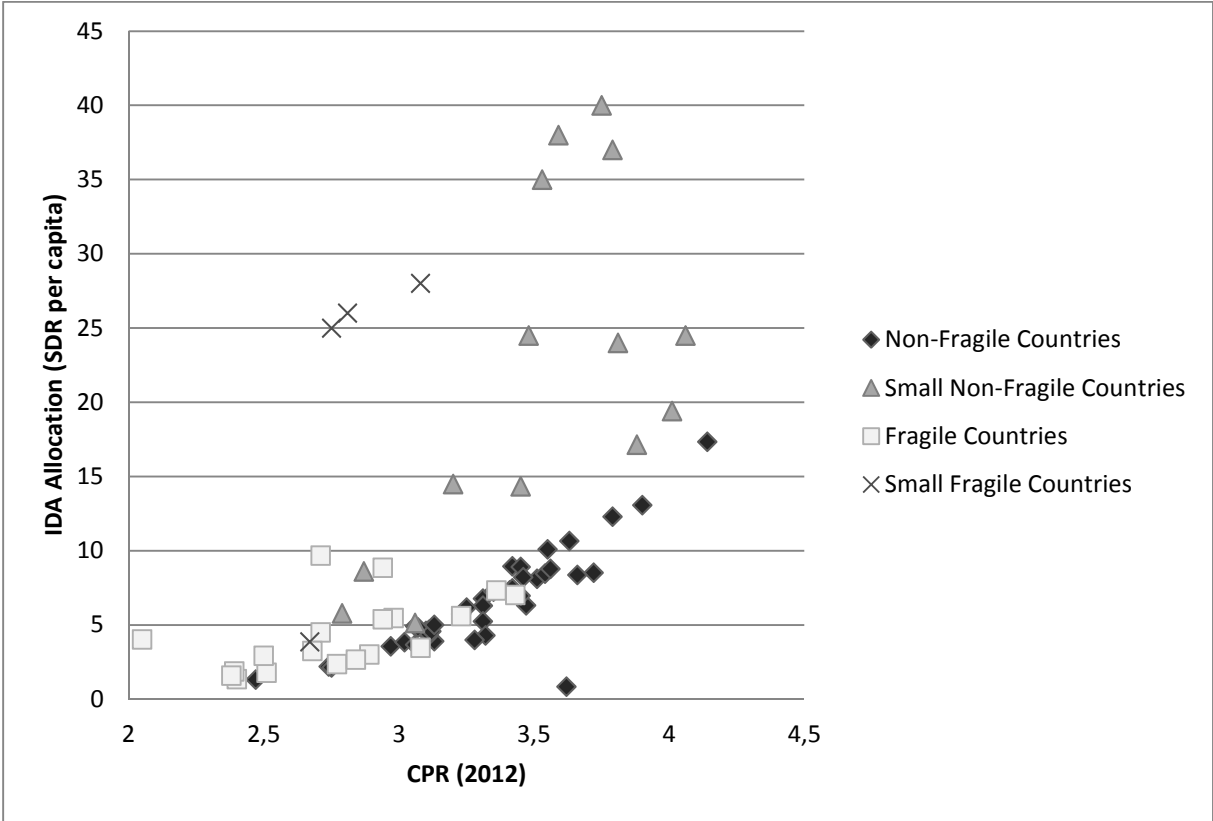
Furthermore, as recently evidenced, governance indicators are not purely endogenous to government decisions. They are determined by exogenous conditions as well (Guillaumont, McGillivray, Wagner, 2013). An exogenous macroeconomic shock will ultimately have a negative impact on governance. As fragile states suffer from structural vulnerabilities, they are prone to experience such shocks lowering even more their governance. This enhances the need to have a preventive approach to state fragility, by taking structural vulnerability into account in aid allocation.

Another source of discontent with the PBA comes from the treatment of very large countries or, at the opposite of the distribution, very small ones. Since allocation shares in most MDBs increase proportionally with population, special treatments have been set up for capping the allocations to very large countries which otherwise would have attracted too much resources (for instance Pakistan and India at IDA). Alternatively, since small countries tend to see their allocation share shrink with population size, leading to very small allocation shares, with incompressible management costs, most MDBs have set up a minimum allocation for each country. Since these minimum allocations have become quite large compared to the amount allocated through the PBA, it implies that the PBA in effect does not apply to those countries. Even a large variation in their governance does not lead to a significant change of a country’s allocation.

With the recent increase of the minimum base allocation for IDA, and the growing number of countries benefitting from a special treatment with regard to their state fragility, it seems that a minority of countries eligible to either IDA are really governed by the PBA. Looking at per capita

allocations in figure 13 illustrates the complexity for MDBs to balance the PBA formula and the exceptions.

Figure 13 - IDA aid allocation per capita as a function of CPR in 2014



Source: Authors' calculations. Note: Original IDA performance based allocations excluding adjustments for front- and back-loading and regional and intra-regional reallocation. Tuvalu with an allocation of 240 SDR per capita in 2014 has been excluded from this figure for the sake of clarity.

Looking at the recent evolution of RETFs, Huq (2010) note that for some categories of countries such as the fragile states RETFs tend to have substituted IDA as trust funds represent today the largest share of World Bank financial flows committed to those countries. This illustrates clearly the question related to the use of trust funds at the World Bank. Addressing this issue, Eicheneuer & Knack (2015) find that the cross-country allocations of aggregate trust fund aid are poverty and policy selective. In this respect, they argue that they are much more similar to allocations from IDA than from bilateral aid. While providing evidence that the PBA strongly influence the allocation of multi-bi aid at IDA, the authors don't show clearly how the proliferation of trust funds reinforces or weakens the weight of performance in the global allocation of aid at IDA.

The first column of Table 4 presents the simple pooled OLS regression of IDA allocation for the period 2009-2013 over the 3 indicators included in the PBA formula. As expected, they are all strongly significant. It is worth mentioning that the R-squared is only 0.78. The first explanation is that the data used here are IDA commitments rather than gross allocation reflecting the strict application of the formula. It includes notably front and back loading operations that influence significantly country allocations. A second explanation is that the numerous exceptions to the

formula (minimum allocations, blend countries capped allocations and fragile states special treatment) tend to already weaken the core message of the PBA. The second column of table 4 presents the pooled OLS regression of total RETF allocation for the period 2009-2013 over the 3 indicators included in the PBA formula. As earlier, the three indicators are significant. The coefficients relative to CPR are very close between columns 1 and 2, while the coefficient relative to GNI per capita in column 2 is stronger and the coefficient relative to population lower. This higher coefficient of GNI per capita is indicative of a stronger emphasis on needs. More importantly, the R-squared is low (0.31) which indicates that less than a third of the variance of total RETF geographical allocation is explained by the criteria of the PBA (under the log-log specification consistent with the PBA formula).

Table 4: IDA and RETF commitments, pooled OLS, Fiscal years 2009-2013

	(1)	(2)	(3)
	IDA Commitments <i>(in logarithm)</i>	RETF Commitments <i>(in logarithm)</i>	IDA+RETF Commitments <i>(in logarithm)</i>
Lagged CPR <i>(in logarithm)</i>	2.768*** (0.441)	3.001*** (0.933)	6.091*** (1.217)
Lagged Population <i>(in logarithm)</i>	0.822*** (0.042)	0.389*** (0.083)	1.181*** (0.114)
Lagged GNI per capita <i>(in logarithm)</i>	-0.252*** (0.073)	-1.111*** (0.162)	-1.375*** (0.202)
Constant	-10.382*** (0.961)	6.434*** (2.642)	-9.424*** (2.711)
Observations	210	210	197
R2	0.78	0.31	0.59

Note: each specification includes a set of time dummy variables. Robust standard errors in parenthesis. *** significant at 1%, ** significant at 5%, * significant at 10%.

In the third column, we present the same regression but we use the aggregation of IDA commitments and total RETF as the new left hand side variable. While all 3 indicators are once again significant, it is interesting to note that the R-squared is only 0.59. If we consider IDA and RETF commitments as the total aid allocation from IDA, only two third of its variance strictly follows the PBA. This new set of results seems to indicate that RETF geographical allocation follows to some extent the current IDA allocation through the PBA as it is applied (with the exceptions to the general rule), however, the majority of those funds are geographically allocated according to a totally different set of criteria.

To investigate further this issue, we simulate, using the IDA 16 PBA formula presented earlier, the virtual RETF geographic allocation that follows strictly the PBA. As for IDA PBA allocation, few exceptions and special treatments had to be introduced. First, we kept the same minimal allocation floor as in IDA 16 PBA formula of 1.5 million of SDR per annum (equivalent to 10.5 million US\$ over the period 2009-2013). Second, we capped India and Pakistan maximum allocation at respectively 11% and 7% of the total envelop. Finally, we ran simulations by

alternatively including or dropping Afghanistan to take into account its very large share of total RETF (30%).

The following table as well as figure A3 in appendix present the simple correlations between IDA commitments, official RETF commitments and simulated RETF commitments over the period 2009-2013. As can be seen, the correlation between IDA commitments and the simulated RETF allocation is by construction close to 100% while the correlation is of only 47% between simulated and official RETF commitments^{††}. As before, it appears clearly that performance is only part of the story explaining RETF grants geographical allocation.

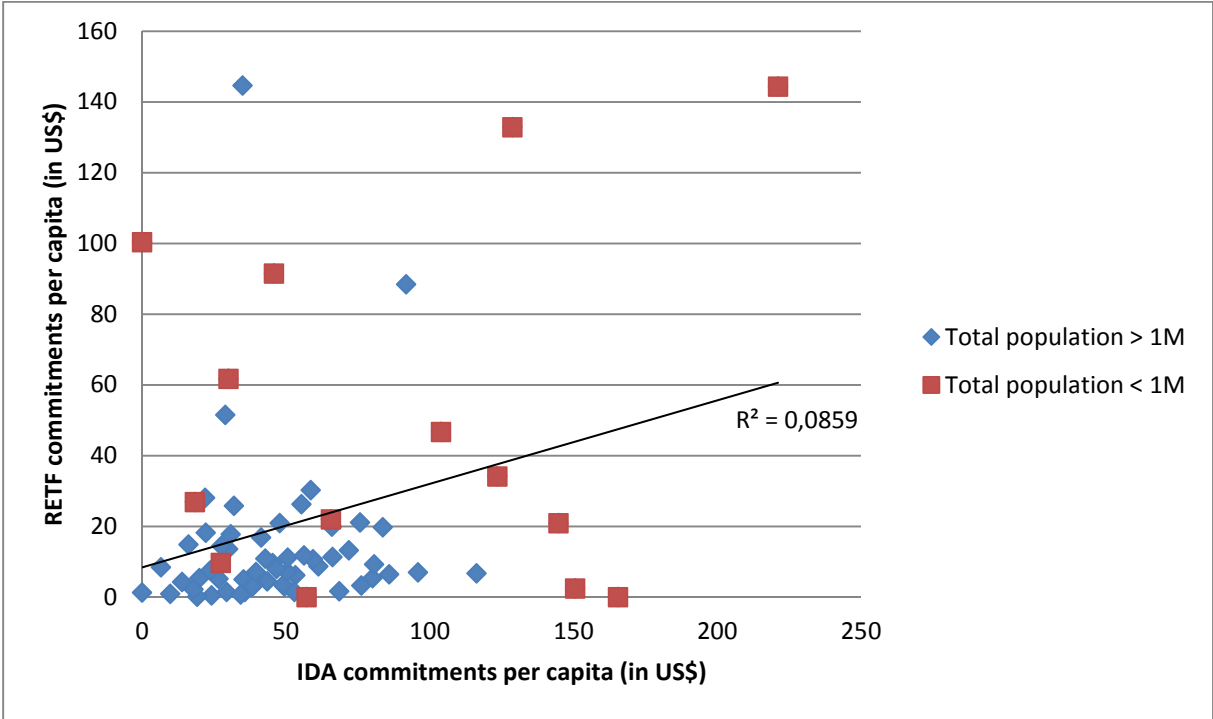
Table 5: IDA and RETF commitments, simple correlations, Fiscal years 2009-2013

Simple correlations	IDA commitments	RETF commitments	Simulated RETF commitments
IDA commitments	100%	-	-
RETF commitments	51%	100%	-
Simulated RETF commitments	99%	47%	100%

This is even more evidenced by figure 14 below displaying the correlation between per capita IDA commitments and RETF per capita commitments. While per capita correlation is higher (62%), once Tonga and Kiribati, two clear outliers in terms of per capita allocation, are removed, the correlation falls to a 30%. Likewise, once small countries with less than one million habitants are removed the correlation drops to 8% and becomes no longer significant.

^{††} The correlation falls below 30% when a few outliers are removed (see figure A3 in appendix).

Figure 14 - RETF commitments per capita as a function of IDA commitments per capita, Fiscal years 2009-2013



Source: Authors' calculations. Note: Tonga and Kiribati were removed from the figure for clarity.

The following table gives the breakdown by income group and regions of IDA commitments and RETF official and simulated commitments (Country by country actual and simulated allocations are displayed in table A2 in appendix). It appears very clearly that RETF allocation is more focused on the needs than it is on performance. Sub-Saharan Africa, Low income countries, LDCs and Fragile States receive a larger share under the current allocation than it would be the case if the stricter PBA was applied. Those groups are the one presenting the lowest level of GNI per capita as well as other indicators of needs.

Table 6: IDA and RETF commitments, simulations by income group and region, Fiscal years 2009-2013

	IDA commitments	RETF commitments	Simulated RETF commitments
Income groups			
Low Income	30%	59%	30%
Lower Middle Income	68%	39%	68%
Upper Middle Income	1%	2%	1%
Least Developed Countries	44%	75%	43%
Fragile States	13%	26%	9%
Regions			
Sub-Saharan Africa	48%	64%	46%
Europe & Central Asia	4%	4%	3%
Middle East & North Africa	1%	1%	1%
East Asia & Pacific	11%	11%	11%
South Asia	34%	17%	36%
Latin American & Caribbean	3%	4%	2%

Evidence from IDA clearly shows that performance tends not to be used as the only criterion for RETF allocation, as the share of concessional public financing channelled through earmarked funds rises, the share of aid allocated through the strict PBA decreases. During the 2009-2013, 30 out of 81 IDA countries received at least 25% more aid from the World Bank thanks to RETF compared to a situation where RETF disbursements would be equal to zero. Furthermore, as many of them are fragile states (Liberia, Central African Republic, Burundi, Sierra Leone, etc.) they have already access within the PBA to the special window for turn-around countries implying that their IDA allocations are already largely disconnected from their performance level. As can be seen from the last column of table A2 in appendix, for some countries the share of total aid received (by adding IDA and RETF flows) escaping the PBA is far from negligible^{‡‡} over the period 2009-2013. Indeed, for countries such as Timor-Leste, Liberia, The Gambia, Solomon Islands, Central African Republic, Guinea, Sierra Leone, and Cambodia more than a third of their total ODA flows received from the World Bank escape the pure application of the PBA. On the other hand, countries like Honduras, Uganda, Tanzania, Uzbekistan, India, Madagascar or Bolivia, in the end, receive less than 90% of what they could pretend to if the PBA was also applied to RETF.

In the context of a fast growing share of trust funds, multilateral donors have to address the strategic question of the articulation between their more classic concessional windows governed by PBAs and their multiple trust funds (IEG, 2011). The fact that trust funds are effectively used to reach countries that lag the most behind is obviously a good thing as the design of new instrument aimed at those countries is certainly one of the main challenges faced by the MDBs today. However, this new approach cannot be totally disconnected of the global strategy leading

^{‡‡} The percentage of aid escaping the PBA is computed as the difference between official and simulated RETF commitments over the sum of IDA and official RETF commitments.

their concessional windows at a risk of the emergence of a double narrative hardly understandable by their clients and stakeholders.

III. Concluding remarks

Earmarked funds are on the rise and their strong appealing potential for bilateral donors in terms of flexibility and ease of implementation continue to support this upward trend. However, this new instrument has developed at such a pace that a comprehensive review of its efficacy and more importantly, of its consistency with traditional concessional financing windows is yet to be made. For the last decade, most MDBs, following the lead of the World Bank, have opted for some sort of performance based allocation for their main concessional funds. Countries that perform well according to an assessment of the quality of their economic policies are expected to receive more multilateral ODA. This widespread practice appears to be the cornerstone of the common philosophy regarding multilateral aid allocation. Trust funds on the other hand, are designed to provide a greater efficacy and flexibility by escaping the constraint of this rigorous allocation rule. As the allocation processes as well as the core objectives of both instruments are meant to be different, their aggregation is likely to undermine the dominant weight of performance. While our econometric results suggest that performance to some extent still tends to guide the allocation of earmarked funds in most MDBs, and more particularly the World Bank, we also find that this influence is limited, pointing to the fact that trust funds are mainly allocated according to a different set of criteria. Furthermore, total ODA received from the World Bank by many countries, notably the most fragile, seems clearly disconnected from their performance levels. This means more discretionary aid allocations by country, which are harder to predict. The multiplication of trust funds could thus also results in an increase in the aid volatility. The growing interest for trust funds may reflect some doubts from bilateral donors about the general allocation rules they are supposed to support, due to its possible lack of flexibility. It also highlights increasing concerns from bilateral donors about the peace and security issues, which are difficult to address within the framework of the PBA, notably in a preventive way.

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Appendix

Table A1: The geographic allocation of multi-bi aid, OLS & Fixed Effects, 2005-2014, OECD CRS data

	CPIA				WGI			
	Disbursements		Commitments		Disbursements		Commitments	
	OLS	FE	OLS	FE	OLS	FE	OLS	FE
	(5)	(6)	(7)	(8)	(5)	(6)	(7)	(8)
Performance	-1.402*** (0.421)	0.739 (1.121)	-1.441*** (0.455)	1.911 (1.801)	-0.588*** (0.218)	-2.135*** (0.596)	-0.787*** (0.223)	-1.353* (0.703)
GDP per capita	-0.178* (0.092)	-1.686** (0.685)	-0.245** (0.097)	-2.670*** (1.003)	-0.671*** (0.049)	-1.486*** (0.498)	-0.722*** (0.051)	-2.107*** (0.616)
Population	0.675*** (0.044)	0.474 (1.800)	0.645*** (0.044)	-1.593 (2.584)	0.499*** (0.023)	-2.609+ (1.629)	0.471*** (0.025)	-4.115** (2.019)
Observations	597	597	590	590	1035	1035	1013	1013
Countries	80	80	80	80	135	135	135	135
Adjusted-R2	0.537	0.158	0.514	0.172	0.564	0.231	0.544	0.241

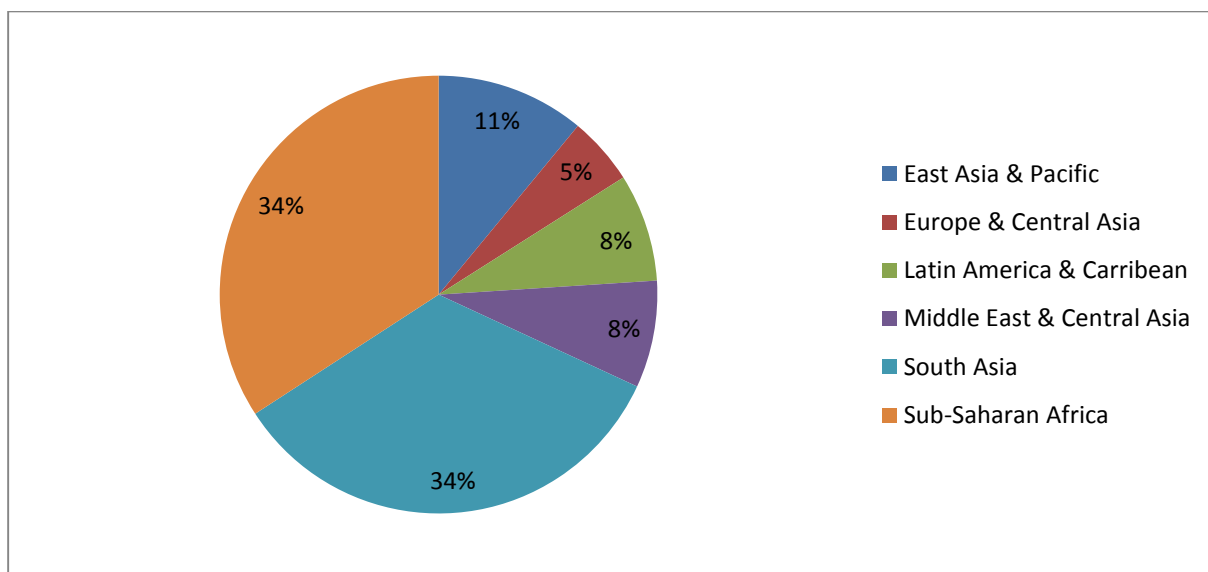
Notes: Each specification includes a set of year dummy variables.

Table A2: RETF commitments official and simulated, Fiscal years 2009-2013

Countries	IDA commitments (1)	RETF commitments (2)	Simulated RETF commitments (3)	Gap between actual and simulated RETF (2) / (3)	Share of total ODA escaping the PBA $\frac{(2)-(3)}{(1)+(2)}$
Timor-Leste	32	57	10	547%	52%
Liberia	350	337	13	2588%	47%
Gambia, The	36	46	8	568%	46%
Solomon Islands	15	32	10	304%	45%
Central African Republic	95	78	8	938%	40%
Guinea	171	159	26	611%	40%
Sierra Leone	180	146	24	618%	37%
Cambodia	93	119	49	242%	33%
Togo	189	109	13	872%	32%
Guyana	14	21	10	200%	30%
Mongolia	157	81	18	438%	26%
Kiribati	44	29	10	281%	26%
Samoa	41	27	10	256%	24%
Lao PDR	299	131	29	447%	24%
Ethiopia	4700	2230	624	358%	23%
Burundi	369	151	30	498%	23%
Tajikistan	223	101	29	351%	22%
Haiti	644	194	21	913%	21%
Guinea-Bissau	42	22	10	213%	18%
Moldova	270	75	31	247%	13%
Grenada	13	14	10	132%	12%
Congo, Dem. Rep.	1606	315	102	310%	11%
Djibouti	54	18	10	173%	11%
Mauritania	83	27	16	170%	10%
Zambia	550	140	75	187%	9%
Kyrgyz Republic	303	64	31	207%	9%
Rwanda	881	208	114	183%	9%
Nepal	1204	255	130	196%	9%
Lesotho	143	26	15	178%	7%
Nicaragua	291	64	41	157%	7%
Papua New Guinea	133	36	26	140%	6%
Bhutan	102	15	9	172%	5%
Mozambique	1547	264	196	135%	4%

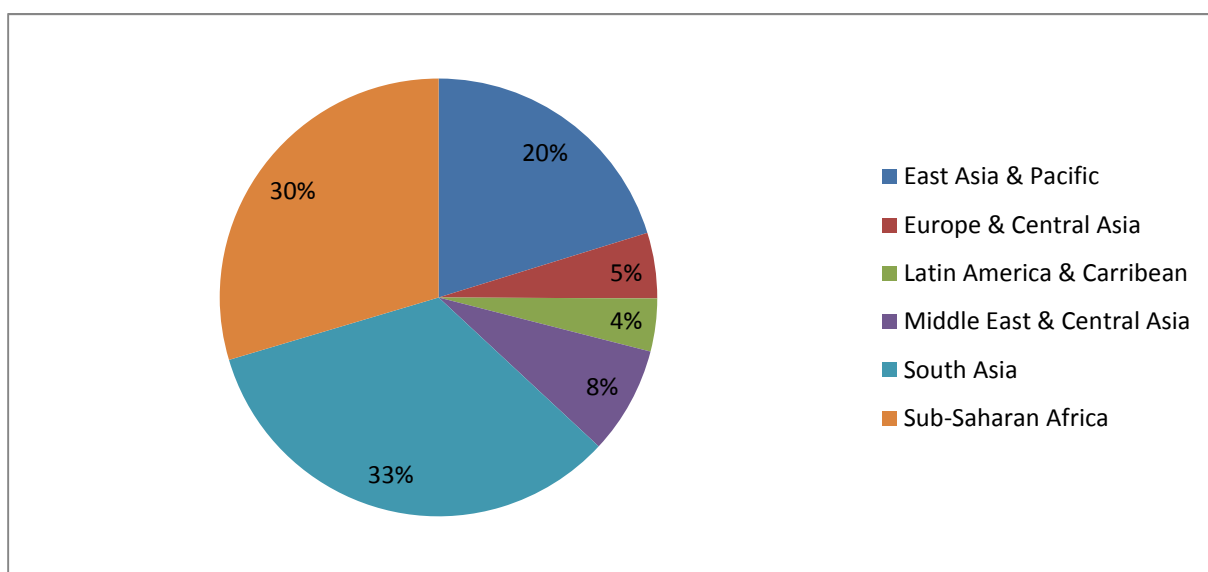
Tonga	71	13	10	128%	4%
Senegal	748	135	105	128%	3%
Yemen. Rep.	784	111	85	130%	3%
Cote d'Ivoire	715	56	34	164%	3%
Niger	607	108	95	115%	2%
Malawi	894	128	116	110%	1%
Bosnia and Herzegovina	180	31	28	108%	1%
Congo. Rep.	71	9	8	111%	1%
Maldives	40	11	10	104%	1%
Benin	466	66	66	101%	0%
Chad	112	10	12	85%	-1%
Bangladesh	6497	665	770	86%	-1%
Burkina Faso	1219	139	165	84%	-2%
St. Vincent and the Grenadines	5	10	10	96%	-3%
Georgia	515	30	49	61%	-3%
Mali	723	84	116	72%	-4%
Vietnam	6889	463	832	56%	-5%
Armenia	285	21	37	57%	-5%
Sri Lanka	1004	71	132	54%	-6%
Kenya	3038	130	310	42%	-6%
Ghana	2034	153	291	53%	-6%
Cameroon	591	30	74	41%	-7%
Angola	360	3	28	9%	-7%
Pakistan	5235	326	784	42%	-8%
Nigeria	5545	229	708	32%	-8%
Sao Tome and Principe	18	8	10	77%	-9%
Honduras	395	11	51	21%	-10%
Uganda	1627	99	280	35%	-10%
Tanzania	2994	72	415	17%	-11%
Uzbekistan	670	14	98	14%	-12%
India	9287	196	1448	14%	-13%
Madagascar	285	88	140	63%	-14%
Bolivia	343	8	64	12%	-16%
Comoros	18	6	10	62%	-16%
Vanuatu	0	23	10	222%	
Eritrea	0	7	11	61%	
St. Lucia	26	0	10		
Marshall Islands	3	0	10		
Cabo Verde	81	0	10		

Figure A1: UNDP Geographic allocation of sector allocable multi-bi aid over 2008-2012



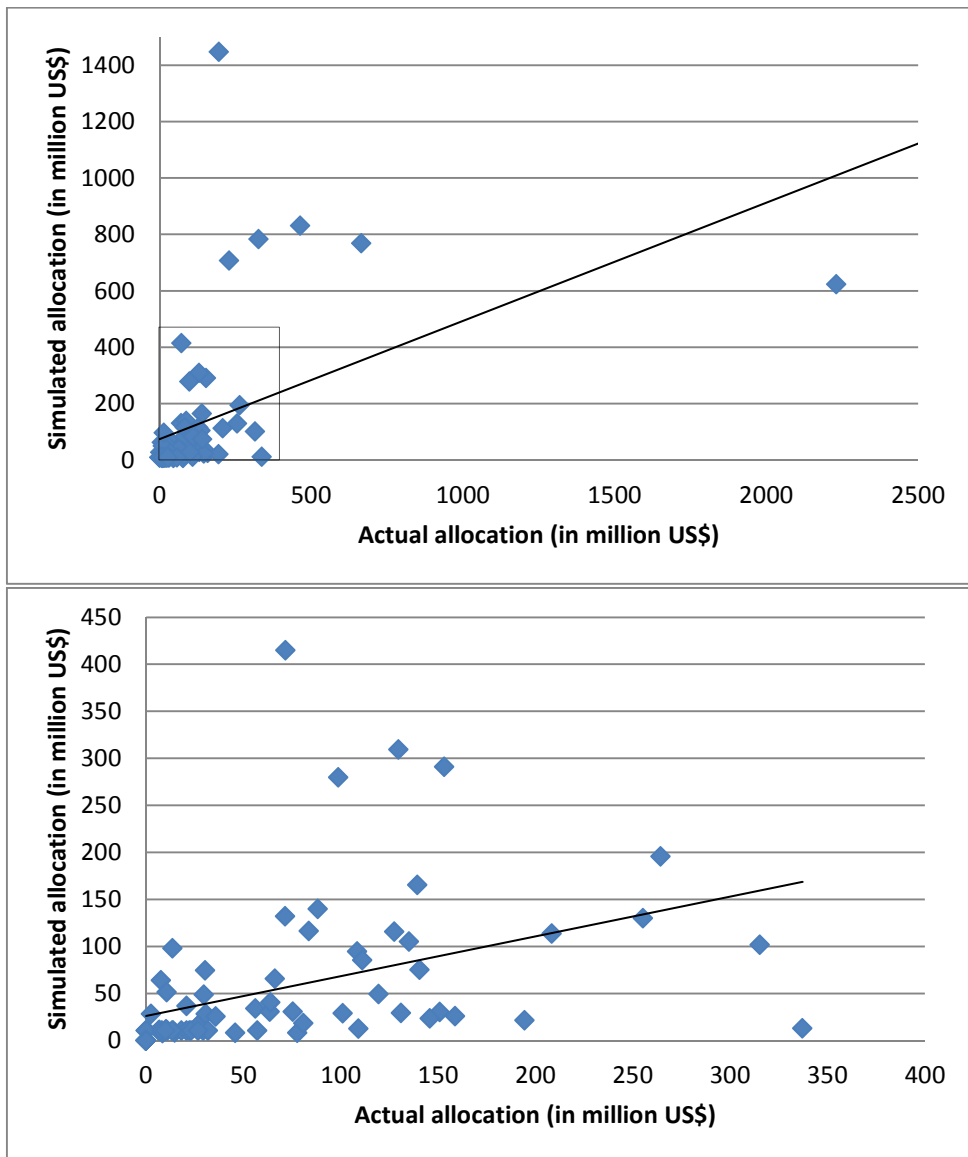
Source: Author's calculation based on Eichenauer and Reinsberg (2015) data

Figure A2: World Bank Geographic allocation of sector allocable multi-bi aid over 2008-2012



Source: Author's calculation based on Eichenauer and Reinsberg (2015) data

Figure A3: RETF commitments official and simulated, simple correlation, Fiscal years 2009-2013



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