# Aid Allocation and Deportation Enforcement

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#### Abstract:

Scaling up deportations has turned into a popular policy call in many destination countries. However, its execution faces practical difficulties since repatriating migrants requires cooperation with countries of origin, which often oppose the return of their co-nationals. We argue that the allocation of official development assistance is used as a bargaining chip in twosided strategic interactions. On the one hand, destination countries use the promise of aid to obtain cooperation on return management. On the other hand, countries of origin can leverage the reception of returnees to obtain more aid. We test this argument on a sample of up to 3,000 deportation corridors from 31 European countries to 142 countries of citizenship over the period 2009 to 2021. To address the main identification challenge of unobserved bilateral migration potentially driving both returns and aid, we estimate the effect of aid on executed returns conditional on previously emitted orders to leave. We find that the elasticity of executed returns with respect to orders to leave increases with bilateral aid allocation. This effect is driven by cases in which returns are non-voluntary and by country pairs with a strong bilateral reliance on aid. This increase in enforcement elasticities translates into a moderate increase in forced returns per aid dollars spent: For an average corridor, a scenario of 10 million bilateral aid dollars compared to no aid is associated with roughly 20 additional enforced returns per year.

Keywords: Immigration Enforcement, Deportation Corridors, Official Development Aid, Dyadic Models

JEL Codes: F22, F35, F51

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#### I. Introduction

International migration is one of the most divisive policy issues of our time. On the one hand, many economists emphasize the multiple economic benefits from international migration and the need for more immigration, especially in aging societies of high-income countries. On the other hand, anti-immigration discourses are on the rise across the Western world, reflected in — and responding to — large electoral gains among right-wing parties that capitalize on anti-immigrant sentiments.

One topic that ranks high on the policy agenda in many high-income countries is the return of migrants who lack resident permits or who are being denied refugee status; even among countries with previous policy traditions of resettlement of refugee populations (Fakhoury and Mencüteck 2023). Incoming president Donald Trump promised the largest deportation operation in the history of the US during election campaigns<sup>1</sup>. Politicians in Europe strike a similar tone. The crackdown of migrants and the intensification of deportation effort is a declared goal of the Italian prime minister Giorgia Meloni and her right-wing governing coalition<sup>2</sup>. In October 2023, the German chancellor Olaf Scholz from the Social Democratic party (SPD in German) figured on the headline of the weekly journal "Der Spiegel" with a statement "to massively scale up deportations"<sup>3</sup>, and a law was passed in January 2024 to accelerate forced returns from Germany<sup>4</sup>. Politicians in the UK have been debating how to reduce the number of asylum seekers, culminating in the plan to deport migrants to Rwanda as a third country from where to process asylum claims.

As much as deportations are applauded by many voters in destination countries of the Global North, these measures are highly unpopular among populations in migrants' countries of origin. Especially in African countries, the image of cuffed deportees reproduces images of colonial oppression (Cham and Adam 2023) and have led to significant political pressure on origin country governments (Zanker et al. 2019; Paasche 2022). For instance, thousands went to the streets in Tunisia after German chancellor Merkel announced the repatriation of migrants

<sup>&</sup>lt;sup>1</sup> <u>https://www.abc.net.au/news/2023-12-18/donald-trump-promises-largest-deportation-operation/103241936,</u> accessed on 5.2.2024.

<sup>&</sup>lt;sup>2</sup> <u>https://www.theguardian.com/world/2023/sep/27/italian-pm-crackdown-migrants-deportation-decree-giorgia-meloni</u>, accessed on 5.2.2024.

<sup>&</sup>lt;sup>3</sup> https://www.spiegel.de/international/germany/interview-with-german-chancellor-olaf-scholz-we-have-to-deport-people-more-often-and-faster-a-790a033c-a658-4be5-8611-285086d39d38, accessed on 30.05.2024.

<sup>&</sup>lt;sup>4</sup> https://www.bundesregierung.de/breg-en/news/repatriation-package-2230562, accessed on 30.05.2024.

considered to be an "Islamist threat" in 2017<sup>5</sup>. In Senegal, returnees from Spain organized riots and protests against the government and lobbied against repatriation agreements (Andersson 2014, 42). In The Gambia, public opposition against deportations even led to the adoption of a moratorium on deportation flights from the European Union (Zanker and Altrogge 2022).

Departing from these observations, our paper focuses on bilateral negotiations over deportations in settings of asymmetrical interdependences and conflicting policy goals. While deportation decisions are made in countries of destination, its execution usually requires the cooperation of governments in migrants' countries of origin. Receiving countries must, for instance, issue travel documents, support the reintegration of returnees, cooperate with coast guards and identification missions, agree on the number of returns, and authorize flight landings (Zanker 2023). This provides strategic leverage that can be employed in the negotiation over readmissions. We argue that the allocation of bilateral development assistance is used as a strategic tool in negotiations over the admission of deportees. Seen from deporting countries, the promise of aid can be used to coerce countries into cooperation. Seen from the perspective of countries of citizenship, the readmission of migrants can be used to negotiate an increase in aid. We refer to the term "deportations" as the removal of migrants from countries' interiors to their countries of citizenship. This excludes the denial of entry at the border and includes forced returns as well as forms of assisted returns often coined as "voluntary" that do not include physical force but employ other forms of "soft" coercion.

We test our argument that aid allocation is used as a bargaining chip over deportation enforcement on a sample of up to 3,000 deportation corridors from 31 European countries to 142 countries of citizenship from the rest of the world over the period 2008 to 2021. The countries of the European Union offer an ideal context to test our argument: For one, forced and assisted returns are an important part of the migration policy toolkit of European countries. Countries of the European Union ordered the return of more than 7 million persons from 2008 to 2021 (Eurostat 2023). At the same time, countries of the European Union reported approximately 2.2 million returns, either by force or under schemes coined "voluntary". The discrepancy between return orders and registered repatriations indicates a considerable rate of non-enforcement (Gibney 2008; Stutz and Trauner 2022) that varies across countries as well as across bilateral deportation corridors. While non-enforcement may have multiple reasons

<sup>&</sup>lt;sup>5</sup> <u>https://www.welt.de/politik/ausland/article160986896/Tunesier-gegen-Abschiebungen-von-Islamisten-aus-Deutschland.html</u>, accessed 31.1.2024.

including appeals to revoke return orders as well as voluntary returns not being registered in bilateral return data, it also hints towards receiving countries' capacities to resist the reception of deportees.

Our main empirical challenge lies in isolating the causal effect of aid on deportations from other variables that are correlated both with aid and with deportations. For instance, aid could be targeted toward countries that send more migrants with the aim of addressing the "root causes" of migration or aid could affect the number of migrants via its impact on the social and economic conditions of migrant-sending countries. We therefore predict the effect of aid on deportations conditional upon previously emitted orders to leave. In the European context, deportations are usually enforced only after an order to leave has been issued. Because we predict deportation elasticities for a given number of persons to whom an order to return has previously been issued, our estimate should not be vulnerable to bias from unobserved bilateral migration flows.

Our main findings are summarized as follows: The elasticity of enforced returns with respect to lagged orders increases by an additional  $\approx 0.04\%$  for every 1% increase in bilateral aid. This effect is strongly statistically significant; it is driven by returns that imply the use of force; and is stronger in countries that rely heavily on bilateral aid. For most deportation corridors, the increase in enforcement elasticities translates into a moderate increase in forced returns per aid dollars spent: For an average corridor, a scenario of 10 million bilateral aid dollars compared to no aid increases the annual number of enforced returns by around 20 persons, all else equal.

The rest of the paper is organized as follows: In Section II, we discuss theoretical arguments on the link between forced returns and aid based on existing literature. We then offer three testable hypotheses on the link between aid allocation and return enforcement in Section III. Section IV presents aggregate data on bilateral return corridors from 31 European and highlights cross-sectional as well as temporal patterns for the main corridors. Section V explains the empirical strategy. We present our main results in Section VI, then test the robustness of our fidnings for alternative specifications in section VII and address heterogeneities across country pairs in Section VIII. Section IX concludes and points to the paradox of aid and forced returns: Aid allocation is used to obtain cooperation on a policy that is likely detrimental to the social and economic development of migrants' countries of origin.

#### **II.** Theoretical considerations

Deportations are a highly conflictive topic in the relations between countries. While applauded by many voters in countries of destination, they are resented by citizens in migrants' countries of origin. A growing literature on deportation externalities mainly from the Latin American context suggests that deportations pose a burden not only on deportees themselves, who must navigate stigma and difficult post-deportation trajectories (Brotherton and Barrios 2009; Schuster and Majidi 2013; Mojica Madrigal 2017; Silver 2018). They also affect communities back home in several direct and indirect ways. The deportation of relatives may come with a loss of access to remittances by migrated family members or an increase in debt taken up to finance the migration of relatives (Hernández-Carretero and Carling 2012, 410; Menjívar, Morris, and Rodríguez 2018, 130). In Latin America, the deportation of migrants with a prior conviction for a crime in the US has been associated with an increase in homicides (Ambrosius and Leblang 2020; 2025). In Northern Central America, the spread of violent gangs has been traced to the deportation of young adults who had been socialized into gang cultures of the urban peripheries of US metropoles during their childhood (Ambrosius 2021; Sviatschi 2022). In Mexico, the precariousness and vulnerability of deportees provided a pool of recruits for powerful drug cartels (Slack 2019) and deportations have fed into local dynamics of violent crime (Rozo, Anders, and Raphael 2021; Ambrosius 2024), through direct or indirect mechanisms. Bandiera et al. (2023) find that deportations increased labor market competition and informal employment in El Salvador; and Ambrosius and Meseguer (2023) show how the forced return of migrants led to the spread of Anti-American sentiments in Latin America and undermined trust into their Northern neighbor. All these examples are drawn from the Latin American context. Although types and patterns of deportation externalities may differ, deportations have been opposed by citizens in countries from across Africa (Zanker et al. 2019; Paasche 2022, Andersson 2014, 42, Zanker and Altrogge 2022).

A peculiarity of deportation enforcement in the context of European countries is the fact that the negotiation and implementation of deportations require cooperation between the deporting and the receiving country. While outright refusals to accept deportation flights as in the case of the Gambia in 2019 are the most visible forms of resisting deportations, more subtle and varied forms of incompliance are more common (Zanker 2023). One strategy to resist the reception of deportees has been the withholding of documentation as a requisite for repatriation. One estimate for the case of Germany suggests that, in a single year, lack of travel documents of 65000 persons prevented them from being deported<sup>6</sup>. Drawing from case studies of Turkey and Morocco with the EU, negotiations over readmission agreements have been described as a "complex process of politicization and depoliticization of dynamics" between different actors (Wolff 2014). These interactions may not take place only at the diplomatic level, but also in more informal and mid- or lower-level negotiations, less visible to the public eye (Qadim 2014). The informalization of the cooperation processes, given the political costs of formal agreements, has been identified as a recent trend (Zanker et al. 2019). For instance, the European Union New Partnership Framework on Migration with Third Countries, launched in 2016, highlighted that "the paramount priority is to achieve fast and operational returns, and not necessarily formal readmission agreements" (Zanker 2023).

In this context, aid may play a crucial role in negotiating the readmission of migrants. From the perspective of deporting countries, dependencies on aid can be leveraged to enforce deportation policies and to "buy" countries' cooperation in terms of migration management. Formally the allocation of aid is not conditioned upon cooperation in terms of migration policies: The Development Assistance Committee (DAC) of the OCED states in his guiding principles that ODA shall not be diverted towards donors' immediate interests on migration<sup>7</sup>. Notwithstanding, many expert opinions and statements by office holders have made such a link quite explicitly. Members of governments have openly threatened countries with a stop of development aid, should they not accept the return of rejected asylum applicants. For instance, the former German Vice Chancellor, Sigmal Gabriel, said in 2019 on public television that the country would not be willing to support countries like Morocco and Algeria financially if they are not willing to take back rejected asylum seekers<sup>8</sup>. The Swedish governments recently announced it would only provide financial assistance to countries that cooperate with their forced return efforts<sup>9</sup>. Adepoju et al. (2010, 47–49) claim that bilateral agreements aimed at curtailing and controlling irregular migration as well as the readmission of repatriated migrants in exchange for economic assistance has become a main strategy of the EU as well as of individual countries. For the case of bilateral relations between Spain and Senegal, Andersson (Andersson 2014, 41) concludes: "To implement repatriation-as-deterrence, Spain had entered into a grand bargain with Senegal.

<sup>&</sup>lt;sup>6</sup> https://www.dw.com/en/thousands-of-deportations-fail-due-to-lack-of-papers/a-43223447, accessed 31.1.2024.

 $<sup>^{7}</sup> https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/migration-oda.htm$ 

<sup>&</sup>lt;sup>8</sup> https://www.zeit.de/politik/deutschland/2016-01/sigmar-gabriel-entwicklungshilfe-fluechtlingskrise-nordafrika, accessed 31.1.2024, cited in Dreher et al. (2019)

<sup>&</sup>lt;sup>9</sup> https://europeanconservative.com/articles/news/swedens-sd-supported-government-to-link-foreign-aid-to-repatriation-cooperation/, accessed 5.2.2024.

In exchange for joint patrols and deportations, Spain provided money and favors. [...] Development cooperation smoothed the ways for policy initiatives while humanizing the cold, dissuasive logic of repatriations". The linkage between aid and migration has also been reinforced in the EU Emergency Trust Fund for Stability and Addressing Root Causes of Irregular Migration and Displaced Persons (EUTF) adopted in 2015 (Zanker 2023).

Our argument connects to a well-established literature on the political economy of aid allocation and the strategic use of aid in relation to other policy goals (see Dreher, Lang, and Reinsberg 2024 for a recent summary). Over the last twenty years, a number of studies have shown that the allocation of aid is not only driven by economic needs and policy performance of the recipients but also by the geopolitical considerations of donors, as measured, for instance, via vote alignments in the UN security council (e.g. Alesina and Dollar 2000; Kuziemko and Werker 2006; Dreher, Nunnenkamp, and Thiele 2008; Carter and Stone 2015; Dreher et al. 2022). While these examples are related to foreign policy agendas, aid allocation may also follow domestic policy goals. One case in point is the allocation of aid to address so-called root causes of migration (Czaika and Mayer 2011; Bermeo and Leblang 2015). In the same logic of allocating aid in the pursuit of other policy agendas, we argue that the allocation of aid is also used to obtain cooperation in repatriation policies.

What distinguishes the case of deportation enforcement from the classical literature on the political economy of aid allocation is the fact that negotiations over readmissions are a case of two-sided strategic interaction rather than a unilateral decision over the allocation of aid. Despite the asymmetry of power between deporting and receiving countries (Del Sarto 2021; Zancker 2023; Mouthaan 2019) and the reinforcement of colonial practices through forced returns (McNeill 2023), the agency of receiving countries in the process of cooperation on return has been widely recognized (Qadim 2014, Mouthaan 2019; Del Sarto 2021; Zanker 2023; McNeill 2023). Such agency helps to explain low rates of deportation to receiving countries despite diplomatic and political efforts from deporting countries (Gibney 2008; Zanker 2023). In this sense, negotiation over deportation enforcement constitutes a particular case of migration diplomacy (Adamson and Tsourapas 2019) in which the governance of population movements across borders becomes an object of interstate diplomacy. For instance, OECD countries have used the facilitation of visa requirements or guest worker schemes for certain countries as part of their foreign policy packages that may interact or overlap with other foreign policy interests in trade or security cooperation (e.g. Bon Tempo 2008; Hollifield, Martin, and Orrenius 2014).

Provisions for migration control have been included in preferential trade agreements, suggesting that the negotiation over trade agreements is used as an instrument to pursue domestic policy goals in the field of migration (Lavenex, Lutz, and Hoffmeyer-Zlotnik 2024). In other instances, policy promises or threats related to the movement of people have been used as a tool to obtain financial concessions. For example, Greece used an issue-linkage strategy in its bail-out negotiation with the EU during its debt crisis, using the hosting of refugees as a bargaining chip to obtain better conditions from the EU (Tsourapas and Zartaloudis 2022), and Turkey hosted refugees from Syria in exchange for massive aid from the EU (cp. Adamson and Tsourapas 2019, 114). Kenya and Pakistan have used the threat of deporting displaced populations within their borders to obtain greater aid from Global North countries in the 2010s who were concerned about a scenario of regional instability (Micinski 2023). Similarly, Lebanon and Jordan demanded greater financial assistance in exchange for hosting Syrian refugees (Del Sarto 2021). These strategies of refugee rent-seeking have been diffused among Global South countries to leverage power in negotiations with other countries, being called "commodification of refugees" (Freier et al. 2021). Applied to the case of deportation enforcement, the threat of non-cooperation can be seen as a "weapon of the weak" to obtain financial aid within relations of bilateral – albeit asymmetrical - interdependences.

The negotiation over aid allocation against cooperation in terms of deportation enforcement may respond to bilateral interdependencies and asymmetries, as well as to corridor-specific leverages and incentives. In the following section, we translate these theoretical considerations into three hypotheses.

# **III.** Hypotheses

Building on existing literature and theoretical considerations in the previous section we formulate three hypotheses to be tested empirically.

*Hypothesis H1: An increase in bilateral aid is associated with a higher number of bilateral returns per orders to leave* 

Our key argument is that aid "buys" the cooperation of receiving countries in terms of return management. We therefore expect the amount of bilateral aid to be correlated with the number of bilateral returns for a given number of orders to leave. As explained above, we expect these correlations to be the result of two-sided strategic interactions between deporting and receiving countries. On the one hand, an increase in enforcement elasticities – the number of executed returns relative to orders – could be driven by deporting countries who condition the allocation of aid on receiving countries' cooperation in terms of migration management. It could also be due to pressure from migrants' countries of origin who offer the repatriation of migrants against additional aid concessions.

Formal bilateral agreements have been signed in several countries to establish rules for the return of migrants being given an order to leave (Harnisch, Lujic, and Potinius 2023). The content of such deals may vary. These may include intentions to cooperate on assisted return programs as well as cooperation in the implementation of forced returns. The allocation of aid could play a role in the process of negotiating the content of bilateral agreements on the one hand; and the existence of such deals could affect the size of enforcement gaps. It is therefore important to control for the existence of return clauses in bilateral migration agreements. However, we argue that these are only part of the story. What characterizes the dynamics between aid allocation and return enforcement is, in our view, precisely the lack of formal rules to regulate bilateral cooperation in terms of return enforcement. The return of 28 Afghans from Germany in August 2024 illustrates this point. Since Germany underholds no official diplomatic relations with the Taliban regime in Afghanistan, the return operation was made possible due to secret negotiations mediated by Qatar<sup>10</sup>. Although we don't know which deals were struck in these secret negotiations, it is likely that the flow of money played a role in obtaining the cooperation of the Taliban. In this as in other cases, it is precisely the lack of rules that gives countries leverage in terms of negotiating the allocation of aid (or in obtaining other concessions).

# *Hypothesis H2: The relationship between aid allocation and return is driven by enforced returns, not by returns based on voluntary schemes*

The classification of returns after an order to leave as either "voluntary" or "forced" is controversial: Returns coined as "voluntary" by deporting countries often imply the threat of physical force in case of non-compliance or other sanctions such as long-lasting situations of

<sup>&</sup>lt;sup>10</sup> "Deutschland schiebt afghanische Straftäter in ihr Heimatland ab". Der Spiegel, 30.8.2024. Accessed on 16.9.24. URL: <u>https://www.spiegel.de/politik/deutschland/flug-nach-kabul-gestartet-deutschland-schiebt-afghanische-straftaeter-in-ihr-heimatland-ab-a-f01c0bb1-b5a8-41cd-977d-098a0c165ca6</u>

economic precariousness, migrants' exclusion from formal labor markets, cuts in financial support and uncertain legal status.

We acknowledge that the term "voluntary returns" is problematic, as it often obscures the various forms of coercion that may underlie these initiatives. However, for the purpose of our argument, it is crucial to focus on the role of migrants' countries of origin in cooperating on readmission procedures, rather than on the agency of the migrants themselves. Under "voluntary" return schemes, the participation of migrants is frequently incentivized through financial assistance aimed at helping them reintegrate into their home countries. Although these programs may also require cooperation at the state level to ensure reintegration, they tend to create fewer tensions in bilateral relations. Consequently, we anticipate that returns labeled as voluntary will be less influenced by bilateral aid commitments in comparison to returns that occur against the wishes of migrants. In cases involving non-consensual returns, countries of origin can employ strategies such as withholding necessary documents, denying landing permits for deportation flights, or other forms of "administrative sabotage," which are not applicable in situations where migrants have consented to their return.

*Hypothesis H3: Enforcement elasticities with respect to aid allocation are higher if origin countries strongly rely on bilateral aid from deporting countries* 

Average correlations between bilateral aid allocation and enforcement rates may hide important heterogeneities within countries, that affect countries' bargaining positions over return procedures. We postulate that the principal leverage of deporting countries lies in receiving countries' reliance on aid. Therefore, the more countries rely on bilateral aid, the more they should respond to the use of bilateral aid allocation in return for cooperation in the implementation of return policies. For instance, Zanker et al. (2019) argue that countries like the Gambia or Niger with a strong reliance on aid have more incentives to cooperate with deporting countries compared to countries like Nigeria and Senegal who have large migrant populations abroad, but where aid plays a much smaller role in overall budgets.

# **IV. Bilateral Return Enforcement: Data**

Data on main variables of interest is made public by Eurostat's Enforcement of Immigration Legislation data sets. These statistics do not include persons who are transferred from one European Member State to another under the mechanism established by the Dublin regulation, nor people whose entry in the territory was denied. The variable "orders to leave" refers to "third-country nationals found to be illegally present who are subject to an administrative or judicial decision or act (...) imposing an obligation to leave the territory" of the destination country (Eurostat, 2024). The variable "total returns" refers to "third-country nationals who have in fact left the territory (...), following an administrative or judicial decision or act" of the destination country (Eurostat, 2024). It refers to all individuals who either voluntarily left after an order or who were subject to an enforced measurement, such as being escorted in an official flight. Eurostat also provides disaggregated data by two distinct types of return: "enforced returns"<sup>11</sup> and "voluntary returns". The former refers to situations "in which the third-country national is subject to the enforcement of the obligation to return" (Eurostat, 2024). The latter term refers to situations in which the "third-country national complies voluntarily with the obligation to return (i.e. no enforcement procedure had to be launched)" (Eurostat, 2024). In this context, "voluntary returns" include both non-assisted and assisted voluntary returns, for instance: in-kind assistance prior to departure, in-kind or in-cash allowance the point of departure/upon arrival, and/or in-kind or in-cash reintegration assistance. We use the term "voluntary" in quotation marks, because the absence of physical force does not necessarily mean that return has been a willing choice of migrants. Rather, this category reflects softer forms of coercion compared to forced return; and incentivized returns are usually paired with enforcement threats or other sanctions under non-compliances.

There are important limitations to discuss regarding the use of Eurostat data. For the period analyzed in this paper, countries reported data to Eurostat on a voluntary basis<sup>12</sup>. The variables used for analysis come from three different data sets, with varying levels of country reporting and year coverage<sup>13</sup>. Eurostat collects and harmonizes data sent by European Union member countries. The data is mainly provided by the Ministries of the Interior or related Immigration Agencies, whose data collection methods and legal frameworks may vary. In some cases, it is challenging to track individuals leaving without notifying authorities or relocating to another

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L\_.2020.198.01.0001.01.ENG.

<sup>&</sup>lt;sup>11</sup> In the original data set, this variable is called "forced returns". We use the term "enforced returns" in our analysis to make a clear distinguishment with the variable "total returns", which arguably can be broadly understood as forced returns, containing both those enforced and "voluntary" returns.

<sup>&</sup>lt;sup>12</sup> The compulsoriness for EU Member States to report for some data sets related to the Enforcement of Migration Legislation only started in 2021, with a three-year period of derogations, extendable for two years more. More information available here:

Accessed on September 19, 2024.

<sup>&</sup>lt;sup>13</sup> The different data coverages are detailed in Annex 2.

EU member state (Stutz and Trauner 2022). Despite limitations, Eurostat stated that "compliance with the regulation requirements ensures a sufficient level of accuracy and comparability" (Eurostat 2024).

All these data sets provide disaggregated data on the citizenship of individuals. While citizenship and country of return do not always overlap, we use citizenship as a close proxy of the country of return, considering it would hold for most cases.

Figure 1 shows the time trends for data aggregated by year, for orders to leave and total returns, for the period 2008 to 2021. Annual rates of total returns relative to orders vary between 18% (2021) and 50% (2016).



Figure 1: Annual Number of Persons Ordered to Leave and Total Returns (in thousands, 2008-2021)

Source: Eurostat, data sets migr\_eiord and migr\_eirtn. Annual aggregates for 32 European countries which reported on orders to leave and total returns for the period from 2008 to 2021.

Figure 2 shows the average proportion of total returns and enforced returns in relation to orders to leave to each of the ten largest corridors for the six countries of the sample with the largest

number of orders issued in absolute terms: France, Germany, Spain, Italy, Belgium and Poland<sup>14</sup>. Rates are estimated relative to orders for the years and corridors in which data is reported on each of the indicators. In several cases, the rate of total returns to orders is 1 or higher, such corridors between Germany towards Kosovo, Albania, North Macedonia and Serbia (corridors DEU\_XXK, DEU\_ALB, DEU\_MKD and DEU\_SRB in the graph), as well as from Belgium towards Ukraine and Mongolia (corridors BEL\_UKR BEL\_MNG in the graph). For these cases in which the enforcement rate of total return is higher than 1, orders have likely been issued in years prior to 2008 not included in the data, but returns were realized after 2008. This points to the difficulty of relating aggregate numbers on return and orders in the presence of uncertain and varying lags between the two indicators. We return to this issue when we discuss our estimation strategy in the next section.

The rates of total returns and enforced returns relative to order vary not only across deporting countries but also across corridors within countries. Differences in enforcement rates may be related to many factors, some of which are stable over time, such as geographical distances. In this paper, we aim to contribute to explaining why the number of returns changes over time, conditional upon number of orders emitted in previous periods.

<sup>&</sup>lt;sup>14</sup> The country code used in the paper is the ISO 3166-1 alpha-3 code and the full list can be consulted in Annexes 2 and 3.



Figure 2: Total Returns and Enforced Returns, as a Share of Orders to Leave, for Selected Corridors (Aggregates, 2008-2021).

Source: Eurostat, data sets migr\_eiord, migr\_eirtn and migr\_eirtn\_vol. We selected the six countries with the highest aggregate number of orders to leave. Then, we selected their ten largest corridors also based on orders to leave. The UK is not shown because we lack separated data on enforced returns for this case. Values are aggregated for the period 2008-2021. Rates were capped at a maximum of 1 in cases where the number of returns are larger than orders.

# V. Empirical Strategy

The goal of this paper is to estimate the effect of bilateral aid allocation and bilateral return enforcement: Is aid allocation used as a bargaining chip against cooperation on return policies? The main empirical threat to identifying this relationship lies in the possibility that both enforced returns and aid could respond to a third unobserved variable. While we control for all time-constant variables such as geographical distances and corridor-specific historical legacies via corridor fixed effects, a threat from time-varying variables remains in the fact that the number of enforced returns is related to bilateral migration flows, that are partly unobserved. The arrival of new migrants is closely related to deportations but also likely to be correlated with bilateral aid. On the one hand, the inflow of aid could affect migration: Aid could have a negative effect on migration because it reduces migration pressure (Lanati and Thiele 2018; Gamso and Yuldashev 2018; Dreher, Fuchs, and Langlotz 2019; Murat 2020) or it could have a positive effect, because a higher income could make migration more affordable (Berthélemy, Beuran, and Maurel 2009; Belloc 2015; Clemens and Postel 2018; Dreher, Fuchs, and Langlotz 2019).

On the other hand, migration could also affect the magnitude of bilateral aid, either because countries allocate aid with the purpose of curtailing migration or because migrants residing in host countries could lobby for an increase in aid towards their countries of origin (Bermeo and Leblang 2015; Czaika and Mayer 2011). In both cases, the correlation of ODA with our variables of interest — total and enforced returns — would be driven by (unobserved) changes in migration. If aid is, on overall, associated with more migration, our estimates would be upward biased and vice versa. At the same time, the population at risk is not well captured in existing bilateral migration data. Asylum data misses those who do not enter via the asylum system, and other estimates on overall migrant stocks and flows such as the OECD International Migration Database (IMD) or estimates obtained from a comparison of migration stocks do not distinguish by migration status and are therefore imperfect measurements of the population at risk (cp. Abel and Cohen 2019).

In the European context, an order to return must be emitted prior to its enforcement. Rather than looking at numbers of enforced returns as such, we therefore predict the likelihood of being returned, conditional on the emitted number of orders to leave in preceding periods. While many of those being vulnerable to returns are not captured in official counts of migrant populations, return orders already identify the population marked for potential return and are therefore preferable over other indicators. This means that we only need to be concerned about endogeneity in terms of enforcement conditional upon the number of orders in previous periods. Bilateral aid is expected to be correlated with bilateral migration, but there are less reasons to be concerned about the endogeneity of returns given orders to leave.

Our baseline model is estimated as follows:

$$\begin{aligned} eq. (1) \ \text{ihs}(returns)_{i,j,t} \\ &= \beta_1 \text{ihs}(aid)_{i,j,t} + \beta_2 \text{ihs}(orders \ to \ leave)_{i,j,t-1} + \beta_3 \ \text{ish}(aid)_{i,j,t} \\ &\quad * \ \text{ish}(orders \ to \ leave)_{i,j,t-1} + \beta_4 X_{i,j,t} + \rho_{i,j} + \tau_t + u_{i,j,t} \end{aligned}$$

The dependent variable *returns* are total returns from deporting country *i* to citizenship country *j* in year *t*. We consider three alternative return indicators as discussed above: Total returns, "voluntary" returns following an order to leave, and enforced returns. For the explanatory variable aid, we use bilateral annual aid commitments. While aid commitment should be more relevant in negotiating readmissions, we compare results to the alternative variable of gross aid disbursement. Negative values that can occur in cases where loan repayments are larger than new commitments or disbursements are truncated at zero. We interact aid with the number of orders to leave (orders to leave ) lagged by one period. All key variables - returns, orders to leave and aid are transformed using the inverse hyperbolic sine (or arcsinh) transformation<sup>15</sup>. In difference to the alternative of natural logarithms, the ISH transformation retains the zero values, while coefficients can still be interpreted as elasticities. Our main interest lies on the interaction coefficient  $\beta_3$  which measures the additional expected percent increase in deportations for every percent increase in aid relative to orders in the previous period. Although related, it should be noted that these coefficients are not directly comparable to indicators of "enforcement gaps" obtained from dividing the number of enforced returns over emitted orders, presented in section III. Here, we predict the percent increase in the number of enforcements in the current period, given a percent increase in return orders in the previous period, after controlling for country and year effects.

All identifying variation comes from changes over time. The inclusion of corridor fixed effects  $\rho$  means that all variables that are specific to a given corridor but that do not change over time are controlled for. Some of these could be related to enforcement rates: Geographical distance for instance could be related to deportation costs; time constant (perceived) cultural distances could affect biases in deportation regimes; as could other institutional or political legacies such as former colonial links.

We include a set of time-varying variables *X* to control for other potential drivers of bilateral deportation risk, and that could also be correlated with bilateral aid. A change in social, political, and economic conditions at origin could in principle be related to both deportations ratios as well as bilateral aid. For instance, the decline of political or economic conditions at origin could increase migrants' resistance to return voluntarily. And a worsening of political or economic

<sup>&</sup>lt;sup>15</sup>The inverse hyperbolic sine transformation is defined as  $log(y_i+(y_i^2+1)^{1/2})$ . Except for very small values of y, coefficients can be interpreted the same way as one on a logarithmic variable.

conditions could also lead to more legal appeals and more return orders being revoked. In this case, forced returns could be associated with a decrease in returns relative to orders. Both conditions could also show up in an increase of bilateral aid and would therefore lead to a downward bias of the interaction coefficient. We control for economic distance via deporting country GDP per capita relative to citizenship country GDP. We control for political distance via deporting country democracy scores (on a scale from 0 –least democratic– to a maximum of 1) relative to receiving country democracy scores. These could affect deportations because fewer people could be willing to return voluntarily to countries that are poorer or less democratic; and because migrants coming from countries that are poorer and less democratic are more likely to obtain protection from deportations and recur to legal means of delaying or revoking deportation orders. Both distances could also be related to bilateral aid. In addition, we control for joint population size because both deportations and ODA are expected to increase with population size. We also include a binary indicator for whether bilateral repatriation agreements were in place as an additional control to assess whether enforcements are driven by such agreements; alone and interacted with orders to leave. Time fixed effects  $\tau$  control for changes that affect all corridors at a given time, and u is the usual error term. Summary statistics, descriptions and sources of all data used is found in Annex 1.

A remaining caveat of the estimation strategy – and a limitation of the data – is the fact that the exact lag between an order to leave and the enforcement of return is unknown and varies for individual cases, as well as for different countries and corridors. To assuage concerns regarding the correct lag between orders to leave and enforced returns, we estimate models for different lags and provide regressions on running means over three-year periods instead of annual periods. This accommodates some of the uncertainty regarding the lags from return orders to executed returns and helps to smooth the effect of outliers. We also exclude all cases where the number of returns exceeds the number of lagged orders in at least one year, and we use lagged asylum rejections instead of lagged orders to leave as an alternative indicator for the number of persons potentially marked for removal.

#### **VI.** Main Results

Table 1 shows results on the baseline model of bilateral aid on enforced returns, for a panel of up to 3174 deportation corridors and a maximum of 31 deporting countries from Europe since 2009. All regressions include corridor fixed effects and are therefore identified via variation

over time only. The first three columns interact lagged orders to leave with aid commitments, and columns four to six interact orders to leave with aid disbursements. The number of corridors and observations vary, depending on data availability for the different aid indicators, and in particular for the different indicators of return: Data on enforced return is available only for a smaller set of country pairs and, is most of these corridors, for fewer years. Our main interest lies on the interaction term between aid and lagged orders to leave. Interactions of lagged orders with committed aid (Column 1) and with disbursed aid (Column 4) indicate that the expected number of implemented returns increases per aid dollar committed or spent. A one percent increase in aid increases predicted returns by an additional 0.016 [0.015] per cent, for a given level of orders. This observation lends support to our fist hypotheses (H1): Aid seems to "buy" countries' cooperation in terms of return management, reflected in a larger number of returns per order to leave. It is unlikely that coefficients for the interaction term are driven by the omitted variable of migration: We identify the population marked for removal via lagged orders to leave. This way, we control for the migrant population at risk of being deported.

	Aid Committed			Aid Disbursed		
	Total	Enforced	Voluntary	Total	Enforced	Voluntary
	Returns	Returns	Schemes	Returns	Returns	Schemes
Aid	-0.041**	-0.13***	-0.082***	-0.047***	-0.14***	-0.042
	[-2.4]	[-4.8]	[-3.6]	[-2.6]	[-4.7]	[-1.6]
Lagged Orders	0.21***	0.077***	0.097***	0.21***	0.083***	0.11***
	[18]	[5.3]	[6.7]	[20]	[5.7]	[7.2]
Aid * Lagged Orders	0.016***	0.039***	0.0043	0.015***	0.034***	-0.0031
	[4.9]	[6.6]	[0.73]	[4.6]	[4.9]	[-0.39]
# Corridors	2892	2091	1978	3160	2239	2126
# Obs.	21776	10138	9162	24661	11013	10037
Years covered	13	13	10	13	13	10
Adj. R^2	0.88	0.83	0.8	0.88	0.83	0.8

Table 1: Effect of Bilateral Aid on Bilateral Returns, Conditional Upon Orders to Leave

Estimates from ordinary least squares regressions for a dyadic panel of up to 31 deporting countries (for aid disbursements) and 29 deporting countries (for aid commitments), and up to 142 countries of citizenship, covering the period 2009 to 2021. Variables of aid, orders to leave and returns have been transformed using the inverse hyperbolic sine transformation and can be interpreted as elasticities. All regressions include corridor and year fixed effects. Orders to leave are lagged by one year. Stars denote statistical significance at the 1% (\*\*\*), 5% (\*\*) and 10% level (\*\*\*). T-values clustered at the corridor level are given in brackets.

Columns 2 and 5 run the same regression for the subset of countries that report data on forced returns. These regressions halve the sample size and cover 22 deporting countries only. In these regressions, the size of the coefficient for the interaction term increases by more than twice its size and also increases in statistical significance, in spite of the smaller sample size. For cases of returns classified as "voluntary" in Columns 3 and 6, we observe no statistically significant effect for the interaction term. This confirms our expectations formulated in Hypothesis H2 that effects are driven by enforced returns not by returns to which migrants consented. Using data on committee or disbursed aid makes little differences, although the effect is slightly larger for aid commitments compared to aid disbursements.



Figure 3: Enforcement Elasticities in Response to Aid Commitments

Enforcement elasticities are based on regression output in Column 2 (left) and in Column 1 (right) in Table 1. Aid commitments on the horizontal axis is transformed back to its original value for better interpretation.

Figure 3 provides an interpretation of the magnitude of the predicted effect, based on coefficients estimated in Columns 1 (total returns, graph at the right) and Column 2 (forced returns, graph at the left). The vertical axis shows the elasticity of returns with respect to orders to leave<sup>16</sup>. For the case of forced returns, a 1% increase in orders is associated with an enforcement elasticity of between 0.1% and 0.3%, depicted for a range of values of bilateral aid commitments (in millions) on the horizontal axis. For total returns, the range is smaller. The depiction of enforcement elasticities is useful in interpreting the magnitude of the estimated effect: The average number of annual orders to leave per corridor was 220 during the period of analysis (2009 to 2021). Hence, an increase in enforcement elasticities from 0.1 to 0.2 would result in 22 additional enforced returns per corridor, everything else unchanged. This increase in enforcement elasticities comes with an additional 10 million USD in bilateral aid on average, compared to a scenario without aid. Apparently, the "price" of increasing enforcement elasticities is high.

<sup>&</sup>lt;sup>16</sup> Taking the derivative of returns with respect to orders gives:  $1/_{return} * \frac{\partial return}{\partial orders} = \frac{\beta_1}{orders} + \frac{\beta_3}{orders} * ln (aid)$ . Multiplying both sides by orders and rearranging gives  $\frac{orders}{return} * \frac{\partial return}{\partial orders} = \beta_1 + \beta_3 * \ln(aid)$ , where the left-hand side is the definition of an elasticity of returns with respect to orders.

The residual plot in Figure 4 assesses the fit of the model. The horizontal axis shows the values of the interaction term between lagged orders and aid commitments, each of them in its transformed version using the inverse hyperbolic sine. The vertical axis shows partial residuals of the (transformed) outcome variable: It depicts the value for forced returns that are not predicted by aid, lagged orders, or corridor and year fixed effects. As such, the figure visualizes the correlation between the interaction (horizontal axis) and the outcome variable for all corridor-year observations after controlling for the other variables included in the model. The fitted line is equivalent to the interaction coefficients  $\beta_3$ , based on Column 3 in Table 1. The size of the circles is drawn proportional to the log of the number of lagged orders – one of the two variables that defines the magnitude of the interaction term. Most of the observations with small numbers of orders (and small circles) are concentrated in the blue dense area around the regression line at the left. A few outliers are named: These values are not well predicted by the interaction between lagged orders and aid.





The residual plot depicts the correlation between the interaction term and the outcome variable, after controlling for all other variables in the model and is based on Column 2 in Table 1. The slope is the coefficient of the interaction term. The size of circles and names of selected outliers are drawn proportional to numbers of enforced returns.

# **VII.** Alternative Specifications

Table 2 shows five variations on our favorite regression of predicting enforced returns from an interaction between lagged orders and aid commitments (Column 3 in Table 1 and the left graph in Figure 3). First, we include several time-varying control variables in addition to the corridor and year fixed effects in Column 2: Joint population size of corridors, their economic distance in terms of per capita GDP, and their political distance in terms of democracy scores. The inclusion of these time-varying controls has only marginal effects on the size and statistical significance of the interacted coefficient in Column 2 compared to the same set of observations in Column 1. Column 3 assesses the effect of bilateral repatriation agreements, interacted with lagged orders. The existence of bilateral repatriation agreement increases the predicted number of forced returns for a given level of (lagged) orders. At the same time, its inclusion diminishes the effect of our variable of interest - the interacted effect of aid with lagged orders - only slightly. Column 4 and 5 address uncertainty in the timing between orders to leave and the enforcement of returns. Column 4 lags orders by two periods instead of one period. Column 5 runs the full specification including all control variables on three-year running means of forced returns, lagged orders, and aid. In both cases, the estimated coefficient for the interaction is very similar to the other specifications.

	Ι	II	III	IV	V
Aid	-0.14***	-0.14***	-0.12***	-0.11***	-0.17***
	[-5.2]	[-5.3]	[-5]	[-4.4]	[-3.5]
Lagged Orders to Leave	0.083***	0.082***	0.068***	0.051***	0.2***
	[5.5]	[5.5]	[4.6]	[3.3]	[7.3]
Agreements			-0.59	-0.56	-0.011
			[-1.3]	[-1.5]	[-0.86]
Aid * Lagged Orders	0.042***	0.042***	0.037***	0.035***	0.036***
	[7]	[7]	[6.8]	[6.1]	[3.9]
Agreements * Lagged Orders			0.23***	0.22***	0.3***
			[3.5]	[3.9]	[3.9]
Lag (Orders to Leave)	one year	one year	one year	two	one year
Periods	annual	annual	annual	years annual	3-yr running means
Additional Controls	no	yes	yes	yes	yes
# Corridors	1895	1895	1895	1892	1602
# Obs.	9366	9366	9366	9177	2792
Years covered	13	13	13	12	4
Adj R2.	0.83	0.83	0.83	0.83	0.93

Table 2: Effect of Bilateral Aid Commitment on Forced Returns, Conditional Upon Orders to Leave. Different Specifications

Estimates from ordinary least squares regressions for a dyadic panel of 22 deporting countries and 118 countries of citizenship covering the period 2009 to 2021. All regressions include corridor and year fixed effects. Time-varying controls are bilateral distance in terms of per capita GDP, bilateral democracy distances, and the natural log of joint population size. As in Table 1, variables of aid, orders to leave and returns have been transformed using the inverse hyperbolic sine transformation and coefficients can be interpreted as elasticities. Aid refers to annual aid commitments. Stars denote statistical significance at the 1% (\*\*\*), 5% (\*\*) and 10% level (\*\*\*). T-values clustered at the corridor level are given in brackets.

Table 3 addresses two additional issues. For one, we show results from Table 2 excluding all corridors in which lagged orders to leave exceeded the number of returns in at least one year (Columns 1 and 2). In most cases, these are corridors with very small overall numbers of orders and returns but also some outlier cases in which repatriation agreements or unilateral policy decisions led to the return of larger numbers of persons with pending orders to leave in specific years. This includes, for instance, removals from Germany towards countries in the Western Balkan countries (see Figure 2). In addition, we estimate enforcement elasticities with respect to asylum rejection instead of orders to leave (Columns 3-5). This allows us to estimate the likelihood of removals relative to an alternative reference group. It should be noted that not all of those who have their asylum rejected necessarily receive an order to leave: Rejections can be appealed; and those whose claims have been rejected can still be granted temporary protection. We estimate enforcement elasticities for asylum rejections on all available corridors and also for a subset of corridors excluding all corridors in which the number of returns were larger than orders to leave in at least one period; and we show results with as well as without additional time-varying controls. In addition to bilateral distances in terms of per capita GDP, bilateral democracy distances, and the natural log of joint population size, these regressions also include controls for bilateral asylum applications, bilateral migration stocks, and bilateral decisions on asylum requests.

Excluding all corridors in which removals exceeded lagged orders reduces the number of observations from  $\approx 2100$  in Column 2 of Table 2 to  $\approx 1200$  in Column 1 of Table 3. Even so, the size of the coefficient changes little, from 0.039 (Column 2 in Table 1) to 0.030 (Column 1 in Table 3) and 0.035 (Column 2 in Table 3, with additional controls). The coefficient for enforcement elasticities is smaller for the case of asylum rejections compared to orders to leave and varies for different samples between 0.017 (Column 3) and 0.027 (Column 2). This reflects the fact that for most corridors and years, the number of asylum rejections is larger than the number of orders to leave.

	Ι	II	III	IV	V
Aid	-0.099***	-0.15***	-0.035*	-0.049**	-0.00021
	[-3.5]	[-2.7]	[-1.7]	[-2.1]	[-0.0074]
Lagged Orders to Leave	0.12***	0.13***			
	[6.4]	[4]			
Lagged Asylum Rejections			0.042***	0.087***	0.034
			[3]	[4]	[1.4]
Aid * Lagged Orders	0.03***	0.035***			
	[4.1]	[3.1]			
Aid * Lagged Asylum Rejections			0.022***	0.027***	0.017**
			[4.3]	[5.1]	[2.3]
Sample	restricted	restricted	all	all	restricted
	sample	sample			sample
Additional Controls	no	yes	no	yes	yes
# Corridors	1183	592	2089	1472	815
# Obs.	5544	3080	10250	7463	4029
Years covered	13	13	13	13	13
Adj R2.	0.86	0.83	0.83	0.83	0.85

Table 3: Effect of Bilateral Aid Commitments on Forced Returns. Alternative Specifications and Samples

Estimates from ordinary least squares regressions for an annual dyadic panel of up to 22 deporting countries and 136 countries of citizenship (Column III) covering the period 2009 to 2021. All regressions include corridor and year fixed effects. Time-varying controls are bilateral distances in terms of per capita GDP, bilateral democracy distances, and the natural log of joint population size, bilateral asylum applications, bilateral migration stocks, and bilateral total decisions on asylum requests. Aid refers to annual aid commitments, and orders to leave and asylum rejections are lagged by one year. Aid, orders to leave and asylum rejections have been transformed using the inverse hyperbolic sine transformation and coefficients can be interpreted as elasticities. The restricted sample excludes all corridors in which the number of returns were higher than the number of orders in at least one year. Stars denote statistical significance at the 1% (\*\*\*), 5% (\*\*) and 10% level (\*\*\*). T-values clustered at the corridor level are given in brackets.

# VIII. Heterogeneity Analysis

Average effects may hide important differences in how enforcement elasticities respond to aid allocation for different regions and groups of countries. We first look at results by different regions of origin and plot the results in Figure 5, all of them based on Column 2 in Table 1. The vertical axis refers to enforcement elasticities, as in Figure 3. On the horizontal axis, we draw levels of aid in its transformed values. We see large differences across migrants' regions of citizenship: While the interaction term is positive and statistically significant at the 5% level in

all regions, scope and uncertainty varies across regions, partly due to differences in the number of corridors. It is noteworthy that corridors towards countries in Sub-Saharan Africa are relatively well predicted (reflected in smaller uncertainty bounds compared to other regions) but the slope is also smaller compared, for instance, to countries in Europe and Central Asia. This means that the same amount of aid "buys" a smaller increase in enforcement elasticities in Sub-Saharan countries compared to countries located in Europe and Central Asia.



Figure 5: Enforcement Elasticities in Different Regions of Origin

The figure depicts the predicted interaction effects between aid commitments and lagged orders in different regions of migrants' citizenship and 95% confidence intervals. The vertical axis are enforcement elasticities with respect to lagged orders, and the horizontal graph is aid in its transformed version (inverse hyperbolic sine). Regressions are as in Column 2 of Table 1, as subsets on different regions. "n" refers to the number of available corridors in each region.

As argued in Hypothesis H3, we expect the effect to be driven by countries strongly reliant on aid. We therefore divide the sample into three approximately equally sized groups: Corridors with strong bilateral aid reliance, corridors with medium bilateral aid reliance, and corridors with weak bilateral aid reliance. We classify corridors into one of the three groups, depending on levels of bilateral aid dependency relative to GDP, calculated at the beginning of the period of analysis in 2008. Figure 6 shows that the interaction effect is both larger in size and statistical

significance in corridors of high bilateral aid dependencies. It is principally in countries of strong bilateral aid dependencies where enforcement elasticities respond to aid allocation.



Figure 6: Enforcement Elasticities under Low, Average and High Aid Dependency

Elasticities of enforcement with respect to lagged orders are drawn on the vertical axis, and transformed aid is drawn on the horizontal axis. Underlying regressions are as in Column 2 of Table 1, as subsets of different corridors. The colored area depicts 95% confidence intervals.

# **IX.** Conclusions

In this paper, we argued that aid is used as a bargaining chip in two-sided strategic interactions over deportation enforcement: Deporting countries use the allocation of aid as a tool to coerce countries into cooperation, while receiving countries use non-compliance in return management as a leverage to obtain more aid. We translated our argument into three hypotheses: First, we expected a higher number of total returns per orders to leave for larger levels of bilateral aid; second, we expected a stronger effect for enforced returns compared to "voluntary" schemes; and third, we expected this effect to be driven by corridors with a strong bilateral aid dependency. In a dyadic panel of up to 3000 country-by-country deportation corridors from Europe over the period 2009 to 2021, we find support for all three hypotheses. Bilateral aid allocation increases the elasticity of return with respect to previously omitted orders. This effect is stronger for the case of enforced returns and among corridors of high bilateral aid dependence. This increase in enforcement elasticities comes with a high price in terms of aid per deportee. In an average corridor, a scenario of 10 million bilateral aid dollars increases

enforcement elasticities with respect to lagged orders to leave by roughly 0.1. This translates to approximately 20 additional annual enforced returns in an average corridor.

In a context where calls for scaling up the forced return of migrants are becoming louder across all major destination countries, the linkages we observe between aid allocation and deportation enforcement creates a paradox: On the one hand, aid is allocated with the purpose to improve social and economic conditions among receivers. But we also see that aid is partly allocated to gain cooperation on a policy that responds to domestic politics in donor countries, but that goes against the interests of receiving countries who fear the multiple negative deportation externalities, such as increase in crime, violence, and informality, that have been documented in recent literature.

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# XI. Annexes

# Annex 1: Data Description

Variable	Data Description	Source	Mean [st.dev.]	# Corridors
Orders to leave	Annual number of orders to leave the territory of country A, emitted to nationals from country B	Eurostat (European Commission). "Enforcement of Immigration Legislation."	252.51 [1,291]	2888 [21667]
Total Returns	Number of third country nationals from country A returned following an order to leave by country B. Third country nationals who have in fact left the territory of the Member State, following an administrative or judicial decision or act stating that their stay is illegal and imposing an obligation to leave the territory.	Eurostat (European Commission). "Enforcement of Immigration Legislation."	94.73 [851.64]	2984 [23658]
Voluntary Returns	Number of third-country nationals who voluntarily comply with the obligation to return (i.e. no enforcement procedure had to be launched) and their departure is confirmed by the information from eg. the border authority or the consulate authorities in the country of origin or other authorities such as IOM or any other organisations implementing a program to assist migrants to return to a third-country.	Eurostat (European Commission). "Enforcement of Immigration Legislation."	26.46 [404.16]	1982 [9268]

Variable	Data Description	Source	Mean [st.dev.]	# Corridors [#Obs.]
Enforced Returns	Number of third-country nationals who are subject to the enforcement of the obligation to return. These are individuals for whom an enforcement procedure has been launched to ensure their return.	Eurostat (European Commission). "Enforcement of Immigration Legislation."	34.16 [228.77]	2096 [10333]
Readmission Agreements:	Whether there's an agreement between country A and country B of readmissions of returned people. Dummy variable.	Institute of Political Science, University of Heidelberg[JL1]	0.07 [0.26]	2984 [23658]
Official Development Assistance Total Commitments:	Total commitments of Official Development Assistance from OECD countries to the world in millions of US dollars (constant prices 2022).	OECD Stats – ODA (Development) Indicators	18.78 [73.57]	2984 [23658]
Gross Official Development Assistance Disbursements:	Gross grants from OECD countries to the world. Destination of Official Development Assistance Disbursements in millions of US dollars (constant prices 2021)	OECD Stats – ODA (Development) Indicators	14.68 [48.81]	2970 [23551]

Variable	Data Description	Source	Mean [st.dev.]	# Corridors
				[#Obs.]
GDP Per Capita Distance:	Difference in GDP per capita, based on purchasing power parity (PPP), between the deporting and the return countries. The GDP per capita PPP is calculated in the same manner for both countries, where an international dollar holds the same purchasing power over GDP as the U.S. dollar in the United States. GDP at purchaser's prices is the sum of gross value added by all resident producers in the country plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2017 international dollars.	World Bank	12.21 [14.31]	2804 [22144]
Total population	Combined total population of both the deporting and return countries (in millions)	World Bank	88.46 [198,79]	22982 [23650]
Liberal Democracy Index Distance	Difference in the Liberal Democracy Index between the deporting and return countries. This index evaluates the degree of liberal democracy in each country, focusing on the protection of individual and minority rights, constitutional civil liberties, rule of law, an independent judiciary, and effective checks and balances limiting executive power, along with the level of electoral democracy. Scale: Interval, from low to high (0-1).	V-Dem Democracy Indices	5.93 [11.72]	2842 [23126]

Country	Code	Orders to leave	Total returns	Enforced returns	Voluntary returns
Austria	AUT	14	14	6	6
Belgium	BEL	14	14	8	8
Croatia	HRV	4	4	4	4
Cyprus	СҮР	4	4	1	1
Czechia	CZE	12	11	7	7
Denmark	DNK	11	11	9	9
Estonia	EST	9	9	9	9
Finland	FIN	14	14	1	1
France	FRA	14	14	8	8
Germany	DEU	14	14	15	1
Greece	GRC	13	13	3	3
Hungary	HUN	6	6	6	6
Iceland	ISL	1	1	1	1
Ireland	IRL	13	13	7	7
Italy	ITA	13	13	8	8
Latvia	LVA	5	5	5	5
Lithuania	LTU	7	7	1	1
Luxembourg	LUX	10	11	7	7
Netherlands	NLD	13	13	1	1

Annex 2: Data on Returns reported to Eurostat, Coverage by Number of Years (2008 to 2021, by Deporting Country)

Country	Code	Orders to leave	Total returns	Enforced returns	Voluntary returns
Norway	NOR	7	8	8	8
Poland	POL	8	8	7	7
Portugal	PRT	13	13	7	7
Romania	ROU	7	7	6	6
Slovakia	SVK	8	8	8	8
Slovenia	SVN	9	9	8	8
Spain	ESP	14	14	7	7
Sweden	SWE	13	13	6	6
Switzerland	CHE	3	3	1	1
United	GBR	12	12	1	1
Kingdom					

Country	Code	Country	Code	Country	Code	Country	Code
Afghanistan	AFG	Djibouti	DJI	Libya	LBY	Serbia	SRB
Albania	ALB	Dominica	DMA	Madagascar	MDG	Seychelles	SYC
Algeria	DZA	Dominican	DOM	Malawi	MWI	Sierra Leone	SLE
		Republic					
Angola	AGO	Ecuador	ECU	Malaysia	MYS	Solomon Islands	SLB
Antigua & Barbuda	ATG	Egypt	EGY	Maldives	MDV	Somalia	SOM
Argentina	ARG	El Salvador	SLV	Mali	MLI	South Africa	ZAF
Armenia	ARM	Equatorial	GNQ	Marshall Islands	MHL	South Sudan	SSD
		Guinea					
Azerbaijan	AZE	Eritrea	ERI	Mauritania	MRT	Sri Lanka	LKA
Bangladesh	BGD	Eswatini	SWZ	Mauritius	MUS	St. Kitts & Nevis	KNA
Barbados	BRB	Ethiopia	ETH	Mexico	MEX	St. Lucia	LCA
Belarus	BLR	Fiji	FЛ	Moldova	MDA	St. Vincent &	VCT
						Grenadines	
Belize	BLZ	Gabon	GAB	Mongolia	MNG	Sudan	SDN
Benin	BEN	Gambia	GMB	Montenegro	MNE	Suriname	SUR
Bhutan	BTN	Georgia	GEO	Morocco	MAR	Syria	SYR
Bolivia	BOL	Ghana	GHA	Mozambique	MOZ	Tajikistan	ТЈК

Annex 3: Country Codes, by Countries of Citizenship

Country	Code	Country	Code	Country	Code	Country	Code
Bosnia &	BIH	Grenada	GRD	Myanmar	MMR	Tanzania	TZA
Herzegovina				(Burma)			
Botswana	BWA	Guatemala	GTM	Nauru	NRU	Thailand	THA
Brazil	BRA	Guinea	GIN	Nepal	NPL	Timor-Leste	TLS
Burkina Faso	BFA	Guinea-Bissau	GNB	Nicaragua	NIC	Тодо	TGO
Burundi	BDI	Guyana	GUY	Niger	NER	Tonga	TON
Cambodia	КНМ	Haiti	HTI	Nigeria	NGA	Trinidad & Tobago	ТТО
Cameroon	CMR	Honduras	HND	North Korea	PRK	Tunisia	TUN
Cape Verde	CPV	India	IND	North Macedonia	MKD	Turkmenistan	ТКМ
Central African	CAF	Indonesia	IDN	Oman	OMN	Tuvalu	TUV
Republic							
Chad	TCD	Iran	IRN	Pakistan	РАК	Uganda	UGA
Chile	CHL	Iraq	IRQ	Palau	PLW	Ukraine	UKR
China	CHN	Jamaica	JAM	Palestinian	PSE	Uruguay	URY
				Territories			
Colombia	COL	Jordan	JOR	Panama	PAN	Uzbekistan	UZB
Comoros	СОМ	Kazakhstan	KAZ	Papua New	PNG	Vanuatu	VUT
				Guinea			
Congo - Brazzaville	COG	Kenya	KEN	Paraguay	PRY	Venezuela	VEN
Congo - Kinshasa	COD	Kiribati	KIR	Peru	PER	Vietnam	VNM

Country	Code	Country	Code	Country	Code	Country	Code
Cook Islands	COK	Kyrgyzstan	KGZ	Philippines	PHL	Yemen	YEM
Costa Rica	CRI	Laos	LAO	Rwanda	RWA	Zambia	ZMB
Côte d'Ivoire	CIV	Lebanon	LBN	Samoa	WSM	Zimbabwe	ZWE
Croatia	HRV	Lesotho	LSO	São Tomé & Príncipe	STP		
Cuba	CUB	Liberia	LBR	Senegal	SEN		