

# UNDERSTANDING THE SOCIAL ACCEPTABILITY OF STRUCTURAL REFORMS - ONLINE ANNEXES

*Online Annexes 3.1 to 3.4 to Chapter 3 of the October 2024 World Economic Outlook lay out the data sources, sample coverage, variable definitions and methodologies used in the main chapter. The first annex presents the sample of economies covered throughout the chapter. The subsequent annexes follow the structure of the chapter and lay out the data sources, variable definitions, and methodologies used in the main chapter.*

## Online Annex 3.1. Sample Coverage

The analysis in the chapter covers a broad sample of advanced economies (AEs) and emerging market and developing economies (EMDEs). In some of the analysis, EMDEs are further divided into groups of emerging market economies (EMEs) and low-income countries (LICs). The coverage varies across the different sections and figures shown in the chapter, as indicated in Annex Table 3.1.1.

**Online Annex Table 3.1.1. Sample of Economies Included in Analytical Exercises**

Group <sup>1</sup>	Economies <sup>2</sup>	Exercise <sup>3</sup>						
		I	II	III	IV	V	VI	VII
A	AEs: Austria; Belgium; Czech Republic; Denmark; Finland; France; Germany; Greece; Ireland; Japan; Korea; Latvia; Lithuania; Netherlands; Norway; Portugal; Spain; Sweden; Switzerland.							
	EMEs: Albania; Algeria; Argentina; Bolivia; Brazil; Bulgaria; Chile; Colombia; Costa Rica; Dominican Republic; Ecuador; El Salvador; Georgia; Guatemala; Hungary; India; Indonesia; Jamaica; Malaysia; Pakistan; Paraguay; Peru; Philippines; Poland; Romania; Russia; Sri Lanka; Thailand; Tunisia; Türkiye; Ukraine; Uruguay; Venezuela.	X	X	X				
	LICs: Bangladesh; Burkina Faso; Côte d'Ivoire; Ethiopia; Ghana; Kenya; Kyrgyz Republic; Madagascar; Mozambique; Nepal; Nicaragua; Nigeria; Senegal; Zimbabwe.							
B	AEs: Australia; Estonia; Hong Kong SAR; Israel; New Zealand; Singapore; United States.							
	EMEs: Azerbaijan; Belarus; Brunei Darussalam; China; Egypt; Fiji; Jordan; Kazakhstan; Mongolia; Vietnam. LICs: Cambodia; Cameroon; Lao P.D.R.; Myanmar; Tanzania; Uganda; Uzbekistan.	X		X				
C	AEs: Croatia; Cyprus; Estonia; Luxembourg; Singapore; Slovak Republic; Slovenia; Taiwan Province of China.							
	EMEs: Angola; Armenia; Azerbaijan; Bahrain; Belarus; Bosnia and Herzegovina; Botswana; Cabo Verde; China; Egypt; Equatorial Guinea; Eswatini; Gabon; Guyana; Iran; Iraq; Jordan; Kazakhstan; Kosovo; Kuwait; Lebanon; Libya; Mauritius; Mongolia; Montenegro, Rep. of; Namibia; North Macedonia; Oman; Panama; Qatar; Saudi Arabia; Serbia; Suriname; Turkmenistan; United Arab Emirates; Vietnam.							
	LICs: Afghanistan; Benin; Bhutan; Burundi; Cambodia; Cameroon; Central African Republic; Chad; Comoros; Congo, Democratic Republic of; Congo, Republic of; Djibouti; Eritrea; Gambia, The; Guinea; Guinea-Bissau; Haiti; Honduras; Lao P.D.R.; Lesotho; Liberia; Malawi; Mali; Mauritania; Moldova; Myanmar; Niger; Papua New Guinea; Rwanda; Sierra Leone; Somalia; South Sudan; Sudan; Tajikistan; Tanzania; Timor-Leste; Togo; Uganda; Uzbekistan; Yemen; Zambia.		X					
D	EMEs: Mexico; Morocco; South Africa.	X	X	X	X	X		
E	AEs: Canada; Italy; United Kingdom.	X	X	X	X		X	
F	AEs: Denmark; France; Germany; Korea.							
	EMEs: Brazil; India; Mexico; Peru. LICs: Bolivia; Georgia; Vietnam.							X

<sup>1</sup>Group of economies according to their use in different analytical exercises.

<sup>2</sup>AEs = advanced economies; EMEs = emerging market economies; LICs = low-income countries; PMR = product market regulation.

<sup>3</sup>Analytical exercises performed in the chapter: I = regulatory stance (Figure 3.1, panel 1); II = protests by reform area (Figure 3.1, panel 2); III = historical analysis (Figures 3.2-3.4, Annex Figures 3.2.1-3.2.2., Annex Table 3.2.3); IV = PMR reforms survey (Figures 3.5-3.7, Annex Figure 3.3.2, Annex Tables 3.3.1 and 3.3.3); V = migrant integration survey (Figures 3.5-3.7, Annex Figures 3.3.1 and 3.3.2, Annex Tables 3.3.2 and 3.3.3); VI = case studies (Table 3.2, Annex Table 3.4.1.).

## Online Annex 3.2. Historical Overview of Reform Attempts—A Novel Database

The narrative database of historical structural reforms is constructed based on quarterly Economist Intelligence Unit (EIU) country reports from 1996 to 2023 spanning 76 countries: 26 advanced economies (AEs), 36 emerging market economies (EMEs), and 14 low-income countries (LICs).<sup>1</sup> The database centers on three reform categories: (i) product market regulation reforms to increase competition and foster private participation in the electricity sector (*PMR-electricity* hereafter), (ii) changes to the pension system aimed at incentivizing labor supply among elderly workers (*elder LP* hereafter), and (iii) reforms in the immigration system to improve the labor market integration of foreign-born workers (*migrant integration* hereafter). The database comprises variables that capture six aspects of these reforms in each country and quarter:

- i. *Existence of reform attempts*: Whether there was a recent, ongoing, or planned *PMR-electricity/elder LP/migrant integration* reform attempt in that country-period.
- ii. *Reform characteristics and direction of policy change*: The specific policy measures considered in each reform episode, as well as the direction of the policy change—that is, whether it is consistent with (or contrary to) enhancing competition and private participation for *PMR-electricity*, increasing labor supply among older workers for *elder LP*, and improving the integration of foreign-born workers for *migrant integration*:

<i>PMR-Electricity</i>	<i>Elder LP</i>	<i>Migrant Integration</i>
Unbundling (bundling) electricity monopoly	Increasing (decreasing) minimum retirement age	Easing (restricting) access to citizenship and residency
Lowering (raising) barriers to entry for new electricity firms	Linking (delinking) retirement age and life expectancy	Expanding (reducing) social benefits and rights for immigrants
Privatizing (nationalizing) electricity firms	Increasing (decreasing) required contribution years	Facilitating (restricting) entry and work visas
Establishing (weakening) a transparent and independent regulatory framework or agency	Enhancing (reducing) incentives to work for longer	Strengthening (weakening) immigration management systems
	Reducing (expanding) early retirement schemes	Supporting (cutting) integration initiatives

- iii. *Reform stages*: The database records the following stages of reform episodes for each reform area: (i) periods when a reform was under discussion by authorities but had not yet been adopted (for instance, legislated) or, if adopted, had not yet been implemented, (ii) periods when a reform was officially implemented. Any periods that do not fall into these categories are considered as times when no reform attempts were made.

<sup>1</sup> The dataset builds on the set of EIU country reports used in Ahir, Bloom and Furceri 2022. The EIU country reports allows tracking the evolution of reform processes with granularity given their quarterly frequency. Moreover, they provide relatively better coverage of social unrest events related to reform attempts than other comparable sources. Finally, the EIU reports have a well-defined structure that remained relatively stable over time, which facilitates processing by large language models (LLMs) and helps improve their accuracy.

- iv. *Consultations/communications strategies*: Whether the authorities used any tools to consult and/or communicate with stakeholders and the public at large, including the following:
- Consultations, hearings, surveys with the public.
  - Consultations within the public administration or with other political parties.
  - Consultations with incumbent firms in the sector (for *PMR-electricity*).
  - Advisory committees involving experts and stakeholders.
  - Negotiations with trade and/or worker unions.
  - Establishing independent agencies to communicate the reform to the public.
- v. *Complementary/compensatory measures*: Whether the authorities used any mitigating measures, complementing the reform or compensating affected stakeholders, including the following:<sup>2</sup>

<i>PMR-Electricity</i>	<i>Elder LP</i>	<i>Migrant Integration</i>
Protecting incumbent firms from competition	Exemption of certain workers and pensioners	Measures to enhance security
Job security or other measures for affected workers	Job training programs for older workers	Reallocating immigrants where needed
Subsidies or price controls	Gradual implementation	Increasing provision of public services
	Minimum guaranteed pensions	Job security measures, trainings, or financial benefits for native workers

(PMR = product market regulation; LP = labor participation)

- vi. *Social resistance and government response*: Whether the reform faced public resistance (strikes, riots, or protests) and, if so, whether the government responded by dropping the reform or modifying its scope. Compared to existing datasets on social unrest, this narrative dataset allows to link the protests with the specific reform attempt, and it considers overall resistance (including not only public unrest but also resistance by interest groups).

The information was extracted from the EIU reports using OpenAI’s GPT-4o model. For each report, the model was tasked with answering questions related to the six aspects of reforms mentioned above, guided by prompts tailored to each reform area. The model’s performance was rigorously evaluated and the prompts refined through an iterative process, comparing its answers against human-generated ones using a subset of reports until achieving an overall accuracy of approximately 80 percent in the test sample—which corresponds to the reading comprehension performance of state-of-the-art models on the DROP (Discrete

<sup>2</sup> In the narrative database, the presence of consultation/communications strategies, as well as complementary/compensatory measures, depends on whether the use of these measures was prominent enough during the reform process to warrant discussions in the EIU reports. The absence of such measures in the narrative database does not necessarily indicate that they were not employed during the reform process. Additionally, the narrative database does not speak to the intensity, sufficiency, or adequacy of these measures.

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Reasoning Over the Content of Paragraphs) benchmark at the time the analysis was conducted.<sup>3</sup>

A reform episode in the narrative database is defined as a continuous period of reform efforts (encompassing either discussion, adoption, or implementation) within the same reform area and with a direction consistent with promoting economic growth: increasing labor supply among older workers for *elder LP*, enhancing competition and private participation for *PMR*, and improving the integration of foreign-born workers for *Migrant Integration*. A reform attempt is considered implemented if at least one EIU report during the reform episode mentions an implementation of the relevant reform measures in the area. Distinct reform episodes are separated by periods of at least two consecutive quarters with no discussion, adoption, or implementation within that reform area. Annex Table 3.2.1 reports the number of episodes identified by the narrative database in each reform area and country income group over 1996–2023.

**Online Annex Table 3.2.1. Number of Reform Episodes, 1996–2023**

	AEs	EMEs	LICs	Total
PMR-Electricity	76	179	85	340
Elder LP	77	48	2	127
Migrant Integration	114	70	19	203

Source: IMF staff calculations.

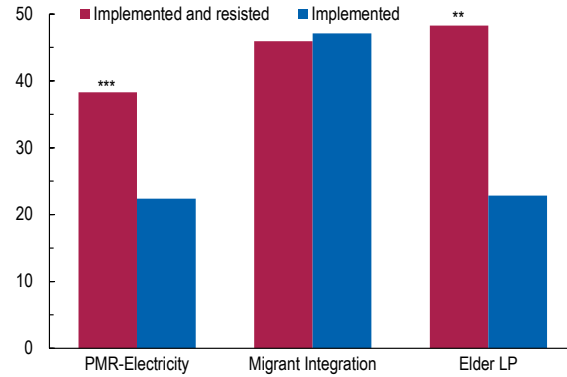
Note: AEs = advanced economies; EMEs = emerging market economies; LICs = low-income countries; LP = labor participation; PMR = product market regulation.

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<sup>3</sup> See model evaluations at <https://openai.com/index/hello-gpt-4o/> and [https://storage.googleapis.com/deepmind-media/gemini/gemini\\_v1\\_5\\_report.pdf](https://storage.googleapis.com/deepmind-media/gemini/gemini_v1_5_report.pdf). DROP (<https://arxiv.org/pdf/1903.00161>) is widely recognized as the de-facto standard for evaluating reading comprehension abilities in language models. While the DROP benchmark reported by LLM developers covers a broad sample of general and domain-specific texts, achieving a level of accuracy of approximately 80 percent on specialized reports covering economic reforms and using complex prompts is particularly notable. Moreover, although a direct comparability with existing datasets cannot be established due to different categorization and type of measures included, implemented and adopted measures from the narrative dataset correlates positive and significantly with other existing reforms records.

To understand whether reform resistance may have implications for the sustainability of implemented reforms, Annex Figure 3.2.1 shows the share of reforms in each policy area that were reversed within five years of implementation, distinguishing whether the reform was resisted at the time of its implementation or not. A reversal is defined as the implementation of a policy in the opposite direction of a previously identified reform implementation—for instance, decreasing minimum retirement age for *elder LP*, introducing entry barriers for *PMR-electricity*, and obstructing labor market integration of foreign-born workers for *Migrant Integration*. The figure shows that among *PMR-electricity* and *elder LP* reforms, a significantly higher share of reforms that were implemented with resistance were subsequently reversed, compared with those that were implemented without resistance.

Online Annex Figure 3.2.1. Reform Resistance and Likelihood of Reversals  
(Percent of reform episodes)



Source: IMF staff calculations.  
Note: This figure displays, for each reform area, the percentage of implemented reforms, both contested and uncontested, that experienced a reversal within 5 years. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively, for *t*-tests comparing reversal rates between resisted and unresisted implemented reforms. LP = labor participation; PMR = product market regulation.

To understand how the use of reform strategies and other factors correlate with reform outcomes, the analysis relies on a multinomial logistic regression framework. The relationship between the determinants and the likelihood of different reform outcomes can be specified using the following function:

$$\Pr(\text{outcome}_{it} = j) = \begin{cases} \frac{1}{1 + e^{\gamma_1 Z_{it}} + e^{\gamma_2 Z_{it}}} & \text{if } j = 0 \\ \frac{e^{\gamma_j Z_{it}}}{1 + e^{\gamma_1 Z_{it}} + e^{\gamma_2 Z_{it}}} & \text{if } j = 1,2 \end{cases} \quad (3.2.1)$$

where *i* and *t* denote country and time respectively and *j* = 0,1,2 denotes the three reform outcome categories. More precisely, the base outcome of the dependent variable (*j* = 0) are reform episodes that ended without a reform implementation—in other words, reforms that were discussed but never implemented. The other possible outcomes are reforms that were implemented but also resisted (*j* = 1); and reforms that were implemented without resistance (*j* = 2). *Z<sub>it</sub>* is the vector of determinants. The baseline specification includes a set of control variables and fixed effects capturing country-specific political, demographic, as well as economic characteristics, and is given by the following equation:

$$\log\left(\frac{\Pr(\text{outcome}_{it}=j)}{\Pr(\text{outcome}_{it}=0)}\right) = \gamma_j Z_{it} + \beta_j X_{it} + \alpha_{g(i)} \quad \text{for } j = 1,2 \quad (3.2.2)$$

where *X<sub>it</sub>* denotes the vector of controls,  $\alpha_{g(i)}$  denotes country income group fixed effects where  $g(i) \in \{AE, EM, LIC\}$  denotes the income group of country *i*. The sources for variables

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in  $Z_{it}$  and  $X_{it}$  are indicated in Annex Table 3.2.2. The left-hand side of the equation corresponds to the log of the relative-risk ratio of implementation outcome  $j$  relative to the base outcome.

Annex Table 3.2.3 reports the results of multinomial logistic regressions analyzing the effect of various factors on reform outcomes. The explanatory variables are grouped into seven categories: macroeconomic context, macroeconomic framework, external factors, political factors, reform strategies, and control variables. Each coefficient indicates the relative risk ratio for a one-unit increase in the corresponding explanatory variable—or, more precisely, the exponent of the corresponding coefficient in  $\gamma_j$  in equation 3.2.2. A coefficient greater (lower) than 1 suggests that an increase in the explanatory variable is associated with a higher (lower) probability of reform implementation (with or without resistance) relative to the probability of reforms being discussed but not being implemented.

### Online Annex Table 3.2.2. Historical Overview of Reforms Attempts: Other Data Sources

Indicator	Sources
Population age shares	World Bank, World Development Indicators
Real GDP growth	IMF, World Economic Outlook database
Financial crises	Laeven and Valencia (2020); Nguyen and others (2022)
Inflation	International Monetary Fund, World Economic Outlook database
Fiscal space	Kose and others (2022)
Exchange rate arrangements	Ilizetki and others (2019)
Fiscal rules	Davoodi and others (2022)
Monetary framework	Romelli (2022)
Globalization index	Gygli and others (2019)
Trade flows and trade partners	Conte and others (2023)
IMF program	IMF, Monitoring of Fund Arrangements (MONA)
Political factors	Scartascini, Cruz, and Keefer (2021); Herre (2023)
Income inequality	Solt (2020)
Electoral democracy index	Coppedge and others (2024)

The results in Annex Table 3.2.3. show that the role of the macroeconomic and political context for the likelihood that reform proposals are implemented is not always consistent, with the magnitude of the coefficient (whether greater than 1 or not) and the significance varying across reform areas. For example, the coefficients under “Macroeconomic context” provide supportive evidence for the hypothesis that financial crises induce reforms, but only for *PMR-electricity* reforms that are resisted.<sup>4</sup> In terms of political factors, having a large margin of majority by the government in the legislature seem to make it easier to implement reforms, but the results are only significant for less-resisted *PMR-electricity* reforms and resisted *migrant integration* reforms. On

<sup>4</sup> Earlier studies pointed to crises as a highly robust driver of reform (for instance, Mahmalat and Curran, 2018; Duval, Furceri and Miethe, 2020, among others). However, there are two notable differences with this analysis. First, the analysis in this chapter looks at the likelihood of implementing reform proposals, while in previous studies the base no-reform outcome confounded reform failures with situations in which reforms were not even considered (as possible they were not even needed). Second, the previous studies did not include *migrant integration* reforms nor *elder LP* reforms.

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the other hand, the variables capturing the use of reform strategies are significantly associated with a higher probability of reform implementation (with or without resistance) across all reform areas.

Online Annex Table 3.2.3. Multinomial Logistic Estimates on the Effects of Historical Contexts and Reform Strategies on the Odds Ratio of Reform Implementation

	PMR-Electricity		Elder LP		Migrant Integration	
	Imp (R)	Imp	Imp (R)	Imp	Imp (R)	Imp
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Macroeconomic context</i>						
GDP growth deviation from 10-year average	0.910** (0.042)	0.944** (0.027)	0.981 (0.054)	0.980 (0.086)	0.950 (0.119)	0.934 (0.059)
Recession	0.220** (0.155)	0.290** (0.142)	0.967 (0.885)	0.360 (0.348)	0.182* (0.171)	0.328 (0.226)
Financial crisis	2.090** (0.624)	1.402 (0.398)	0.850 (0.513)	0.650 (0.318)	0.551 (0.229)	0.903 (0.419)
<i>Macroeconomic framework</i>						
Inflation deviation from 1-year average	1.001 (0.001)	0.998*** (0.001)	0.996*** (0.001)	1.002** (0.001)	0.981 (0.025)	0.987 (0.023)
Strong fiscal position	1.084 (0.305)	0.933 (0.191)	0.293** (0.160)	0.519 (0.231)	0.565 (0.202)	1.440 (0.369)
Flexible exchange rate	1.005 (0.041)	0.997 (0.031)	0.952 (0.042)	0.898** (0.044)	1.039 (0.061)	0.989 (0.029)
Strong fiscal/monetary framework	1.354 (0.333)	1.425* (0.276)	0.805 (0.275)	0.437** (0.171)	1.494 (0.522)	0.904 (0.199)
<i>External factors</i>						
Share of countries implementing the reform in the past 5 years	1.042 (0.610)	3.245** (1.593)	4.223 (5.599)	1.684 (1.730)	0.238** (0.166)	1.850 (1.218)
Globalization index	0.892*** (0.027)	0.957** (0.021)	1.066 (0.045)	1.099** (0.047)	0.991 (0.037)	1.009 (0.030)
Engaged in regional trade agreements	1.000 (0.006)	0.997 (0.005)	1.122*** (0.009)	0.977** (0.011)	0.999 (0.008)	1.000 (0.008)
IMF program	0.789 (0.337)	1.130 (0.304)	0.798 (0.639)	3.993** (2.581)	1.208 (0.762)	0.760 (0.320)
<i>Political factors</i>						
Chief Executive, years in office	1.045* (0.025)	1.010 (0.019)	0.982 (0.067)	1.076 (0.054)	0.979 (0.045)	0.926* (0.039)
Year of election	0.371** (0.159)	0.534*** (0.128)	2.267* (0.985)	0.574 (0.244)	0.369 (0.249)	1.282 (0.426)
Years until next election	1.166 (0.145)	0.865* (0.075)	1.560** (0.323)	1.014 (0.190)	0.963 (0.208)	0.999 (0.130)
Large margin of majority	1.395 (0.382)	1.595*** (0.258)	0.517 (0.265)	0.959 (0.342)	2.341*** (0.767)	1.128 (0.264)
Leader ideology (left)	0.689** (0.100)	0.683*** (0.070)	0.926 (0.220)	1.114 (0.225)	1.139 (0.220)	1.250 (0.196)
<i>Reform strategies</i>						
Consultation/communication strategy	3.477*** (1.055)	1.295 (0.271)	4.306** (2.702)	0.844 (0.382)	2.824** (1.230)	1.568* (0.408)
Complementary/compensatory measures	3.652*** (1.096)	0.982 (0.201)	3.723** (2.007)	3.402*** (1.340)	2.162* (0.882)	1.627* (0.415)
Constant	33.882** (54.285)	17.745** (21.729)	0.000*** (0.000)	0.000*** (0.000)	0.286 (0.693)	0.131 (0.278)
Observations	995	995	637	637	463	463
Income group fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Model Chi-Squared Test	797.5	797.5	30937	30937	2899	2899

Source: IMF staff calculations.

Note: Estimations include controls for lagged reform index for PMR-Electricity, exports of goods and services as a share of GDP, share of population over 65 years old, deviation of Gini coefficient from 10-year average, electoral democracy index, and country income group fixed effect. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent level, respectively. The coefficients report changes in the odds ratio of reform implementation outcomes. Value greater (smaller) than 1 indicates increase (decrease) in the odds ratio relative to the baseline outcome (reforms that were discussed but never implemented). Robust standard errors are reported in parentheses. Imp (R) = Implemented and resisted; Imp = Implemented; LP = labor participation; PMR = product market regulation.

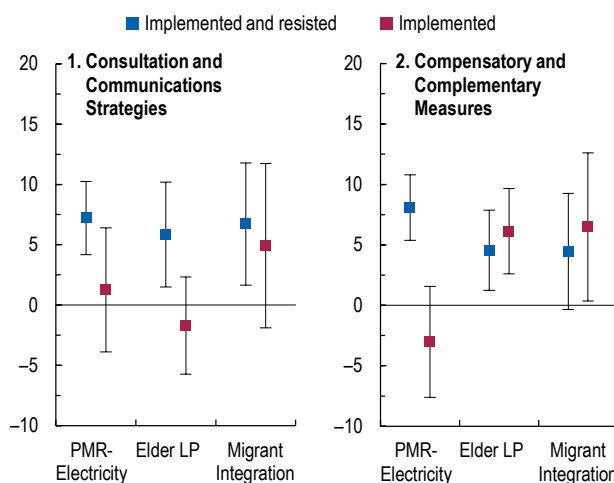


Zooming in on the role of reform strategies, Annex Figure 3.2.2 reports the average marginal effects of both consultation and communications strategies and the use of mitigating measures (that is, compensatory and complementary measures) on the likelihood of reform implementation, for both resisted and unresisted reforms. The marginal effects are calculated at the observation level and then averaged across the sample. The estimates in Annex Figure 3.2.2 indicate that the use of consultation and communications strategies is associated with a 6-8 percentage points higher probability of implementation in the case of resisted reforms. Additionally, the use of compensatory and complementary measures is associated with a 5-8 percentage point increase in the

probability of resisted reforms being implemented, and a 6 percentage point increase of implementation in the case of unresisted *elder LP* and *migrant integration* reforms.<sup>5</sup> To sum up, the analysis reveals that reform attempts involving explicit efforts to consult or communicate with social stakeholders, as well as measures to complement the reforms or to compensate those affected, are more likely to be implemented, especially when reforms face resistance.

To gauge the relative importance of reform strategies compared to other factors in explaining reform outcomes, Figure 3.4 in the chapter reports the results of a dominance analysis in a multinomial logistic regression framework based on Equation 3.2.2. This method compares the goodness-of-fit, measured by the regressions' pseudo-R<sup>2</sup>, across all sub-models including different combinations of explanatory factors, and decomposes the variables' relative contribution to the overall fit. Figure 3.4 reports the predictive power of the seven variable categories over the variability of the multinomial logit model. As a robustness check, the dominance analysis is re-estimated by including the determinants of interest in the multinomial logistic regressions individually, rather than in clusters, to allow for more flexibility in model selection. The results confirm that reform strategies remain the most important in predicting reform outcomes, with a joint explanatory power ranging from 25 to 45 percent across reform areas.

Online Annex Figure 3.2.2. Change in the Probability of Occurrence of a Reform Implementation (Percentage points)



Source: IMF staff calculations.  
 Note: The average marginal effects are derived from multinomial logistic regressions (equation 3.2.2) where the base outcome is reform attempts that are not implemented. The marginal effects are calculated for each observation and then averaged across the sample. The confidence spikes represent 90 percent confidence intervals. LP = labor participation; PMR = product market regulation.

<sup>5</sup> It should be noted that the relative risk ratios reported in Annex Table 3.2.3 can have different levels of statistical significance than the corresponding variables' marginal effects presented in Annex Figure 3.2.2. This discrepancy can result from the non-linear relationship between marginal effects and the estimated parameters, especially when the parameters are only marginally significant.

### Online Annex 3.3. Attitudes Toward Reforms—Survey Analysis

To study the drivers of people’s attitudes towards reforms, the chapter conducted two online large-scale surveys with embedded randomized control trial experiments.<sup>6</sup> This annex uncovers the details of the analysis based on these surveys that is presented in the chapter. Additional details about the surveys, including the questionnaires, are presented in Albrizio and others (2024a and 2024b).

- The first survey focuses on reforms to ease product market regulation (*PMR reforms*) and covers Mexico, Morocco, and South Africa. In all three countries the regulatory stance of network sectors is relatively tight compared to peers, in either the electricity sector, the telecommunications sector, or both (IMF Structural Reform Database; World Bank-OECD database).<sup>7</sup> Moreover, the need to foster competition in networks sectors was highlighted in at least one IMF Staff Report over the past three year. Feasibility to conduct representative online surveys also conditioned the sample selection.
- The second survey tests attitudes towards policies to integrate foreign-born workers into the labor market (*migrant integration policies*). It focuses on a subset of policies compared to the historical analysis and the examples of policies provided in the questionnaire are discussed in the chapter. The analysis covers Canada, Italy, and the United Kingdom. Each of these countries has experienced significant inflows of different types of immigrants (i.e., refugees, economic migrants, etc.), so that the findings can be relevant for a broader range of advanced economies. Additionally, the 2020 Migrants Integration Policy Index indicates a positive gap in migrant labor market mobility and integration indices in all three countries, suggesting there is still scope for policy improvements.<sup>8</sup> Lastly, immigration remains a highly salient topic among the public in all three countries, raising the importance of understanding the factors driving support for policies aimed at better integrating immigrants into domestic labor markets.

The surveys were conducted between June 7 and July 12, 2024, by YouGov, a global leader in data analytics, without revealing the institutional source of the questionnaire to prevent response biases. A total of 12,600 respondents (2,100 per country) were selected from a representative preselected pool based on each country’s demographic profile along age, gender, education, employment status, and regional distribution of the population. Propensity score matching was applied to improve the alignment with the population sample. All surveys were conducted online with residents aged 18 years and older and administered in the local languages. Additionally, participants in the migrant integration survey were required to be born in the country. Standard checks and protocols were employed to validate the data, ensuring its reliability, and guarding

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<sup>6</sup> Both surveys have been pre-registered in AsPredicted and certified by the German Association for Experimental Economic Research.

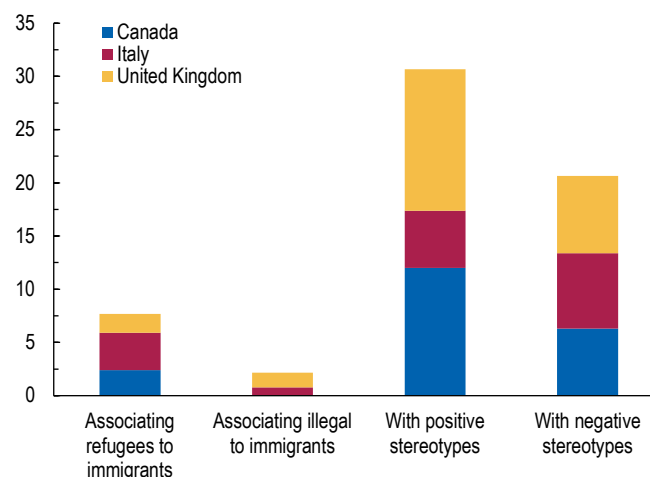
<sup>7</sup> The regulatory stance in the tighter network sector in the three countries ranks between the 6th and 52nd percentiles among 46 emerging market peers—with a lower percentile indicating a tighter regulatory stance—according to the IMF Structural Reform Database. For Mexico and South Africa, the regulatory stance in network sectors (entry barriers) ranks between the 12th and 24th percentiles—with a lower percentile also indicating a tighter regulatory stance—among 67 advanced and emerging market peers, based on the World Bank-OECD database.

<sup>8</sup> According to the 2020 Migrants Integration Policy Index, Canada scores 76 over 100 in immigrants labor market mobility and 80/100 overall, Italy 67/100 and 58/100 and United Kingdom 48/100 and 56/100, respectively.

against potential respondents’ inattention. The questionnaire was pretested with a small group of participants in two pilot rounds, which allowed to refine the design and improve the multiple-choice questions.

The design of the questionnaire has the following common features across surveys. First, it collects socioeconomic information on respondents. Second, it elicits beliefs about societal values, institutions, and policies related to the specific reform context. Third, it provides one of multiple information treatments, depending on which treatment group the respondent was randomly assigned to, or no information for those randomly assigned to the control group. Finally, it gathers responses to construct the three main outcomes variables: support for policies; perception of the effects of the policies; and willingness to sign a petition in support or against the reform.

**Online Annex Figure 3.3.1. Stereotypes**  
(Share of respondents, percent)



Source: IMF staff calculations based on IMF-YouGov survey.  
Note: The figure shows the overall share of respondents that associate immigrants to refugees or to illegal migrants, and that have positive or negative views about immigrants’ personal traits and their impact on the economy and society. The different colors indicate the proportion of respondents by country.

To capture respondents’ support for policies, the surveys include the following questions:

- *PMR reforms* questionnaire - Respondents are asked “Do you support or oppose allowing private companies to produce and sell [electricity / telecommunication services] in the country?” and are prompted to select one option in a Likert scale ranging from strongly support to strongly oppose.
- *Migrant integration policies* questionnaire - Respondents are given a list of four policies: (i) giving immigrants work authorization as soon as they arrive, (ii) making it quicker and easier to recognize immigrants’ work experience and qualifications from other countries, (iii) providing job training and job search assistance for immigrants, (iv) Supporting immigrants in creating new businesses (through access to financing, mentoring, and networking). Respondents are then asked “Would you support or oppose the following policies to help immigrants find jobs in the country?” and prompted to select, for each policy, one option between strongly support and strongly oppose. The answers to these four policies are combined in a country-specific index, following Anderson 2008, which is further standardized across countries to ease the interpretation.

To capture respondents’ perceptions of the effects of policies, the questionnaires employ the following strategies:

- *PMR reforms* questionnaire – Respondents are asked two questions. The first question focuses on their overall perception: “Do you view it as beneficial or detrimental for consumers when several companies compete to provide services such as [electricity / telecommunications]?”.

## WORLD ECONOMIC OUTLOOK

Respondents are prompted to select an option between highly beneficial to highly detrimental. The second question focuses on their perceptions related, separately, to the cost, quality, and access to utility services: “How do you think private companies competing to provide [electricity / telecommunication] services change things? Think about the cost, the quality and access to the [electricity / telecommunication] services?”. Respondents are prompted to select one option for each of these three dimensions, from significantly cheaper or better, to significantly pricier or worse.

- *Migrant integration policy* questionnaire – Respondents are asked: “Imagine that the government implemented measures to integrate immigrants in the labor market. How do you think this would affect the following elements in your country?”. The elements consist of (i) jobs for people born in the country, (ii) money the government gets from taxes, (iii) crime immigrants commit. Respondents are prompted to indicate how they think that the policy would impact on each element, in a scale ranging from strongly decrease to strongly increase. Similarly to the policy support, an index is created based on these answers.

Using the data collected in each survey, the main analysis is based on variations of the following equation:

$$y_{ic} = \beta_1 T_{ic} + \beta_2 \mathbf{soc}_{ic} + \beta_3 \mathbf{bel}_{ic} + \theta_c + \varepsilon_{ic} \quad (3.3.1)$$

where  $y_{ic}$  is the main variable of interest for the individual  $i$  of country  $c$ , which is, alternatively, support for *PMR reforms* or *migrant integration policies*, beliefs about the effect of policies on various outcomes, and willingness to sign a petition. The primary explanatory variable ( $T_{ic}$ ) tests three information strategies aimed at enhancing support for reforms. Other covariates include individuals’ socioeconomic characteristics ( $\mathbf{soc}_{ic}$ ), such as demographics, income, education, employment, social engagement, and political leaning. Additionally, a vector ( $\mathbf{bel}_{ic}$ ), includes various beliefs and perceptions depending on the survey, spanning from trust in government and institutions to specific reform-related aspects, such as views on the government’s role in the economy and stereotypes about immigrants. Stereotypes are based on respondents’ perceptions of immigrants, considering traits (like hard-working, lazy, dangerous, friendly, refugees, and illegal immigrants) as well as their perceived impact on the economy. These stereotypes are elicited through open-ended questions without predetermined categorization and analyzed using large language models. Annex Figure 3.3.1 provides an overview of respondents’ perceptions about immigrants, categorized by country. Finally, the model specification accounts for country fixed effects ( $\theta_c$ ), and  $\varepsilon_{ic}$  represents the error term.

### Annex 3.3.1. Predicting Policy Support—The Role of Beliefs

Before diving into the results of the experiment analysis, this subsection provides an overview of the intrinsic role of beliefs and individual socioeconomic characteristics in explaining support for policies, independently of the information provided to respondents. The correlations between people’s beliefs and support for *PMR reforms* and *migrant integration policies* discussed in the main text are based on Equation 3.3.1 and shown in Annex Figures 3.3.2 (panel 1 and 2, respectively).

The correlation between individuals' socioeconomic characteristics and reform support, instead, are reported in Annex Figures 3.3.2, panel 3 and 4 (for *PMR reforms* and *migrant integration policies*, respectively):<sup>9</sup>

- Support for *PMR reforms* is lower among those working in, or who know someone that works in, public utility companies, as they may fear the costs of opening network sectors to competition. Additionally, support for reforms tends to increase with age, income, and education; while it tends to decrease among women, respondents with children, as well as those that identify themselves as left-leaning individuals.
- Support for *migrant integration policies* is also significantly correlated with individual characteristics highlighted in the literature studying support for immigration (Alesina, Miano and Stantcheva 2023b, Haaland and Roth 2020). In particular, support tends to increase with the education of respondents and is higher for people who are familiar with immigrants and other cultures (those with immigrant friend, or lived abroad, or do charity work). Politically right-leaning respondents are more likely to oppose immigration policies as well as respondents working in low-skilled occupations, potentially due to labor market competition concerns.

To gauge the relative role of beliefs and perceptions versus socioeconomic characteristics, dominance analysis (Luchman, 2021) is used to decompose the share of the overall variance of people's support for *PMR reforms* or *migrant integration policies* that is explained by the different explanatory variables (similarly to Dechezleprêtre and others, 2022, and Dabla-Norris and others, 2023). The results are reported in Figure 3.5 in the main text. As shown in Equation 3.3.1 above, the explanatory variables are socioeconomic characteristics, the treatment indicators, country fixed effects, and the beliefs and perceptions. For *PMR reforms*, the latter are clustered in five groups: *Market Economy*, *Distribution and Equity*, *Trust and Corruption*, *Views and Satisfaction with the Sector*, and *Knowledge and Effect of Policies*. For *migrant integration policies*, beliefs and perceptions are clustered into *Stereotypes*, *General Trust and Universalism*, *Contact with other cultures*, and *Knowledge and Effect of Policies*. For each reform area, the dominance analysis determines the relative importance of these clusters in a multiple regression framework based on Equation 3.3.1. By comparing the impact of removing each predictor on the model's overall explanatory power, measured by the regressions'  $R^2$ , this method decomposes the clustered relative contribution to the overall fit. Overall, beliefs and perceptions explain about 80 percent of support for policies.<sup>10</sup>

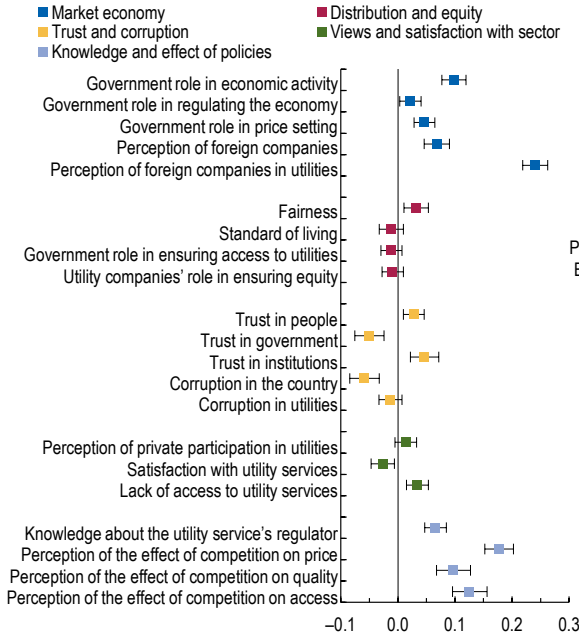
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<sup>9</sup> Following Dechezleprêtre and others (2022), equation 3.3.1 is estimated without including the beliefs block of variables. This is because some belief and perception might be caused by the socioeconomic characteristic and including both variables might dilute the role of socioeconomic variables.

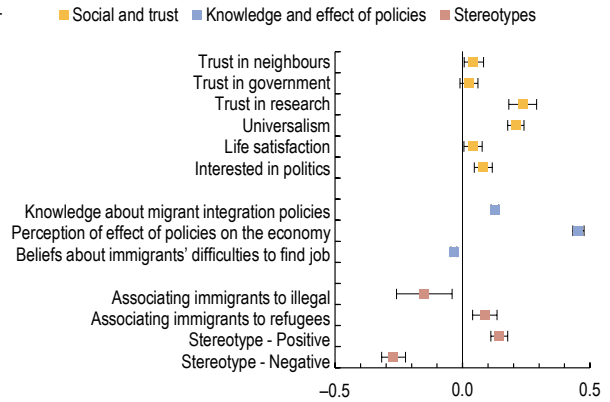
<sup>10</sup> Restricting the dominance analysis for *PMR reforms* to the control group yields similar results: beliefs and perceptions account for 81 percent of policy support while individuals' characteristics explain only 9 percent (compared to 80 percent and 6 percent, respectively, in the baseline regression); knowledge and perceptions about the effect of policies explain 29 percent of policy support (compared to 37 percent in the baseline regression). The variance decomposition results for *migrant integration policies* remain essentially unchanged when the sample is restricted to the control group.

Online Annex Figure 3.3.2. Correlation between People's Beliefs and Socioeconomic Characteristics with Policy Support  
(Coefficients)

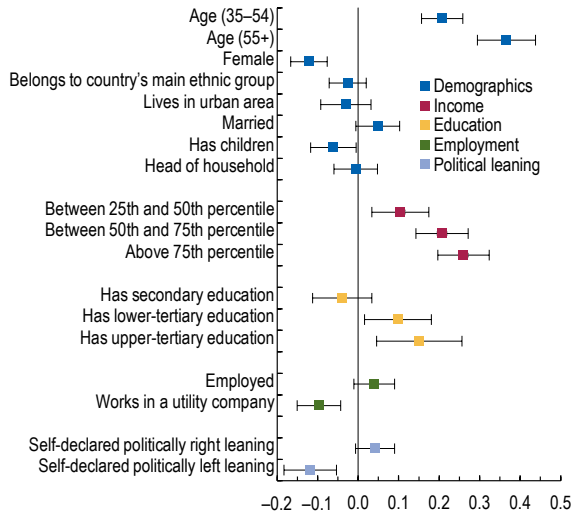
1. PMR: Beliefs



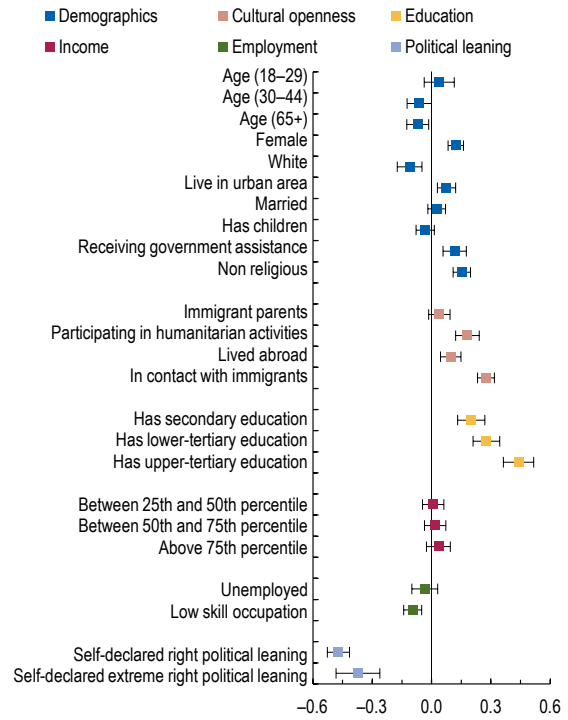
2. Migrant Integration: Beliefs



3. PMR: Socioeconomic Characteristics



4. Migrant Integration: Socioeconomic Characteristics



Source: IMF staff calculations based on IMF-YouGov survey.

Note: The figure shows the estimated coefficients from ordinary least squares regressions of the support for PMR reforms (electricity and telecommunication sectors combined) or migrant integration policies on individuals' beliefs and perceptions (panels 1 and 3) and on individuals' socioeconomic characteristics (panels 2 and 4). The regressions in panels 1 and 3 control for individuals' socioeconomic characteristic, treatment indicators, and country fixed effects. The regressions in panels 2 and 4 control for treatment indicators and country fixed effects. A positive coefficient indicates an increase in policy support. Bars represent 90 percent confidence intervals.



### Annex 3.3.2. Information Strategies to Boost Reform Acceptability

The chapter examines three information strategies aimed at boosting support for reforms. Respondents were randomly assigned different information treatments through an illustrated slideshow embedded in each questionnaire. As detailed in Table 3.1 in the main text, the first hypothesis tests the importance of raising awareness about the costs of maintaining the status quo (that is, the costs of non-reforming) in the electricity and telecommunications sectors. Respondents to the *PMR reforms* survey received information on the price, quality, and access to electricity or telecommunications services (Annex Figure 3.3.3 presents the slideshow of the status-quo treatment used for the *PMR survey* in South Africa related to electricity services).

The second hypothesis evaluates the impact of information about the beneficial effect of policies related to *PMR* and *migrant integration* reforms, respectively (Annex Figure 3.3.4 includes part of the treatment for the *migrant integration* survey in the United

Kingdom). Finally, the third hypothesis tests the importance of countering the narrative of cultural and value differences between natives and immigrants (Alesina, Miano and Stantcheva 2023b). This treatment presents real-life experiences of three immigrants and their struggle in the labor market, inspired by newspaper articles (Annex Figure 3.3.5). The impact of these treatments on support for reforms are tested empirically by estimating the effects of the treatment indicators of interest,  $T_{ic}$ , in Equation 3.3.1.



from the International Energy Agency (IEA) are over of the South African Rand vis-à-vis the US

able in South Africa than in richer  
companies in South Africa report  
cuts, for about 2 hours and 20



The main results for the two surveys are reported in Annex Table 3.3.1 and Annex Table 3.3.2. Columns (1)-(3) of Annex Table 3.3.1 report the effect of the treatments on support for *PMR reforms* in the electricity sector (column 1), the telecommunications sector (column 2), and in both sectors combined (column 3). Column (1) of Annex Table 3.3.2 show the impact of the treatments on support for *migrant integration policies*. The results underscore the importance of information strategies to boost support for reforms and, in particular, are consistent with the hypothesis that explaining the effect of policies (*Effect of Policies*, and *Status quo + Effect of Policies* treatments outlined in Table 3.1 in the main text) on various outcomes people care about (for instance, the price of utility services, or the level of crime) can significantly increase reform support. The effect is also significant and even stronger when the information treatment delves on the how policies work (*Effect of Policies + Mechanism*). The latter is particularly important to shift support of individuals with misperceptions about immigrants and their effect on the economy as well as politically right leaning respondents (Annex Table 3.3.2, column 2).<sup>11</sup> Moreover, these results are broadly consistent when the regressions are estimated at the country level, as shown in columns (4)-(6) of Annex Table c3.3.1 (for Mexico, Morocco and South

### Online Annex Figure 3.3.4. Example of Treatment: Effect of Policies

In the UK, immigrants can wait **from a few months to several years** before receiving permission to work. Research studies\* find that when immigrants start working **soon after they arrive, the economy gets bigger and stronger.** (\*studies by Harvard University and the International Monetary Fund)



Source: IMF-YouGov survey questionnaire.

Note: The figure reports a snapshot of the treatment *effect of policies* for the migrant integration reforms survey conducted in the United Kingdom. This treatment is presented to respondents of both surveys, but the text and illustrations are tailored by survey and to the country context. The PMR survey covers Mexico, Morocco, and South Africa. The migrant integration survey covers Canada, Italy, and United Kingdom.

### Online Annex Figure 3.3.5. Example of Treatment: Immigrants' Stories

Kabir, a **software engineer** from India, immigrated to Canada with dreams of a better future for himself and his family.

Upon arriving in Canada, Kabir **applied for more than 100 IT jobs over two years with no success**, due to lack of local experience. **He needed local experience to get a job, but he needed to get a job to get local experience.**

Kabir worked long hours in multiple jobs unrelated to his profession, **grappling with a profound sense of dissatisfaction**, until one day a friend informed him about a program to help professionals trained abroad.

After several months attending night courses to enhance his English and IT skills, **Kabir finally found a job as IT technical support in a bank.** He is delighted to reside in Canada with his family.

Source: IMF-YouGov survey questionnaire.

Note: The figure reports a snapshot of the treatment *Immigrants' stories* for the *migrant-integration reforms* survey. This treatment is presented only to respondents of this survey and consists of three immigrants' job market integration experiences. Each story takes place in one of the surveyed countries and it is inspired by BBC and The Guardian newspaper articles. The *migrant-integration* survey covers Canada, Italy, and the United Kingdom.

<sup>11</sup> Column 2 reports the marginal effect for individual with negative stereotypes about immigrants for illustration. However, the same result also hold for politically right leaning respondents.



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Africa, respectively) and columns (3)-(5) in Annex Table 3.3.2 (for Canada, Italy and the United Kingdom, respectively).<sup>12</sup>

**Online Annex Table 3.3.1. PMR Reforms: Effect of Information Strategies on Reform Support, Beliefs about the Effect of Policies, and Willingness to Sign a Petition**

	Reform support						Beliefs about the effect of policies on:			Signing a petition to:		Reform support weighted
	(1)	(2)	(3)	(4)	(5)	(6)	Cost	Quality	Access	Facilitate entry	Limit entry	
Status quo	0.08** (0.04)	-0.00 (0.04)	0.03 (0.03)	0.09** (0.05)	-0.00 (0.05)	0.01 (0.05)	0.03 (0.03)	-0.02 (0.03)	-0.07** (0.03)	0.00 (0.01)	0.00 (0.01)	0.00 (0.04)
Status quo + effect of policies	0.41*** (0.04)	0.27*** (0.03)	0.34*** (0.03)	0.36*** (0.04)	0.31*** (0.05)	0.34*** (0.05)	0.34*** (0.03)	0.24*** (0.03)	0.23*** (0.03)	0.09*** (0.01)	-0.07*** (0.01)	0.31*** (0.05)
Number of observations	3,186	3,101	6,287	2,095	2,096	2,096	6,286	6,286	6,282	6,283	6,281	6,287
R <sup>2</sup>	0.37	0.32	0.35	0.39	0.29	0.27	0.16	0.16	0.17	0.17	0.15	0.33
Sector	Elec.	Tel.	Both	Both	Both	Both	Both	Both	Both	Both	Both	Both
Sample	All	All	All	MEX	MAR	ZAF	All	All	All	All	All	All-weighted
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Source: IMF staff calculations based on IMF-YouGov survey.

Note: The table presents the results of regressions analyzing the impact of treatments on reform support, beliefs about the effects of policies, and the willingness to sign a petition. These regressions control for a set of individual characteristics, beliefs, country fixed effects, and the pre-treatment support for policies. Columns (1)–(3) display the results for reform support, from cross-country regressions, in the sectors of electricity (column 1), telecommunications (column 2), and both electricity and telecommunications combined (column 3). Columns (4)–(6) present the country-specific results for reform support, for both sectors combined, in Mexico (column 4), Morocco (column 5), and South Africa (column 6). Columns (7)–(9) report the impact of the treatments on beliefs about the effect of policies on cost, quality, and access to services for the two sectors combined. Columns (10) and (11) show the impact of the treatments on the willingness to sign a petition facilitating or limiting the entry of private firms, respectively. Column (12) reports the results on reform support from a cross-country regression using weighted-OLS, where the weights match the within-country distribution of age, gender, employment status, education, and geographic location. Robust standard errors are reported in parentheses. The symbols \*, \*\*, and \*\*\* indicate that the coefficients are statistically significant at the 10 percent, 5 percent, and 1 percent levels, respectively. Elec. = electricity; Tel. = telecommunications; MEX = Mexico; MAR = Morocco; ZAF = South Africa; PMR = product market regulation.

To illustrate the underlying mechanisms behind the additional support by those that received the information treatment, Equation 3.3.1 is estimated with  $y_{ic}$  as the indicator capturing

<sup>12</sup> Due to the limited time frame of the analysis, it is not possible to test for the persistence of the observed effect. However, Haaland and Roth (2020) found that when assessing the impact of providing evidence on the labor market effects of immigration on public support for immigration, the treatment effects persisted in a follow-up study. This suggests that information might have a lasting impact on people's perspectives.

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respondents' beliefs about the effect of policies on different variables: the price, quality, and access to utility services in the *PMR* survey; and jobs for native workers, public finances, and crime rates in the *migrant integration* survey. In the *PMR* case, the *Status quo + Effect of Policies* treatment significantly shifts people's perceptions regarding the effect of competition on the cost, quality and access to electricity and telecommunication services (Table 3.3.1, columns 7-9). For example, the share of respondents who believe that fostering competition positively impacts access to electricity and telecommunication services increases by about 3 percentage points. In the *migrant integration* survey, all treatments successfully shift beliefs about the impact of policies on public finances, crime rates, and jobs for native workers (Table 3.3.2, columns 6-8). The effect is particularly large for the share of people who believe that providing immigrants with the tools to work can reduce crime rates. In summary, explaining the effect of policies and how they work is a crucial channel for increasing reform support across very different policy areas.

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**Online Annex Table 3.3.2. Migrant Integration Policies: Effect of Information Strategies on Reform Support, Beliefs about the Effect of Policies and Willingness to Sign a Petition**

	Reform support					Beliefs about the effect of policies on			Signing a petition			Reform support weighted
	Negative stereotype		By country			Public finances	Crime rates	Natives' jobs	Pro-reform	Against-reform	Negative stereotype	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Effect of policies	0.23*** (0.03)	0.08 (0.07)	0.27*** (0.04)	0.24*** (0.05)	0.17*** (0.05)	0.23*** (0.03)	0.38*** (0.03)	0.31*** (0.03)	0.00 (0.02)	-0.03** (0.01)	-0.08** (0.04)	0.21*** (0.04)
Effect of policies + mechanism	0.29*** (0.03)	0.16** (0.07)	0.34*** (0.04)	0.25*** (0.05)	0.26*** (0.04)	0.25*** (0.03)	0.38*** (0.03)	0.28*** (0.03)	-0.02 (0.02)	-0.04*** (0.01)	-0.08** (0.04)	0.27*** (0.03)
Immigrants' stories	0.11*** (0.03)	-0.04 (0.07)	0.12*** (0.04)	0.09* (0.05)	0.13*** (0.05)	0.06 (0.03)	0.12*** (0.03)	0.02 (0.03)	0.01 (0.02)	-0.03*** (0.01)	-0.11*** (0.04)	0.10*** (0.03)
Observations	5,707	5,707	1,904	1,889	1,914	5,707	5,708	5,708	5,708	5,708	5,708	5,707
R <sup>2</sup>	0.54	0.54	0.62	0.48	0.55	0.22	0.30	0.34	0.25	0.20	0.20	0.55
Sample	All	All	GBR	CAN	ITA	All	All	All	All	All	All	All
Estimate	Average Effect	Marginal Effect	Average Effect	Average Effect	Average Effect	Average Effect	Average Effect	Average Effect	Average Effect	Average Effect	Marginal Effect	Average Effect
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: IMF staff calculations based on IMF-YouGov survey.

Note: The table presents the results of regressions analyzing the impact of treatments on reform support, beliefs about the effects of policies, and the willingness to sign a petition. These regressions control for individual characteristics, beliefs, and country fixed effects. Column (1) displays the results for reform support from a cross-country regression. Column (2) reports the marginal effect for respondents with negative stereotypes about immigrants. Columns (3)-(5) present the country-specific results for reform support for United Kingdom (column 3), Canada (column 4), and Italy (column 5). Columns (6)-(8) report the impact of the treatments on beliefs about the effect of policies on public finances, immigrants' crime rate, and natives' jobs and wages. Columns (9) and (10) show the impact of the treatments on the willingness to sign a petition in support of policies integrating immigrants in the labor market and against, respectively. Column (11) reports the marginal effect on respondents with negative stereotypes about immigration on their willingness to sign a petition against policies to integrate immigrants. Column (12) displays the results on reform support from a cross-country regression using weighted-OLS, where the weights match the within-country distribution of age, gender, employment status, education, and geographic location. Robust standard errors are reported in parentheses. The symbols \*, \*\*, and \*\*\* indicate that the coefficients are statistically significant at the 10 percent, 5 percent, and 1 percent levels, respectively. CAN = Canada; ITA = Italy; GBR = United Kingdom.

While survey questions can directly elicit people's policy views, there is a concern that self-reported preferences may not always align with actual behavior. However, several studies have demonstrated a correlation between survey responses and real-world behaviors when both can be measured (for instance, Fehr, Epper, and Senn 2020). Although the current setting does not allow for the measurement of real-world behavior, the survey included real-stakes questions. More precisely, after eliciting policy support, both surveys asked respondents if they would be willing to sign a hypothetical petition, either in support of or against policy changes. Annex Table 3.3.1 shows that in the *PMR survey*, the information treatment significantly increased the share of respondents inclined to endorse a petition supporting the reform (column 10) and decreased the share of those willing to sign a petition against the reform (column 11). In the

*migrant integration* survey, only the share of respondents prepared to sign a petition against foreign-born workers' integration reforms significantly decreased because of the treatment (Annex Table 3.3.2, column 10). This suggests that the treatment is more effective among respondents initially opposed to integration policies. In particular, respondents with biased perceptions and negative stereotypes about immigrants, as well as politically right-leaning respondents, become less likely to sign a petition against integration policies compared to other respondents, suggesting a strong role for information strategies in correcting people's misperceptions in this reform area (Annex Table 3.3.2, column 11).<sup>13</sup> While questions about signing a hypothetical petition can serve as a proxy for actions, it is important to interpret cautiously the lack of significant effect on the willingness to sign a petition in the case of the *migrant integration* survey. The previous literature has indeed documented a gap between intentions and actions, which may be influenced by various factors such as skepticism about the petition's impact, privacy concerns, the need for more information on the reform's specifics, and reluctance to engage in follow-up actions that may require time and effort.

The baseline analysis uses unweighted Ordinary Least Squares (OLS) to estimate Equation 3.3.1, for several reasons. First, respondents were selected from representative preselected pools in each country. Moreover, there is not a clear endogenous sampling problem in terms of sample selection, so weights are not strictly required (Solon, Haider and Wooldridge 2015). Also, using weights can reduce the precision of estimates due to the added noise from boosting the importance of the intersection of demographic cells that are difficult to capture (for instance, unemployed people living in rural areas), even when robust standard errors are used.

However, despite targeting representative samples, the final survey samples do deviate somewhat from demographic targets. For instance, the *PMR survey* in some countries tends to overrepresent individuals with higher education levels, urban residents, and those currently employed, due to the inherent challenges in reaching low-skilled individuals and rural populations in low- and middle-income countries through an online survey (see Albrizio and others, 2024a, for more details). The representativeness of the *migrant integration* survey is high in the case of Italy, while the survey somewhat oversamples employed and high-income people in the case of Canada and United Kingdom (see Albrizio and others, 2024b, for more details). As a robustness check, Equation 3.3.1 is estimated using weighted least squares (WLS), where the weights used match the within country distribution of education, urbanicity, employment, gender, age, and region of residence. The main results reported in the last columns of Annex Tables 3.3.1 and 3.3.2 remain broadly unchanged.

Finally, rather than attempting to average out heterogeneity through weighting, the analysis explores whether there is a heterogeneous treatment effect in the dimensions where divergence occurs between weighted and unweighted samples—namely, education, urbanicity and unemployment for *PMR reforms*, and unemployment and income for *migrant integration policies*. In

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<sup>13</sup> Annex Table 3.3.2, column 11, reports the marginal effect for individuals with negative stereotypes about immigrants for illustration. However, the results also hold for the other categories mentioned.

both cases, the analysis does not reveal any significant changes, confirming the appropriateness of using unweighted OLS analysis due to the gain in precision at no apparent cost.

### Annex 3.3.3. Understanding People's Concerns to Improve Policy Design

Informing the public opinion about the need for policies and the reform effect is crucial but it is not enough. Concerns about the distributional consequences and other short-term effects from reforms also hinder reform support. Leveraging the experimental setup of the survey, respondents are first asked why they do not support the policy change and, second, are asked if they would instead support the reform if the government committed to additional hypothetical measures, related to their concerns. Figure 3.7 in the main text reports the results from this exercise. The hypothetical mitigating measures considered, depending on the survey and the concern indicated, include the following (see Albrizio and others, 2024a and 2024b, for more details):

- *PMR reforms* – For respondents expressing concerns about the cost and quality of services, or risks related to national security if the sector is handled by private companies, the corresponding mitigating measure is the creation of an independent regulatory agency (to ensure, for instance, that companies compete to deliver high-quality services at fair prices). Next, for those with concerns about access and affordability of services for the poorest, the mitigating measure assumes the government commits to ensuring price affordability for the poorest households and adequate coverage across the country, including in remote rural areas. Finally, for respondents concerned about the effect of *PMR reforms* on jobs, the mitigating measure assumes temporary jobs protection and job-training programs for affected workers.
- *Migrant integration policies* - For respondents with concerns related to job and wage losses, or concerns about fairness toward native workers, multiple mitigation measures were outlined in the questionnaire: (i) active labor market policies to facilitate the reallocation of workers (since previous studies show that native workers often move up the skill and wage ladder when there are migrant inflows); (ii) temporarily lower tax rates or social security payments to provide financial relief for negatively affected workers; (iii) measures to improve the skill and geographical allocation of migrant workers and reduce pressure at specific immigrant entry points, including domestic policies (such as migrant-tailored online platforms for job search and mentoring programs) and cross-country coordination (to oversee and ease the integration of foreign-born workers across countries; see Box 3.1 in the main text). For respondents concerned about overcrowding of public services, mitigating measures included the commitment to an adequate expansion of public infrastructure (schools, hospitals, and transportation), ensuring that access to public services by the native population is not jeopardized. Finally, for respondents concerned about the cost of housing, mitigating measures included public support to facilitate the construction of new housing or improve the geographical allocation of immigrants.

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Among respondents who indicate they would still oppose the reform even if the government could commit to adopt mitigating measures, the most cited reasons for continued resistance relate to trust in the parties involved in the reform and skepticisms about the ability to effectively implement the reform or mitigating measures (Annex Table 3.3.3). For instance, in the case of *PMR reforms* (panel 1), approximately 44 percent of those who remain opposed they don't want the private sector or foreign investors to handle the provision of electricity and telecommunication services, 36 percent express a lack of trust in the private sector, and 18 percent indicate they don't trust the government willingness or ability to implement an adequate reform. For those who remain opposed to *migrant integration policies*, the primary reason (54 percent) is lack of trust in the institutions' ability or willingness to implement adequate reforms.

### Online Annex Table 3.3.3. Ultimate Reason for Non-Support (Percent)

#### 1. PMR Reform

Don't want the private sector or foreign investors to control the provision of services	43.83
Don't trust the private sector	35.86
Don't trust the government's willingness or ability to implement good reforms	18.19
Other reasons	2.12

#### 2. Migrant Integration Policies

Don't trust the government's willingness or ability to implement good reforms	53.94
Don't want foreign workers in the country	14.90
Doubt effectiveness or feasibility of policies or mitigating measures	10.97
Concerns about jobs	7.28
Fiscal constraints	6.86
Other reasons	6.05

Source: IMF staff calculations based on IMF-YouGov survey.

Note: PMR = product market regulation.

## Online Annex 3.4. Selection of Country Cases

The selection of reform episodes for the country case studies applies the approach of Alesina and others (2023a) and identifies major employment protection legislation (EPL) reforms as those in which the change in the aggregate EPL index in the IMF structural reform database exceeded two standard deviations of the average change in the database. The country cases selected span a variety of countries at different income groups and geographic regions (Table 3.2 in the main text). In addition, the reforms differ in terms of the comprehensiveness (i.e., in terms of other labor market policies or reforms in other policy areas that were implemented in combination with EPL reforms), the bundling of EPL with other types of structural reforms, and the implementation status (for instance, whether it was fully or partially implemented, and whether it endured or was subsequently reversed); see Annex Table 3.4.1. The variation in the implementation status allows to study which strategies helped not only to secure reform approval, but also to ensure it could be implemented and sustained over time.

## CHAPTER 3 UNDERSTANDING THE SOCIAL ACCEPTABILITY OF STRUCTURAL REFORMS

**Online Annex Table 3.4.1. Historical EPL Reform Episodes and Additional Characteristics**

Country Cases	Country Classification at Reform	Trigger of the Reform	EPL Change	Other Labor Policy Focus	Other Major Reforms within Two Years	Reform Status
Bolivia (1985)	LIC	Economic crisis with hyperinflation	Major	Wage bargaining	Currency, fiscal, trade, SOE privatization, business deregulation, financial, etc.	Reversed in 2006
Brazil (2017)	EME	Economic crisis, new government mandate to reduce high labor cost and rigidity	Minor	Labor litigation, collective bargaining, outsourcing	Progress made in SOE privatization	Implemented with some resistance
Denmark (1990s)	AE	High unemployment rate	Minor	ALMP, Unemployment benefits	Education, housing, healthcare, pension	Implemented and sustained
France (2015–17)	AE	High unemployment rate	Minor	Collective bargaining, temporary work	Education, training, housing, unemployment insurance, corporate tax	Implemented and sustained; further planned reforms in the area slightly delayed
Georgia (2006)	LIC	New government mandate	Major	Working hours and leaves	Tax and customs, business deregulation, judicial, education, healthcare, land rights, anti-corruption	Partially unwound in 2013
Germany (2003–05)	AE	High unemployment rate	Minor	ALMP, unemployment benefits, temporary work	Education, healthcare, pension, corporate tax	Implemented with some resistance
India (2014–20)	EME	New government mandate to address long-standing structural weaknesses	N/A	Minimum wage, working conditions	Tax system, demonetization, insolvency, financial inclusion, housing, agricultural, health insurance	Legislated in 2020 but not yet fully implemented
Korea (2016)	AE	Need to boost growth and competitiveness in the face of ageing population	Minor	Minimum wage, working hours, youth employment	Corporate governance, education, environmental, and energy	Largely withdrawn due to resistance
Mexico (2012)	EME	New government mandate	Minor	Collective bargaining	Energy, telecommunication, fiscal, financial, political, and electoral	Implemented and sustained
Peru (2008)	EME	Desire to reduce informal employment by pro-reform government	Minor	Flexible working hours and easing regulation	Fiscal transparency, education, healthcare, pension, judicial, anti-corruption	Implemented with adjustments
Vietnam (2012)	LIC	Economic considerations as part of transition to market economy	Minor	Regulations on labor contracts and labor protection	Education, anti-corruption, business deregulation, social security, and welfare	New Labor Code enacted in 2012 and sustained

Source: IMF staff compilation.

Note: AEs = advanced economies; EMEs = emerging market economies; LICs = low-income countries; EPL = employment protection legislation; ALMP = active labor market policies; SOE = state-owned enterprise.



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