



BRIEF 2

Do legal restrictions affect refugees' labor market and education outcomes? Evidence from harmonized data¹

Leveraging Harmonized Data to Improve Welfare among Forcibly Displaced Populations and their Hosts: A Technical Brief Series

World Bank Poverty and Equity Global Practice
June 2023

Introduction

This is the second in a series of three technical briefs produced by the World Bank's Poverty and Equity Global Practice to share results of a multi-country data harmonization exercise concerning forcibly displaced populations (FDPs) and host communities. The work aims to generate knowledge that can improve welfare among FDPs and hosts by informing policy and operational decisions in countries affected by forced population displacement. The data harmonization exercise incorporates survey findings from 10 countries across five regions that hosted FDPs in the period 2015 to 2020. The first brief in the series provided background on the data harmonization effort and discussed its methodology, then drew on the data to construct a multidimensional profile of FDPs and host communities across diverse contexts. This second brief leverages the harmonized data to shed light on a critical policy question for countries hosting FDPs: whether and how legal restrictions on refugees affect key labor market and welfare outcomes. We find that refugees in countries with more liberal refugee policy regimes have better socio-economic outcomes. De jure access to the labor market and free movement are positively related to refugee employment rates, while refugee children in countries with more generous educational rights for refugees are more likely to be in school. The positive relationship of liberal policy and employment outcomes is more pronounced for women.

Between 2010 and 2020, the global number of refugees and asylum seekers doubled to over 30 million.² The three possible durable solutions for these individuals are repatriation, resettlement to a third country, and local integration. Since the great majority of refugees live in protracted situations, staying in host countries for more than five years, local integration is by far the most common outcome.³ This places a burden on hosting countries, where not only humanitarian responses but also development and integration policies are required (Devictor and Do, 2017). Unlike in developed countries, policies in many developing countries have exhibited a liberalizing trend over time, for example removing labor market restrictions for refugees (Blair, Grossman, and Weinstein, 2022a).

Why is this important?

There is a broad consensus that a successful policy regime for protracted refugee crises in developing countries requires the right to work, freedom of internal movement, better legal status for refugees, and investments in education and service delivery for both refugees and host communities. For example, a 2016 World Bank report on forced displacement stressed the importance of policies that enhance freedom of internal movement and the right to work. These provisions create economic opportunities in areas with large numbers of forcibly displaced persons and help people who are de facto part of society to acquire a satisfactory legal status (Devictor, 2016).

Employment not only provides a sustainable livelihood and reduces the need for humanitarian aid, but also provides psychological and social benefits to refugees (Hussam et al. 2022). In the longer term, the education of refugee children will help their economic and social integration and contact with the host population can reduce prejudice and thus foster good relations. Experimental tests of this “contact hypothesis” have mostly used contexts such as education (Boisjoly et al., 2006; Scacco and Warren, 2018; Rao, 2019) or sports (Lowe 2019; Mousa, 2020), so it is plausible that employment can also foster positive interactions which would contribute to social cohesion.

What this brief contributes

This brief aims to provide evidence on the empirical relationship between refugee policies and labor and education outcomes in developing countries that host refugees. The considerable variation in refugee policy between developing countries has recently been documented in new datasets, notably the Developing World Refugee and Asylum Policy Dataset (DWRAP) (Blair, Grossman, and Weinstein, 2022a), the KNOMAD Migration and the Law database (KNOMAD, 2021), and the Global Refugee Work Rights Report (Ginn et al., 2022).⁴ DWRAP, which covers all countries in the harmonized data, represents the most expansive coding of asylum and refugee policies in the developing world to date. This brief leverages the unique DWRAP resource to inform its analysis.

Blair, Grossman, and Weinstein (2022a) and Betts and Sterck (2022) discuss some of the reasons for refugee policy variation across countries, including the responses of developing-world policy makers to nearby crises. They show that, unlike in developed countries, policies in many developing countries have exhibited a liberalizing trend over time, a finding that holds true for the countries in the harmonized dataset. For example, in such different contexts as Uganda and Ecuador, legal changes in 2006 and 2012, respectively, have granted refugees and asylum seekers a general right to work. In Uganda, the change also provided broad access to education.

The core objective of this brief is to shed light on the question of whether these liberalizations in de jure policy do in fact improve the situation of refugees in their host countries. We focus on a subset of policy dimensions, namely access to the labor market, freedom of movement, and education policy, and analyze the empirical relationship between countries' policy scores in these domains and related outcomes, specifically employment status, school enrolment, and educational achievement.

We find that, within a given displacement context, refugees in countries with more liberal policies have better socio-economic outcomes. De jure access to the labor market and free movement are positively related to employment, while refugee children in countries with more generous educational rights for refugees are more likely to be in school. We also show that the positive relationship of liberal policy and employment outcomes is greater for women. This is in accordance with generally weaker attachment to the labor market and greater elasticity of labor supply among women, which would mean that more restrictive policies affect them especially strongly.

The value of harmonized data for policy

The harmonized dataset of refugee and host surveys from several refugee contexts and hosting countries enables us to address a relative lack of evidence on the integration of refugees in developing countries. Even though 86 percent of refugees are hosted by developing countries, most of the currently available economic evidence on FDP events and policy responses comes from developed countries.⁵ The lack of evidence for developing countries reflects data limitations, especially for the type of data often used in developed-country contexts (linkable administrative, census, and survey data, including panel data) to attribute causality to a refugee influx or to host country policy. Consequently, little is known about the efficacy of integration policy in developing-country settings, especially in complex and long-lasting refugee-hosting contexts (Devictor and Do, 2017). Ongoing conflict and its spillovers severely limit the ability to collect timely information for even basic program monitoring. In practice, the policy response in developing countries so far—be it humanitarian or development oriented—has often had to rely on anecdotal experience and evaluations with limited external validity.

Of course, legal barriers to employment are only one of the problems refugees must confront. Some obstacles are directly linked to refugees' experience of displacement, such as a loss of assets and networks and negative effects on mental and physical health. Others relate to other barriers in the host country, where refugees' skills and education may be in lower demand and where the refugee influx itself may have created labor oversupply (see Schuettler and Caron (2020) for an overview). Arguably, children face the greatest disruptions, including in critical childhood investments in health and education.

Nevertheless, the bulk of the evidence on forced migration suggests that refugees can succeed in a range of economic contexts, under the right circumstances. Research on refugees in the United States shows that, despite starting off poorer, refugees can catch up and fare better economically than economic migrants in the long run (Cortes, 2004). The size and structure of the host economy, the right to work, and mobility are among the factors that determine the extent to which refugees can obtain productive work and contribute to the host country's economy (Marbach et al. 2018, Fasani et al. 2022). Our results cannot strictly establish causality

Refugee selection and the potential dependence of policy choices on the refugee context complicate a causal interpretation of any empirical findings. For example, Blair, Grossman, and Weinstein (2022b) show that liberal policies attract a larger number of refugees, which could directly impact their employment chances. This suggests that refugees take the policy regime into account in their decision making, which could affect the composition of refugee inflows—for example, individuals' average education and age, as well as unobserved characteristics such as their motivation to find work. Governments could also decide on a more liberal refugee policy when refugees are ethnically close to the hosts, as Blair, Grossman, and Weinstein (2022b) find.

To partially address these issues, our empirical strategy makes use of the fact that the dataset includes host and national populations in addition to refugees; this enables us to control for the overall employment level of each hosting country. Additionally, we include fixed effects for the specific displacement context of refugees, so that we only compare similar populations with each other. Apart from helping to account for compositional dynamics involving refugee populations from the same region, these fixed effects also address different logics of refugee policymaking across hosting regions (Hammoud-Gallego and Freier 2022) and the possibility of regional policy diffusion or coordination (Blair, Grossman, and Weinstein, 2022a). The available individual characteristics of survey respondents – age, gender, reading ability – are also used as control variables.

Structure of the brief

This brief first discusses the variables available in the harmonized dataset, with a focus on those relevant to employment and labor market outcomes for refugees, and educational outcomes for refugee children. We then draw on DWRAP's policy liberality analysis to characterize the distinctive policy contexts in the countries covered by the harmonized dataset. The brief's final section presents our empirical findings on the relationship between policy regimes and refugee employment and schooling.

Harmonized survey data on displaced populations

The harmonized dataset that underpins this analysis includes household surveys with representative samples of forcibly displaced persons - refugees or internally displaced persons (IDPs) - and a comparable sample of hosts/nationals. This brief focuses on refugees alone as IDPs generally are governed by the legal frameworks that apply to the host country. For the purposes of this analysis, IDPs are included but classified as non-refugees. At present, there are 10 countries in the dataset, from five different displacement contexts: (1) Lebanon, Jordan, and the Kurdistan Region of Iraq (KRI), which all host refugees from the Syrian and Iraqi civil wars; (2) Chad and Niger in the Sahel region; (3) Uganda and Ethiopia in East Africa; (4) Peru and Ecuador in Latin America; and (5) Bangladesh, which hosts Rohingya refugees. For this analysis we use 9 countries.⁶

The outcomes of interest available in the dataset include labor force participation and employment for working age persons, and school attendance and education outcomes for school-age children. These are the refugee outcomes that this report focuses on. We also utilize information on an individual's age, gender, education, and family situation as control variables and to investigate the heterogeneity of findings.

Who are the people in the harmonized data?

Together, the surveys include 177,261 individuals from 35,711 households. 66,212 of the respondents are refugees. Table 1 presents key demographics for these refugees in each of the nine countries (people displaced from Venezuela are counted among the refugees here). The dataset includes several thousand individuals from refugee households in each country. For host and national sample individuals, Chad and Niger are outliers with 44,000 and 39,000 observations, respectively, while the Peruvian data does not include any.⁷

In each country, roughly half of the survey respondents are women. On average, respondents are relatively young, with more than half of the population below 18 years old in several countries. Reading proficiency for the host population correlates with known country-wide literacy rates⁸; refugees often, but not always, have lower literacy rates (see Figure 3, below). Employment is defined as any kind of paid work over a reference period of the previous 7 days.

Table 1. Key characteristics of refugee populations in the harmonized dataset (nine countries)

	ECU	PER	LBN	JOR	IRQ	TCD	NER	ETH	UGA
PERCENTAGE FEMALE	49%	48%	49%	50%	49%	56%	53%	53%	52%
PERCENTAGE >=18 YEARS	55%	50%	33%	39%	50%	52%	49%	49%	42%
- OF WHICH: EMPLOYED	85%	94%	44%	22%	39%	57%	56%	23%	38%
- OF WHICH: CAN READ	99%	-	82%	74%	61%	49%	22%	47%	59%
PERCENTAGE <18 YEARS	45%	50%	67%	61%	50%	48%	51%	51%	58%
- OF WHICH: IN SCHOOL	58%	36%	35%	45%	35%	67%	25%	83%	87%

Employment rates among refugees vary across countries and contexts

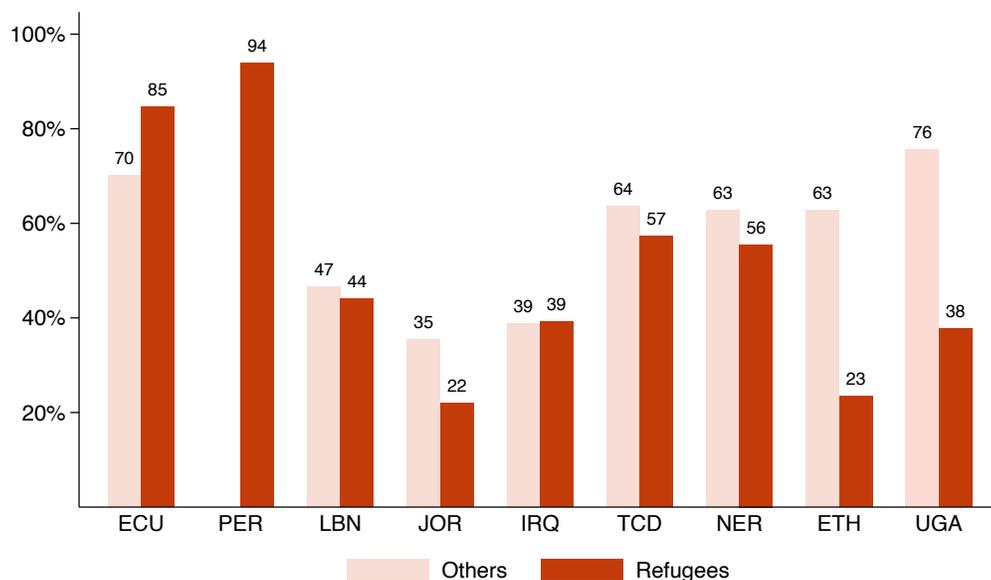
For the purpose of this project, we are especially interested in the outcomes of internationally displaced persons. They represent the group which is principally affected by the liberality or restrictiveness of policy regimes. Internally displaced persons, by contrast, have labor market access and other civil rights as citizens of their country of residence.

The employment rates of refugees (as a share of the adult population) show remarkable variation across countries and contexts in our dataset. As shown in Figure 1, it is above 85 percent for displaced Venezuelans in Ecuador and Peru, but

much lower in the African and Middle Eastern contexts. These patterns are not just driven by differences in employment rates among locals; for example, nationals in Chad and Niger have very similar employment rates, but refugee employment rates in Chad almost reach this same level, while refugee employment rates are much lower in Niger. The employment rates for hosts are relatively close to the rates estimated by the International Labor Organization (ILO).⁹ We report employment rates for all adults rather than just males or household heads; otherwise, the percentages would be higher, especially in the Middle Eastern countries.

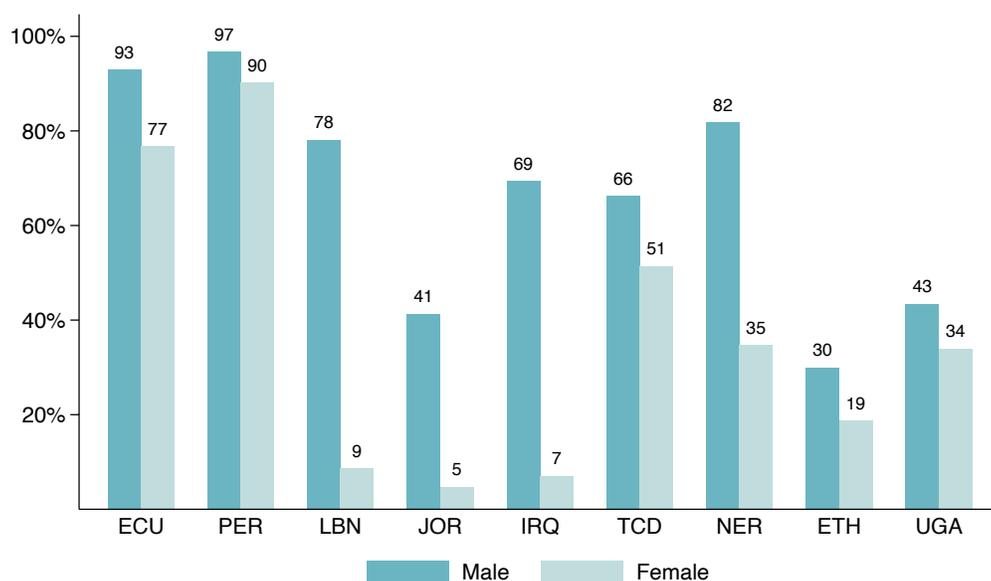
Just as they are for natives, the employment rates of female refugees are lower than those of men in all countries and contexts, but the difference is especially stark in Iraq, Jordan, and Lebanon (Figure 2). This also reflects a generally low female labor force participation rate in the Middle East.¹⁰

Figure 1. Share of adults who are employed, by refugee status, nine countries



Women refugees show lower employment rates than men across all settings

Figure 2. Adult refugees' employment status, by gender, nine countries



Mixed results in reading proficiency and school attendance

The picture is mixed when it comes to reading proficiency (defined as a dummy indicating whether the individual can read, rather than a score) and school attendance of refugee children below 18 years old. In the Middle Eastern countries and in Niger, non-refugees generally show better outcomes than refugees on these education indicators. But this is not the case in other countries (Figure 3). This underlines how different refugee populations can be across contexts, including with respect to the question of who becomes displaced and who can gain asylum in a specific country, and how this selection is affected by education. Schooling policies and the involvement of international organizations and NGOs also differ substantially from country to country, as subsequent sections will discuss.

Figure 3. Adult reading proficiency, by refugee status

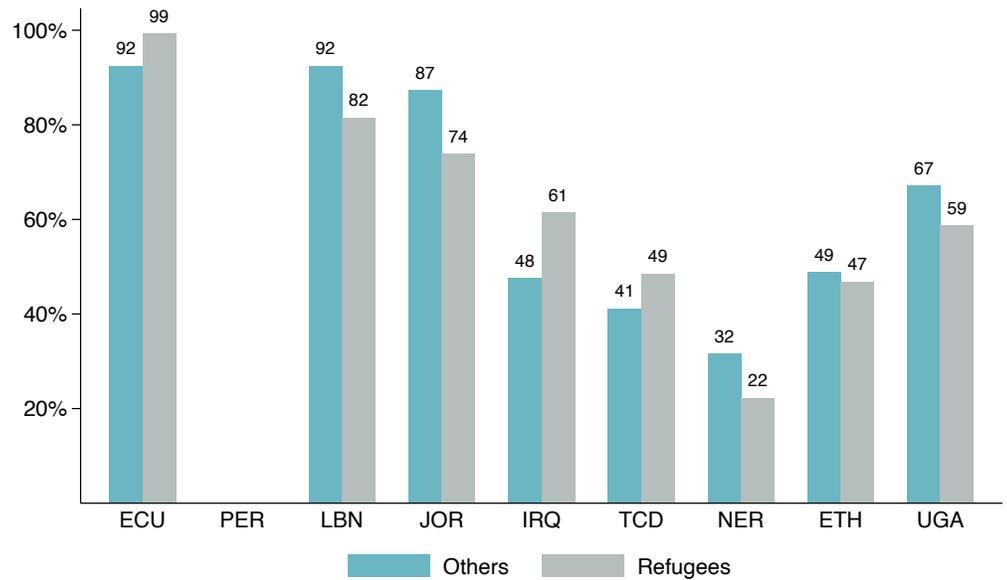
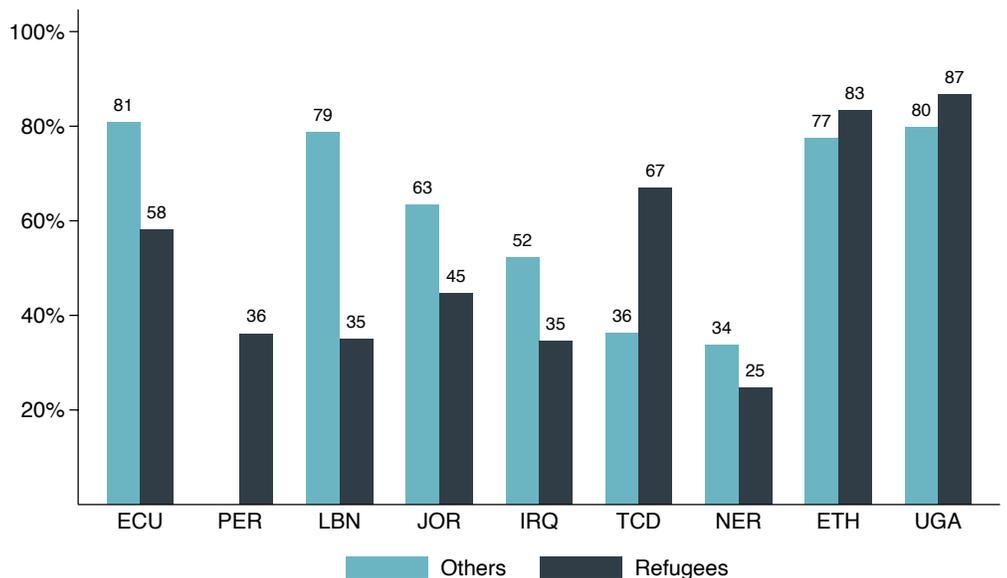


Figure 4. School enrollment among children and youth (below 18 years), by refugee status, nine countries



Comparing the liberality of refugee policy regimes across host countries

The analysis proposed in this brief draws on the Developing World Refugee and Asylum Policy dataset (DWRAP), a newly available dataset of all national laws pertinent to refugees and asylum seekers in a sample of 136 African, Middle Eastern, South Asian, and Latin American countries between 1951 and 2017. In total, the DWRAP data set includes more than 250 unique, national-level migration laws. DWRAP offers a *de jure* measure and complements ongoing efforts like the Refugee Work Rights index (Ginn et al., 2022), which also capture aspects of countries' *de facto* environments.

As discussed, DWRAP represents the most expansive coding of asylum and refugee policies in the developing world to date. Countries were selected for inclusion in DWRAP according to their UN geoscheme region, with a focus on regions underrepresented in existing migration policy indices, and because countries in these regions are large origin and destination states for externally displaced populations. In 2017, about 70 percent of all asylum seekers originated from, and 35 percent sought refuge in, DWRAP-covered countries; likewise, DWRAP countries produced 87 percent and hosted 81 percent of the world's refugees.

Here, we briefly summarize findings from the DWRAP analysis of the liberality of policy environments in the countries in the harmonized dataset. A more detailed discussion of DWRAP data and methods is provided in Annex A.

How DWRAP assesses policy regimes

DWRAP conceptualizes refugee and asylum policy as a combination of policy provisions regulating five core dimensions—access: the ease of entrance and security of status; services: provision of public services and welfare; livelihoods: the ability to work and own property; movement: encampment policies; and participation: citizenship and political rights. To allow fine-grained aggregation, the five policy dimensions are categorized into 14 policy strands: status security, control measures, family unity, legal recourse, education, aid, health care, property, land, employment, settlement policy, document access, citizenship, and political rights. For the analysis of policy and refugee outcomes, we focus on three out of these 14 policy strands: employment, movement, and education. These are most directly related to our chosen outcome variables, namely refugee employment and educational achievement in the host country.

The DWRAP data cover *de jure* policies on asylum and forced migration. Focusing on *de jure* (rather than *de facto*) policies has theoretical and empirical advantages. First, *de jure* policies offer a more objective measure because coding is based on legal texts, rather than subjective judgments about policy enforcement. Second, the international community can advocate adoption of certain policies, but enforcing implementation is much more difficult. Third, charting the *de jure* environment in countries is important for understanding whether gaps, when they emerge, are a product of deficient policy frameworks or deficient enforcement of existing policies.

The DWRAP team uses a straightforward aggregation procedure to transform the policy coding into a scale of displacement policy liberality (for more details, see Annex A). Each index score is ultimately scaled to range from 0 to 1. By constructing index scores for policy strands, policy fields, and policies, DWRAP ensures comparability of policy regimes within and across countries over time.

In Table 2 we highlight the relative liberality of countries in our sample. Taking DWRAP data from 2017, we calculate each country's overall rank among the countries included in DWRAP and its rank in terms of deciles of policy score. A low number represents a high rank on the index, and thus a relatively liberal policy regime. As highlighted, the countries in our sample represent diversity in overall and field-specific liberality. Countries like Uganda and Ecuador are quite liberal along all dimensions in this global comparison, often placing in the first decile of all DWRAP countries. Peru and Ethiopia are also relatively liberal, although less so in the livelihoods domain, which includes the right to work. Niger, while less liberal overall, does have relatively liberal policies for services and livelihoods. Finally, Jordan, Lebanon, and Chad are relatively illiberal.

Table 2. Comparing the liberality of refugee policy regimes across countries: rankings based on DWRAP

COUNTRY	Year	Overall		Employment		Movement		Education	
		Rank	Decile	Rank	Decile	Rank	Decile	Rank	Decile
ECUADOR	2017	18	2	1	1	3	1	88	10
ETHIOPIA	2017	26	3	48	6	40	5	20	3
IRAQ	2002	5	1	22	3	36	5	33	4
JORDAN	2017	70	8	70	8	61	7	83	10
LEBANON	2017	61	7	46	6	51	6	63	7
NIGER	2017	53	5	40	5	62	7	32	4
PERU	2017	16	2	69	8	14	2	36	5
CHAD	2017	63	7	80	9	56	7	79	9
UGANDA	2017	4	1	3	1	15	2	7	1

Source: Authors' calculations based on DWRAP.
 Note: Scores and rankings are specific for the policy strands of interest in this brief: employment, movement, and education.

Do more liberal policies help refugees thrive?

Are the different policy environments described correlated with different outcomes for refugees? This section summarizes the results of our analysis of the association between the liberality of refugee policy and the outcomes experienced by refugees, in particular their employment and school enrolment. Countries adopt more liberal policy, especially with respect to the right to work and to movement, with the expectation that it helps refugees find employment, and they restrict refugee employment to limit labor market competition for the local population. Our theoretical prior is therefore that the causal impact of policy liberality (as measured by a higher policy score in the DWRAP data set) results in greater refugee employment.

Analytic approach

We test this prediction using regressions with an individual's employment or school enrolment as dependent variable. The full specification is

$$w_i = \beta_1 R_i + \beta_2 R_i \times \text{index}_c + \gamma X_i + \mu_c + R_i \times \mu_r + \epsilon_i$$

index_c is our main treatment variable, namely the DWRAP index score in 2017. R_i is a dummy taking the value 1 when the individual is a refugee. It enters the regression directly, and additionally, the index value index_c affects these refugee individuals, but not the locals. This allows the inclusion of country fixed effects μ_c , and of region fixed effects interacted with the refugee dummy, $R_i \times \mu_r$. The coefficient of interest is β_2 , which shows the effect of policy liberality on the employment w_i of refugees, relative to the employment of locals in the same country. The region fixed effects interacted with refugee status ensure that refugees in one country are compared to refugees residing in a different country, but only within the same region. More details of the analysis and regression tables are presented in Annex B.

We find that our preferred research designs, which use host and national populations as a control group for refugee populations in the same country while also controlling for the refugee context, do show the theoretically expected positive association, which suggests that policies do have the expected effects. Note however that a causal interpretation of the findings faces important difficulties, which we discuss together with our results.

Refugees living under liberal policy regimes are more likely to be employed

We look first at correlations between policy scores and employment of adult refugees, without controlling for host population employment rates. Annex Table AB1 shows that these correlations are positive, but small and not statistically significant. This is true for the overall policy index as well as for the employment and movement strands of the index, which indicate the extent to which refugees and asylum seekers are allowed to take up work and move around in the host country. The results also show that, as expected, the ability to read correlates positively with employment, even if the regression coefficient is not always significant. Women are less likely to be employed. Age affects employment positively, but the quadratic effect is negative, suggesting an inverted U-shaped relationship between age and employment.

Importantly, policy as a treatment variable only varies at the level of countries, which makes it difficult to isolate even its conditional correlation with outcome variables such as employment. Many other factors vary between countries, and the (so far) limited number of contexts in the dataset makes it impossible to control for them. Therefore, it is preferable to look for ways to include fixed effects which can absorb these other factors. One strategy is to exploit the fact that our surveys also include host populations. These are by definition not affected by policies towards refugees and asylum seekers and can therefore serve as de facto control groups. Our analysis adopts this approach, which is further explained in Annex B.

Findings from the resulting regressions are reported in Annex Table AB2. The coefficients on policy variables are positive and significant. For each of the policy variables, we first report a) a regression including refugee and host populations, but not the fixed effects, b) a regression including the refugee context fixed effect, and c) a regression including the country fixed effects. We find that inclusion of the refugee context fixed effect increases the effect sizes and significance substantially – this likely captures the fact that refugees in relatively liberal regions such as East Africa have low employability, due to their lower formal education and local language fluency, compared to Latin America or the Middle East. Our preferred specification also adds the country fixed effects and thus controls for the overall employment rate of hosts. This decreases the effect size, but also improves precision of the estimates. The reason for the decreased effect size can be found in the fact that some relatively liberal countries have higher overall employment than neighboring countries (within the same refugee context).

These findings suggest that the employment rate of refugees relative to locals is higher in countries where the relevant policies are more liberal, compared to countries within the same region. The effect of 0.25 in our preferred specification is quite sizeable: for example, the very liberal Uganda has a DWRAP policy score of .51, compared to .33 in Ethiopia. The difference of .18 would be associated with a likelihood of employment higher by about 4.5 percentage points. This is similar in magnitude to the effect of being able to read in our regressions.

Of the sub-components of the policy index, freedom of movement seems to be the most important driver of better employment outcomes. It is more important than policies directly capturing the right to work (compare specifications (2) and (3) in Annex Table AB2). The movement index captures whether refugees live in camps or are free to settle outside of them (Blair et al. 2022a). This makes the finding plausible: greater freedom of movement enables refugees to seek employment opportunities, for example in population centers far away from encampments.

Impacts differ by gender

So far, the analysis has focused on the employment of all refugees above the age of 18 years; employment is overall much greater among men. Refugee policies could have differential effects by gender, especially since female labor supply is more elastic than male labor supply (see e.g., Blau and Kahn, 2007).

The analysis reveals that the positive association between policy liberality and employment is indeed mostly driven by female refugees (Annex Table AB3). For them, a .18 difference in the overall policy score (such as between Uganda and Ethiopia) would result in a 10-percentage point increase in the employment rate, while there would be no increase for men. This pattern also holds for the sub-components investigated here, namely the employment and movement strands. It should be noted that some of these associations lose statistical significance in this heterogeneity analysis.

This strengthens the plausibility of our findings. We would expect endogeneity concerns to be smaller in the case of women – for example, the effect of policy on the selection of who enters the country could be stronger for men, if it is men who make the decision to move. At the same time, since female labor force participation is generally more responsive to policy, the fact that our findings are stronger for women favors their attribution to the effect of policy.

The liberality of education policy positively predicts refugee children's likelihood of being in school

The DWRAP dataset is not limited to policies directly related to employment. DWRAP's broader scope permits us to consider another dimension, the education strand. This feature captures the extent to which refugee children have the same rights and access to education as native children.

Here, we see a promising pattern: the liberality of education policy predicts positively the likelihood that refugee children are currently in school, and whether they can read and write (Annex Table AB4). The 28-point difference between the education score of Uganda (.5) and Ethiopia (.22) would be associated with almost a three-percentage point increase of the likelihood of being in school and being able to write. This confirms that the policy dimensions measured here not only capture de jure differences but have real implications for refugees. To the extent that parental characteristics are only partly inherited, refugee children are also presumably less selected in the policy-correlated pattern we discussed above.

These positive findings about the education of young refugees make it plausible that they also have more success in the labor market as adults. The dataset includes too few adult second-generation refugees to test this directly, but their greater educational success as children is encouraging.

Discussion and Conclusion

The theoretical prior underpinning our analysis is that the causal effect of policy liberality on employment is positive. This is most obvious in the case of policies which grant access to the labor market. Freedom of movement should also facilitate employment in a straightforward way. We do find this positive association in our preferred specifications, which suggests that these policies do indeed improve the integration and welfare of refugees.

It must be noted that our findings depend on the inclusion of fixed effects, capturing unobserved local conditions for host populations and region-wide characteristics of the refugees. Countries such as Uganda have overall low employment despite the liberal policy regime (compare Figure 1). The fixed effects ensure that the employment gap between refugees and hosts in Uganda is compared to that same gap in Ethiopia. But refugee policy making is influenced by multiple concerns, including expectations about the labor market success of the refugees themselves. Our various empirical strategies cannot fully rule out such reverse causality.

The motivation behind restrictive refugee employment policies can be the potentially negative impact of refugees on native employment. Verme and Schuettler (2021) provide a recent review article and document mixed findings – the impact of refugees on local employment can also be positive, for example by inducing demand for services. This literature should appease some fears of labor market competition by refugees, but policy makers might still take the negative perceptions into consideration, especially in the developing world where the evidence base is so thin.¹¹

This brief focusses on employment of the refugees themselves, which is an important step towards a sustainable solution to displacement. Such solutions are particularly important in protracted refugee crises, in which humanitarian interventions alone are not enough.

Employment of refugees also generates positive and cooperative interactions with locals. This is more likely when refugees do not live in camps but can move and integrate with the host population freely, and we find that freedom of movement is especially strongly correlated with refugee employment. This concurs with findings by Betts et al. (2023), who show in the context of East Africa that contact with refugees increases positive attitudes towards them. However, the finding only holds in urban contexts, where refugees have freedom of movement, and not near rural refugee camps. These findings therefore suggest that more liberal policies would also increase social cohesion and trust between refugees and hosts.

The third brief in this series provides more detailed analysis and comparisons of distinct displacement contexts, and the implications for measuring wellbeing among the displaced.



Acknowledgments

This brief series and the associated harmonized database were prepared by a team led by Tara Vishwanath, Nandini Krishnan, and Maria Eugenia Genoni. The core team for the briefs included Jacob Hennig, Alexander Irwin, and Alejandro Lopez Aguilar. The harmonized dataset core team included Joseph Andrew Green, Arthur Alik Lagrange, and Alejandro Lopez Aguilar. The work has been carried out under the general direction of Luis Felipe Lopez-Calva and Benu Bidani. The team gratefully acknowledges advice from the peer reviewers Kevin Carey, Sergio Olivieri, Silvia Redaelli, and Sharad Tandon. In addition, the team gratefully acknowledges help from the many people who have led the country-specific survey efforts, as well as from those who have supported the preparation of these briefs including Jessica Adler and Karem Edwards.

Bibliography / End Notes

1. Front page photo by Mohamed Azakir, © World Bank. Mother and child in the Zaatari Refugee camp, Jordan. Last page photo: ©HelkinReneDiaz. Venezuelan migrant.
2. UNHCR (<https://www.unhcr.org/en-us/figures-at-a-glance.html>). In this brief, the term “refugees” refers to recognized refugees, asylum seekers, and other forcibly displaced persons (FDPs) residing outside their country of origin, including for example Venezuelans displaced in Latin America. This does not include the over 50 million internally displaced persons (IDPs). The policies investigated here apply to international refugees and not to nationals.
3. UNHCR. <https://www.unrefugees.org/news/protracted-refugee-situations-explained/>
4. While DWRAP and NOMAD summarize de jure policy, the Global Refugee Work Rights database adds value by including a de facto measure of implementation.
5. Evidence from developed countries shows how refugees often struggle to integrate into host countries, and in particular to find employment (see e.g. Arendt (2022), Fasani et al. (2021), Fasani et al. (2022), Schuettler and Caron (2020), and Sarvamäki and Hämäläinen (2016)).
6. We do not include the Rohingya refugee population in this analysis, since we only observe them in one policy context (namely under severe employment and movement restrictions in Cox’s Bazar, Bangladesh). We therefore cannot compare their outcomes to those of a similar population of refugees in another country. Consistent with the restrictive policies, employment among the Rohingyas in Cox’s Bazar is low, especially compared to the host population (World Bank, 2019).
7. For more detailed descriptive statistics, including a comparison with host populations, see the first brief in this series. Table 1 shows percentages weighted by harmonized inverse sampling probability weights. For regressions, the total weights of each country population are equalized. For example, even though Ethiopia is a larger country than Chad, both populations have the same weight in the regressions. We do this because the treatment variables are at the level of countries - we want to ensure that all countries have the same weight, rather than giving larger populations greater importance in our findings.
8. See for example World Bank data: <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS>
9. Reported here: <https://data.worldbank.org/indicator/SL.EMP.TOTL.SP.ZS>
10. <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>
11. Some middle-income countries are well represented, such as Turkey and Colombia, where relatively good administrative data is available (e.g., Altındağ et al. (2020), Aksu et al. (2022), Calderon-Mejia and Ibanez (2016), Morales (2018)). In low-income countries, researchers often rely on survey data, remote sensing data and other sources, for example in Alix-Garcia and Saah (2010) or Alix-Garcia et al. (2018).

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Annex A. Leveraging the Developing World Refugee and Asylum Policy (DWRAP) dataset

Our empirical tests draw on DWRAP, a newly available data set of all national laws pertinent to forcibly displaced people in a sample of 136 African, Middle Eastern, South Asian, and Latin American countries between 1951 and 2017. In total, the DWRAP data set includes more than 250 unique, national-level migration laws. DWRAP offers a de jure measure and complements ongoing efforts like the Refugee Work Rights index (Ginn et al., 2022), which also capture aspects of countries' de facto environments. DWRAP expands the geographic and temporal scope of asylum policy indices considerably. In Table AA1, we outline the temporal and geographic coverage of existing migration policy datasets compared to DWRAP, demonstrating the extent to which existing data are West-centric.

Importantly, DWRAP covers all countries in our harmonized dataset. The Refugee Work Rights (RWR) index, on the other hand, does not cover Niger and Iraqi Kurdistan, 2 of the 9 countries in our survey data. A comparative analysis using the Refugee Work Rights index would show whether policies as coded in DWRAP have different effects from the de facto situation.

Table AA1. Coverage of highly cited migration policy indices

Index	Years Covered	Asylum Specific	Total	Europe	North Am.	Latin Am.	Middle East	Asia (Non ME)	Africa	Oceania
LOI Index	1995	No	8	8	0	0	0	0	0	0
Mayda (2010)	1980-1995	No	14	10	2	0	0	1	0	1
Ortega and Peri (2009, 2013)	1980-2006	Yes	14	10	2	0	0	1	0	1
Peters (2015,2017)	1783-2010	Yes	19	5	2	2	2	5	1	2
Hatton (2009, 2016)	1997-2012	Yes	19	16	2	0	0	0	0	1
IMPALA	1960-2016	Yes	26	21	2	0	0	1	0	2
ICRI	1980-2008	No	29	16	2	2	3	2	2	2
IMPIC	1980-2010	Yes	33	23	3	1	2	2	0	2
MIPEX	2004-2014	Yes	38	31	2	0	1	2	0	2
DEMIG Policy	1945-2014	Yes	45	28	3	3	2	5	2	2
DWRAP	1951-2017	Yes	136	1	16	17	15	28	58	1

DWRAP conceptualizes refugee and asylum policy as a combination of policy provisions regulating five core dimensions—access: the ease of entrance and security of status; services: provision of public services and welfare; livelihoods: the ability to work and own property; movement: encampment policies; and participation: citizenship and political rights. Consequently, for each law DWRAP codes 54 provisions across these five policy fields. To allow fine-grained aggregation, the five policy dimensions are categorized into 14 policy strands: status security, control measures, family unity, legal recourse, education, aid, health care, property, land, employment, settlement policy, document access, citizenship, and political rights. Empirical tests show that these policy indices associate with observed variables in ways consistent with theoretical expectations. For instance, using DWRAP data, Blair, Grossman, and Weinstein (2022a) show that countries shift their policies in expectation of refugee flows when violent civil conflicts breakout in their neighborhoods. Similarly, Blair, Grossman, and Weinstein (2022b) show that liberal refugee policies conditionally attract refugee flows.

For the analysis of policy and refugee outcomes, we focus on three out of these 14 policy strands: employment, movement, and education. These are most directly related to our chosen outcome variables, namely refugee employment and educational achievement in the host country.

The DWRAP data cover de jure policies on asylum and forced migration. Focusing on de jure (rather than de facto) policies has theoretical and empirical advantages. First, de jure policies offer a more objective measure because coding is based on legal texts, rather than subjective judgments about policy enforcement. Second, the international community can advocate adoption of certain policies, but enforcing implementation is much more difficult. Third, charting the de jure environment in countries is important for understanding whether gaps, when they emerge, are a product of deficient policy frameworks or deficient enforcement of existing policies.

Coding begins in 1951, which marks the signing of the landmark Convention Relating to the Status of Refugees. Since coding back 66 years raises measurement challenges, the texts of laws were evaluated individually, going systematically through national legal frameworks to code along the 54 provisions outlined in Table AA2. This approach facilitates reliable coding of historical policies. By contrast, most other migration policy indices rely on expert surveys. While this has the benefit of enabling an assessment of de facto policy provisions, it limits how far back in time one can code.

Table AA2. Provisions considered in DWRAP coding

Policy	Policy Fields													
	Access				Services				Livelihoods			Movement		Participation
	Status	Control	Family	Recourse	Education	Aid	Health	Property	Land	Employment	Settlement	Documents	Citizenship	Rights
Strands	Accept	No penalty for unlawful entry	Extend status to family	Court access	Primary education	Aid access	Healthcare access	Transfer property	Provided land	Employment rights	Free movement	Document access	Citizenship path	Political participation
	Asylum Seekers													
	Non-refoulement	Security checks	Family reunion	Reasoned decision	Post primary education	Aid Type	Healthcare costs	Asset seizure	Land lease	Self-Employment	Conditional movement document cost		Years to Citizenship	Association rights
Variables	Exclusion categories		Personal status rights	Appeal denial	Affirmative action	Social security	Health based entry	Asset compensation		Professional Employment	Encampment		Citizenship by Marriage	
	Cessation Categories				Religious education		Health restrictions	Own moveable property		Employment Permit			Citizenship by Birth	
	Remain if status pending right to remain				Language training vocational training			Own fixed property intellectual property leasing rights		Employment restrictions taxation			Citizenship for unaccompanied minors	

The corpus of laws and policies pertinent to forced migration was identified chiefly using UNHCR submissions to the Universal Periodic Review, a mandated, cyclical review of UN member states organized by the Office of the High Commissioner for Human Rights. UNHCR submits to the Universal Periodic Review process for virtually every country in a given cycle. UNHCR submissions detail the evolution of a state’s forced displacement policies, or lack thereof, as well as states’ international legal obligations to FDP, and details of states’ de facto protection environments, including instances of refoulement and other violations of migrants’ rights.

Legal instruments referenced in UNHCR submissions were used to identify key laws and policies in individual states. Information from UNHCR submissions was supplemented with information from the UNHCR’s Refworld database, the International Labour Organisation’s NATLEX database, the International Organisation for Migration’s Migration Law Database, the UN Office on Drugs and Crime’s SHERLOC database, and the Law Library of Congress. Using these sources, coders located full texts of more than 90 percent of the national laws in the DWRAP data set. Secondary sources, including historical reports and NGO assessments, were used to code provisions of the laws for which full texts could not be located. The DWRAP team uses a straightforward aggregation procedure to transform the policy coding into a scale of displacement policy liberality. Specifically, they use a series of summary indices to aggregate from individual policy provisions to policy strands, policy strands to policy fields, and policy fields to policies. Each summary index is the mean of standardized outcomes weighted by the inverse of the covariance matrix, which maximizes the information captured in the index. Each index is further scaled to range from 0 to 1. By constructing index scores for policy strands, policy fields, and policies, they ensure comparability of policy regimes within and across countries over time. To test the robustness of our results to the aggregation schema, they also verified that principal component analyses give a similar decomposition of the data.

Table AA3. Policy liberality rankings based on DWRAP

Country	Year	Overall		Access		Services		Livelihoods		Movement		Participation	
		Rank	Decile	Rank	Decile	Rank	Decile	Rank	Decile	Rank	Decile	Rank	Decile
Uganda	2017	4	1	1	1	5	1	1	1	10	2	13	2
Peru	2017	16	2	35	5	26	3	51	7	11	2	8	1
Ecuador	2017	18	2	19	3	43	5	15	2	3	1	25	5
Ethiopia	2017	26	3	13	2	19	3	42	6	24	4	14	2
Niger	2017	53	5	56	7	25	3	20	3	37	7	32	7
Lebanon	2017	61	7	77	9	56	7	39	6	30	6	32	7
Chad	2017	63	7	44	5	49	6	60	8	34	7	32	7
Jordan	2017	70	8	79	9	56	7	62	9	36	7	32	7
Iraq	2017	--	--	--	--	--	--	--	--	--	--	--	--

In Table AA3 above we highlight the relative liberality of countries in our sample. Taking DWRAP data from 2017, we calculate each country’s overall rank and its rank in terms of deciles of policy score. As highlighted, the countries in our sample represent diversity in overall and field-specific liberality. Countries like Uganda and Ecuador are quite liberal along all dimensions in this global comparison. Peru and Ethiopia are also relatively liberal, although less so in the livelihoods domain, which includes the right to work. Niger, while less liberal overall, does have relatively liberal policies for services and livelihoods. Finally, Jordan, Lebanon, and Chad are relatively illiberal.

There is also sufficient within-region variation, which we exploit for the main specifications of our analysis. For example, legal employment for refugees in Niger is more accessible than in neighboring Chad, and Ecuador similarly has more liberal employment policies than Peru.

In this brief, we are not using within-country variation in policy scores over time. But it is important to note that these countries have all arrived at their current policy regime in the context of their own history, their internal politics and the international situation. Refugee crises have often played a role in changes to refugee laws; for example, Uganda liberalized its laws against the background of heightened displacement from Eastern Congo and Somalia in 2006. Figure AA.4 shows how the policy indices of the countries in our dataset have tended towards liberalization, in line with general trends (Blair et al., 2022a). This highlights the possibility that refugee characteristics influence policy making (Abdelaaty 2021), in ways which complicate the attribution of any correlation between policy and refugee outcomes to the causal effect of policy. However, the countries in our focus had no major policy changes in the recent past (no changes after 2012), which somewhat attenuates this concern.

**DWRAP POLICY INDEX
(Countries in harmonised dataset)**

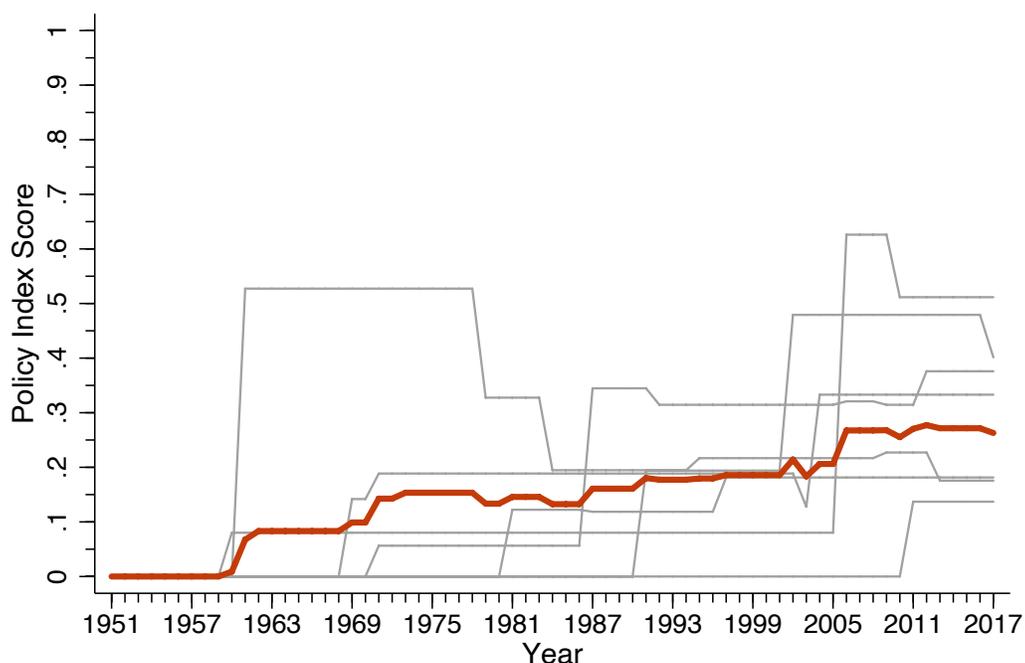


Figure AA4. DWRAP policy index scores over time

Annex B. Regressions conducted for main analysis

TABLE ABI. Policy indices and employment correlations

VARIABLES	(1)	(2)	(3)
	Employed	Employed	Employed
Policy Index	0.12 (0.28)		
Employment strand		0.26 (0.1)	
Movement field			0.52* (0.27)
Reading	0.06 (0.03)	0.05** (0.02)	0.06** (0.02)
Female	-0.20** (0.08)	-0.20** (0.08)	-0.20** (0.08)
Age	0.03*** (0.00)	0.03*** (0.00)	0.03*** (0.00)
Age squared	-0.03*** (0.00)	-0.03*** (0.00)	-0.03*** (0.00)
Observations	22,865	22,865	22,865
R-squared	0.09	0.10	0.10

Robust standard errors in parentheses, clustered at country level

*** p<0.01, ** p<0.05, * p<0.1

Policy as a treatment variable only varies at the level of countries, which makes it difficult to isolate even its conditional correlation with outcome variables such as employment. Many other factors vary between countries, and the (so far) limited number of contexts in the dataset makes it impossible to control for them. Therefore, it is preferable to look for ways to include fixed effects which can absorb these other factors.

One such way is to exploit the fact that our surveys also include host populations. These are by definition not directly affected by policies towards refugees and asylum seekers and can therefore serve as de facto control groups. This addresses one important threat to a causal interpretation of our findings: policy makers could adopt more restrictive policies specifically because local unemployment is high. Since high local unemployment of natives would also reduce refugee employment, this would bias the correlation between liberal policy and refugee employment.

Additionally, we include region fixed effects interacted with refugee status. This ensures that refugees in one country are only compared to refugees residing in a different country, but within the same region.

A regression specification using this design is

$$w_i = \beta_1 R_i + \beta_2 R_i \times \text{index}_c + \gamma X_i + \mu_c + R_i \times \mu_r + \epsilon_i$$

Where R_i is a dummy taking the value 1 when the individual is a refugee. It enters the regression directly, and additionally the index value index_c affects these individuals, but not the locals. This allows the inclusion of country fixed effects μ_c , and of region fixed effects interacted with the refugee dummy, $R_i \times \mu_r$. The coefficient of interest is β_2 , which shows the effect of policy liberality on the employment w_i of refugees, relative to the employment of locals in the same country.

Table AB2. Policy indices and employment with country and refugee context FE

Outcome: EMPLOYMENT	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Policy Index	0.05 (0.30)	0.71*** (0.18)	0.25*** (0.07)						
Employment strand				0.16 (0.13)	0.34*** (0.05)	0.11** (0.04)			
Movement field							0.25 (0.26)	0.90*** (0.15)	0.30** (0.12)
Controls: Age, gender, reading. HH type	yes	yes	yes	yes	yes	yes	yes	yes	yes
refugee context FE		yes	yes		yes	yes		yes	yes
country FE			yes			yes			yes
Observations	79,061	79,061	79,061	79,061	79,061	79,061	79,061	79,061	79,061
R-squared	0.24	0.30	0.31	0.24	0.30	0.31	0.24	0.30	0.31

Robust standard errors in parentheses,

*** p<0.01, ** p<0.05, * p<0.1

Table AB3. Policy indices and employment – Gender heterogeneity

VARIABLES	(1) employed	(2) employed	(3) employed
Policy index	-0.07 (0.13)		
Female x Policy Index	0.56** (0.21)		
Employment strand		-0.06 (0.11)	
Female x Employment strand		0.30 (0.16)	
Movement field			0.14 (0.15)
Female x Movement field			0.28* (0.12)
Female	-0.37*** (0.07)	-0.37*** (0.07)	-0.37*** (0.07)
Controls: Age, gender, reading proficiency	yes	yes	yes
Fixed effects: HH type, refugee context, country	yes	yes	yes
Observations	79,061	79,061	79,061
R-squared	0.31	0.31	0.31

Robust standard errors in parentheses, clustered at country level

*** p<0.01, ** p<0.05, * p<0.1

Table AB4. Policy indices and education outcomes

VARIABLES	(1)	(2)	(3)
	school	read	write
Education strand	0.09*** (0.01)	0.03 (0.04)	0.10** (0.04)
Controls: Age, gender	yes	yes	yes
Fixed effects: HH type, refugee context, country	yes	yes	yes
Observations	56,646	81,665	81,663
R-squared	0.41	0.46	0.46

Robust standard errors in parentheses, clustered at country level

*** p<0.01, ** p<0.05, * p<0.1

