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« **Aid, Trade and Migration : How are OECD
countries policies connected in times of crisis ?**»

Auteurs

Aurore Gary, Audrey-Rose Menard

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Aid, Trade and Migration: How are OECD countries policies connected in times of crisis?

Aurore Gary[*]   Audrey-Rose Menard[†]

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Abstract

This paper aims at explaining how aid, trade and migration in developed nations are connected, in particular in times of economics crisis. It relates to a new strand of the aid allocation literature, which aims at determining how donors' domestic policies and their political environment can delineate bilateral aid allocations.

We use a gravity model framework to jointly determine aid, trade and migration between pairs of developed and developing countries as well as their relation to unemployment in OECD nations. Namely, we focus on the core determinants of these policies with the particular aim of determining whether aid, trade, migration and unemployment policies are interdependent or not. We apply a three-stage least squares method on a data set covering 22 Development Assistance Committee (DAC) countries and 153 recipient countries from 2000 and 2010.

Our data reveal that not only aid, trade and migration policies affect respectively aid, trade and migration flows but also they affect each other. Likewise, these policies can be substitutes for developed countries unemployment policies.

Keywords: Foreign aid, Trade, Migration.

JEL codes: F22, F4, F35, O11.

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[*]Paris I Panthéon-Sorbonne University. 118 Boulevard de Magenta 75010 Paris, France. Phone: +33175501479. Email: aurore.gary@univ-paris1.fr

[†]University of Strasbourg, Bureau d'Économie Théorique et Appliquée. 61 avenue de la Forêt Noire, 67000 Strasbourg, France. Phone: +33380602090. Email: amenard@unistra.fr

1   Introduction

Foreign aid is one policy amongst many others, including migration and trade policies. Aid allocation toward developing countries is therefore determined by other public restrictions. As reported in Berthélemy et al. (2009), aid flows increase migration flows to donor countries below a critical income threshold in origin countries (i.e. developing countries), rendering migration policy in donor countries more restrictive (due to a higher demand for protection). We extend their study by including trade flows in a simultaneous equations system, and by controlling for unemployment as a measure of economic health of donors.

The main originality of this essay relies on the inclusion of trade flows in the aid-migration nexus to estimate whether these donors' policies are interdependently and simultaneously determined. Furthermore, we also argue that the tightness of the labor market (say an increase in unemployment rates) may not only exert downward pressures on both migration (directly) and aid (indirectly) as suggested by Azam and Berlinschi (2009) but also may directly increase aid allocations. Indeed, governments of industrialized nations may be more likely to tighten their migration policies when unemployment rates are high. In turn, due to lower pressure from the migrant population, aid flows should decrease. Second, donors may want to expand their assistance in order to slow down incentives for migrating from aid recipient countries.

Therefore, our main contribution includes a greater understanding of donors' decisions, especially in a time of economic crisis. Aid effectiveness literature would benefit from a thorough knowledge of OECD countries' policies by considering a set of policies that also affect developing countries, namely aid, trade, and migration policies.

Our gravity-based predictors appear to be highly relevant to explain (1) how migration, trade and aid policies are interrelated and need to be addressed simultaneously, (2) and how the unemployment burden encourages donors to adjust their policies. Four main results are identified. First, aid and migration flows are positively correlated. New migrants tend to lobby for higher assistance, which in turn attracts new migrants thanks to deeper connection between the two countries.

Second, turning to aid and trade policies, we find that commercial interests of donors play a major role in aid allocation. Exports to developing countries favor altruistic aid policies while additional aid inflows do not necessarily create new market opportunities.

Third, regarding the trade-off between trade and migration flows, imports from developing countries make migration policies more restrictive. Trading partners with whom OECD countries have trade deficits are less likely to send migrants. Furthermore, consistent with the Hecksher-Ohlin-Samuelson model, migration inflows decrease exports to developing countries.

Finally, we show that donors economic health affect their policies. Unemployment policies, designed to absorb the rise of unemployment, and migration policies, often designed to control migrants inflows, seem to be linked together. We indeed find that unemployment reduces migration from developing countries. OECD countries with high unemployment rates seem to be less attractive for potential migrants. Besides, owing to deteriorating job market conditions, policy makers would also be likely to tighten their migration policies. In addition, we observe that higher unemployment is associated with greater aid allocations. This result makes sense if donors tend to use foreign aid allocation as an instrument designed to serve their unemployment policy interests. Donors, facing increasing rates in unemployment, may want to allocate additional aid towards developing countries in order to lower incentives to migrate and protect their labor market from potential incomers.

The remainder of the paper is structured as follows. Section 2 briefly reviews the literature on the interdependence between aid, trade, and migration flows. In section 3, we describe our data and the econometric methodology. In section 4, the main results are discussed. Section 5 provides various robustness tests and section 6 concludes.

2   A summary review of the literature

Few studies have examined how OECD countries domestic policies - which are likely to affect developing economies - are jointly determined. Firstly, Lundsgaarde et al. (2007) evidenced a "displacement effect" showing that trade and aid policies are substitutes.

Their findings suggested that imports from developing countries are likely to reduce aid flows, which supports the "trade not aid" effect. This effect lies on the idea that a better way to promote economic development is through trade (Winters et al., 2004), and not thanks to the provision of foreign aid. In other words, trade may decrease aid amounts when donors develop trade with their partner countries. Additionally, if imports from developing countries increase and exceed donors exports, trade deficits with recipient countries may betray a loss of jobs from donor countries to developing countries (increasing unemployment in donor countries), which in turn may lower the donors' willingness to allocate foreign assistance (Lundsgaarde et al., 2007).

Other studies have addressed how donors use tied aid in order to increase their exports to developing countries. As supported by Canavire-Bacarreza et al. (2006), Dollar and Levin (2006) and Claessens et al. (2009) in particular, bilateral donors are prone to reward trade partners and new market opportunities. Michaelowa and Welt-Wirtschafts-Archiv (1996) also explained that tied aid (to donor exports) is a mean to reinforce political support and contributions from lobby groups. Lobby groups in turn affect the government intervention in favor of tied aid to create new jobs. Testing for the aid-trade relationship in both directions and considering separate panels, Osei et al. (2004) found that largest donors tend to trade more with their aid-recipient countries, though foreign aid seems not to deepen trade relationships. Conversely, Wagner (2003) indicated that aid induces exports of goods, in particular for New Zealand, Australia, United States and France. Up to 35 per cent of aid amounts can be directly spent into imports of goods from the donor country. Martínez-Zarzoso et al. (2014) explained that aid does not affect trade anymore since the 2000s, maybe because the OECD Development Assistance Committee recommended to untie aid in order to avoid large administrative costs required when tying aid.

Secondly, according to the Hecksher-Ohlin-Samuelson model, international migration and international trade can be substitutes. As a consequence, liberalizing trade would decrease incentives for migration. However, if immigrants do prefer goods produced in their country of origin, migration and trade can easily be complements (Campaniello, 2014). Migrant networks can facilitate bilateral economic transactions and reduce transaction

cost (Ehrhart et al., 2014), making trade performance better for destination countries (see specific developed countries studies of Gould (1994) and Peri and Requena-Silvente (2010) for instance). Indeed, immigration can gum out cultural barriers due to cultural differences between host and origin countries (Rauch and Casella, 2003). In their gravity model, Felbermayr and Jung (2009) showed that immigration from South to North increase trade flows of North countries while Parsons (2012) found this positive relationship only for North exports to South.

Thirdly, regarding aid and migration flows, donors may use foreign assistance as a policy instrument for limiting inflows of migrants (Azam and Berlinschi, 2010), provided that aid reduces income differentials between origin and destination countries (Angelucci, 2004). People should rather want to stay in their country of origin, which is familiar to them and where they have their networks (non-monetary costs). If aid is able to reduce enough wage differentials between countries, people willing to move would not be willing to anymore. Using a simple game-theoretic model as well as an empirical investigation, Azam and Berlinschi (2010) highlighted a donors' trade-off between aid outflows and migration inflows from developing countries. Berthélemy et al. (2009) found that this effect hold in countries above a critical income threshold equal to USD 7,300 per capita in PPP 2000 prices. Otherwise, aid flows increase migration pressures in OECD countries, encouraging thereafter restrictive migration policies. Based on data from Greece, Spain, Portugal and Greece, Faini and Venturini (1993) confirmed that aid, which increases revenues and lowers financial constraints to migrate, encourages migration flows from relatively poor countries. Bilateral aid may also diffuse information on donor countries, easing in turn potential migration. Lahiri and Raimondos-Møller (2000) provided a theoretical explanation of how ethnic groups exert pressures to allocate more aid to their countries of origin, and how governments in donor countries accept such political influence from these lobby groups. Cultural, ethnic and family ties with their countries of origin determine this influence. In a case study, Anwar and Michaelowa (2006) confirmed that ethnic lobbying and the extent of US business interests play a major role in explaining aid allocation. They found that two opposing ethnic groups (Pakistanis and Indians living in the US) exert a significant influence on US aid disbursements to

Pakistan.

Finally, Fleck and Kilby (2006) and Milner and Tingley (2010) argued that aid efforts and commitments are influenced by politics in donor countries (such as government priorities or ideological positions of political parties), in particular in times of economic crisis. As the economy gets worse (whether related to trade positions or to economic growth), aid flows tend to decline, mainly those allocated towards low income countries (Tingley, 2010).

We therefore extend the study of Berthélemy et al. (2009) (i) by including trade flows in their analysis with the objective of addressing how aid, migration and trade policies are jointly determined, and (ii) by controlling for unemployment as a measure of economic health of donors (namely OECD nations). Indeed, based on the results of Azam and Berlinschi (2010), we expect that, due to internal pressures in times of crisis, donors would increase the amounts of aid allocated to developing countries with the aim of improving economic conditions, and therefore decrease incentives for migration.

3 Econometric Methodology and Data

3.1 The model

Our objective in this paper is twofold. We aim at (i) investigating the interactions lying between aid, trade and migration and (ii) determining the explanatory factors they have in common.

We propose a joint simultaneous model of three equations: trade, migration and aid allocation. We base our analysis on (Berthélemy et al., 2009) (i) by adding to their gravity model of migration and aid a trade equation, and (ii) by including the labor market in OECD countries. International trade flows can indeed be well described by a "gravity equation" in which bilateral trade flows are a log-linear function of incomes and distances between trading partners. Besides, our gravity model presents a geographic view of aid, trade and migration, which enables us to investigate the potential of interactions between pairs of countries. Using panel data gives also various advantages: (i) using both time and cross-sectional dimensions allows to account for all the information

and increases the precision of empirical estimates; (ii) it is possible to consider countries' heterogeneity and (iii) we can control for omitted biases, in particular for country specific effects that cannot be directly included into the model.

We estimate the following system of equations:

$$
\begin{cases}
aid_{ijt} = \beta_0 + \lambda_i + \lambda_j + \lambda_t + \beta_1 X_{ijt} \\
\quad + \beta_2 migration_{ijt} + \beta_3 trade_{ijt} + \beta_4 unemployment_{jt} + \epsilon_{ijt} \\
migration_{ijt} = \theta_0 + \lambda_i' + \lambda_j' + \lambda_t' + \theta_1 X_{ijt}' \\
\quad + \theta_2 aid_{ijt} + \theta_3 trade_{ijt} + \theta_4 unemployment_{jt} + \epsilon_{ijt}' \\
trade_{ijt} = \gamma_0 + \lambda_i'' + \lambda_j'' + \lambda_t'' + \gamma_1 X_{ijt}'' \\
\quad + \gamma_2 migration_{ijt} + \gamma_3 aid_{ijt} + \gamma_4 unemployment_{jt} + \epsilon_{ijt}''
\end{cases}
\tag{1}
$$

where i stands for the developing country, j the donor, t for the year, $X_{ijt}, X_{ijt}', X_{ijt}''$ for the control variables, and $\epsilon_{it}, \epsilon_{ijt}', \epsilon_{ijt}''$ for error terms. aid_{ijt} refers to the log of bilateral aid allocated to recipient i by donor j, $trade_{ijt}$ to the log of bilateral trade between developing country i and developed country j, $migration_{ijt}$ to the log of bilateral migration inflows from origin country i to destination country j, and $unemployment_{jt}$ to the unemployment rate in developed country j. Since we investigate the interdependence between aid, migration, and trade flows, we rely upon migration flow data from the OECD. Indeed, flows of aid and trade are more likely to influence flows of migration than stocks of migrants, namely migrants who have already move to the destination country. The OECD database is the only source to provide flows on migrants in OECD countries up to 2010 although this source does not enable us to control for the education level achieved by immigrants. The World Bank provides information on this education level, but the related data on the stock of immigrants are only available up to 2000.

X_{ijt} includes variables in bilateral terms (such as migration inflows in OECD countries, exports to developing countries, former colonies, common language, trade balance and the Japan-Asia dummy variable), as well as at the recipient level (per capita GDP, population size, governance quality and trade openness) and at the donor level (amounts of total aid allocated).

X'_{ijt} refers to bilateral aid flows, imports from developing countries (i.e. exports from developing to OECD countries), recipient and donor trade openness, unemployment rates and population in rich countries, per capita GDP and population in developing countries, geographic distance between developing and developed country, dummy variables for common language shared by the two country, for a former colonial relationship and for western offshoots (Canada, the United States, Australia, and New Zealand), and specific proximities between Latin America and the USA, differences in unemployment rates between rich and developing countries and the square of per capita GDP in developing countries.

X''_{ijt} includes control variables at the donor level (per capita GDP, population size, trade openness, real interest rate) as well as at recipient level (per capita GDP, population size) and bilateral variables (migration and aid flows, dummy variables for common language shared by the two country, for a former colonial relationship and for contiguity geographic distance between trade partners). To control for unobserved specific country characteristics for each pair of trading countries, we include country pair specific fixed effects in our trade equation (Carrere, 2006). To control for common shocks (for example, changes of oil prices), we also include year specific effects, as in (Carrere, 2006). Standard gravity equations also include exporter and importer fixed effects. Hence, donor fixed effects allow us to control for exporter fixed effects and recipient fixed effects for importer fixed effects.

3.2   The endogeneity issue

In model (1), equations are seemingly related regressions. Our empirical model describes potential (and expected) feedback relationships between aid, trade, and migration policies. We employ a simultaneous equations model, whose parameters are estimated using the three-stage least squares (3SLS) method to address above-mentioned endogeneity issues.

The 3SLS method uses an instrumental variable (IV) approach to produce consistent estimates and a Generalized Least Squares (GLS) procedure to solve the fact that residu-

als of the three equations are correlated. Namely, as the Seemingly Unrelated Equations generalizes Ordinary Least Squares, the 3SLS procedure generalizes the 2SLS procedure by taking into account the correlations between residuals across equations of system (1). Each equation contains endogenous variables (the dependent variable from other equations included in the system, i.e. aid, migration, and trade) among the explanatory variables, which causes a correlation of cross-equation disturbances.

In addition to *Aid*, *Trade* and *Migration*, *Unemployment*, *Differences in unemployment*, *GDP (South)*, *Governance*, *Imports*, *Donor trade openness* and *Recipient trade openness* are assumed to be endogenous to either *Aid*, *Trade* or *Migration*. First, *Unemployment* (and then *Difference in unemployment* is awaited to be affected by the stock of migrants. More migrants (through their supply of labor and demand of goods or via their labor complementarities) are prone to have an effect on the unemployment rate (Boubtane et al., 2013; Ortega and Peri, 2014a). Immigration flows in OECD countries may also affect unemployment rates by directly rising the labor supply (see for example Heid and Larch (2012)). Second, *GDP (South)* influences the decision made by donors to allocate assistance (see, among others, Dollar and Levin (2006)). Besides, The economic impact of migration has been largely documented (see Combes et al., 2014 for an analysis of the impact of migration and remittances on origin countries poverty). Third, it is intuitive that trade openness of both donors and recipients can affect *Exports* of OECD countries. Fourth, the quality of *Governance* has been revealed as a core motive for aid allocations to reward recipient countries efforts to build better institutions (see, among others, Dollar and Levin (2006)). Finally, we also suspect *Imports* to be endogenous to *Migration*. Bilateral imports can increase thanks to immigrants inflows because transaction costs may be lower between the two countries and because immigrants are prone to demand products from their origin countries (Mundra, 2005).

Each equation k ($k = 1$ to 3) of our system satisfies the order condition of identification (the number of exogenous variables excluded in equation k is higher than the number of endogenous variables included in equation k). As our equations are all over-identified, we can employ the 3SLS estimator to obtain consistent, asymptotically normal and asymptotically efficient estimates (Wooldridge, 2010).

Our estimates are produced via the following procedure. Firstly, endogenous variables are instrumented. Predicted values are determined through a regression of each endogenous variable on all exogenous variables used in the system of equations (1).[1] Secondly, the residuals from the 2SLS estimation of the two equations of model (1) are used to obtain a consistent estimate of the covariance matrix of the disturbances. Thirdly, the covariance matrix and instruments from the first stage are employed in a GLS estimation to give consistent estimates of the parameters of model (1). These estimates are more precise than those of a simple 2SLS (standard errors of the three-stage estimates are smaller than those for the two-stage estimates) given the second stage that enables us to control for the correlation of the cross-equation disturbances.

3.3   The data

Our dataset comprises data for 22 DAC countries and 153 recipient countries from 2000 to 2010. Descriptive statistics are reported in Table 7. Correlation matrices are shown in Table 8. Table 9 provides a detailed description of our variables and their sources. The list of countries (for both donors and recipients) included in our sample is provided in Table 6.

4   Empirical Results

Table 1 presents results from the joint determination of aid, migration and trade equations. Estimated coefficients have expected signs. Regarding the goodness of fit statistics, R squares are relatively high (between 0.610 and 0.956). The fit explains at least 61% of the total variation in the data. With the aim of comparing our specifications and selecting the model that minimizes the information loss, we also make use of Akaike information criterion (AIC) and Bayesian information criterion (BIC) criteria.[2] We also

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[1]All explanatory variables in the system are taken to be instruments for endogenous variables excepted for *Unemployment*, **Imports**, *Difference in unemployment*, *GDP (South)*, *Governance*, *Donor trade openness* and *Recipient trade openness*, assumed to be correlated with error terms.

[2]Notice that AIC relies upon the goodness of fit of the model and the complexity of the model. It does not provide information about the absolute quality of the model but rather on the relative quality of the model, i.e. on the candidate that minimizes the information loss.

use the BIC criterion in order to test whether adding parameters results in overfitting.[3] We chose the fitted specification corresponding to the minimum values of AIC and BIC.

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[3]Both AIC and BIC resolve this issue but BIC uses a larger penalty term than AIC.

Table 1: Gravity estimation of aid, migration and trade (3SLS)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Benchmark			GDP squared			Aid squared		
	Aid	Migration	Exports	Aid	Migration	Exports	Aid	Migration	Exports
Aid		0.182***	-0.0714		0.182***	-0.0707		0.0182*	-0.0779
		(0.00480)	(0.102)		(0.00480)	(0.102)		(0.00991)	(0.102)
Migration	0.723***		-0.649***	0.722***		-0.650***	0.689***		-0.642***
	(0.0205)		(0.239)	(0.0205)		(0.239)	(0.0206)		(0.239)
Unemployment	0.101***	-0.159***		0.101***	-0.159***		0.101***	-0.176***	
	(0.0187)	(0.0164)		(0.0187)	(0.0164)		(0.0187)	(0.0163)	
Exports	0.188***	-0.00763		0.188***	-0.00743		0.192***	-0.00196	
	(0.00839)	(0.00492)		(0.00839)	(0.00493)		(0.00839)	(0.00488)	
Imports		-0.0153***			-0.0154***			-0.0151***	
		(0.00275)			(0.00275)			(0.00273)	
Contiguity			-2.387			-2.386			-2.383
			(1.741)			(1.741)			(1.741)
GDP (South)	-0.219	0.234***	2.034***	-0.221	-0.234	2.034***	-0.206	0.239***	2.024***
	(0.150)	(0.0676)	(0.478)	(0.150)	(0.328)	(0.478)	(0.150)	(0.0669)	(0.478)
GDP (North)			2.651***			2.650***			2.658***
			(0.422)			(0.422)			(0.422)
Population (South)	-0.00411***	0.00541***	0.00152	-0.00410***	0.00571***	0.00152	-0.00395***	0.00502***	0.00149
	(0.00147)	(0.000669)	(0.00156)	(0.00147)	(0.000700)	(0.00156)	(0.00147)	(0.000662)	(0.00156)
Population (North)		0.0231***	0.000713		0.0232***	0.00069		0.0247***	0.000937
		(0.00303)	(0.00551)		(0.00303)	(0.00551)		(0.00300)	(0.00551)
Distance		-0.233***	-2.361***		-0.234***	-2.360***		-0.236***	-2.362***
		(0.0115)	(0.337)		(0.0115)	(0.337)		(0.0114)	(0.337)
Common language	0.257***	0.129***	0.584	0.257***	0.130***	0.585	0.263***	0.139***	0.583
	(0.0374)	(0.0172)	(0.539)	(0.0374)	(0.0172)	(0.539)	(0.0374)	(0.0170)	(0.539)
Real interest rate			-0.00181			-0.00179			-0.00188
			(0.00312)			(0.00312)			(0.00312)
Donor trade openness		-0.0200***	-0.0146		-0.0200***	-0.0146		-0.0182***	-0.0143
		(0.00331)	(0.0125)		(0.00331)	(0.0125)		(0.00328)	(0.0125)
Former colony	1.100***	0.185***	1.927***	1.101***	0.183***	1.926***	1.109***	0.148***	1.923***

Table 1 – *Continued from previous page*

VARIABLES	(1) Aid	(2) Migration	(3) Exports	(4) Aid	(5) Migration	(6) Exports	(7) Aid	(8) Migration	(9) Exports
	(0.0701)	(0.0352)	(0.729)	(0.0701)	(0.0353)	(0.729)	(0.0701)	(0.0350)	(0.729)
Recipient trade openness	0.00160*	0.000544		0.00160*	0.00054		0.00156*	0.000675*	
	(0.000859)	(0.000381)		(0.000859)	(0.000381)		(0.000859)	(0.000377)	
Former colony of the UK		0.306***			0.309***			0.258***	
		(0.0684)			(0.0684)			(0.0679)	
Western offhoots		1.956***			3.574***			1.828***	
		(0.421)			(1.185)			(0.417)	
USA-Latin America		0.791***			0.786***			0.801***	
		(0.0385)			(0.0387)			(0.0382)	
Youth unemployment (South)		4.21e-05			0.000491			0.000383	
		(0.00136)			(0.00140)			(0.00135)	
Difference in unemployment		-0.0386***			-0.0408***			-0.0377***	
		(0.00985)			(0.00997)			(0.00977)	
Total aid of donor	0.533***			0.533***			0.535***		
	(0.0432)			(0.0432)			(0.0433)		
Japan-Asia	0.552***			0.554***			0.497***		
	(0.0943)			(0.0943)			(0.0946)		
Former colony of Spain	0.152			0.154			0.2		
	(0.191)			(0.191)			(0.191)		
Governance quality	0.0674***			0.0680***			0.0633***		
	(0.0200)			(0.0200)			(0.0201)		
Constant	-2.045**			-2.037**			-2.217**		
	(0.971)			(0.971)			(0.972)		
GDP squarred (South)					0.0321				
					(0.0220)				
Aid squarred								0.0321***	
								(0.00178)	
Observations	11 903	11 903	11 903	11 903	11 903	11 903	11 903	11 903	11 903
R-squared	0.657	0.597	0.956	0.657	0.597	0.956	0.659	0.61	0.956

Continued on next page

Table 1 – *Continued from previous page*

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Aid	Migration	Exports	Aid	Migration	Exports	Aid	Migration	Exports
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Couple Fixed Effect	No	No	Yes	No	No	Yes	No	No	Yes
Time Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1. Donor, recipient and time fixed effects are included but not reported. AIC: 69537.11, BIC: 87762.16

4.1 Aid allocation

We first take a look at the effects of trade on aid allocations (Columns 1, 4 and 7 in Table 1). Bilateral donors tend to favor trade partners with whom they have business interests (as in Dollar and Levin (2006) and Claessens et al. (2009) among others). Our measure of donors' exports to developing countries corroborates such commercial interest motives in the aid allocated by OECD countries. A 1% increase in exports leads to a 0.188% increase in aid flows. Rising exports to developing countries reflects that aid flows are associated with new market opportunities for donors. We also make use of trade openness in recipient countries and observe that more open economies are more likely to receive financial assistance from OECD donors.

Besides, our data reveal that the geographical shape of foreign aid allocations is influenced by the stock of migrants living in the donor country. Our results are consistent with the "lobbying activities" evidenced by Lahiri and Raimondos-Møller (2000) and Berthélemy et al. (2009). Migration inflows in OECD nations increase the amount of aid provided to countries from which migrants originate, suggesting that networking and lobbying effects alter aid allocations. A 1% increase in migration flows leads to a 0.723% increase in aid flows. While the natives would be rather impartial about the destination of foreign assistance, migrants (residing in the donor country) are prone to lobby the government in favor of their country of origin. Therefore, because additional assistance attracts more migrants, generous aid policies should go hand in hand with more restrictive migration policies if OECD donors want to control the entry of new migrants (as it is common according to Pedersen et al. (2008)).

We furthermore contribute to the aid allocation literature showing that unemployment in donor countries may have a direct effect on the amounts of their foreign assistance. The coefficient of *unemployment* is significantly positive. Specifically, unemployment in OECD countries is associated to higher amounts of foreign assistance, which conveys the idea that aid and unemployment policies may be connected. We explain that donors are prone to use foreign assistance in times of crisis (say when unemployment rates are increasing) in the aim of reducing the unemployment rate thanks to the development effect of foreign aid. Actually, allocating aid to developing countries

is awaited to reduce the difference between origin and destination countries' incomes, lowering migration incentives and potential entrants into the labor market. Azam and Berlinschi (2009) evidenced that foreign aid can be indeed an instrument to control for immigration. However, our results support that additional assistance increases instead migration (as developed in subsection 4.2). This is not necessarily counterproductive because new migrants can help to decrease unemployment (see, for example, Jean and Jimenez (2011) and Boubtane et al. (2013)). For instance, due to complementarities and a reduction of wages for skilled workers, entries of new migrants can increase employment (Chassamboulli and Palivos, 2014). Focusing on the 2000 decade in the United States, Chassamboulli and Palivos (2014) evidenced that native workers gain in terms of unemployment thanks to migration inflows. Accordingly, because migrants would accept lower wages, firms should be able to create new jobs.

Control variables have expected signs. GDP per capita in recipient countries enters with a negative sign, suggesting that donors are altruistic, but is not significant, revealing that per capita revenues are not a core matter for donors. This finding is in line with Dreher et al. (2010), who evidenced that aid is equally allocated across income group countries. Former colonies as well as common language enter with a positive sign, implying that donors tend to reward their geopolitical friends (according to either historical ties or geographic and cultural proximity). Our dummy variable for specific former Spanish colonies is positive as expected but never significant while our data confirm the strong link between Japan and Asian countries found by Berthélemy et al. (2009). Donor self-interests are major motives in bilateral aid allocation (at least for "traditional" DAC donors), which is consistent with the existing literature (Younas, 2008; Hoeffler and Outram, 2011). Small countries tend also to receive larger per capita aid flows, which is consistent for instance with Trumbull and Wall (1994) and Dollar and Levin (2006), and supports the idea that bilateral donors prefer to spend their assistance in countries where they can have their highest impact per person. In line with Clist et al. (2012), we observe that better governed countries receive more bilateral aid since our governance variable enters with a positive sign.

4.2 Migration flows

Turning to the migration equation (Columns 2, 5 and 8 in Table 1), we observe that a 1% increase in aid flows leads to a 0.182% increase in migration flows, which supports the "attraction effect" (Berthélemy et al., 2009; Azam and Berlinschi, 2009). Attraction implies that recipient countries benefit from financial aid flows, contact networks, and more information about the donor economy making migration to the donor country easier for citizens of aid recipient countries, in particular for skilled citizens of origin countries (Berthélemy et al., 2009).

As far as the trade-migration relationship is concerned, we observe that exports do not significantly affect the flow of migrants. However, our available data do not enable us to disaggregate between skilled and unskilled workers. Berthélemy et al. (2009) explained that migration and trade flows are complements only when skilled migrants meet labor needs and fill employment gaps in technological sectors in OECD countries. The negative coefficient of our measure of OECD bilateral imports from developing countries reveals that migration policies in OECD countries tend to be restrictive with respect to developing countries with whom they have low or negative trade balances. Our measure of trade openness in donor countries is significant and negative, which is consistent with above results. The cost of importing goods may be lower than the cost of hiring foreign workers (Faini and Venturini, 1993). Traditional theory (price equalization is achieved thanks to factor mobility) predicts that trade and migrants are substitutes. Open economies are therefore less likely to receive migrants. Higher trade can decrease migration, in particular in the textile sector where the share of foreign worker is important (Faini and Venturini, 1993). In other words, increasing imports would decrease the need for migrants to work in the related sector. Liberalizing trade can possibly be an effective policy to mitigate the migration flows.

The negative sign of our estimate of unemployment in OECD nations brings to light that working migrants are likely to choose their destination according to the probability of being employed in destination countries. This result is consistent with Pope and Withers (1993), Islam (2007), Damette and Fromentin (2013). This effect, augmented by differences in unemployment rates between donors and recipient countries, suggests

that an increase in unemployment rates in destination countries reduces the probability of migrating due to fewer job opportunities. Lower unemployment rates in developing countries also reduce economic incentives to migrate to OECD countries. Besides, policy makers in OECD countries are also more likely to tighten their migration policies when unemployment rates are high in their own countries. Indeed, the government efforts to reduce unemployment may include restrictive migration policies (because of internal pressures for protecting job, in particular in times of economic crisis and elections) lowering migration inflows (Azam and Berlinschi, 2009).

Our results confirm that geographical distances between a donor and a recipient country may dissuade recipients citizens from migrating given financial and social costs of migration but also given higher travel risks (see, for example, Berthélemy et al. (2009) and Ortega and Peri (2014b)). Sharing specific ties (and information) with an OECD country seems to encourage migration inflows. Former colonies (and in particular former British colonies) tend to send more migrants to OECD countries and a common language with the destination country is a strong incentive to migrate. Results also confirm strong migratory links between the Unites States and Latin American countries. As expected according to Berthélemy et al. (2009) for example, Western offshoots attract more migrants than Western Europe. Our estimates reveal that increases in income per capita in origin countries induce higher migration flows. Given initial fixed costs of migration (be there financial or social), extremely poor citizens of developing countries are less able to afford such costs to migrate to rich and distant nations (Angelucci, 2004). Furthermore, rich countries are less willing to accept poorer immigrants since they are less likely to be skilled. We also observe that the most highly-populated destination countries (respectively origin countries) are more likely to receive (respectively send) migrants.

We also investigate possible non linear effects of aid and GDP (Column 5). We do not find a support for the "hump-shaped pattern" empirical hypothesis, which suggests that income per capita and emigration flows are negatively correlated for high levels of GDP per capita (Hatton and Williamson, 2003; Clark et al., 2007) but instead that migration does not increase any more. Indeed, the square of GDP per capita (treated

as potentially endogenous to migration) is not significant (see Column (5) in Table 4). For higher income countries increases in income per capita do not turn into higher migration due to better local conditions. Besides, we observe that higher aid inflows finance greater migration, maybe because at a certain point aid becomes sufficient to pay migration costs. Indeed, the coefficient of the square of aid is significantly positive (Column 8).

4.3 Trade flows

Columns 3, 6 and 9 in Table 1 report estimates for the trade equation. Our results are in line with Martínez-Zarzoso et al. (2014): aid does not promote higher exports from OECD countries to aid recipient countries. Though bilateral donors reward new market opportunities with higher assistance, they do not significantly tie aid to their commercial interests, which is consistent with the OECD Development Assistance Committee recommendation (see, for instance, Knack and Smets (2013)).

Surprisingly, migration inflows enter with a negative sign. Therefore, when considering simultaneously aid, trade and migration flows, we do not find anymore the "knowledge" or "networking" effect observed by Wagner et al. (2002). On the contrary, our results support those of Egger et al. (2012) for high levels of migration. We find no evidence that higher immigration increase trade, even though immigrants know better products and opportunities in their countries of origin. Impact of new migrants on trade may be higher and more significant on imports from the origin country (because of better knowledge of the market or preferences) than on exports (Head and Ries, 1998).

The coefficient of GDP per capita in both recipient and donor countries is positive. OECD countries seem to export more to emerging countries (in line with Carrere (2006) for example) and even more if they are themselves richer. Though positive (suggesting that small countries are less likely to trade with OECD countries), the coefficient on population size in recipient countries is not significant. As expected (see, for example Baier and Bergstrand (2009)), bilateral distance creates a barrier to trade. Former colonial past has a positive impact on exports to developing countries, suggesting that OECD countries tend to export more to former colonies (as found in Rauch (1999)).

Estimated coefficient for population size in donor countries is insignificant. Furthermore, we fail to find that common language and contiguity explain trade flows.

5 Robustness Checks

Because OECD policies are interconnected, moving trade, aid or migration policies have not only direct consequences. This section provides a sensitive analysis of our benchmark results using alternative data, sampling techniques, and alternative specifications. The aid-migration relationship is robust to all changes. Likewise, unemployment in OECD countries conditions in the same way aid and migration flows in all of our specifications. However, the significance (but not the sign) of the trade-migration relationship as well as the significance of the coefficient of aid in the trade equation vary across specifications. Trade and migration remains substitutes, in line with traditional theory, but the causality runs either from exports to migration or from migration to exports.

To flatten out possible aid fluctuations, we average the data over five years and ten years (see Table 2). A potential shortcoming is that foreign aid may fluctuate annually to some extent due to donors' constraints or budgetary plans (Bulíř and Hamann, 2008). To smooth out the effects of aid volatility, we re-estimate our model (1) using data based on five years averages and ten years averages, which allows us to have a comparison with the findings of Berthélemy et al. (2009). Most of our results are robust to the inclusion of alternative time spans of aid except for trade. When we control for aid volatility, signs hold but significance varies. First, aid significantly decreases exports. This result gives support to the "trade not aid" effect (Lundsgaarde et al., 2007). The "trade not aid" concept is the idea that the best way to promote economic development is through trade and not through the provision of foreign aid. The negative sign of our coefficient could mean that a decrease in foreign assistance results in higher trade toward developing countries. This displacement effect gives support to the idea that "trade not aid" has been translated into actual policy choices (increasing trade with developing countries instead of increasing foreign assistance). Second, exports turn to decrease migration and migration does not increase trade anymore.

Tables 3 and 4 test for regional disparities and divides the sample into six sub-samples of recipient countries by excluding one region in each regression. It allows us to verify whether our results are sensitive to sample selection. To retain enough data, we chose to drop alternatively each region from the whole sample. Otherwise, observations are insufficient. These groupings of countries corresponds to (i) former Soviet countries, (ii) South and East Asia, (iii) Europe and Central Asia (Table 3), and to (iv) Latin America, (v) the MENA region, and (vi) Sub-Saharan Africa (Table 4). Our results are very similar for all sub-samples, except for *GDP (South)* in the migration equation. Aid seems to be provided to poorest countries in all countries (in line with Dollar and Levin (2006) for instance) but Latin American countries and MENA countries. In the rest of the developing world, aid seems to be equally allocated across income groups of countries. Trade and migration are still substitutes but significance still varies across samples. Finally, results confirm a "trade not aid" effect.

Furthermore, extreme deviations from the main sample of estimates can possibly be problematic for our analysis. We test whether our results are driven by extreme values or not. We delete some excessive outliers using the Billor et al. (2000) procedure, in particular their blocked adaptive computationally efficient outlier nominators (BACON) algorithm. Inspecting for remarkable values for *Aid*, *Migration* and *Trade*, 234 observations were dropped.[4] The exclusion of outliers does not alter any sign of coefficients (see Columns 1 to 3 in Table 5). Additionally, we considered the 2000-2008 period, before the economic crisis and the sharp rise in unemployment rates (see Columns 4 to 6 in Table 5). Signs are not sensitive to the 2008 crisis. Again, significance varies for the trade-migration connection and for the coefficient of aid in the trade equation.

Furthermore, we use the six individual indicators of governance (instead of our overall measure of *Governance Quality*) provided by the World Bank Institute (see Table 9 for a definition of these variables). Results reported in Table 6 (Column 2) show expected signs and significance for these additional explanatory variables while all other signs of estimated coefficients remain unchanged. In particular, for the governance indicators, we observe that foreign aid is not selective in terms of corruption (in line with De la

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[4]We use the 0.90 percentile of the chi-squared distribution as a threshold to separate outliers from non-outliers.

Croix and Delavallade, 2014) but seems to be correctly targeted in terms of regulatory quality. Aid is also allocated to unstable countries (as usual for humanitarian aid). We additionally make use of other measures of donors economic health. We test whether aid flows are impacted more directly by fiscal pressures or debt deficits generated by recessions than by the changes in unemployment rates. Higher debt and lower tax revenues are, as expected, associated with lower aid flows. The estimate of *Unemployment* remains positive and significant.

To sum up, aid and migration flows are positively correlated whereas trade and migration flows tend to be used as substitutes. Aid is likely to reward new trade opportunities while donors seem also to promote development either through greater assistance or thanks to trade development. We also determine how the unemployment burden leads to adjustments in migration policies.

Table 2: Robustness test (1) – Aid averages

	(1)	(2)	(3)	(4)	(5)	(6)
	Five years average			Ten years average		
VARIABLES	Aid	Migration	Exports	Aid	Migration	Exports
Aid (five years average)		0.196***	-0.218**			
		(0.00496)	(0.108)			
Aid (ten years average)					0.206***	-0.200*
					(0.00503)	(0.120)
Migration	0.674***		-0.494	0.657***		-0.424
	(0.0185)		(0.311)	(0.0175)		(0.289)
Unemployment	0.142***	-0.174***		0.126***	-0.182***	
	(0.0171)	(0.0167)		(0.0163)	(0.0166)	
Exports	0.189***	-0.00894*		0.179***	-0.00894*	
	(0.00767)	(0.00500)		(0.00728)	(0.00498)	
Imports		-0.0154***			-0.0147***	
		(0.00279)			(0.00277)	
Contiguity			0.142			-1.558
			(1.018)			(1.241)
GDP (South)	-0.0907	0.216***	1.765***	0.142	0.151**	1.982***
	(0.137)	(0.0683)	(0.461)	(0.130)	(0.0681)	(0.440)
GDP (North)			2.526***			2.275***
			(0.279)			(0.304)
Population (South)	-0.00410***	0.00536***	0.00136	-0.00476***	0.00559***	0.000748
	(0.00129)	(0.000652)	(0.00120)	(0.00120)	(0.000633)	(0.00137)
Population (North)		0.0237***	0.007		0.0267***	0.0034
		(0.00305)	(0.00545)		(0.00303)	(0.00394)
Distance		-0.233***	-2.087***		-0.233***	-1.936***
		(0.0116)	(0.300)		(0.0116)	(0.240)
Common language	0.292***	0.127***	0.629	0.295***	0.124***	1.766***
	(0.0342)	(0.0173)	(0.469)	(0.0324)	(0.0173)	(0.561)
Real interest rate			-0.00351			-0.00229

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Table 2 – *Continued from previous page*

	(1)	(2)	(3)	(4)	(5)	(6)
			(0.00319)			(0.00297)
Donor trade openness		-0.0223***	0.000577		-0.0205***	-0.00197
		(0.00351)	(0.0142)		(0.00352)	(0.0142)
Former colony	1.095***	0.170***	0.834	1.154***	0.146***	1.630**
	(0.0638)	(0.0354)	(0.670)	(0.0606)	(0.0354)	(0.814)
Recipient trade openness	0.00115	0.000489		0.00148*	0.000423	
	(0.000797)	(0.000394)		(0.000765)	(0.000396)	
Former colony of the UK		0.322***			0.326***	
		(0.0687)			(0.0685)	
Western offshoots		2.213***			-2.722***	
		(0.429)			(0.426)	
USA-Latin America		0.766***			0.742***	
		(0.0383)			(0.0377)	
Youth unemployment (South)		-0.000143			3.93e-05	
		(0.00138)			(0.00137)	
Difference in unemployment		-0.0387***			-0.0407***	
		(0.00997)			(0.00993)	
Total aid of donor	0.464***			0.323***		
	(0.0391)			(0.0371)		
Japan-Asia	0.691***			0.693***		
	(0.0828)			(0.0775)		
Former colony of Spain	0.15			0.132		
	(0.167)			(0.159)		
Governance quality	0.0580***			0.0635***		
	(0.0183)			(0.0173)		
Observations	12 138	12 138	12 138	12 221	12 221	12 221
R-squared	0.689	0.599	0.957	0.706	0.602	0.958
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Couple Fixed Effect	No	No	Yes	No	No	Yes
Time Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 3: Robustness test (2) – Subsamples, excluding former soviet countries, South Asia, and Europe and Central Asia

	Excluding Former Soviets			Excluding South Asia			Excluding Europe and Central Asia		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VARIABLES	Aid	Migration	Exports	Aid	Migration	Exports	Aid	Migration	Exports
Aid		0.186***	-0.228***		0.171***	-0.635***		0.205***	-0.183**
		(0.00515)	(0.0653)		(0.00496)	(0.214)		(0.00517)	(0.0726)
Migration	0.726***		-0.397	0.676***		-0.593*	0.844***		-0.0465
	(0.0214)		(0.269)	(0.0215)		(0.308)	(0.0228)		(0.305)
Unemployment	0.0981***	-0.150***		0.0950***	-0.181***		0.0983***	-0.117***	
	(0.0201)	(0.0176)		(0.0191)	(0.0168)		(0.0210)	(0.0174)	
Exports	0.227***	-0.0172***		0.190***	-0.0115**		0.252***	-0.0309***	
	(0.00913)	(0.00528)		(0.00860)	(0.00501)		(0.00968)	(0.00526)	
Imports		-0.0173***			-0.0148***			-0.0185***	
		(0.00288)			(0.00275)			(0.00282)	
Contiguity						-0.645			
						(1.558)			
GDP (South)	-0.821***	0.264***	2.254***	-0.298**	0.247***	1.333***	-0.994***	0.403***	1.693***
	(0.189)	(0.0863)	(0.598)	(0.151)	(0.0674)	(0.391)	(0.192)	(0.0850)	(0.519)
GDP (North)			2.203***			2.224***			2.111***
			(0.331)			(0.449)			(0.268)
Population (South)	-0.00202	0.00539***	-0.000494	-0.00666**	0.00675***	0.00503***	-0.00244	0.00500***	-0.00023
	(0.00157)	(0.000719)	(0.00165)	(0.00298)	(0.00136)	(0.00169)	(0.00159)	(0.000703)	(0.00144)
Population (North)		0.0220***	0.0122***		0.0264***	0.0270**		0.0170***	0.0107**
		(0.00327)	(0.00396)		(0.00310)	(0.0117)		(0.00325)	(0.00511)
Distance		-0.256***	-2.090***		-0.254***	-2.401***		-0.230***	-1.701***
		(0.0126)	(0.455)		(0.0116)	(0.414)		(0.0130)	(0.327)
Common language	0.260***	0.133***	0.66	0.276***	0.0918***	0.156	0.246***	0.140***	1.006**
	(0.0384)	(0.0177)	(0.594)	(0.0381)	(0.0174)	(0.608)	(0.0390)	(0.0171)	(0.469)
Real interest rate			-0.00275			-0.00954**			-0.00311
			(0.00333)			(0.00441)			(0.00341)
Donor trade openness		-0.0203***	0.0144		-0.0194***	0.0627*		-0.0198***	0.01
		(0.00359)	(0.0122)		(0.00335)	(0.0340)		(0.00366)	(0.0112)

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Table 3 – *Continued from previous page*

	Excluding Former Soviets			Excluding South Asia			Excluding Europe and Central Asia		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Former colony	1.070***	0.195***	1.189	1.131***	0.226***	3.647***	0.907***	0.188***	0.774
	(0.0730)	(0.0368)	(1.127)	(0.0719)	(0.0348)	(1.160)	(0.0742)	(0.0356)	(0.646)
Recipient trade openness	0.00214**	0.000508		0.000551	0.000713*		0.00173*	0.000383	
	(0.000921)	(0.000409)		(0.000882)	(0.000388)		(0.000961)	(0.000410)	
Former colony of the UK		0.315***			0.134*			0.262***	
		(0.0710)			(0.0755)			(0.0693)	
Western offshoots		-2.580***			-2.600***			-2.388***	
		(0.435)			(0.407)			(0.442)	
USA-Latin America		0.795***			0.824***			0.837***	
		(0.0398)			(0.0382)			(0.0387)	
Youth unemployment (South)		-0.000725			0.000201			0.00247	
		(0.00159)			(0.00135)			(0.00169)	
Difference in unemployment		-0.0395***			-0.0422***			-0.0267***	
		(0.0101)			(0.00990)			(0.00963)	
Total aid of donor	0.573***			0.527***			0.578***		
	(0.0464)			(0.0448)			(0.0485)		
Japan-Asia	0.483***			0.511***			0.346***		
	(0.101)			(0.109)			(0.103)		
Former colony of Spain	0.15			0.0888			0.205		
	(0.195)			(0.191)			(0.195)		
Governance quality	0.0701***			0.0902***			0.0566**		
	(0.0211)			(0.0204)			(0.0220)		
Constant	0.276	4.766***		-3.787***	4.580***		0.645	3.584***	
	(1.169)	(0.773)		(1.250)	(0.771)		(1.188)	(0.776)	
Observations	10 574	10 574	10 574	11 062	11 062	11 062	9 624	9 624	9 624
R-squared	0.66	0.603	0.954	0.652	0.573	0.918	0.663	0.617	0.957
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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Table 3 – *Continued from previous page*

	Excluding Former Soviets			Excluding South Asia			Excluding Europe and Central Asia		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Couple Fixed Effect	No	No	Yes	No	No	Yes	No	No	Yes
Time Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 4: Robustness test (3) – Subsamples, excluding Latin America, MENA, and Sub-Saharan Africa

VARIABLES	Excluding Latin America			Excluding MENA			Excluding Sub-Saharan Africa		
	(1) Aid	(2) Migration	(3) Exports	(4) Aid	(5) Migration	(6) Exports	(7) Aid	(8) Migration	(9) Exports
Aid		0.161***	-0.142		0.171***	-0.147		0.215***	-0.174
		(0.00522)	(0.112)		(0.00515)	(0.103)		(0.00631)	(0.111)
Migration	0.715***		-0.667**	0.652***		-0.858***	0.747***		-0.0742
	(0.0241)		(0.279)	(0.0215)		(0.328)	(0.0229)		(0.205)
Contiguity			-1.059			-2.648*			-0.653
			(1.583)			(1.409)			(1.255)
Unemployment	0.136***	-0.177***		0.0895***	-0.167***		0.0730***	-0.150***	
	(0.0212)	(0.0182)		(0.0192)	(0.0174)		(0.0232)	(0.0219)	
Exports	0.202***	-0.00661		0.197***	-0.00875*		0.177***	-0.00886	
	(0.00937)	(0.00549)		(0.00851)	(0.00524)		(0.0100)	(0.00691)	
Imports		-0.0172***			-0.00986***			-0.0233***	
		(0.00300)			(0.00302)			(0.00385)	
GDP (South)	-0.222	0.219***	2.164***	0.0919	0.196***	1.586***	-0.362*	0.389***	2.220***
	(0.161)	(0.0702)	(0.633)	(0.154)	(0.0715)	(0.479)	(0.188)	(0.0958)	(0.481)
GDP (North)			1.513***			2.913***			2.057***
			(0.385)			(0.309)			(0.536)
Population (South)	-0.00421***	0.00534***	0.000306	-0.00434***	0.00536***	0.00330**	-0.00509***	0.00513***	-2.00e-05
	(0.00153)	(0.000680)	(0.00151)	(0.00146)	(0.000681)	(0.00141)	(0.00148)	(0.000740)	(0.00126)
Population (North)		0.0260***	0.00279		0.0248***	0.00133		0.0178***	0.00293
		(0.00336)	(0.00612)		(0.00322)	(0.00431)		(0.00401)	(0.00420)
Distance		-0.277***	-1.286***		-0.234***	-2.334***		-0.242***	-1.920***
		(0.0139)	(0.275)		(0.0124)	(0.369)		(0.0142)	(0.421)
Common language	0.199***	0.0857***	0.865	0.272***	0.127***	1.000*	0.378***	0.306***	-0.359
	(0.0412)	(0.0189)	(0.869)	(0.0384)	(0.0181)	(0.594)	(0.0667)	(0.0329)	(0.588)
Real interest rate			-0.0019			-0.00511			-0.00347
			(0.00369)			(0.00333)			(0.00337)
Donor trade openness		-0.0205***	0.0193*		-0.0253***	-0.0145		-0.0219***	0.0105
		(0.00363)	(0.0102)		(0.00351)	(0.0134)		(0.00436)	(0.00807)

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Table 4 – *Continued from previous page*

	Excluding Latin America			Excluding MENA			Excluding Sub-Saharan Africa		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Former colony	1.211***	0.119***	1.219*	1.094***	0.132***	1.813	0.971***	0.153***	2.235***
	(0.0760)	(0.0403)	(0.639)	(0.0726)	(0.0374)	(1.141)	(0.0946)	(0.0519)	(0.701)
Recipient trade openness	0.00169*	0.000496		0.00175*	0.000979**		0.00388***	-0.000228	
	(0.000966)	(0.000423)		(0.000896)	(0.000409)		(0.00101)	(0.000488)	
Former colony of the UK		0.389***			0.390***			0.350***	
		(0.0741)			(0.0726)			(0.0925)	
Western offshoots		2.608***			-3.173***			1.348**	
		(0.447)			(0.426)			(0.590)	
USA-Latin America		0.814***			0.846***			0.558***	
		(0.156)			(0.0396)			(0.0448)	
Youth unemployment (South)		-0.000265			-0.00034			-0.000302	
		(0.00145)			(0.00152)			(0.00171)	
Difference in unemployment		-0.0341***			-0.0299***			-0.0832***	
		(0.0103)			(0.0101)			(0.0205)	
Total aid of donor	0.541***			0.529***			0.492***		
	(0.0490)			(0.0446)			(0.0511)		
Japan-Asia	0.531***			0.621***			0.745***		
	(0.100)			(0.0940)			(0.101)		
Governance quality	0.0464**			0.0555***			0.131***		
	(0.0219)			(0.0205)			(0.0266)		
Former colony of Spain				0.277			-0.0988		
				(0.192)			(0.208)		
Observations	9 746	9 746	9 746	10 835	10 835	10 835	8 075	8 075	8 075
R-squared	0.657	0.587	0.952	0.67	0.588	0.956	0.646	0.623	0.959
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Couple Fixed Effect	No	No	Yes	No	No	Yes	No	No	Yes

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Table 4 – *Continued from previous page*

	Excluding Latin America			Excluding MENA			Excluding Sub-Saharan Africa		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Time Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 5: Robustness test (4) – Excluding outliers and before crisis

	(1)	(2)	(3)	(4)	(5)	(6)
		Excluding outliers			Before 2008	
VARIABLES	Aid	Migration	Exports	Aid	Migration	Exports
Aid		0.156***	-0.198**		0.188***	-0.144*
		(0.00398)	(0.0969)		(0.00534)	(0.0742)
Migration	0.924***		-0.659***	0.750***		-0.460
	(0.0253)		(0.252)	(0.0227)		(0.350)
Unemployment	0.0748***	-0.110***		0.219***	-0.207***	
	(0.0192)	(0.0136)		(0.0441)	(0.0190)	
Exports	0.180***	-0.00363		0.169***	-0.00565	
	(0.00845)	(0.00406)		(0.00950)	(0.00551)	
Imports		-0.00869***			-0.0130***	
		(0.00228)			(0.00296)	
Contiguity			-0.752			0.0957
			(1.724)			(1.364)
GDP (South)	-0.228	0.177***	1.749***	-0.519**	0.291***	1.168
	(0.149)	(0.0555)	(0.476)	(0.202)	(0.0910)	(0.735)
GDP (North)			3.019***			2.953***
			(0.387)			(0.469)
Population (South)	-0.00356**	0.00389***	0.00345***	-0.00336	0.00644***	0.00342**
	(0.00168)	(0.000632)	(0.00131)	(0.00212)	(0.000967)	(0.00136)
Population (North)		0.0179***	0.00605		0.0146***	0.00147
		(0.00252)	(0.00456)		(0.00297)	(0.00330)
Distance		-0.167***	-2.591***		-0.217***	-2.226***
		(0.00965)	(0.353)		(0.0129)	(0.441)
Common language	0.243***	0.101***	0.286	0.223***	0.145***	1.961***
	(0.0376)	(0.0142)	(0.529)	(0.0432)	(0.0196)	(0.629)
Real interest rate			-0.00368			-0.00931*
			(0.00325)			(0.00521)
Donor trade openness		-0.0132***	-0.00621		0.0147***	-0.00292
		(0.00271)	(0.0177)		(0.00513)	(0.00878)
Former colony	1.038***	0.128***	1.648**	1.064***	0.191***	0.748
	(0.0709)	(0.0293)	(0.706)	(0.0744)	(0.0366)	(0.460)
Recipient trade openness	0.00145*	0.000504		0.00130	-0.000739*	
	(0.000853)	(0.000312)		(0.000863)	(0.000437)	
Former colony of the UK		0.248***			0.385***	
		(0.0585)			(0.0740)	
Western offshoots		1.244***			0.708	
		(0.347)			(0.549)	
USA-Latin America		0.638***			0.824***	
		(0.0343)			(0.0454)	
Youth unemployment (South)		0.000738			-0.00199	
		(0.00112)			(0.00165)	
Difference in unemployment		-0.0307***			-0.0399***	
		(0.00806)			(0.0103)	
Total aid of donor	0.513***			0.509***		
	(0.0439)			(0.0707)		
Japan-Asia	0.527***			0.692***		
	(0.0963)			(0.123)		
Former colony of Spain	0.246			0.168		

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Table 5 – *Continued from previous page*

	(1)	(2)	(3)	(4)	(5)	(6)
	(0.204)			(0.190)		
Governance quality	0.0684***			0.125***		
	(0.0200)			(0.0263)		
Observations	11 669	11 669	11 669	9 194	9 194	9 194
R-squared	0.646	0.567	0.953	0.652	0.596	0.960
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Couple Fixed Effect	No	No	Yes	No	No	Yes
Time Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Table 6: Robustness test (5) – Adding explanatory variables

	(1)	(2)	(3)
VARIABLES	Aid	Migration	Exports
Aid		0.198***	-0.240**
		(0.00520)	(0.0969)
Migration	0.802***		-0.412
	(0.0233)		(0.263)
Unemployment	0.300***	-0.301***	
	(0.0477)	(0.0185)	
Exports	0.187***	-0.00204	
	(0.00931)	(0.00556)	
Imports		-0.0152***	
		(0.00309)	
Debt	-0.904***		
	(0.332)		
Tax revenue	1.305**		
	(0.660)		
Contiguity			-0.144
			(1.170)
GDP (South)	-0.425**	0.259***	1.661***
	(0.173)	(0.0730)	(0.498)
GDP (North)			2.748***
			(0.394)
Population (South)	-0.00862***	0.00837***	0.00192
	(0.00176)	(0.000771)	(0.00122)
Population (North)		0.0416***	0.00638*
		(0.00330)	(0.00349)
Distance		-0.156***	-2.229***
		(0.0132)	(0.361)
Common language	0.175***	0.144***	-0.704
	(0.0412)	(0.0187)	(0.820)
Real interest rate			-0.000492
			(0.00316)
Donor trade openness		0.0267***	-0.0105**
		(0.00225)	(0.00441)
Former colony	1.076***	0.148***	3.277***
	(0.0722)	(0.0364)	(0.787)
Recipient trade openness	0.00171*	-0.000468	
	(0.000902)	(0.000413)	

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Table 6 – *Continued from previous page*			
	(1)	(2)	(3)
Total aid of donor	0.579***		
	(0.0538)		
Japan-Asia	0.507***		
	(0.108)		
Former colony of Spain	0.13		
	(0.194)		
Control of corruption	-0.0716		
	(0.138)		
Governance efficiency	0.176		
	(0.164)		
Political stability	-0.182**		
	(0.0712)		
Regulatory quality	0.798***		
	(0.121)		
Rule of law	-0.177		
	(0.153)		
Voice accountability	0.18		
	(0.115)		
Former colony of the UK		0.234***	
		(0.0693)	
Western offshoots		-0.624	
		(0.433)	
USA-Latin America		0.845***	
		(0.0407)	
Youth unemployment (South)		0.001	
		(0.00150)	
Difference in unemployment		-0.0302***	
		(0.0107)	
Constant	-32.89*		
	(17.45)		
Observations	10 028	10 028	10 028
R-squared	0.648	0.585	0.957
Constant	Yes	Yes	Yes
Donor Fixed Effect	Yes	Yes	Yes
Recipient Fixed Effect	Yes	Yes	Yes
Couple Fixed Effect	No	No	Yes
Time Fixed Effect	Yes	Yes	Yes
Notes: Standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0.1$.			

6 Conclusion

Following Berthélemy et al. (2009), this paper introduces the link between trade and migration and aid to simultaneously address the aid-migration-trade policies connections among OECD countries.

First, our data confirm that aid and migration flows are positively correlated, which gives support to the networking and lobbying effects (Lahiri and Raimondos-Møller (2000) and Berthélemy et al., 2009). An increase in the number of migrants in host countries leads to upward pressures on aid allocated to their countries of origin. In turn, migrants are also more likely to move towards countries from which they receive aid inflows, even after controlling for cultural links and geographical conditions. Since aid and migration flows are positively correlated, a "Big Push" aid policy would counterbalance restrictive migration policies, reducing therefore their effectiveness.

Second, we observe that exports, namely market opportunities, are rewarded by higher aid flows. Our gravity-based predictors corroborate the "push effect" of exports to developing countries on aid flows. Donors can arbitrate between aid and trade policies to foment development. Regarding the trade-migration nexus, we find that imports from developing countries are associated with restrictive migration policies in OECD countries. Exports and migration tend to be substitutes, which confirms traditional theory. In other words, in the attempt to reduce migration pressure, OECD nations could liberalize trade with developing countries partners.

Finally, our findings suggest that the unemployment burden encourages donors to adjust both aid and migration policies. In particular, OECD countries with high unemployment rates are less attractive for potential migrants from developing countries. Moreover, when job market conditions are getting worse in developed economies, policy makers are more likely to tighten their migration policies, partly because of internal pressures. Donors may want to provide assistance in order to improve local conditions in developing economies, reducing in turn incentives for migrating. However, the joint determination of aid, trade and migration shows that greater assistance increases the flow of migrants. According to Chassamboulli and Palivos (2014), entries of new migrants are likely to create new jobs making, in the end, generous aid policies beneficial for reducing unemployment in developed economies.

Appendix

Descriptive Statistics

Table 7: Summary statistics

Variable	Observation	Mean	Standard deviation	Minimal	Maximal
Bilateral aid	41465	1.16	1.52	-4.61	9.46
Colony	43758	0.04	0.20	0.00	1.00
Common language	43758	0.13	0.33	0.00	1.00
Diff. in unemployment	35880	1.24	1.65	0.07	41.76
Diff. in unemployment	35880	0.67	1.13	0.04	35.80
Distance	43758	7929.08	4206.25	59.62	19629.50
Employment protection	43452	2.09	0.84	0.26	4.58
Exports	41487	16.49	3.04	0.69	25.73
Former colony of Portugal	43758	0.00	0.05	0.00	1.00
Former colony of Spain	43758	0.01	0.07	0.00	1.00
Former colony of the UK	43758	0.02	0.12	0.00	1.00
GDP (south)	40876	7.46	1.22	4.78	10.19
Governance quality	42130	-2.28	4.08	-14.95	7.68
Imports	40286	15.62	3.91	0.16	25.76
Inflation (change)	43758	2.09	2.01	-5.39	15.65
Japan Asia	43758	0.01	0.10	0.00	1.00
Migration	26321	1.48	7.65	0.00	261.27
Population (North)	42328	42.47	64.09	3.81	313.91
Population (south)	42086	36.57	144.65	0.01	1350.69
Real interest rate	28305	3.10	2.50	-5.81	10.67
Rural population	43758	22.20	9.78	2.49	45.60
Tax wedge	43758	36.92	10.56	15.87	57.10
Terms of trade adjustment	43452	-6.68e+11	7.38e+12	-7.43e+13	2.26e+13
Total aid of donor	43758	2419.38	3462.99	70.03	23127.07
Trade in GDP	43758	78.57	36.61	20.26	191.37
Unemployment	40848	6.87	3.29	2.53	25.06
Union density	40851	31.52	19.63	7.54	79.08
USA LA	43758	0.01	0.10	0.00	1.00
Western Offshoots	43758	0.18	0.39	0.00	1.00

Table 8: Correlation matrices

Correlation matrix for equation (1)

	Bilateral aid	Migration	Exports	Recipient trade	GDP (south)	Population (south)	Colony	Total aid of donor	Japan Asia	Colony of Spain	Common language	Governance quality
Bilateral aid	1.0000											
Migration	0.3836	1.0000										
Exports	0.3433	0.5300	1.0000									
Recipient trade	-0.0393	-0.0426	-0.0330	1.0000								
GDP (south)	-0.3646	0.0471	0.2838	-0.0100	1.0000							
Population (south)	0.1776	0.3574	0.2994	-0.0124	-0.0543	1.0000						
Colony	0.2446	0.2153	0.1368	-0.0260	-0.0215	-0.0063	1.0000					
Total aid of donor	0.3545	0.2936	0.2739	-0.0539	0.0015	-0.0045	0.0422	1.0000				
Japan Asia	0.1434	0.0622	0.0625	0.0146	-0.0162	0.0535	0.0052	0.0836	1.0000			
Colony of Spain	0.1012	0.1875	0.0502	0.0047	0.0412	-0.0165	0.4451	-0.0270	-0.0089	1.0000		
Common language	0.1809	0.1576	-0.0003	-0.0255	-0.0838	-0.0012	0.3655	0.1324	-0.0347	0.2433	1.0000	
Governance quality	-0.2903	-0.0474	0.0885	-0.0097	0.6869	-0.0527	-0.0068	-0.0017	-0.0089	0.0151	0.0030	1.0000

Correlation matrix for equation (3)

	Unemploy.	Migration	Union density	Tax wedge	Employ. protection	Rural population	Real interest rate	Inflation (change)	Terms of trade adjustment	Trade in Industry GDP
Unemployment	1.0000									
Migration	0.1100	1.0000								
Union density	0.1182	-0.1874	1.0000							
Tax wedge	0.5212	-0.0151	0.5669	1.0000						
Employment protection	-0.0562	-0.2746	0.3095	0.3844	1.0000					
Rural population	0.1268	0.1538	-0.0922	0.1422	0.2592	1.0000				

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Inflation (change)	-0.0516	-0.0171	-0.0666	-0.0559	0.0276	0.1033	1.0000			
Real interest rate	0.1191	0.0158	-0.0315	0.1142	-0.0416	-0.1809	-0.0980	1.0000		
Terms of trade adjustment	0.1676	0.0306	0.1399	0.1722	-0.0696	0.0964	-0.0309	-0.0092	1.0000	
Trade in GDP	-0.1775	-0.2371	0.2650	0.2894	0.6083	-0.0744	0.0217	-0.1111	-0.1678	1.0000
Industry	-0.2891	-0.2056	0.2992	-0.1613	0.3651	0.3005	0.0885	-0.2297	-0.1880	0.1814	1.0000

Correlation matrix for equation (3)

	Migration	Bilateral aid	Imports	Recipient trade	GDP (south)	Population (south)	Population (donor)	Distance	Colony	Former colony of the UK	Former colony of Portugal	Japan
Migration	1.0000											
Bilateral aid	0.3669	1.0000										
Imports	0.4852	0.2702	1.0000									
Recipient trade	-0.0511	-0.0453	-0.0400	1.0000								
GDP (south)	0.0769	-0.3483	0.3509	-0.0092	1.0000							
Pop. (south)	0.3401	0.1639	0.2899	-0.0173	-0.0422	1.0000						
Pop. (donor)	0.3362	0.3449	0.3008	0.0348	-0.0191	-0.0210	1.0000					
Distance	-0.2040	-0.0867	-0.1815	-0.0052	-0.0496	0.0016	0.0855	1.0000				
Colony	0.2329	0.2505	0.1446	-0.0227	-0.0239	-0.0046	0.0066	-0.0647	1.0000			
Former colony of the UK	0.1550	0.0996	0.0806	-0.0219	-0.0140	0.0585	0.0142	-0.0034	0.3799	1.0000		
Former colony of Portugal	0.0465	0.0323	0.0123	-0.0129	-0.0183	0.0023	-0.0233	-0.0157	0.2121	-0.0034	1.0000	
Western offshoots	0.1117	0.0157	-0.0177	-0.0113	0.0103	-0.0096	0.3420	0.4496	-0.1073	-0.0432	-0.0241	-0.1052
USA LA	0.2395	0.1031	0.1209	0.0380	0.0522	-0.0182	0.3678	-0.0813	-0.0211	-0.0080	-0.0045	-0.0195
Common language	0.1865	0.2059	0.0142	-0.0218	-0.1346	0.0106	0.1056	0.1295	0.3924	0.1377	0.1278	-0.0656
Unemployment	0.1589	0.0993	0.1380	-0.0078	-0.0058	-0.0064	0.1065	-0.1754	0.1543	-0.0203	0.0060	-0.1301
Trade in GDP	-0.2176	-0.1594	-0.0775	0.0931	0.0137	0.0009	-0.5462	-0.2716	-0.0636	-0.0453	-0.0117	-0.2893
Diff. in unemploy.	0.0222	0.1199	0.0075	0.0016	-0.2075	0.0356	0.0435	0.0243	0.1019	-0.0122	-0.0085	-0.0421

Table 8 – *Continued from previous page*

GDP (south) squared	0.0027	-0.0182	-0.0148	-0.0244	-0.0519	-0.0183	-0.0525	-0.0091	0.9962	0.3418	-0.3565	0.0642
Diff. in unemploy. (young)	-0.0329	-0.0060	-0.0153	0.0971	0.0065	0.0357	-0.0000	0.0011	-0.2573	-0.0571	0.1192	-0.0155

	Western offshoots	USA LA	Common language	Unemploy.	Trade in GDP	Diff. in unemploy.	GDP (south) squared	Diff. in unemploy. (young)
Western offshoots	1.0000							
USA LA	0.1858	1.0000						
Common language	0.3256	-0.0007	1.0000					
Unemploy.	-0.1014	-0.0005	0.0778	1.0000				
Trade in GDP	-0.4792	-0.1694	-0.1792	-0.2301	1.0000			
Diff. in unemploy.	-0.0318	-0.0035	0.0735	0.3551	-0.0755	1.0000		
GDP (south) squared	0.0105	0.0489	-0.1316	-0.0064	0.0135	-0.2004	1.0000	
Diff. in unemploy. (young)	-0.0277	-0.0046	0.0978	0.2699	-0.0602	0.9311	-0.2478	1.0000

Description of explanatory variables

Table 9: Description and Sources of variables

Variables	Description	Sources
Population (South)	Population of developing countries (million inhabitants)	World Development Indicators (WDI), World Bank
Population (North)	Population of OECD countries (million inhabitants)	World Development Indicators (WDI), World Bank
GDP per capita (South)	GDP per capita (constant 2005 US$)	WDI, World Bank
Migration inflows	Inflows of foreign population by nationality	International Migration database, OECD
Former colonial link	Dummy variable is equal to one if two countries have ever had a colonial link	CEPII
Former colony of Spain	Dummy variable is equal to one if the developing country is a Former colony of Spain	Own calculations
Common language	Dummy variable is equal to one if two countries share a common language	CEPII
Geographical distances	Average distance between DAC country and the region	CEPII
Unemployment rate	Harmonised unemployment (monthly), Total, All persons	OECD
Distance	Distance between OECD nations and developing countries (kilometers)	CEPII
ODA	Official Development Assistance, Net disbursements, Constant prices, 2012 USD Millions	DAC, OECD
Share of young population	Developing country's young population, 15-29 years old	United Nations, Department of Economic and Social Affairs, population division
Governance	Sum of the six individual governance indices (instead of the overall governance index) provided by the World Bank: control of corruption, voice and accountability, government effectiveness, political stability, regulatory quality, and rule of law.	World Governance Indicator, World Bank
Terms of trade adjustment	Terms of trade adjustment (constant LCU) measure the capacity to import less exports of goods and services in constant prices	WDI, World Bank
Inflation	Inflation, consumer prices (annual %)	WDI, World Bank
Employment Protection	Strictness of employment protection-individual and collective dismissals	
Notification Procedures	Notification procedures in the case of individual dismissal of workers with a regular contract	OECD, Labour force Statistics

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Table 9 – *Continued from previous page*		
Union density	Trade union density rate, ratio of wage and salary earners that are trade union members, divided by the total number of wage and salary earners.	OECD, Labour force Statistics
Tax wedge	Average Tax Wedge (%), sum of personal income tax and employee plus employer social security contributions together with any payroll tax less cash transfers, expressed as a percentage of labour costs.	OECD, taxing wages
Japan-Asia	Dummy variable is equal to one if the developing country is an Asian country and the OECD country is Japan	Own Calculations
Western Offshoots	Dummy variable is equal to one if the OECD country is Australia, New Zealand, Canada, or the United States of America	Own Calculations
USA-LA	Dummy variable is equal to one if the developing country is a Latin American country and the OECD country is the United States of America	Own Calculations
Region name	1: East Asia and Pacific, 2: South Asia, 3: Europe and Central Asia, 4: Latin America, 5: MENA, 6: Sub Saharan Africa	Own Calculations

List of donors and recipient countries included in our sample

DAC donors included in our sample are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Korea, The Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, The United Kingdom, The United States of America

Table 10: List of recipient countries

Afghanistan	Congo, Dem. Rep.	Indonesia	Morocco	St Kitts and Nevis
Albania	Congo, Rep.	Iran	Mozambique	St Lucia
Algeria	Costa Rica	Iraq	Namibia	St Vincent and Grenadines
Angola	Cote d'Ivoire	Jamaica	Nauru	Sudan
Antigua and Barbuda	Cuba	Jordan	Nepal	Sudan
Argentina	Djibouti	Kazakhstan	Nicaragua	Suriname
Armenia	Dominica	Kenya	Niger	Swaziland
Azerbaijan	Dominican Republic	Kiribati	Nigeria	Syria
Bangladesh	East Timor	Korea, Dem. Rep.	Niue	Tajikistan
Belarus	Ecuador	Kyrgyz Republic	Pakistan	Tanzania
Belize	Egypt	Lao PDR	Panama	Thailand
Benin	El Salvador	Lebanon	Papua New Guinea	Togo
Bhutan	Eritrea	Lesotho	Paraguay	Tokelau
Bolivia	Estonia	Liberia	Peru	Tonga
Bosnia	Ethiopia	Libya	Philippines	Tunisia
Botswana	Fiji	Lithuania	Romania	Turkey
Brazil	Gabon	Macedonia	Russian Federation	Turkmenistan
Bulgaria	Gambia	Madagascar	Rwanda	Tuvalu
Burkina Faso	Georgia	Malawi	Samoa	Uganda
Burundi	Ghana	Malaysia	Sao Tome and Principe	Ukraine
Cambodia	Grenada	Maldives	Senegal	Uruguay
Cameroon	Guatemala	Mali	Serbia and Montenegro	Uzbekistan
Cape Verde	Guinea	Marshall Islands	Seychelles	Vanuatu
Central African Republic	Guinea-Bissau	Mauritania	Sierra-Leone	Venezuela
Chad	Guyana	Mauritius	Slovak Republic	Vietnam
Chile	Haiti	Mexico	Slovenia	Yemen
China	Honduras	Micronesia, Fed. Sts.	Solomon Islands	Zambia
Colombia	Hungary	Moldova	Somalia	Zimbabwe
Comoros	India	Mongolia	Sri Lanka	

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