

Aid Allocation and Deportation Enforcement

Christian Ambrosius and Marina Luna
(Freie Universität Berlin)

13/2/2024

Preliminary Draft

Abstract:

Scaling up the forced return of migrants has turned into a popular policy call in most destination countries. However, its execution faces practical difficulties because repatriating migrants requires cooperation on the part of origin countries who are typically opposed to the reception of deportees. We argue that the allocation of official development assistance is used as a bargaining chip in two-sided strategic interactions: Deporting countries use the promise of aid as a strategic tool to enforce cooperation. Seen from the receiving end, repatriation of deportees can be leveraged to obtain more aid. We test this argument on a sample of more than 2800 deportation corridors from 31 European countries to 121 countries of citizenship over the period 2008 to 2021. To address the main identification challenge of unobserved bilateral migration potentially driving both deportations 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 for countries with a stronger reliance on aid: While a 1% increase in orders to leave is associated with a 0.24% increase in forced returns in a scenario of no aid, the elasticity of returns with respect to orders increases by an additional 0.02% increase for every 1% increase in bilateral aid. For the average deportation corridor, this translates to a relatively small increase of executed returns per aid dollar spent. This effect is more relevant if no repatriation agreements are in place; and the effect is weaker in countries with access to Chinese aid, suggesting a better bargaining position of countries of origin. In sum, our findings lend support to a paradox of aid and migration policies: Aid allocation is used to obtain cooperation on a migration policy that responds to domestic politics in destination countries but that is likely detrimental to economic development at origin and expensive for deporting countries.

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

JEL Codes: F22, F35, F51

Acknowledgements: This paper benefitted from excellent research assistance by Justina Lee, Leonardo Montel and Isidora Villegas and has received funding from Fritz-Thyssen Foundation as part of the project “Immigration Enforcement across the World: Drivers and Consequences of Cross-County Variation in Deportation Risk”.

I. Introduction

International migration has become 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 [cite]. On the other hand, we witness an overall rise in anti-immigration discourses across the Western world, reflected in - and responding to - large electoral gains among right-wing parties that capitalize on anti-immigrant sentiments.

A topic that ranks high on the migration policy agenda of many destination countries is the forced return of migrants who are not being granted residence status. The United States deported a total of 6.4 million migrants between 2000 and 2020, 90% of whom were sent back to Latin America and the Caribbean (US Department of Homeland Security, various years). Countries of the European Union ordered the return of more than 7 million persons since the year 2008 and deported almost 2.2 million (Eurostat 2023). Almost everywhere, current migration debates include the call for scaling up deportations. In October 2023, the German chancellor Olaf Scholz from the social democratic party figured on the title page of the weekly journal “Der Spiegel” with a statement “to massively scale up deportations”, and a law was passed in January 2024 to facilitate forced returns from Germany. The crackdown of migrants and an intensification of deportation effort is a declared goal of the Italian prime minister Giorgia Meloni and her right-wing governing coalition¹. Politicians in the UK are 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, and up-runner for presidential election Donald Trump promises the largest deportation operation in history if elected president².

For some countries, the inflow of returned migrants is of considerable size. For instance, more than 40,000 migrants were returned to Albania in 2016 alone, corresponding to more than one removal for every 100 persons of the country’s home population (Eurostat 2023). For countries such as El Salvador and Honduras, the cumulative inflow of deported migrants from the US since the late 1990s is equivalent to roughly 5% of their current population stocks (US Department of Homeland Security, various years). In these countries, deportations pose an

¹ <https://www.theguardian.com/world/2023/sep/27/italian-pm-crackdown-migrants-deportation-decree-giorgia-meloni>, accessed 5.2.2024

² <https://www.abc.net.au/news/2023-12-18/donald-trump-promises-largest-deportation-operation/103241936>, accessed 5.2.2024

important burden not only on deportees themselves, who have to navigate stigma and difficult post-deportation trajectories (Brotherton and Barrios 2009; Schuster and Majidi 2013; Mojica Madrigal 2017; Silver 2018). They also pose a burden on families and communities of deportees, as evidenced by a growing literature on deportation externalities [check literature from other regions]. 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). 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 metropolises during their childhood (Ambrosius and Leblang 2020; 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 of these studies suggest that deportations bear important costs not only for migrants themselves but also for their families, communities, and countries of origin. As much as deportations are applauded by 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 evokes memories of colonial oppression (Cham and Adam 2023) and have led to significant political pressure on origin country governments (Zanker et al. 2019; Paasche 2022) [check Zanker 2023 for more examples]. For instance, thousands went to the streets in Tunisia after German chancellor Merkel announced the repatriation of migrants considered to be an "Islamic threat" in 2017³. In Senegal, returnees from Spain organized riots and protests against the government and lobbied against repatriation agreements (Andersson 2014, 42). In Gambia, public opposition against deportations even led to the adoption of a moratorium on deportation flights from the European Union (Zanker and Altrogge 2022).

³ <https://www.welt.de/politik/ausland/article160986896/Tunesier-gegen-Abschiebungen-von-Islamisten-aus-Deutschland.html>, accessed 31.1.2024

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 incoherence 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 deported⁴. The fact that deportations require some degree of cooperation on the side of receiving countries provides countries with leverage in their negotiation over deportation enforcement. We argue that countries' asymmetrical dependence in other policy fields – namely, their dependence on bilateral development assistance – turns into a strategic tool in negotiations over the admission of deportees. Seen from the side of deporting countries, dependencies on aid can be leveraged to enforce deportation policies and “buy” countries cooperation in terms of migration management. Seen from the receiving side, non-cooperation can be used strategically in order to obtain more aid. While the allocation of aid is not formally or officially conditioned upon cooperation in terms of migration policies [see statement DAC], 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 readmission of rejected asylum applicants. For instance, then German Vice Chancellor Sigmar Gabriel said 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 seekers⁵. The Swedish governments recently announced it would only provide financial assistance to countries that cooperate with their repatriation efforts⁶. Adepoju et al. (2010, 47–49) claims 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. In exchange for joint patrols and repatriations, Spain provided money and favors. [...] Development cooperation smoothed the ways for policy initiatives while humanizing the cold, dissuasive logic of repatriations”.

⁴ <https://www.dw.com/en/thousands-of-deportations-fail-due-to-lack-of-papers/a-43223447>, accessed 31.1.2024

⁵ <https://www.zeit.de/politik/deutschland/2016-01/sigmar-gabriel-entwicklungshilfe-fluechtlingskrise-nordafrika> , accessed 31.1.2024, cited in Dreher et al. (2019)

⁶ <https://europeanconservative.com/articles/news/swedens-sd-supported-government-to-link-foreign-aid-to-repatriation-cooperation/>, accessed 5.2.2024

Building on these scattered observations, we would expect the allocation of aid to be strategically used in bilateral deportation enforcement. The countries of the European Union offer an ideal context to test the hypothesis that bilateral aid allocation is related to bilateral deportations: For one, approximately 40% of all orders to leave result in either enforced returns or “voluntary” returns. The discrepancy between return orders and registered repatriations indicates a considerable rate of non-enforcement (Stutz and Trauner 2022). While non-enforcement may have multiple reasons including appeals to revoke return orders as well as voluntary returns not being registered in bilateral return data, it also hints towards countries’ capacities to resist the reception of deportees. A second reason for focusing on the European case is data availability: Eurostat provides a dataset of comparable indicators of repatriations as well as orders to leave for a sample of 31 European countries.

Our main empirical challenge lies in isolating the effect of aid on deportations from other variables that are correlated both with aid and with deportations. In case we couldn’t isolate such effect, we would measure a correlation between aid and migration, rather than an effect of aid on deportations. We therefore predict the effect of aid on deportations conditional upon previously emitted orders to leave. Because we predict deportation elasticities for the subset of population that has previously been marked by an order to return, our estimate should not be vulnerable to bias from unobserved bilateral migration flows.

The rest of the paper is organized as follows: In the following section II, we develop hypotheses on the expected link between aid allocation and deportations. Section III presents data on deportation corridors from 31 European countries to countries from the rest of the world and highlights cross-sectional as well as temporal patterns for the main deportation corridors in the European context. Section IV explains the empirical strategy. We present results in Section V. In the baseline regression, we find that the elasticity of returns with respect to orders increases by an additional 0.02% increase for every 1% increase in bilateral aid. For the main deportation corridors, this translates into a moderate increase in forced returns for every aid dollar spent: [calculate and add examples here]. The effect holds for different categories of aid and is less relevant in cases where no repatriation agreements exist. We also see that access to Chinese aid reduces the effect of aid on deportations, suggesting a stronger bargaining position among countries with alternative sources of development finance. Section VI concludes with open

question and point to the paradox for development cooperation. Aid allocation is used to obtain cooperation on a policy agenda that responds to domestic politics but that is most likely detrimental to development and that is costly to deporting countries.

II. Hypotheses

We expect aid allocation to be systematically used as a bargaining chip in bilateral deportation enforcement. This argument connects to two strands of literature: Seen from the deporting country, our argument relates to literature on the political economy of aid allocation, and the strategic use of aid in relation to other policy goals. Alesina and Dollar (2000) show how the direction of foreign aid is dictated as much by political and strategic considerations as by the economic needs and policy performance of the recipients. Kuziemko and Werker (2006) and Dreher et al. (2008) provide evidence that aid is being traded against vote alignment in the UN. While these examples are related to foreign policy agenda, aid allocation may also follow domestic policy goals: One case in point is the allocation of aid in order 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.

A second strand of research that is relevant to our argument is the literature on migration diplomacy (Adamson and Tsourapas 2019). In numerous cases, the governance of population movements across borders has been the 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 the area of trade or security cooperation (e.g. Bon Tempo 2008; Hollifield, Martin, and Orrenius 2014). 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). Applied to the case of deportation enforcement, countries' refusal to cooperate can be used as a tool to negotiate an increase in financial aid. Seen from the perspective of migrants' countries of origin, the threat of non-cooperation can be seen as a "weapon of the weak" to obtain financial aid within

relations of asymmetrical dependence. While this argument is complementary to the political economy of aid allocation literature, it differs by assigning agency to migrants' countries of origin rather than to donor countries (Qadim 2014).

Building on these strands of literature, we formulate three hypotheses:

H1: orders to leave from a departing country to a country of return lead to more deportations if aid from the departing country to the country of return increases too

We interact aid with orders to return. We expect that a departing country can increase the rate of deportations in relation to orders to leave issued once it had previously increased the amount of aid allocated to the country of return, all else equal.

H2: Aid is more important as a bargaining chip over deportations if no rules on readmission are in place between the departing country and the country of return

We estimate the interaction effect of aid with bilateral migration agreements and orders to leave. If rules on repatriation have been previously agreed between the countries, we would expect that there would be less space in the aid provision negotiations to bargain over deportations.

H3: Alternative funding options improve bargaining positions over deportations from the point of view of origin countries and weakens bargaining positions of departing countries

We estimate the interaction effect of departing country aid with Chinese aid with orders to leave. The use of Chinese aid data is due to the increasing relevance of the country as an aid provider and as an alternative to traditionally predominant aid donors (Trebesch and Reinhart, 2023). We would expect that more aid from China would lead to a smaller effect of aid of departing country on deportations. The more the aid from China, less aid-dependent a country of return would be from a departing country, improving the bargaining leverage of the former in relation to the latter over deportations.

III. Data

Deportation data from 31 European countries⁷ is made public by Eurostat’s Enforcement of Immigration Legislation data set⁸. The period of the data is from 2008 to 2021⁹ and includes information on return to 121 countries¹⁰ outside Europe, which creates 2,882 return corridors.

The two variables of interest are “orders to leave”¹¹ and “returns following an order to leave”¹². Eurostat collects and harmonizes data sent by member countries, which ensures coherent categories. “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).

“Returns following an order to leave” refers to “third-country nationals who have in fact left the territory (...), following an administrative or judicial decision or act (...) imposing an obligation to leave the territory” (Eurostat, 2024). These returns include both enforced returns and voluntary returns. “Forced returns” refer to the use of enforcement means, e.g. being escorted in a plane by official agents. “Voluntary returns” can be assisted or unassisted by the destination government or another agency. They refer to the compliance with the order to leave without enforcement means, which raises the conceptual challenge of to which extent voluntary return represents the will of the returnees.

Here we describe aggregated figures for the sample of countries, as well as highlight the main country-by-country corridors. Figure 1 depicts the time trends of the aggregated sample of orders to leave and returns between 2009 and 2021. The average proportion of total returns

⁷ The 31 European countries are Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom. The reporting countries Iceland, Norway, Switzerland and United Kingdom are not part of European Union. Liechtenstein and Montenegro have not reported to this data sets.

⁸ The Eurostat data sets used are “Third country nationals ordered to leave (migr_eiord)” and “Third country nationals returned following an order to leave (migr_eirtn)”.

⁹ Not all countries have reported for all years. Annex 2 describes the level of data coverage for each country that report data to Eurostat.

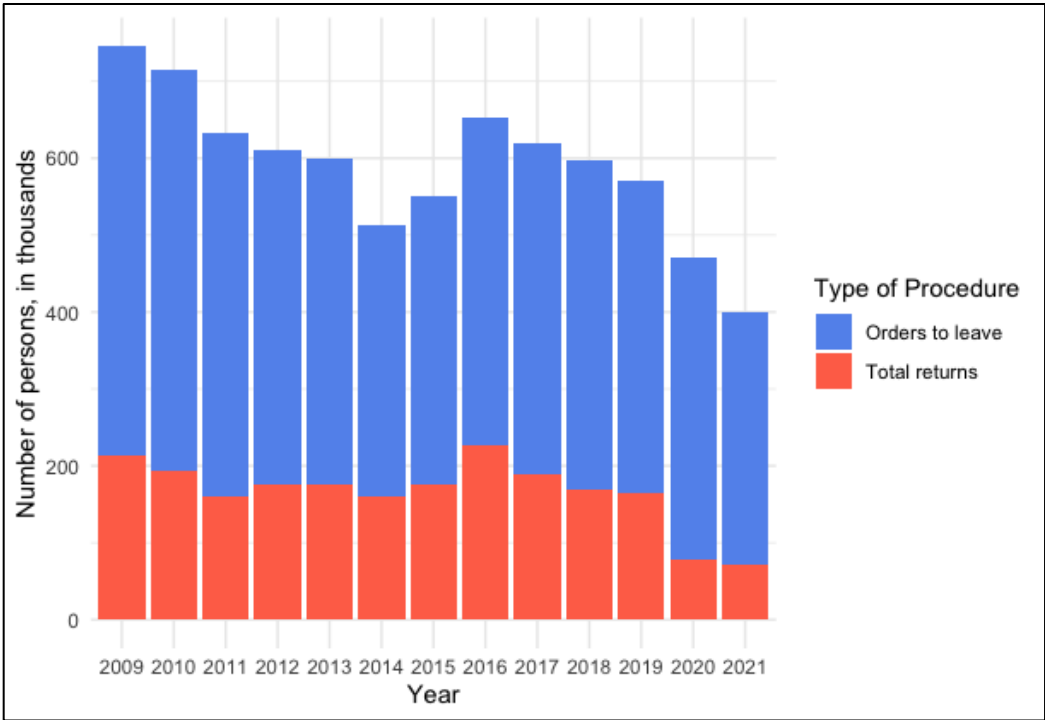
¹⁰ Deporting countries report the citizenship of the individuals deported rather than the country to which the individual is deported to. While the citizenship and the country of return are not necessarily identical, we used citizenship as a close proxy of country of return to build the pairs of deportations corridors for the analysis.

¹¹ These statistics do not include persons who are transferred from one Member State to another under the mechanism established by the Dublin Regulation.

¹² These statistics do not include persons who are transferred from one Member State to another under the mechanism established by the Dublin Regulation.

relative to orders to leave is 39%. The graph indicates two decreasing cycles: one from 2009 to 2015, and the other from 2016 to 2021, with the sharpest decrease in the years of 2020 and 2021.

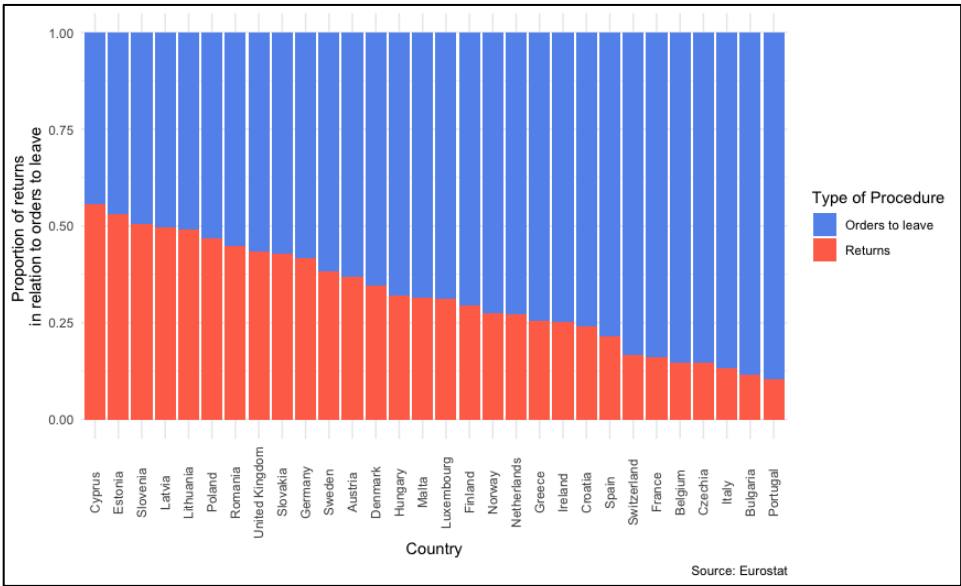
Figure 1: Number of persons ordered to leave and number of persons returned, in thousands, 2009-2021, for sample of destination countries



The countries that issue orders to leave the most do not necessarily implement returns in the same scale. Figure 2 shows the average proportion of returns in relation to orders to leave to each country of the sample. It illustrates that the rate of effective deportations ranges from 12% in Portugal to more than 50% in Estonia and Cyprus.

The destination countries with the largest aggregated quantity of orders to leave for the analyzed period in decrescent order are France, Greece, Spain, United Kingdom and Italy. For returns, the top ranker countries in decrescent order are United Kingdom, Germany, Greece, France and Spain.

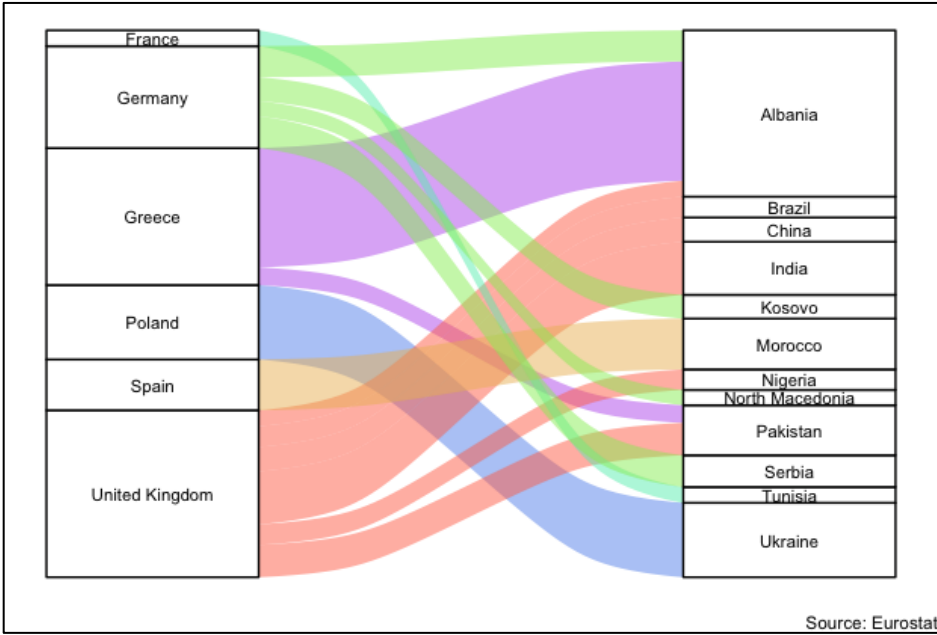
Figure 2: Average proportion of returns in relation to orders to leave, by country of the sample, 2009-2021



One important caveat is that these aggregated figures hide large variation in deportation risk by corridors. Considering this, Figure 3 shows the largest 15 return corridors from the sample for the period analyzed¹³. The combinations between destination countries and countries of return are varied. The largest return corridors are Greece-Albania, followed by Poland-Ukraine, United Kingdom-India, Spain-Morocco and United-Kingdom-Pakistan.

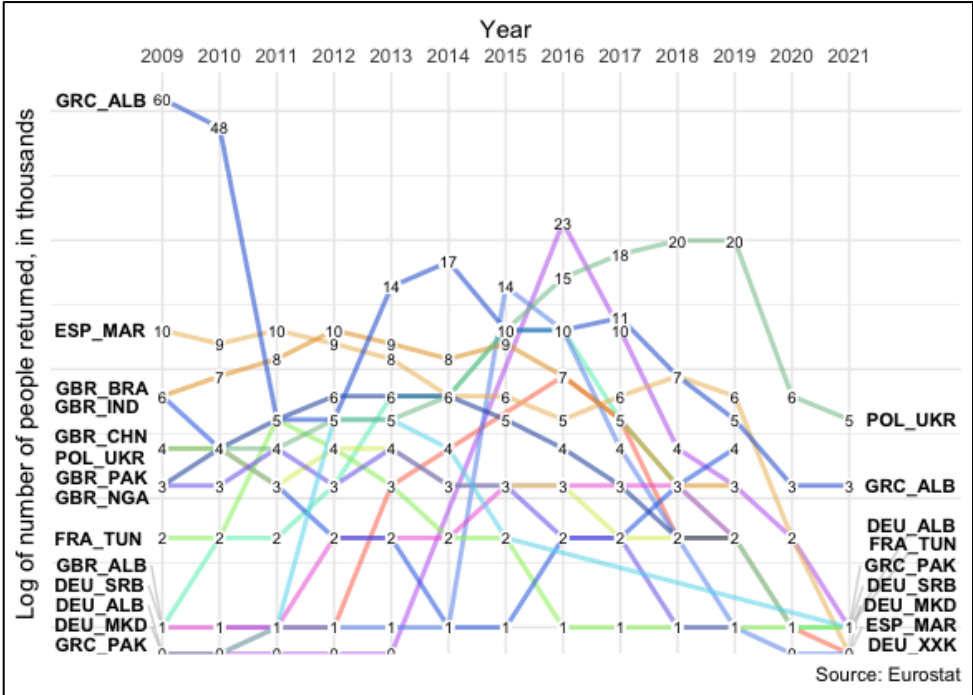
¹³ The complete list of the 15 main corridors is, in decrescent order: Greece-Albania, Poland-Ukraine, United Kingdom-India, Spain-Morocco, United Kingdom-Pakistan, Germany-Serbia, Germany-Albania, United Kingdom-China, Germany-Kosovo, United Kingdom-Brazil, United Kingdom-Nigeria, Greece-Pakistan, United-Kingdom-Albania, France-Tunisia and Germany-North Macedonia.

Figure 3: Top 15 corridors based on annual average of returns, 2009-2021, for sample of destination countries



The corridors present distinct trends in terms of variation over time as well as in terms of relevant years. Figure 4 shows the time trends for the main 15 return corridors for the sample and period analyzed. The largest corridor, Greece-Albania, decreased from 60 thousand persons returned in 2009 – its peak - to 5 thousand in 2019. The second largest, Poland-Ukraine, increased from 4 thousand in 2009 to 20 thousand in 2019 – its highest amount.

Figure 4: Time trends for top 15 deportation corridors, in hundreds, 2009-2021, for sample of departing countries (logarithmic scale)



In this paper we argue that some of this variation in bilateral risk can be explained by strategic interaction, particularly the negotiations around the provision of aid between countries. To explore this, our explanatory variables are the Official Development Assistance (ODA), publicly available by OECD Statistics Development Indicators; and Chinese Aid, publicly available by AidData, Global Chinese Development Finance Dataset.

Our control variables are Gross Domestic Product (GDP) per capita, population, both made publicly available by the World Bank; data on political system, made available by the V-Dem Democracy Indices; and data on readmissions agreements, made available by the Institute of Political Science of the University of Heidelberg. Information on the used data is detailed on Annex 1.

IV. Empirical Strategy

In this paper, we want to test the effect of aid on deportations: Is aid dependence used as a bargaining chip against cooperation in repatriation policies?

The main empirical threat to identification lies in the possibility that both deportations 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 deportations 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 variable of interest – deportations – 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 leave is emitted prior to deportation. Rather than looking at deportation numbers as such, we therefore study realized returns or deportation likelihood conditional on orders to leave that precede returns. While many of those being vulnerable to deportations are not captured in official counts of migrant populations, return orders already identify the population marked for deportation and are therefore preferable over other migration 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 deportations given orders to leave.

Our baseline model is estimated as follows:

$$\text{eq. (1) } \ln(\text{returns})_{i,j,t} = \beta_1 \ln(\text{aid})_{i,j,t} + \beta_2 \ln(\text{return orders})_{i,j,t-1} + \beta_3 \ln(\text{aid})_{i,j,t} * \ln(\text{return orders})_{i,j,t-1} + \beta_4 X_{i,j,t} + \rho_{i,j} + \tau_t + u_{i,j,t}$$

The dependent variable *returns* are total returns from deporting country *i* to citizenship country *j* in year *t*. For the explanatory variable *aid*, we use bilateral annual gross aid disbursements. Negative values that can occur in cases where loan repayments are larger than disbursements are truncated at zero. We interact *aid* with the number of orders to leave (*return orders*) lagged by one period. All key variables – *returns*, *orders to return* and *aid* are provided in log terms and can therefore be interpreted as elasticities¹⁴. Our main interest lies on the interaction coefficient β_3 which measures the additional expected percentage increase in deportations for every percentage increase in aid relative to orders. [note for the next round: Also use aid relative to GDP. More important to understand how dependent a country is? One the other hand, GDP is endogenous. Maybe aid relative to initial GDP.]

¹⁴ We prefer the log in spite of zero variables because of ease of interpretation and because results make no practical difference compared to alternative approaches proposed for instance by Chen and Roth (2023).

All identifying variation comes from changes over time. The inclusion of corridor fixed effects ρ 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. We control for economic distance via departing country GDP per capita relative to citizenship country GDP, and for political distance via departing 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 provide regressions in which we measure running means over three-year instead of annual periods because of unknown lags from return orders to executed returns and in order to smooth annual outliers. Time fixed effects τ control for changes that affect all countries at a given time, and u is the usual error term.

As an extension of the model, we run two additional regressions related to our second hypotheses. First, we evaluate the role of international agreements on forced returns and their relationship with ODA. We create a binary variable for each corridor that takes the value “1” for all years in which an agreement with a clause on the repatriation of migrants was in place between two countries. Return agreements would be complementary to the role of aid in cases where aid is used to add pressure to the implementation of return agreements. They could also be substitutes for each other if aid is used as a bargaining chip over deportations primarily in situations where no return agreements are in place. We assess interactions between orders and return agreements, as well as between aid and return agreements, and also include a triple interaction between all three variables.

As a second extension to the baseline model, we evaluate whether a stronger reliance on bilateral aid from deporting countries increases the effect of aid on deportations related to our third hypotheses. We use the inflow of Chinese aid from Custer et al. (2021) as an indicator for the existence of outside funding options that affect bargaining positions and estimate a triple interaction between return orders, bilateral aid, and Chinese aid received by origin countries. Since Chinese aid should improve bargaining positions of deportees' countries of origin, we expect a negative coefficient on this triple interaction: If countries receive more aid from China, bilateral aid is expected to have a weaker effect on deportations given a certain increase in orders. Under the plausible assumption that Chinese ODA is exogenous to bilateral deportations as well as to bilateral aid from deporting to migrants' countries of origin, the interaction with Chinese aid also lends additional support to the causal interpretation of our results. [Also check other heterogeneities, for instance being a transit country. Should also increase bargaining positions. Develop later.]

V. Results

Table 1 shows results on the baseline model of bilateral aid on deportations, for a panel of 2882 deportation corridors from 31 European countries since 2008. All regressions include corridor fixed effects and are therefore identified via variation over time only. Column 1 shows a positive and statistically significant correlation between bilateral aid and bilateral deportations: Countries who receive more aid from specific countries also tend to receive more deportees from these countries. As discussed above, this could reflect changes in the underlying population at risk if bilateral aid has an effect on international migration along country pairs. We therefore show interactions of aid with return orders in the previous period in column 2. The interacted coefficient on the logged variables indicates that a one percent increase in aid increases deportations by an additional 0.02 per cent, for a given level of orders.

Since the effect is estimated conditional upon orders, it is unlikely that the large and statistically significant coefficient for the interaction term is driven by the omitted variable of migration: We identify the population marked for removal via orders to leave and therefore control for the migrant population at risk of being deported. However, other variables – for instance, 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 worsening of political or economic

conditions at origin could increase migrants' resistance to return voluntarily. And worse political or economic conditions could also lead to more legal appeals and more deportation 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. Column 3 therefore adds controls for joint population size of corridors, their economic distance in terms of per capita GDP and their political distance in terms of democracy scores. These additional time-varying controls have only marginal effects on the size and statistical significance of the interacted coefficient compared to Column 2. Controlling for political and economic distances as well as for joint population size affects estimates in Table 1 only marginally, suggesting that omitted variable bias does not pose a serious threat to the results.

Table 1: Effects of Aid (Gross Disbursements) on Total Returns

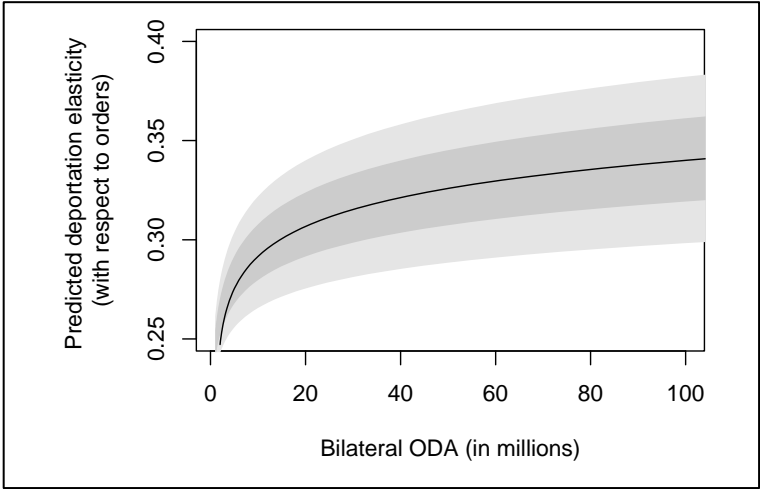
	ln(total returns)		
ln(ODA)	0.065*** [6.52]	-0.04*** [-2.68]	-0.04** [-2.73]
ln(return orders)		0.24*** [34.64]	0.24*** [34.56]
ln(return orders) * ln(ODA)		0.020*** [6.72]	0.020*** [6.78]
time-varying controls	no	no	yes
periods	annual	annual	annual
Adj. R2	0.88	0.89	0.88
# obs.	23868	23868	16813
# corridors	2882	2882	2122
# years	13	13	13

Estimates from ordinary least squares regressions for a dyadic panel of 31 departing countries and up to 121 countries of citizenship covering the period 2008 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, as well as the natural log of joint population size. ODA refers to total gross annual disbursement of official development aid. Return orders are lagged by one year. Stars denote statistical significance at the 1% (***), 5% (**) and 10% level (*). T-values are given in squared brackets.

Figure 5 provides a visual interpretation of the magnitude of the predicted effect, based on coefficients estimated in Column 2. The vertical axis shows the elasticity of returns with respect

to orders to leave¹⁵. A 1% increase in orders is associated with between 0.25% and 0.35% increase in returns for a range of values of aid (in millions) depicted on the horizontal axis. To get a sense of its practical relevance, we can predict the number of deportees for different levels of aid and orders. This is what is being done in Table 2 for 15 of the main deportation corridors [we will later use here the corridors we have in section III]. The first column predicts the annual increase in deportations we would expect for a one percent increase in aid and based on the average annual number of orders to leave in each of the corridors. The second column provides the corresponding dollar value of a one percent increase in aid with respect to the average value of bilateral aid in each of the corridors. The last column divides the amount of aid per predicted increase in deportations to approximate a “price tag” for using aid as a bargaining tool for deportation enforcement. While the amount of aid per deportee varies a lot, the dollar value of aid in return for deportation enforcement is large in all of them [maybe it would make more sense to calculate aid relative to GDP, do this in the next round].

Figure 5: Predicted Deportation Elasticity as a Function of Bilateral Aid



The figure shows predicted deportation elasticities with respect to orders-to-lave, based on estimated coefficients in Column 2 of Table 1. Confidence intervals depict one (dark grey) and two standard errors (light grey).

¹⁵ Taking the derivative of returns with respect to orders gives:
 $1/return * \frac{\partial return}{\partial orders} = \beta_1/orders + \beta_3/orders * \ln(aid)$. Multiplying both sides by orders and rearranging gives
 $orders/return * \frac{\partial return}{\partial orders} = \beta_1 + \beta_3 * \ln(aid)$, where the left-hand side is the definition of an elasticity of returns with respect to orders.

Table 2: Predicted Increase in Deportations for on a one Percent Increase in Aid

Deportation corridors	Predicted additional deportations for a one percent increase in aid	Corresponding dollar value of a one percent increase in aid (in millions, constant 2015 USD)	Aid per deportee (USD, in thousands)
GRC_ALB	440	30	68
GRC_AFG	370	6	16
ESP_MAR	222	99	446
FRA_DZA	208	226	1087
POL_UKR	208	68	327
GRC_PAK	186	2	11
FRA_MAR	158	931	5892
GBR_IND	148	643	4345
FRA_TUN	147	387	2633
ITA_MAR	132	13	98
GBR_PAK	125	731	5848
GRC_IRQ	109	2	18
BEL_MAR	103	33	320
ITA_TUN	100	60	600
GBR_NGA	93	616	6624

Predicted deportations are based on coefficients in Table 2, column 2, for a one percent increase in aid (a change in $\log(\text{aid})$ by one) and for the mean value of annual orders to leave in each corridor. The second column provides information on dollar equivalents of a one percent increase in aid with respect to the mean value of bilateral aid provided over the period. The third column calculates the amount of aid per deportee, by dividing the two columns.

Regression output in Table 1 refers to total gross aid disbursements. To assess the role of different categories of aid, we repeat regressions in Column 3 for four different categories of aid on which we have bilateral data in Table 3: Total aid; humanitarian assistance; technical assistance; and equity investments. Total aid differs from gross disbursement principally by including the repayment of debt. Since we use natural logarithms, we truncate these values at zero: This is relevant especially for total aid. These subcategories are not reported for all corridors and years, samples therefore differ considerably across these four regressions. We see a positive coefficient for the interaction for all categories but equity investments. Equity investments however cover relatively few corridors.

Table 3: Interacted Effects of Aid on Log of Total Return, for Different Categories of Aid

	Total ODA	Technical Assistance	Humanitarian Assistance	Equity Investments
ln(ODA)	-0.35** [2.48]	-0.086*** [-3.43]	-0.62** [-2.32]	0.004 [1.22]
ln(return orders)	0.25*** [36.94]	0.25*** [31.3]	0.22*** [12.85]	0.46*** [12.52]
ln(return orders) * ln(ODA)	0.015*** [5.30]	0.028** [1.99]	0.023*** [4.64]	-0.0048 [-0.76]
time-varying controls	yes	yes	yes	yes
Adj. R2	0.89	0.89	0.89	0.94
# obs.	23991	17933	7197	1083
# corridors	2887	2407	1535	275
# years	13	13	13	13

All regressions follow the specification of Column 3 in Table 1, including corridor and year fixed effects as well as time-varying control variables. Regressions differ by category of aid and sample size, since not all categories are available for all corridors and years. Stars denote statistical significance at the 1% (***), 5% (**) and 10% level (*). T-values are given in brackets.

Next, we evaluate the role of bilateral migration agreements that include clauses on repatriation. We observe such agreements in 216 of the 2882 corridors from Table 1, and for a total of up to 1729 corridor-year observations. Column 1 of Table 4 interacts readmission agreements (lagged by one year) with aid. The interaction has a positive and statistically significant sign. This regression however does not control for controls and could be related to bilateral migration that could, in turn, be related to both an increase in aid and the probability of having signed readmission agreements [maybe no need to show this column]. The coefficient for the

interaction is still statistically significant after controlling for orders to return in Column 2. Column 3 shows the effect of readmission agreements interacted with lagged return orders, including time-varying controls for population size, economic distances, and political distances but ignoring the role of bilateral aid. The elasticity of returns with respect to orders is larger for countries having signed migration treatise with repatriation clauses, as we would expect. Compared to countries with the same magnitude of orders but without agreements, expected deportations increase by an additional 0.06 per cent. Column 4 includes a triple interaction between agreements, return orders, and aid. This allows us to assess whether agreements have an additional effect, given an increase in orders and aid. The coefficient for the tripe interaction is negative suggesting that aid is a substitute rather than a complement for return agreements: While the sign on the interaction between aid and return orders confirms the results we obtained in Table 1, we see a weaker effect of aid on deportations in countries that signed bilateral return agreements.

Table 4: The Effect of Readmission Agreements on Returns

	ln(total returns)			
ln(ODA)	0.058*** [5.58]	0.024*** [3.16]		-0.043*** [-2.82]
ln(return orders)		0.27*** [44.77]	0.27*** [42.51]	0.24*** [32.80]
readmission agreements	-0.024 [-0.33]	-0.25 [-0.37]	-0.33*** [-3.25]	-0.45*** [-3.42]
readmission agreements*ln(return orders)			0.084*** [4.79]	0.11*** [4.25]
readmission agreements*ln(ODA)	0.082*** [3.05]	0.060** [2.36]		0.12* [1.90]
ln(return orders)*ln(ODA)				0.021*** [6.55]
readmission agreements * ln(return orders)*ln(ODA)				-0.021** [2.02]
time-varying controls	yes	yes	yes	yes
Adj. R2	0.87	0.88	0.89	0.89
# obs.	23868	23868	23868	23868
# corridors	2882	2882	2882	2882
# years	13	13	13	13

Estimates from OLS regressions on a dyadic country panel including corridor and year fixed effects as well as time-varying control variables as in Table 1. Readmission agreements refer to a binary variable for whether bilateral migration agreements including clauses for repatriation agreements were in place for a given corridor and year. Stars denote statistical significance at the 1% (***), 5% (**), and 10% level (*). T-values are given in brackets.

[here Figure 2: Visualization of interaction]

Finally, we evaluate heterogeneity in bargaining positions over deportations in Table 5. In concrete, we put forward the hypothesis that the bargaining position of countries who have alternative funding options improves. An important alternative source of funding among countries that rely on bilateral aid is China. We therefore expect a weaker effect of aid on deportations in countries that receive more Chinese aid, and we test this prediction using a triple interaction between Chinese aid, bilateral aid and return orders. We calculate access to Chinese aid in different ways. Column 1 uses the log of total Chinese aid in the current year. The effect of aid on deportations conditional upon return orders is lower in countries who receive more

aid from China, although the statistical significance and magnitude of the effect is not very large. Results are similar for Chinese aid lagged by one year in Columns 2 and holds when we use Chinese aid at the beginning of the period in 2008, as an average over preceding years [not yet done] or relative to GDP [not yet done]. [maybe also add something like Figure 1 for different levels of Chinese Aid]

Table 5: Effects of Aid (Gross Disbursements) on Total Returns, Conditional on Chinese Aid

	ln(total returns)	
ln(ODA)	-0.07*** [-3.19]	-0.11*** [-3.21]
ln(return orders)	0.25*** [24.80]	0.27*** [18.29]
ln(Chinese aid)	-0.012 [-1.68]	
ln(return orders) * ln(ODA)	0.021*** [4.95]	0.033*** [4.97]
ln(return orders) * ln(Chinese aid)	-0.0009 [-0.40]	-0.011* [-1.86]
ln(ODA) * ln(Chinese aid)	0.014*** [2.82]	0.035*** [2.66]
ln(ODA) * ln(Chinese aid) * ln(return orders)	-0.002* [1.80]	-0.007*** [-2.65]
Chines Aid timing	current	at t=0
time-varying controls	yes	yes
Adj. R2	0.89	0.88
# obs.	16813	16397
# corridors	2122	1976
# years	13	13

Estimates from OLS regressions on a bilateral panel including corridor and year fixed effects as well as time-varying control variables as in Table 1. Chinese aid refers to total bilateral grants from China. Return orders are lagged by one year. Stars denote statistical significance at the 1% (***), 5% (**) and 10% level (*). T-values are given in brackets.

VI. 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 a tool to coerce countries into cooperation, while receiving countries use non-compliance in the deportation

process as a leverage to obtain more aid. We therefore expected a positive effect of aid allocation on enforced returns for a given number of orders, related to our first hypotheses. We tested the proposition on a dyadic sample of 31 departing countries from Europe to 121 countries of the rest of the world over the period 2008 to 2021. Bilateral aid allocation increased the elasticity of return with respect to previously omitted orders. This policy comes with a high price in terms of aid per deportee in a typical corridor. The effect is stronger in countries that have not signed migration agreements with repatriation clauses and is weaker in countries with access to Chinese aid. The effect we find is plausibly causal: We control for all corridor fixed effects that are constant over time. Estimating an effect of aid conditionally on previously emitted orders to leave addresses the concern that unobserved migration flows bias the results. We also find that the effect we observe is largely unaffected by time-varying political and economic distances between country pairs.

In a context where calls for scaling up deportations 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 the 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, and that noticeably goes against the interests of receiving countries who fear the multiple negative deportation externalities that have been documented in recent literature. Alternatively, “aid against deportation enforcement” could be interpreted as a compensation for negative deportation externalities. Seen this way, donors pay a high price in dollar terms to obtain cooperation on a policy that figures prominently on voters’ priorities, but that has brought few documented benefits for destination countries in terms of migration deterrence, labor markets or security [add some reference here literature from the US case: No improvement in safety, negative labor market effects, little if any deterrence, but unintended outcomes].

We leave two main extensions for future research: First, an analysis of distinct effects for “voluntary” or assisted return schemes as distinct from forced returns. Second, we want to test the relationships between aid and deportations beyond European corridors. Both extensions require a major effort in terms of data collection and their harmonization across jurisdictions. These extensions currently face the challenge that many countries are reluctant to provide full information on their intended and executed return operations.

VII. Literature

- Abel, Guy J., and Joel E. Cohen. 2019. "Bilateral International Migration Flow Estimates for 200 Countries." *Scientific Data* 6 (1): 82.
- Adamson, Fiona B, and Gerasimos Tsourapas. 2019. "Migration Diplomacy in World Politics." *International Studies Perspectives* 20 (2): 113–28. <https://doi.org/10.1093/isp/eky015>.
- Adepoju, Aderanti, Femke Van Noorloos, and Annelies Zoomers. 2010. "Europe's Migration Agreements with Migrant-Sending Countries in the Global South: A Critical Review." *International Migration* 48 (3): 42–75. <https://doi.org/10.1111/j.1468-2435.2009.00529.x>.
- Alesina, Alberto, and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33–63. <https://doi.org/10.1023/A:1009874203400>.
- Ambrosius, Christian. 2024. "Violent Crime and the Long Shadow of Immigration Enforcement." *Journal of Conflict Resolution*.
- Ambrosius, Christian, and David A Leblang. 2020. "Exporting Murder: US Deportations and the Spread of Violence." *International Studies Quarterly* 64 (2): 316–28. <https://doi.org/10.1093/isq/sqaa014>.
- Ambrosius, Christian, and Covadonga Meseguer. 2023. "Forced Returns Fuel anti-Americanism: Evidence from U.S. Deportations to Latin America." *Global Networks*, February, e12439. <https://doi.org/10.1111/glob.12439>.
- Andersson, Ruben. 2014. *Illegality, Inc.: Clandestine Migration and the Business of Bordering Europe*. Univ of California Press.
- Bandiera, Antonella, Lelys Dinarte Diaz, Sandra V. Roza, Carlos Schmidt-Padilla, María Micaela Sviatschi, and Hernan Winkler. 2023. "The Unintended Consequences of Deportations: Evidence from Firm Behavior in El Salvador." *Economic Development and Cultural Change* 71 (4): 1331–58. <https://doi.org/10.1086/720760>.
- Belloc, Filippo. 2015. "International Economic Assistance and Migration: The Case of Sub-Saharan Countries." *International Migration* 53 (1): 187–201. <https://doi.org/10.1111/j.1468-2435.2011.00686.x>.
- Bermeo, Sarah Blodgett, and David Leblang. 2015. "Migration and Foreign Aid." *International Organization* 69 (3): 627–57.
- Berthélemy, Jean-Claude, Monica Beuran, and Mathilde Maurel. 2009. "Aid and Migration: Substitutes or Complements?" *World Development* 37 (10): 1589–99. <https://doi.org/10.1016/j.worlddev.2009.02.002>.

- Bon Tempo, Carl J. 2008. *Americans at the Gate: The United States and Refugees during the Cold War*. Princeton University Press. <https://doi.org/10.1515/9781400829033>.
- Brotherton, David C., and Luis Barrios. 2009. "Displacement and Stigma: The Social-Psychological Crisis of the Deportee." *Crime, Media, Culture: An International Journal* 5 (1): 29–55. <https://doi.org/10.1177/1741659008102061>.
- Chen, Jiafeng, and Jonathan Roth. 2023. "Logs with Zeros? Some Problems and Solutions." *The Quarterly Journal of Economics*, qjad054.
- Clemens, Michael A., and Hannah M. Postel. 2018. "Deterring Emigration with Foreign Aid: An Overview of Evidence from Low-Income Countries." *Population and Development Review* 44 (4): 667–93. <https://doi.org/10.1111/padr.12184>.
- Custer, Samantha, Axel Dreher, Thai-Binh Elston, A. Fuchs, S. Ghose, J. Lin, A. Malik, B. C. Parks, B. Russell, and K. Solomon. 2021. "Tracking Chinese Development Finance: An Application of AidData's TUFF 3.0 Methodology." Williamsburg, VA: AidData. https://docs.aiddata.org/ad4/pdfs/AidData_TUFF_methodology_3_0.pdf.
- Czaika, Mathias, and Amy Mayer. 2011. "Refugee Movements and Aid Responsiveness of Bilateral Donors." *Journal of Development Studies* 47 (3): 455–74. <https://doi.org/10.1080/00220388.2010.492855>.
- Dreher, Axel, Andreas Fuchs, and Sarah Langlotz. 2019. "The Effects of Foreign Aid on Refugee Flows." *European Economic Review* 112 (February): 127–47. <https://doi.org/10.1016/j.eurocorev.2018.12.001>.
- Dreher, Axel, Peter Nunnenkamp, and Rainer Thiele. 2008. "Does US Aid Buy UN General Assembly Votes? A Disaggregated Analysis." *Public Choice* 136 (1): 139–64. <https://doi.org/10.1007/s11127-008-9286-x>.
- Eurostat. 2023. "Third Country Nationals Returned Following an Order to Leave - Annual Data (Rounded) (Online Data Code: MIGR_EIRTN)."
- Fuchs, Andreas, André Gröger, Tobias Heidland, and Lukas Wellner. 2023. "The Effect of Foreign Aid on Migration: Global Micro Evidence from World Bank Projects." Kiel Working Paper. <https://www.econstor.eu/handle/10419/279785>.
- Gamso, Jonas, and Farhod Yuldashev. 2018. "Does Rural Development Aid Reduce International Migration?" *World Development* 110 (October): 268–82. <https://doi.org/10.1016/j.worlddev.2018.05.035>.
- Harnisch, Sebastian, Tijana Lujic, and Katharina Potinius. 2023. "Strategic Migration Policy - HD.SMP 1.0 [Research Data]." heiDATA. <https://doi.org/10.11588/data/ZAS2YZ>.

- Hernández-Carretero, María, and Jørgen Carling. 2012. "Beyond 'Kamikaze Migrants': Risk Taking in West African Boat Migration to Europe." *Human Organization* 71 (4): 407–16.
- Hollifield, James, Philip L. Martin, and Pia Orrenius. 2014. *Controlling Immigration: A Global Perspective*. Stanford University Press. https://books.google.com/books?hl=en&lr=&id=oec_BAAAQBAJ&oi=fnd&pg=PR5&dq=Controlling+Immigration:+A+Global+Perspective&ots=fVu_xCIk8L&sig=M2QW7GL-AZzViER_dggovbdh4C4.
- Kuziemko, Ilyana, and Eric Werker. 2006. "How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations." *Journal of Political Economy* 114 (5): 905–30. <https://doi.org/10.1086/507155>.
- Lanati, Mauro, and Rainer Thiele. 2018. "The Impact of Foreign Aid on Migration Revisited." *World Development* 111: 59–74.
- Menjívar, Cecilia, Juliana E. Morris, and Néstor P. Rodríguez. 2018. "The Ripple Effects of Deportations in Honduras." *Migration Studies* 6 (1): 120–39.
- Mojica Madrigal, Oscar Ariel. 2017. "Sentimientos Encontrados. Acercamiento a Los Procesos de Reinserción de Migrantes Deportados." In *Experiencias Migratorias a Estados Unidos. Estudios Realizados En Michoacán, Puebla y Guerrero. México: Universidad de La Ciénega Del Estado de Michoacán de Ocampo*, Eduardo Santiago Nabor, Leticia Díaz and Adrián Urióstegui. Michoacán de Ocampo.
- Murat, Marina. 2020. "Foreign Aid, Bilateral Asylum Immigration and Development." *Journal of Population Economics* 33 (1): 79–114.
- Paasche, Erlend. 2022. "'Recalcitrant' and 'Uncooperative': Why Some Countries Refuse to Accept Return of Their Deportees." Migrationpolicy.Org. December 20, 2022. <https://www.migrationpolicy.org/article/recalcitrant-uncooperative-countries-refuse-deportation>.
- Qadim, Nora El. 2014. "Postcolonial Challenges to Migration Control: French–Moroccan Cooperation Practices on Forced Returns." *Security Dialogue* 45 (3): 242–61. <https://doi.org/10.1177/0967010614533139>.
- Rozo, Sandra V., Therese Anders, and Steven Raphael. 2021. "Deportation, Crime, and Victimization." *Journal of Population Economics* 34 (1): 141–66. <https://doi.org/10.1007/s00148-020-00785-3>.

- Schuster, L., and N. Majidi. 2013. "What Happens Post-Deportation? The Experience of Deported Afghans." *Migration Studies* 1 (2): 221–40. <https://doi.org/10.1093/migration/mns011>.
- Silver, Alexis M. 2018. "Displaced at 'Home': 1.5-Generation Immigrants Navigating Membership after Returning to Mexico." *Ethnicities* 18 (2): 208–24. <https://doi.org/10.1177/1468796817752560>.
- Slack, Jeremy. 2019. *Deported to Death: How Drug Violence Is Changing Migration on the US–Mexico Border*. Vol. 45. University of California Press. <https://books.google.com/books?hl=en&lr=&id=sbKPDwAAQBAJ&oi=fnd&pg=PR9&dq=slack+deported+to+death&ots=MUROG6qxO1&sig=5DUcUe4jUp1PrCSCGFYByny3MxI>.
- Spotts, JoAnne D. 2001. "US Immigration Policy on the Southwest Border from Reagan through Clinton, 1981-2001." *Geo. Immigr. LJ* 16: 601.
- Stutz, Philipp, and Florian Trauner. 2022. "The EU's 'Return Rate' with Third Countries: Why EU Readmission Agreements Do Not Make Much Difference." *International Migration* 60 (3): 154–72. <https://doi.org/10.1111/imig.12901>.
- Sviatschi, Maria Micaela. 2022. "Spreading Gangs: Exporting US Criminal Capital to El Salvador." *American Economic Review* 112 (6): 1985–2024. <https://doi.org/10.1257/aer.20201540>.
- Tsourapas, Gerasimos, and Sotirios Zartaloudis. 2022. "Leveraging the European Refugee Crisis: Forced Displacement and Bargaining in Greece's Bailout Negotiations." *JCMS: Journal of Common Market Studies* 60 (2): 245–63. <https://doi.org/10.1111/jcms.13211>.
- US Department of Homeland Security. Various Years. *Yearbook of Immigration Statistics*. Washington, D.C. . <https://www.dhs.gov/immigration-statistics/yearbook>.
- Zanker, Franzisca. 2023. "A Typology of Resistance: The 'Hot Potato' of European Return in West Africa." *Territory, Politics, Governance*, April, 1–20. <https://doi.org/10.1080/21622671.2023.2198579>.
- Zanker, Franzisca, and Judith Altrogge. 2022. "Protective Exclusion as a Postcolonial Strategy: Rethinking Deportations and Sovereignty in the Gambia." *Security Dialogue* 53 (5): 475–93. <https://doi.org/10.1177/09670106221119598>.
- Zanker, Franzisca, Judith Altrogge, Kwaku Arhin-Sam, and Leonie Jegen. 2019. "Challenges in EU-African Migration Cooperation: West African Perspectives on Forced Return." *Policy Brief* 2019 5. https://www.arnold-bergstraesser.de/sites/default/files/_medam_policy_brief_return_002.pdf.

VIII. Annex

Annex 1: Data Description

Variable	Data Description	Source	Mean [st.dev.]	# Corridors [#Obs.]
Total Returns: total_rtn	Number of third country nationals from country A returned following an order to leave by country B. This figure encompasses individuals who were removed through enforcement, those who left voluntarily following an order to leave, and instances where return is inferred, although not explicitly verified by border authority information.	Eurostat eirtn	90.23 [730.10]	2882 [23868]
Gross Official Development Assistance Disbursements: ODA.Gross.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	15.57 [58.51]	2882 [23868]
GDP Per Capita Distance: distance_GDPpc	Difference in GDP per capita, based on purchasing power parity (PPP), between the departing 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	11.67 [13.99]	2882 [23868]

Variable	Data Description	Source	Mean [st.dev.]	# Corridors [#Obs.]
Liberal Democracy Index Distance: distance_libdem	Difference in the Liberal Democracy Index between the departing 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	4.19 [4.20]	2882 [23868]
Total population: pop_joint	Combined total population of both the departing and return countries (in millions)	World Bank	89,73 [207,02]	2882 [23868]
Orders to leave: orders_leave_lag1	Total number of persons who, in the previous year, were subject to an administrative or judicial decision or act imposing an obligation to leave the territory. This variable is lagged by one year.	Eurostat eiord	231.35 [1,202]	2882 [23868]
Readmission Agreements: agreement_readm_lag1	Whether there's an agreement between country A and country B of readmissions of returned people. Dummy variable. This variable is lagged by one year.	Harnisch et al. (2023).	0.07 [0.26]	2882 [23868]
Chinese Official Development Assistance Grants 2008: odachina_grant_t0	Official Development Assistance from China to the world for the year 2008, measured in US dollars.	AidData. 2023. Global Chinese Development Finance Dataset, Version 3.0.	19.23 [29.88]	1976 [16397]
Chinese Official Development Assistance: odachina_grant	Official Development Assistance from China to the world, measured in US dollars (constant prices 2021).	AidData. 2023. Global Chinese Development Finance Dataset, Version 3.0.	46.77 [315.15]	2122 [16813]

Variable	Data Description	Source	Mean [st.dev.]	# Corridors [#Obs.]
Net Total Official Development Assistance: ODA.Total.Net	Net 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	13.39 [48.57]	2882 [283862]
Humanitarian Official Development Assistance: ODA.Humanitarian	Aid Assistance from OECD countries to the world. Destination of Official Development Assistance Disbursements in millions of USD dollars (constant prices 2021) by Humanitarian Aid.	OECD Stats – ODA (Development) Indicators	35.31 [88.85]	1535 [7197]
Official Development Assistance for Equity Investments: ODA.equity.inv	Aid Assistance from OECD countries to the world. Destination of Official Development Assistance Disbursements in millions of USD dollars (constant prices 2021) by Equity Investments.	OECD Stats – ODA (Development) Indicators	62.02 [141.79]	273 [1074]
Technical Official Development Assistance: ODA.Technical	Aid Assistance from OECD countries to the world. Destination of Official Development Assistance Disbursements in millions of USD dollars (constant prices 2021) by Technical Assistance.	OECD Stats – ODA (Development) Indicators	4.87 [18.40]	2406 [[7930]

Annex 2: Level of country reporting to Eurostat

Country	First reporting year	Last reporting year ¹⁶	Number of years reported	Annual average of orders to leave	Annual average of total return
Austria	2009	2021	13	8045	4673
Belgium	2009	2021	13	25412	4355
Bulgaria	2011	2021	11	2714	354
Croatia	2017	2021	5	3874	1236
Cyprus	2009	2021	11	478	599
Czechia	2009	2021	13	3687	628
Denmark	2012	2021	10	2402	1264
Estonia	2010	2021	12	290	329
Finland	2009	2021	13	4132	1730
France	2009	2021	13	84331	16052
Germany	2009	2021	13	32503	23257
Greece	2009	2021	13	59761	20373
Hungary	2009	2021	13	5370	2522
Iceland	2009	2009	1	0	5
Ireland	2009	2021	13	1224	411
Italy	2009	2021	13	33450	5138
Latvia	2009	2021	13	585	576

¹⁶ There might be reporting gaps between the first and the last year of reporting for a given country.

Country	First reporting year	Last reporting year¹⁶	Number of years reported	Annual average of orders to leave	Annual average of total return
Lithuania	2009	2021	13	1200	1152
Luxembourg	2010	2021	11	634	285
Malta	2014	2021	8	284	131
Netherlands	2009	2021	13	17614	6588
Norway	2012	2021	7	9967	3769
Poland	2009	2021	13	13095	11542
Portugal	2009	2021	13	5959	697
Romania	2009	2021	13	1705	1391
Slovakia	2009	2021	13	1108	831
Slovenia	2009	2021	13	1144	1162
Spain	2009	2021	13	52180	14182
Sweden	2009	2021	13	15516	9652
Switzerland	2019	2021	3	2518	505
United Kingdom	2009	2019	11	51736	39859