

Make, Take, Buy, Build, Replace: Labor Supply and the Politics of Membership

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Abstract

Rich societies face persistent labor shortages but respond in strikingly different ways—raising birth rates, importing workers, mobilizing excluded domestic groups, or automating production. We develop a framework that treats these responses, together with the coerced labor regimes of the past, as five substitutable strategies—Make, Take, Buy, Build, and Replace—arrayed along two axes: a distributive axis, which shapes returns to capital and labor, and a membership axis, which shapes access to the political community. We explain why polities facing similar demographic pressures adopt different portfolios and why those portfolios evolve in path-dependent ways, and we illustrate the framework’s reach across the political economy of fertility and care, the politics of immigration restriction, the legacies of coerced labor, and the trajectory of automation. How societies choose among these strategies shapes the distribution of economic gains, the boundaries of political membership, and, through both, the character of the international order.

Introduction

States that prioritize increasing birth rates are often the same ones that actively restrict immigration. From an economic perspective, this is counterintuitive: importing workers provides immediate labor, while pronatalist policies take decades to produce results. Governments nevertheless favor the slower, more expensive route while rejecting the quicker alternative. The pattern is not an accident of bad policy. It reveals something more fundamental: when states secure labor, they are often securing a particular kind of political community. Once the focus shifts from how much labor to whose labor, the economic logic of factor endowments and comparative advantage loses its grip. What happens to our theories of labor supply when whose labor becomes as important as how much?

The question is both local and global. Labor is secured across borders as often as within them through migration and the trade that substitutes for it, through guest-worker regimes and the global care chains that move women’s labor from poorer to richer countries, and through the offshoring of production followed by its automation and reshoring. How states approach the supply of labor shapes the movement of people, the structure of trade, the trajectory of technological change, and the boundaries of political membership itself. Immigration is increasingly seen as a key aspect of globalization politics, not just an accompanying element (Leblang and Peters 2022). Our framework broadens this perspective to encompass the full menu of strategies governments use to meet labor demands. The core issue behind labor supply concerns is deeply political: wealthy societies experience below-replacement birth rates, leading to aging populations. This results in a shrinking workforce necessary for sustaining production, tax revenue, and care for the elderly. Governments cannot ignore these demographic challenges; the crucial question is how they will respond.

We propose that five main responses should be considered collectively. These options can be viewed as an extension of the firm’s classic decision to make or buy its inputs (Coase 1937; Williamson 1985), applied at the level of the entire society.¹ A society can **Make** future workers by increasing its birth rate through

¹The Coase/Williamson framework theorizes the firm’s choice between contracting in markets and integrating production. The analogy is imperfect—the costs here are political rather than transactional—so we borrow it as an organizing analogy, not a theory of contracting.

family policies. It can **Take** labor through coercion. It can **Buy** labor by importing workers or goods that contain foreign labor. It can **Build** a larger workforce from its existing population by encouraging previously excluded groups to enter paid employment. Or it can **Replace** human labor with capital and technological automation. Here, “Make” refers to reproduction; “Take” to coercion; “Buy” to importation of workers or their embodied labor; “Build” to converting non-workers into workers; and “Replace” to automation. These five options encompass the key ways a society can address a labor shortage by influencing who performs work—whether by producing, coercing, importing, mobilizing, or substituting. Like a firm choosing the most cost-effective mix of inputs, a society selects among these strategies to obtain labor at minimal political cost, adjusting its approach as the relative costs change. We propose a framework to analyze this portfolio choice.

The relationships among the five responses are systematic and vary with the time horizon. Within a single adjustment episode—triggered by an exogenous shock such as a demographic shift, migration cutoff, or wage surge that renders the current strategy mix untenable—these strategies act as substitutes: lowering the cost of one reduces demand for the others. Restricting immigration, for example, increases the return to both automation and domestic mobilization.

Across episodes, however, the relationship reverses. Each mobilization leaves institutional residue—laws, administrative capacities, technologies, and changed expectations—that lowers the cost of the other strategies later, so, over the long run, they behave as complements. The combination of short-run substitution and long-run complementarity explains why polities facing similar pressures adopt such different portfolios and why those portfolios evolve in path-dependent ways.

Three key variables determine the selection and combination of strategies. The first is the relative scarcity of labor, which drives the need to increase supply. The second is the transaction cost involved in controlling different types of labor, influencing the most practical expansion approach. The third is the boundary of political membership, determining whether a polity is willing to accept the political implications of admitting new members in exchange for their labor. These factors collectively explain why polities facing similar shortages adopt different mixes of Make, Take, Buy, Build, and Replace. In this context, “the polity” refers to the governing coalition that sets the prices for these instruments. Since changing membership boundaries shifts both political power and income, the decision among strategies often becomes a matter of domestic contention.

The dominant tradition in trade and coalition politics, running from Stolper and Samuelson (1941) through Rogowski (1989), sees a single dimension of conflict: expanding labor supply depresses returns to incumbent workers and raises returns to capital. That distributive axis is real, but it captures only one of the two dimensions along which labor-supply politics is fought. The second is a membership axis: whether a labor supply strategy opens or closes the political community’s boundary. Immigration admits outsiders as potential members; coercion expands the labor force while denying membership altogether; pronatalism grows only the in-group; automation sidesteps the boundary by removing the need for added workers. This last exemption gives Replace political insulation—a strategy that involves no persons does not implicate political membership. Factorial models place this membership axis in the background, if it is acknowledged at all. Our theoretical contribution is to conceptualize the political membership boundary as a labor-supply instrument; this move unifies slavery, immigration restriction, and pronatalism as responses to a common problem.

Our argument proceeds as follows. Section 1 develops the two axes along which labor-supply politics is contested and positions the five strategies within that space. Section 2 examines each strategy in turn, highlighting both its position within the two-dimensional framework and its relationships to the others. Section 3 shows how the strategies operate as substitutes within adjustment episodes and as complements across them, identifying the conditions under which each relationship prevails. Section 4 analyzes how incumbent labor

responds to expansion through exclusion or inclusion exit, with outcomes shaped by labor's organizational form. Section 5 provides a descriptive illustration of the conditional relationship between Make and immigration restriction while Section 6 applies the framework to artificial intelligence. The conclusion draws these threads together and proposes a research agenda that follows from understanding the labor supply as a unified political problem.

1. Two Axes: Who Wins and Who Belongs

Labor-supply politics is fought along two axes at once (Figure 1), yet most theoretical traditions in international and comparative political economy focus on only one of them. The first is distributive. Any strategy that expands the supply of labor tends to depress returns to incumbent workers while raising returns to capital. This is the distributional conflict highlighted in factor-endowments models of political economy (Stolper and Samuelson 1941; Rogowski 1989). Where labor cannot move easily across sectors, conflict runs along sectoral rather than class lines, as the specific-factors tradition holds (Jones 1971; Samuelson 1971), even when we move from individual preferences to coalition formation (Hiscox 2001, 2002). This approach is indispensable for understanding the material stakes of labor-supply expansion, but it is silent on the question of membership.

The second axis is membership. A long tradition treats the boundary of membership as politically constructed and contested—from Weber's (1978) account of social closure, to Brubaker's (1992) analysis of citizenship as a form of social closure and Bosniak's (2006) examination of how liberal states simultaneously include and exclude the alien, to Mann's (2005) study of democracy's exclusionary face, and to the scholarship on ascriptive versus civic membership (Smith 1997; Zolberg 2006). Scholarship on welfare chauvinism likewise examines how access to benefits and protections is rationed by belonging (Andersen and Bjørklund 1990) and how contemporary states actively calibrate the requirements of membership itself—civic-integration tests, language conditions, citizenship curricula—as instruments of boundary management (Goodman 2014). The membership dimension is equally prominent in the study of political behavior, where a second, non-economic axis structures party competition and public opinion and where citizenship policy is a well-developed research program in its own right (Goodman 2023). Our claim is narrower: the membership boundary is not merely strategic but substitutable. Opening or closing it functions as one of five instruments for securing labor, weighed against coercion, reproduction, domestic mobilization, and automation. Thus, we treat the tightening of citizenship laws, subsidies for robotics and/or automation, and pro-natalist campaigns not as three developments for three separate policies, but as related adjustments within a single system.²

While the membership boundary is contested domestically, it is situated within an international system. Citizenship rules are often recognized across borders through treaty; refugee protection is treaty-regulated; dual nationality is negotiated bilaterally; and the demographic frames now shaping populist politics in rich democracies circulate transnationally (Brubaker 2017). Treating membership as a priced labor-supply instrument connects domestic and international labor politics and policies in two ways. The first runs through the distributional politics of openness, where preferences are driven less by material self-interest than by anxiety about out-groups (Mansfield and Mutz 2009; Rho and Tomz 2017). The second runs through the management of the resulting political backlash, which states have historically contained through the compensation bargain

²The membership axis treats the boundary as one dimension for tractability. Membership is, in fact, multi-dimensional—Marshall's (1950) civil, political, and social rights need not move together: EU free movement extends social but limited political rights; Gulf *kafala* extends labor-market access while withholding civil and political rights; undocumented U.S. residence creates economic participation without legal status. A fuller treatment would disaggregate the axis.

of embedded liberalism (Ruggie 1982).³ That bargain itself rested on exclusionary migration foundations: postwar openness in goods was sustained by managed closure in people (Goodman and Pepinsky 2021).

We argue that political membership has a political price. Receiving states already weigh the number of migrants they admit against the rights they extend, pricing membership at the admission margin (Ruhs 2013), and citizenship itself can be treated as inherited property with a demonstrable value (Shachar 2009). The same pricing governs not only admission but also the choice among all five instruments, and the prices themselves change over time depending on the institutional context. The price is not set by demography alone. Political entrepreneurs raise the salience of membership by making citizenship and composition national issues (Howard 2009; De Vries and Hobolt 2020), while courts cap how far exclusion can run by protecting the rights of resident non-citizens (Joppke 1998). The membership price of each strategy is a political product, not a demographic given. This reframes what Hollifield (2004) calls the “liberal paradox”: the simultaneous pull toward economic openness and political closure that he argues is structural to liberal migration states. The paradox is real, but it is a property of the Buy strategy specifically: importing workers delivers labor efficiently while simultaneously generating political resistance against new membership. Treating Buy as one of five priced instruments conditions the paradox rather than treating it as a permanent structural tension. Politics relieve both pressures at once by shifting demand to Make, Build, or Replace—strategies that secure labor without broadening membership.

Relocating the liberal paradox to Buy is an analytical claim. At the level of available instruments, the paradox is a property of Buy alone. Operationally, however, the legal architecture of a migration state—residence rights, family reunification, and non-refoulement—raises the cost of closing Buy once it is open. This is the complementarity mechanism at work: the very entitlements that make switching costly are themselves the accumulated legacy of prior Buy episodes. Politics that never fully opened their labor markets, such as Japan and South Korea, face a different politics of adjustment than politics that built mature migration states (Chung 2020).

Positioning the five strategies in Figure 1’s two-dimensional space illustrates why similar economic grievances sometimes produce straightforward wage protection and at other times conflict organized around identity and demographic anxiety. The vertical axis runs from outcomes that favor incumbent labor (bottom) to outcomes that favor capital (top); the horizontal axis runs from closing the membership boundary (left) to opening it (right). Buy and Build sit on the side that opens the boundary, while generally favoring capital. Take and Make sit on the side that closes it. Replace sidesteps the boundary altogether by reducing the need for additional workers, which is the source of much of its appeal to capital. Figure 1 maps these positions.

The distinction between the two axes is descriptive and analytical. When the membership axis dominates, politics forgo more efficient labor-supply solutions because those solutions would alter the composition of the community in ways unacceptable to the governing coalition. When the distributive axis dominates, the same scarcity pressure pushes toward whichever strategy expands the workforce at least cost, regardless of where the workers come from or what claims on membership they may make at a later date. Both axes operate simultaneously; the strategies are arrayed as substitutes across them. We trace these strategies in the following section.

³Embedded liberalism is Ruggie’s name for the postwar bargain that let states sustain international openness by buffering domestic dislocation through compensation and labor protection. It recurs below—as the conversation the framework joins (§1), the counterpart to dense national unions (§4), and the fraying architecture behind the first international-order pressure (Conclusion).

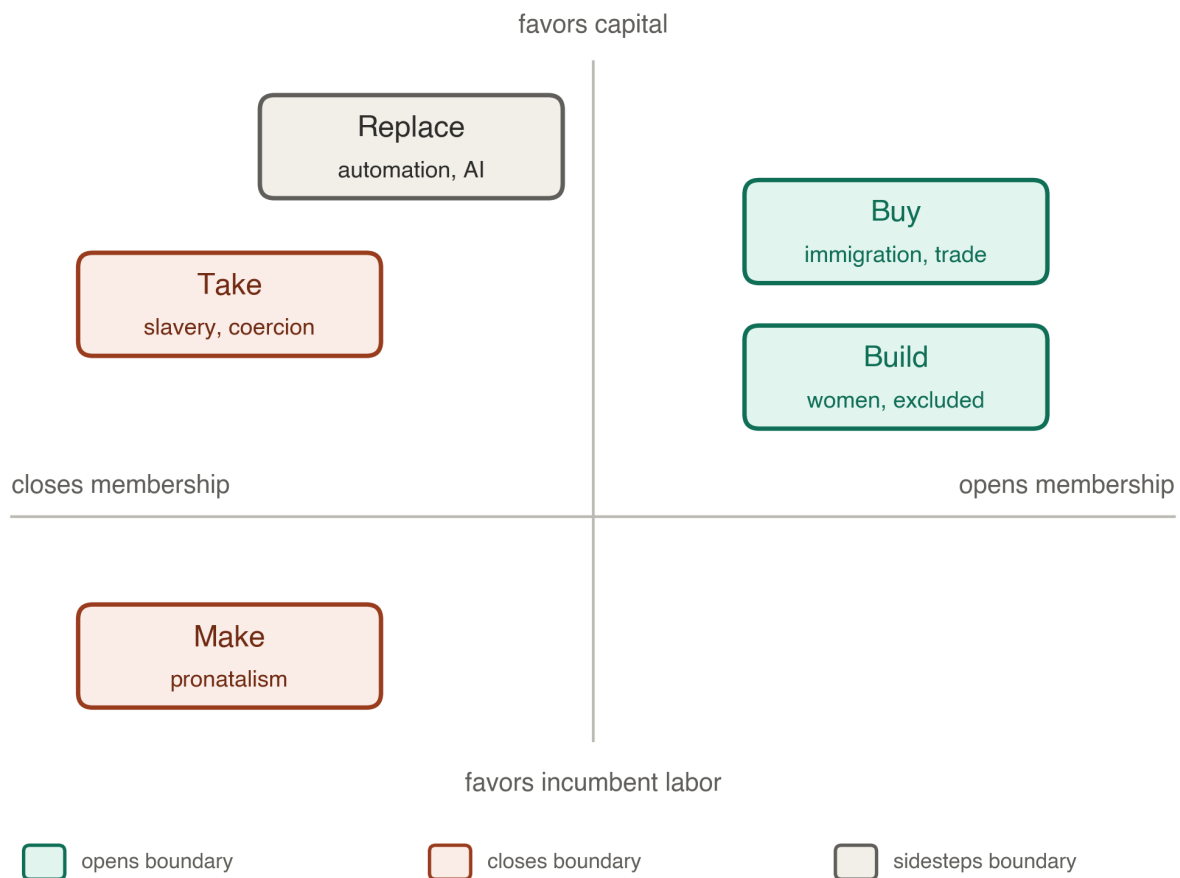


Figure 1. The labor-supply strategy space. The vertical axis runs from outcomes that favor incumbent labor (bottom) to outcomes that favor capital (top); the horizontal axis from closing the membership boundary (left) to opening it (right). Buy and Build sit on the opening side, Take and Make on the closing side, and Replace sidesteps the boundary. Section 4 develops how incumbent labor responds within this space through two exits.

2. Five Ways to Secure Labor

Table 1 summarizes the governing conditions and coalitional implications across the five strategies; the profiles that follow develop them.

The five categories follow the same criterion: each changes *who* performs the work. Strategies that change only *how much* work existing workers do—productivity, hours, demand management—operate on a different margin and lie outside the framework. Across the five, the differences in moral and historical register are large—chattel slavery and pronatalist family policy are not comparable in any humane sense—but the strategies are substitutes on the single dimension of who performs the work. The membership axis registers a second, morally weighty dimension: how each strategy treats the boundary of the political community.⁴

Table 1. The five labor-supply strategies.

Strategy	Governing condition	Coalition (champions vs. opponents)	Central prediction
Make (reproduction)	Sub-replacement fertility, with the composition of the community politically salient	Long-horizon and identity actors—nation, church, dynasty, state—vs. firms and women’s mobilization	Pronatalism pairs with immigration restriction only where composition is salient and native fertility has fallen below replacement
Take (coercion)	Abundant land and resources, scarce labor, and cheap enforcement	Landed and plantation capital with the coercive state vs. free labor, abolitionism, and rival capital	Emerges where enforcement is cheap; once abolished, mutates into quasi-coercive forms wherever a legal channel lowers enforcement cost
Buy (importation)	Labor scarcity plus an open or low-voice channel cheaper than Make or Replace	Employers in labor-intensive sectors, with concentrated benefits, vs. incumbent labor and nativists, with diffuse costs	Default politics is expansionary; restriction prevails only when identity mobilization activates the diffusely harmed; employers prefer deportable, low-voice sources
Build (mobilization)	A resident but excluded labor reserve and a tightening labor market	Capital in tight markets, egalitarian movements, and aging-state fiscal authorities vs. incumbent insiders	Complements Make where care is defamilialized and crowds it out where it is not; participation converts into pressure for the franchise

⁴The framework prices instruments—why a polity reaches for one strategy over another given relative costs—but does not generate the resistance dynamics that move those prices. Institutional residue accumulates, but the contestation that builds or undoes it (labor and women’s movements, abolitionism, immigrant-rights organizing) sits outside the transaction-cost frame. Explaining that contestation is work for adjacent literatures.

Strategy	Governing condition	Coalition (champions vs. opponents)	Central prediction
Replace (substitution)	Rising labor bargaining power and political wage; falling capital-goods prices	Capital seeking to minimize political voice; cross-skill effects divide incumbent labor	Cheap immigration delays it, and restriction accelerates it; AI shifts exposure toward high-wage cognitive work and, if reinstatement is weak, scrambles the capital-skill alliance

2.1 Make: reproduction

Make is the only strategy whose output is temporally disconnected. Because Make does not deliver labor in the present, it is the strategy most strongly influenced by the membership axis and least responsive to short-term factor prices. Make is championed primarily by actors with long-time horizons—the nation, the church, or the dynastic state—rather than by firms, which reliably prefer strategies that expand the workforce immediately. When states pursue Make aggressively, the motive is rarely just about the size of the labor force. It is more concerned with *which* future workers are produced. By reproductive nationalism, we mean a pronatalist policy aimed at increasing births within the established political community while restricting the entry and reproduction of outsiders. This is why Make sits on the narrowing side of the membership boundary and fuses readily with immigration restriction when the composition of the population becomes politically salient.

On pure efficiency grounds, Buy dominates Make. Imported workers are immediately productive, whereas higher birth rates pay off only after fifteen to twenty years and require deep investment in health and education. The decision to pursue the slower, more expensive route while closing the faster one, therefore, reveals the primacy of the membership axis. The American historical record illustrates the pattern clearly. After the 1808 ban on the transatlantic slave trade, natural increase became the dominant source of growth in the enslaved population—Make nested inside Take, with the boundary fully closed. This was a structural outcome rather than a deliberate natalist policy, and one exceptional among New World slave societies, where enslaved populations generally failed to reproduce their numbers (Tadman 2000). In the early twentieth century, the “race suicide” panic combined pronatalist rhetoric with the restrictionist movement that produced the 1924 national-origins quotas (Tichenor 2002). Similar dynamics are visible today in several countries where sub-replacement fertility coexists with renewed natalist efforts and tighter immigration controls (Brubaker 2017).

Make carries two recurring limitations. Pronatalist programs that discourage women’s paid employment tend to fail, because the policies that actually raise fertility in rich countries—affordable childcare, parental leave, and secure maternal employment—are precisely those that expand women’s labor-force participation (Esping-Andersen 1999). Make also has a coercive variant, in which the state restricts abortion and contraception. This is Take’s logic applied to reproductive labor. The variant typically appears where governing coalitions also resist mobilizing the same women into paid employment—coercive Make substituting for the Build the coalition refuses.

2.2 Take: coercion

Take represents a limiting case on both axes: it expands labor supply while denying workers membership entirely and granting them zero political voice. Coercion emerges under one condition above all—abundant land and resources combined with scarce labor (Domar 1970). In such settings, free labor markets bid wages toward the marginal product of labor, leaving landowners little surplus to capture; coercion arises to take the rents that would otherwise accrue to workers.

Take is viable only when enforcement costs are low. Those costs rise with workers' exit options and with political scrutiny, so coercion persists in relatively closed economies backed by state power and supported by low-cost identification technologies. Racialization historically served as one such technology—a heritable marker, codified in fugitive-slave law, that lowered the cost of detecting escape.⁵ Once formally abolished, Take frequently mutates into quasi-coercive forms—convict leasing, debt peonage, or guest-worker systems—wherever legal channels lower the cost of control (Blackmon 2008).⁶

The coalition supporting Take is distinctive. Landed capital aligns with the state's coercive apparatus; opposing them are free labor (which resists competition from unpaid workers), moral abolitionists, and rival capital pursuing Buy, Build, or Replace strategies (Foner 1970; Bonacich 1972; Wright 2006). The American Civil War can be understood as a violent contest between a Take regime in the South and a Buy/Build/Replace regime in the North.⁷ The same logic operated in reverse in Eastern Europe after the late Middle Ages, where abundant land and grain export opportunities led lords to reimpose serfdom on a peasantry that had begun to gain freedom in the West (Brenner 1976).⁸ Through this lens, the same scarcity that raised wages in one region intensified coercion in another.

Take has not disappeared so much as moved across borders. Its contemporary forms are largely international: coerced and bonded labor embedded in global supply chains (ILO 2022), and the *kafala* systems that bind migrant workers to employers inside the Gulf's labor-importing regimes (Ruhs 2013). The international governance of coerced labor has tracked this geographic shift, from Britain's sixty-year campaign to suppress the Atlantic slave trade (Kaufmann and Pape 1999) through the twentieth-century forced-labor conventions to today's anti-trafficking global regime. Where the historical cases of Take were largely domestic, its persistence and regulation today run through the same cross-border channels as Buy.

2.3 Buy: importation

Buy is the most efficient expansion strategy on labor-supply grounds because imported workers can be immediately productive. What distinguishes Buy from Take is not the crossing of a border but rather consent and exit. Buy covers the importation of workers who enter voluntarily and retain some baseline of rights, along with the goods that embody such labor; coerced importation, however organized, belongs to Take.

⁵The racial-capitalism tradition holds that race was constitutive of New World labor systems, not merely a cheap instrument selected for the purpose (Robinson 1983). We bracket that claim and treat racialization as one technology that lowered the enforcement cost of Take, without denying the deeper work the same categories did.

⁶Post-emancipation indenture—workers from India, China, and elsewhere transported to Caribbean and Pacific plantations on term contracts—was a Buy/Take hybrid: nominally contractual but practically coercive, with limited exit and no path to membership. The taxonomy treats such arrangements as the quasi-coercive end of Buy rather than a sixth category, since what separates them from free migration is a matter of degree—exit cost, scope of rights—not kind. The Gulf *kafala* system runs on the same logic today.

⁷Du Bois (1935) makes a stronger claim: the general strike of the enslaved—their mass withdrawal of cooperation from the Confederate war effort—helped decide the war, making the enslaved agents who foreclosed options otherwise open to the slaveholding class. Coerced labor was thus not merely an input but a collective actor whose self-organization eroded the enforcement capacity sustaining Take—a dynamic outside our transaction-cost frame but not contradicting its coalition logic.

⁸The case sits at the center of a long debate over whether class power or factor prices drove these divergent paths. Brenner argued for the former; we borrow the comparison while bracketing the larger thesis.

Indenture and *kafala* sit between the two poles, with exit costs and rights narrowing as one moves from Buy toward Take. Under standard trade theory, importing workers and importing goods are substitutes (Mundell 1957), though they can become complements under certain conditions. These two forms of importing diverge sharply on the membership axis: importing workers opens the boundary, while importing goods does not.

Among the five strategies, Buy is the one most dependent on a foreign counterpart; a polity cannot import workers on its own terms; it must reach an arrangement with the states that send them. The instrument that does this work is the bilateral labor agreement—a treaty between a sending and a receiving state that sets the conditions under which labor crosses the border. Labor migration, unlike trade and investment, has never acquired a strong multilateral regime, so these bilateral agreements, rather than a global institution, remain the primary architecture governing labor mobility (Peters 2019).

The politics of Buy are characterized by concentrated benefits and diffuse costs. Employers in labor-intensive sectors gain clear advantages, while the costs are spread across incumbent workers. This structure produces the expansionary bias in that restriction becomes politically viable only when identity-based mobilization activates the diffusely harmed (Freeman 1995). Attitudes toward immigration are driven far more by sociotropic concerns about national and cultural consequences than by personal economic effects (Hainmueller and Hopkins 2014), which is why opposition to Buy aligns readily with Make.

Buy interacts strongly with the other strategies through substitution. The 1924 U.S. quotas closed European immigration and accelerated both mechanization (Replace) and the Great Migration of Black workers from the South (Build) (Collins 1997; Boustan 2017). Employers consistently prefer low-voice sources of labor—guest workers and the undocumented—whose deportability minimizes future political costs (De Genova 2002). The Gulf *kafala* systems represent the extreme form of this preference: labor is purchased through the market, even as workers remain permanently outside membership through employer-tied visas and summary deportability. These arrangements occupy the quasi-coercive end of Buy.

2.4 Build: mobilization

Build expands the labor force without adding new bodies or crossing borders. It operates on the participation margin by redefining what counts as work and who may perform that work for pay. In doing so, Build typically generates demand for other strategies to fill the resulting “care deficit” (Folbre 2001; Hochschild 2000). When women enter paid employment, care previously provided within the household must often be purchased, frequently from immigrant women. Female participation and care-sector immigration, therefore, tend to rise together.

Build stands in conditional opposition to Make. When care is outsourced through public provision, the two strategies can complement each other. Where care remains familial or market-based, Build crowds out Make, resulting in very low domestic reproduction (Esping-Andersen 1990, 1999). Reliable contraception expands the feasible set by decoupling the timing of paid work from the timing of childbearing, so Build need not be a wholesale substitute for Make (Goldin and Katz 2002).⁹

Build’s position on the membership axis is nuanced: the workers Build adds are already members of the political community; what opens is not the external boundary that governs entry but the internal boundary that determines which residents count as full economic participants. Buy admits outsiders; Build upgrades

⁹The social-reproduction tradition (Bhattacharya 2017; Fraser 2016) holds that female labor-force participation cannot be explained by market equilibration alone. Fraser (2016) shows that capital absorbed feminist demands for inclusion in ways that intensified rather than resolved the care crisis—dual-earner households became the norm without a socialization of care. The conditions for Build are thus more contested than scarcity plus public childcare, and female participation has proven institutionally sticky once established—the residue the main text distinguishes from the reversible coalition.

the standing of insiders.¹⁰ The distinction explains why the two strategies generate different politics. The newly mobilized cannot be cast as outsiders, only as members whose political claims are being renegotiated, which is why Build produces pressure for fuller political incorporation rather than nativist backlash (Marshall 1950).

The coalition supporting Build joins capital facing tight labor markets, egalitarian movements, and fiscal authorities concerned with aging populations. Opposition comes from incumbent insiders defending status and wages.

Build is uniquely reversible at the coalitional level: when scarcity eases, the alliance between capital and the mobilized group can dissolve, and the same group can be reabsorbed when scarcity returns. The institutional residue of participation, however, persists: legal precedents, changed expectations, and organizational infrastructure built during one Build episode lower the cost of mobilizing the same group—or another—in the next. This combination of within-episode reversibility and cross-episode complementarity is distinctive of Build.

2.5 Replace: substitution

Replace expands effective labor supply by substituting capital and technology for human labor, sidestepping the membership boundary as a byproduct. It shares the membership-sidestep with offshoring but dispenses with human workers altogether rather than reaching them across borders.¹¹ Its transaction-cost structure is the mirror image of Take's: high fixed costs but near-zero ongoing governance costs. Machines and algorithms do not unionize, strike, vote, or demand incorporation, which makes Replace attractive to capital as labor's bargaining power rises.

Replace operates through tasks rather than entire jobs. It displaces labor from automated tasks while creating new tasks in which labor is reinstated (Autor, Levy, and Murnane 2003; Acemoglu and Restrepo 2019). Historically, reinstatement has kept pace with displacement, preventing the mass unemployment once widely predicted (Autor 2015). The political stakes, therefore, center around distribution rather than aggregate employment. Routine-biased technical change aligned high-skill labor with capital while hollowing out the middle of the skill distribution (Goldin and Katz 2008). The choice between Buy and Replace is governed by relative prices: cheap immigration delays automation, while immigration restriction accelerates it.

This price logic has documented empirical support. Where low-wage immigrant labor is abundant, employers adopt labor-saving machinery more slowly (Lewis 2011); where an established supply of imported labor is withdrawn, they mechanize to replace it (Clemens, Lewis, and Postel 2018). The same task-routineness that determines whether a job can be offshored also determines whether it can be automated, so the political coalitions that organize against Buy and against Replace draw on overlapping populations (Owen and Johnston 2017). We return to this in a discussion of the Bracero guest-worker program below.

East Asia shows substitution as a long-run equilibrium rather than a one-episode response. Japan and South Korea face very low fertility and have held Buy closed on composition grounds (Chung 2020), pushing the work of expanding labor supply onto the other available strategies. Pronatalist family policy partly compensates for the births immigration would otherwise have supplied; women and older workers are mobilized

¹⁰The participation effect is constructed in both directions. Child-labor prohibition and the institutionalization of retirement removed entire categories of residents from paid work; those exclusions created the reserves—the young, the old—that later Build episodes draw on, as when Japan and South Korea activated workers past customary retirement ages. Yesterday's closure of participation supplies tomorrow's mobilizable reserve.

¹¹This closeness matters: Section 6 argues that artificial intelligence is a Replace substituting for a global Buy, reshoring tasks once performed abroad. Replace and offshored Buy are close substitutes in their membership effects even when their mechanisms differ.

through Build; and robot adoption leads the world (Acemoglu and Restrepo 2020). Korea is the purest case. Pronatalism has produced little fertility recovery, Buy remains closed, and Replace bears most of the weight of meeting domestic labor demand.

The relationship among these five strategies is governed by systematic processes of substitution and complementarity that operate on different time horizons. We discuss this in the next section.

3. Substitutes Now, Complements Later

The five strategies do not operate independently. Their relationships are governed by a single mechanism: the accumulation of institutional architecture—laws, administrative capacities, technologies, organizational precedents, and normative expectations—that lowers the cost of using strategies a polity had not previously emphasized. This mechanism produces different relationships depending on the time horizon and the nature of the shock that sets adjustment in motion.

An adjustment episode¹² begins with an observable, exogenous pressure that renders the prevailing strategy mix unsustainable: a sustained rise in the old-age dependency ratio, a sharp reduction in net migration, real-wage growth that markedly raises the cost of labor, or a major technological or regulatory change that alters the relative cost of one strategy. It ends when the triggering pressure subsides—when the dependency ratio stabilizes, migration recovers, or wage growth slows—rather than when a new strategy portfolio settles. We anchor both boundaries in observable conditions rather than in the strategy shifts the episode is meant to explain. This definition fits discrete shocks cleanly (a recruitment ban, a treaty termination, a quota law) and slow-moving pressures more loosely. We return to this case in Section 5, below.

Within an adjustment episode, the strategies tend to function as substitutes: when one channel becomes more costly or politically difficult, demand shifts toward the others, provided switching costs are not prohibitive. Over longer periods spanning several episodes, they tend to function as complements because each episode leaves institutional residue that lowers the cost of deploying a previously underused strategy in the next. Substitution and complementarity are therefore not competing descriptions of a single process but rather predictions that hold under different conditions and on different time scales.

One qualification regarding the adjustment episode. Make’s labor-supply effects arrive a generation after the episode in which the policy is adopted: pronatalist programs chosen in response to perceived scarcity today do not deliver workers for twenty years. Within-episode substitution, therefore, applies to Make as a policy choice: when immigration closes on membership grounds, pronatalism rises as a political response. It is not a pre-determined labor-supply outcome. Make is thus both a within-episode substitute at the policy level and a cross-episode complement at the supply level; its distinctive time horizon places it in both halves of the framework.

Three scope conditions govern the strength of these relationships. Substitution is more likely the larger the initiating shock relative to existing institutional capacity, and the more moderate the switching costs between strategies. Complementarity strengthens as a state accumulates administrative infrastructure, technological capability, and organizational precedent from prior episodes. And the distinction between substitution and complementarity is sharpest when the shock is well-defined in time; diffuse, slow-moving pressures make

¹²Our construction of episodes adapts work on labor-market adjustment to discrete international shocks to substitution across the full set of labor-supply strategies rather than within any one. For example, the China trade shock (Autor, Dorn, and Hanson 2013), the termination of bilateral labor agreements (Clemens, Lewis, and Postel 2018), and the postwar bargain managing adjustment to openness (Ruggie 1982; Peters 2017).

within-episode and across-episode effects hard to separate. The framework, therefore, requires two pre-commitments. Shock size and switching costs are assessed independently of the adjustment they are invoked to explain, and the horizon under test—short-run substitution or long-run complementarity—is specified in advance.

The interwar United States is the clearest within-episode case. The First World War and the national-origins quotas of 1921 and 1924 sharply reduced European immigration, closing the Buy channel on which Northern industry had long depended. Employers did not absorb the shortage; they shifted demand to substitutes—accelerating mechanization and recruiting Black workers from the segregated rural South into Northern factories—triggering the Great Migration (Collins 1997; Boustan 2017). Had employers absorbed the shortage through native wage increases alone—rather than moving demand to mechanization and the Great Migration—the substitution claim would not have held. The same logic ran in reverse in postwar Western Europe: West Germany, France, and Switzerland imported Southern European, Turkish, and North African workers through guest-worker programs—Buy in low-voice form (Castles and Kosack 1973). When the 1973 oil shock prompted recruitment bans, the closure of Buy raised the return to its substitutes, and female labor-force participation and automation both rose. Had European labor markets responded primarily through wage compression of natives instead, the prediction would have failed.

The Bracero termination lets us observe the same mechanism with rare precision and at a moment when the framework could have failed. From 1942 to 1964, the United States imported Mexican agricultural labor under a bilateral treaty with Mexico; the program ended in 1964. The shock was large and dated; switching costs were moderate, since mechanical harvesters and substitutable crops already existed. The prediction was fixed before the data: with the cheapest channel closed and a binding harvest-labor shortage, demand should move to Replace rather than to higher wages for incumbent workers. Had the closure raised native farm wages and left technology untouched, the substitution claim would not have survived. Instead, growers mechanized where machines were available and switched crops where they were not, while the wages and employment of domestic farmworkers barely moved (Clemens, Lewis, and Postel 2018). The reverse holds in the cross-section: where immigrant labor remained cheap and abundant, employers were slower to mechanize (Lewis 2011). The distributive lesson is equally telling: closing Buy did not protect incumbent labor but routed returns to capital through Replace—the default outcome the framework predicts and the reason the inclusion exit examined in Section 4 is so rare.

Across longer horizons, the strategies compound. The administrative and legal machinery built to manage Western European guest workers later eased the expansion of family-reunification and settlement policy—Buy’s residue lowering the cost of more Buy. Women’s wartime mobilization left precedents, expectations, and infrastructure that lowered the cost of the permanent rise in female participation a generation later, a rise that reliable contraception then made structural (Goldin and Katz 2002). Decades of robot adoption in East Asia created the engineering capacity and supply chains that made later waves of automation easier to mount. A polity’s labor-supply history is therefore cumulative: the strategy it reaches for in any decade is shaped by the residues of prior episodes, not chosen *de novo*.

4. Labor’s Two Exits: Exclusion and Inclusion

Incumbent labor does not directly choose among the five strategies; it responds to whichever strategy capital and the state have selected. That response takes the form of the protective counter-movement that Polanyi (1944) identified as inherent to the commodification of labor. Because the strategies differ in how they affect returns to incumbent workers and the boundaries of membership, labor’s reaction is shaped by the two axes introduced in Figure 1. The response follows one of two paths, each defined by its position on the

membership axis (the vocabulary of exit follows Hirschman 1970). The exclusion exit combines restriction, tariffs, and nativist mobilization. The inclusion exit combines expanded membership with outcomes that protect or improve the position of incumbent workers. Under default conditions, expansion favors capital by increasing labor supply and lowering the price of labor, which is why inclusion exits are rare. Whether incumbent labor allies across these lines, and with whom, follows the same cross-class coalitional logic that shapes social policy and electoral institutions (Mares 2003; Cusack, Iversen, and Soskice 2007).

Reaching the inclusion exit requires neutralizing the mechanism through which new workers undercut incumbents. Three strategies can accomplish this. The first is equalization through encompassing organization. When newcomers are covered by the same wage floors, employment protections, and union representation as incumbents, they cannot be used to depress existing standards. Only centralized, encompassing labor movements can internalize these effects rather than free-ride on exclusion (Olson 1982; Western 1997). The second mechanism is complementarity. When new workers perform tasks that raise incumbents' productivity rather than substitute for them, opening the boundary can increase native wages (Ottaviano and Peri 2012; Peri 2012). The third is political incorporation. Because resident workers can eventually vote and organize, labor movements can expand their electoral coalition by bringing newcomers inside it.

The exclusion/inclusion distinction has a partisan-electoral counterpart in the insider-outsider tradition, where social-democratic parties governing for protected labor-market insiders produce exclusionary politics toward outsiders, immigrants, and the precarious (Rueda 2007). The two accounts agree on the prediction but differ on the mechanism. The partisan account emphasizes electoral incentives; we emphasize the organizational form of labor itself. Partisan incentives shape which organizational forms are politically viable, and organizational form shapes which exits a labor movement can realistically choose.

The variation across wealthy democracies bears this out. Where labor is organized in encompassing, peak-level confederations, it can pursue the inclusion exit: the Nordic countries, with centralized bargaining and solidaristic wage policy, absorbed rising postwar and post-enlargement migration without large wage compression, and remain the closest approximation of solidaristic inclusion (Swenson 2002; Esping-Andersen 1990). Where labor is fragmented along craft, racial, or guild lines, it defaults to exclusion or segmentation. From the Chinese Exclusion Act through the AFL's support for the 1924 quotas, American unions repeatedly chose exclusion when confronted with new labor (Mink 1986; Tichenor 2002). Japan routed its limited migration into a non-regular tier outside the enterprise unions that represent its regular workers, sustaining segmentation for decades (Chung 2020). Postwar continental Europe sits between unions that accepted guest workers as temporary, then divided when the workers settled, producing a contested middle rather than either pole (Castles and Kosack 1973).

The organizational form on which these cases depend is itself eroding. The decline of manufacturing unions and the rise of platform and gig work have made it harder, in every rich democracy, for labor to act as the coherent force the inclusion exit requires (Weil 2014). Sectoral bargaining, alt-labor networks, and transnational solidarity efforts attempt to rebuild that capacity, but even if successful, they remain partial fixes. The declining national unions were themselves the domestic counterpart to the embedded-liberalism bargain that let states manage international openness while shielding labor (Ruggie 1982); a bargain that held in the wealthy democracies, where left and labor coalitions succeeded in demanding compensatory transfers (Garrett 1998; Adserà and Boix 2002). This bargain was unsuccessful in the developing-country periphery, where weaker labor organizations allowed openness to erode the welfare state instead (Rudra 2002). As that international bargain unravels, the domestic labor-form residue degrades with it: the inclusion exit becomes less feasible everywhere, and which exit a polity can take is not only a domestic question but also a consequence of which international architectures still organize its domestic relations.

5. Babies and Borders

The framework’s most counterintuitive claim concerns the relationship between Make and Buy. On pure labor-supply grounds, importing adult workers dominates raising the birth rate because the former delivers labor immediately, whereas the latter pays off only fifteen to twenty years in the future. A polity that pursues a pronatalist policy while simultaneously restricting immigration is therefore doing something that standard distributive models cannot easily explain. Our theory is conditional: pronatalism and immigration restriction travel together primarily where the membership axis is politically salient and when native fertility has already fallen below replacement. Where either condition is absent, pronatalism tends to coexist with relatively open immigration.

The discrete-shock cases in Section 3 are relatively clean from an inferential perspective because their onsets and endings are easily identifiable. The pressures behind the babies-and-borders bundle are not like that: aging and fertility decline move slowly, with no sharp closure to mark an episode. We therefore turn to a different kind of evidence. If this policy bundle is general, it should be visible within individuals: the same people who hold pronatalist and traditional dispositions should be the ones drawn to closing the boundary, and the association should sharpen where native reproduction has fallen furthest below replacement.

We draw descriptive evidence from the Integrated Values Surveys, which pool the World Values Survey and the European Values Study—nearly 400,000 respondents across 104 countries surveyed between 1981 and 2022. Figure 2 reports two tests: Panel A asks whether the bundle is visible at the level of the individual respondent; Panel B asks whether it sharpens in countries with the lowest fertility.

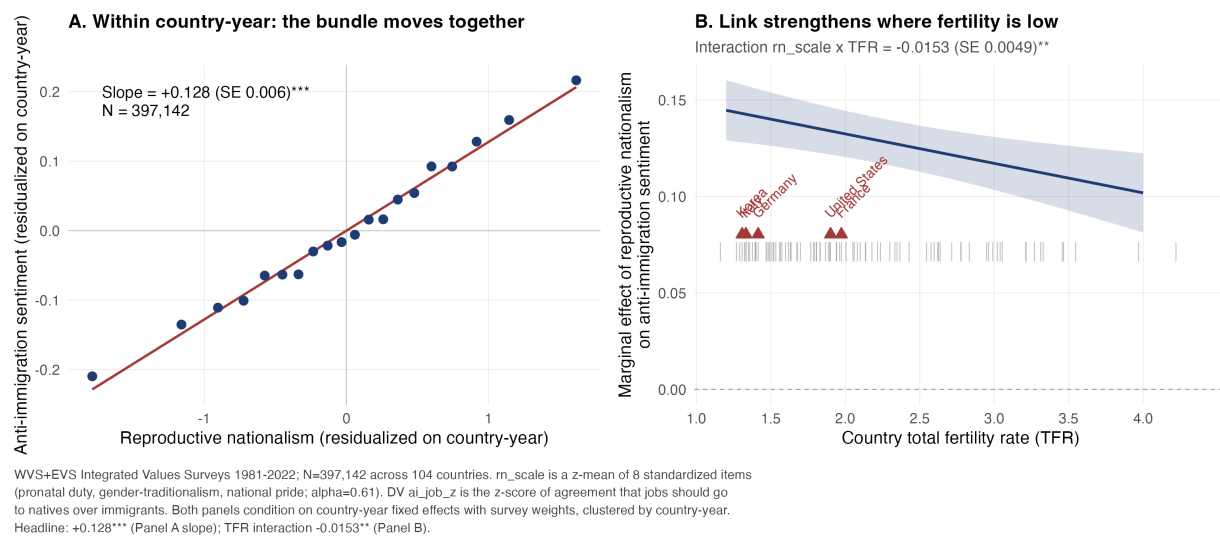


Figure 2. The babies-and-borders bundle in the Integrated Values Surveys, 1981–2022. Panel A is a within-country-year binscatter: each point is one of twenty equal-weight bins of respondents on a reproductive-nationalism scale, plotted against their support for prioritizing natives over immigrants in scarce jobs, after netting out everything that varies across countries and across survey waves. Panel B traces the marginal effect of the same scale on anti-immigration sentiment across the observed range of country total fertility, with a 95 percent confidence ribbon and country anchors marked at within-panel mean TFRs. The bundle is visible within the same person in the same country in the same year, and it is uniformly positive across the fertility range but measurably steeper in the lowest-fertility countries. Author’s analysis of the Integrated Values Surveys (WVS Trend v4.1 + EVS Trend ZA7503 v3.0.0); see Appendix A for construction.

Panel A holds within-country and within-wave variation fixed: it compares respondents to others in the same

country in the same survey year, so anything that varies across countries (history, regime type, welfare state, religious composition) or across time (the postwar boom, the end of the Cold War, the post-2015 refugee politics) is netted out. We operationalize reproductive nationalism here as an individual disposition rather than a policy stance—a related but distinct construct—built from items that capture pronatal duty, gender-traditional dispositions, and national pride. Within this comparison, individuals who score higher on the reproductive-nationalism scale are significantly more likely to say that scarce jobs should go to natives rather than immigrants.¹³ Whatever national mood, recession, or news cycle a country is living through, the same person who leans pronatal and traditional leans toward closing the labor-market boundary to outsiders. Make and Buy-closing are not, at the level of voters, two separate dispositions; they sit on the same underlying axis.

Panel B asks the conditional question. The framework claims not that preferences for the Make-Buy bundle are constant but that the bundle sharpens where the membership rent is most acutely contested—where the in-group cannot reproduce itself by birth, and new members must come from outside if they come at all. Panel B plots the marginal effect of the reproductive-nationalism scale across the observed range of country total fertility. The association is positive and statistically significant across the entire range, but it is steeper where fertility is lowest—roughly a sixth larger in a country at a total fertility rate of 1.2 (Korea and Italy sit near this point; Korea’s contemporary fertility, near 0.8, falls below the figure’s visible range) than at 2.5. Total fertility is not a political variable that countries choose in the short run; it is a slow-moving demographic stock that moderates preferences.

Politically, this bundle has been embraced by the populist-nationalist surge reshaping rich democracies. For two decades, parties on the populist right across Europe and North America have paired pronatalist rhetoric with sharp immigration restriction, framing both in terms of demographic survival and welfare-state membership. The 2008–09 financial crisis loosened established party loyalties and opened political space for anti-system competitors (Hopkin 2020; Mudde 2019). The 2015 Syrian refugee crisis tightened the bundle further, particularly in Central and Eastern Europe; the Orbán government in Hungary made a “demographic replacement” frame explicit and paired strict closure with aggressive pronatalist subsidies (Brubaker 2017); and the COVID pandemic normalized border closures and surfaced demographic vulnerability anew (Pevehouse 2020). Cultural-backlash scholarship reads this bundling as status anxiety mobilized around national identity (Inglehart and Norris 2016; Norris and Inglehart 2019). Our portfolio-pricing account predicts the same bundling for a different reason: closing the membership boundary raises the political return to reproducing the established community, while opening it lowers that return. The two mechanisms are difficult to separate in the data; we conjecture that they reinforce each other.

The coalition that bundles Make with Buy-closing—pronatal, identity-oriented, drawn to a community whose boundaries are reckoned by birth and descent—is precisely the coalition that the next wave of automation threatens to scramble. The high-wage cognitive workers whose tasks artificial intelligence most directly exposes are the professional class on which this coalition has come to depend for its electoral plurality in many rich democracies. If their material position erodes, the bundle that organizes the present politics of labor supply does not survive in its current form. Section 6 takes up that inversion.

6. The Coming Inversion: Artificial Intelligence and the Capital-Skill Alliance

The next wave of Replace breaks with every wave before it. By inversion, we mean the break in automation’s incidence: whereas earlier waves displaced workers at the bottom and middle of the wage distri-

¹³The three components cohere only moderately, and the association holds when each is examined separately rather than being driven by any one (Appendix A).

bution, artificial intelligence threatens the top. Every prior wave of labor-displacing technology shared a relatively consistent feature: displacement fell most heavily on routine manual and middle-skill cognitive tasks, while non-routine cognitive work remained relatively protected because it complemented rather than competed with new capital. Mechanization replaced physical strength on the farm and factory floor. Computerization—through routine-biased technical change—hollowed out clerical and craft occupations in the middle of the skill distribution while raising returns to non-routine cognitive work (Autor, Levy, and Murnane 2003; Goldin and Katz 2008). Across these episodes, the incidence of displacement varied in a roughly inverse proportion to wages and education: the further up the skill distribution, the less exposed the worker (Frey and Osborne 2017). The political consequence was a durable capital-skill alliance: high-skill workers benefited from technological change and had little material incentive to align with the routine workers it displaced.

Artificial intelligence—particularly the generative systems that have diffused rapidly since 2022—inverts this historical pattern. Where prior computerization targeted the middle of the wage distribution, early evidence on large language models reverses the incidence, concentrating exposure among high-education, high-wage cognitive tasks: drafting, analysis, coding, legal research, diagnostics, and complex problem-solving (Eloundou et al. 2024; Felten, Raj, and Seamans 2021). Measured through patent text rather than task descriptions, software and AI exposure skews toward higher-skill occupations, even as robotics skews toward lower-skill occupations (Webb 2020). The framework does not, by itself, predict that AI’s incidence is high rather than low; that is an empirical premise about this technology’s task profile, drawn from the exposure literature. What the framework supplies is the consequence. Once the premise holds, the membership-sidestep that made Replace politically safe is gone, and the standard economics of task displacement and reinstatement (Acemoglu and Restrepo 2019) plays out on a newly exposed group with high income, high status, and no prior reason to organize as a labor force.

Exposure is not displacement. Reinstatement is more likely in activities that require interpersonal trust, physical co-presence, or complex judgment under uncertainty—such as certain forms of medicine, education, senior advisory and counseling work, and care. New tasks in these domains are likely to complement rather than fully substitute for human labor. Reinstatement is harder in domains that are codifiable, transaction-oriented, and less dependent on physical presence or deep relationships—large segments of finance, corporate law, consulting, software development, and analytical work. AI-driven displacement is most likely to concentrate in this second set in the medium term, where reinstatement buffers are weakest.

Some of the strongest early evidence runs counter to the claim. In customer-service work, generative AI raises the productivity of less-experienced workers and compresses the skill gradient (Brynjolfsson, Li, and Raymond 2025); experimental studies of writing tasks find the same leveling (Noy and Zhang 2023). Whether AI chiefly displaces high-wage workers or augments lower-wage ones is therefore unsettled. The inversion remains a claim about exposure whose translation into displacement remains unknown.

A second possibility cuts in a different direction. If reinstatement occurs largely within firms and occupations—routine portions of professional work are automated while higher-judgment portions expand—the capital-skill alliance might compress rather than scramble. Senior professionals retain their positions; junior ones see their entry-level rungs removed; and the capital-skill alliance fractures along lines of seniority rather than across class lines. Whether occupation displacement or occupation compression dominates will determine future coalition politics.

Our framework locates the AI revolution’s consequences in the coalition politics of the newly exposed. The populations displaced by earlier waves of automation possessed limited political voice and weak organizational capacity, which is why backlash often took the form of the exclusionary exit—nativism and identity-based mobilization rather than encompassing material demands (Autor et al. 2020). The group now exposed

by artificial intelligence is different in every relevant respect: high in income, education, media access, and cultural capital, but without a tradition of collective organization because its members have consistently been the winners in prior technological episodes.¹⁴

Two paths are now open. Exposed professionals can move further toward capital, seeking to own or control the models rather than compete with them—a rentier strategy available primarily to those with assets or equity stakes. Alternatively, for the first time in decades, members of this group can make common cause with the routine workers from whom they have drifted over two generations, potentially rebuilding a cross-skill labor coalition around redistribution and protection. Which path prevails will depend heavily on whether labor’s organizational form is encompassing or fragmented—the same organizational variable that shapes whether labor takes the exclusion or inclusion exit when confronting labor-supply expansion. Because the existing organizational forms available to exposed professionals—licensing boards, bar associations, medical societies—are exclusionary by design, the default path is occupational closure rather than encompassing coalition. Reversing that prior requires new organizational forms capable of bridging the gap between high-skill professionals and routine workers, which is precisely what the framework predicts will not emerge spontaneously from existing institutions.

The inversion is also observable internationally. Although Replace has historically sidestepped domestic membership questions, artificial intelligence creates boundaries within the international system because the enabling technology is concentrated among a few firms and states. A precision is needed here. What internationalizes Replace is not membership in the person-centered sense used throughout this essay; it is the scarcity of the technology that enables Replace, and control over these scarce inputs—frontier models, training data, advanced compute—operates as a chokepoint (Farrell and Newman 2019). The politics that results—export controls, trusted-partner blocs, claims of technological sovereignty—functions like membership politics because it draws boundaries around who may gain access, but what crosses or fails to cross the border is capital and code rather than persons. The analogy is functional, not definitional: Replace becomes subject to the same exclusionary demands that long shaped Buy, without acquiring Buy’s membership costs. The deeper continuity is with the case of the Bracero program: artificial intelligence is a Replace that substitutes for a *global* Buy. When an imported-labor channel closes, demand shifts toward automation rather than higher wages; what differs now is the level at which the channel operates and the identity of those it displaces. Artificial intelligence closes a global services channel—the H-1B engineer, the Bangalore back office—and pushes high-wage cognitive labor toward the technology. This reshoring follows the same price logic as the mechanization of the tomato harvest, but the workers it exposes sit at the top of the wage distribution rather than the bottom, which is why its political consequences run in the opposite direction.

Conclusion

The politics of labor supply will sit near the center of the major challenges facing rich societies in the coming decades. Treating Make, Take, Buy, Build, and Replace as substitutable strategies, arrayed along the distributive and membership axes, reconnects domains that are still too often studied in isolation. The framework generates predictions about coalitional alignment and policy portfolios that single-axis approaches miss, and it offers a way to think systematically about how societies respond when they run short of workers.

Two developments now underway make an integrated view especially necessary. Artificial intelligence

¹⁴High-skill occupations are not unorganized—licensing boards, bar associations, medical societies, and academic unions are substantial infrastructure (Abbott 1988; Freidson 1994). But those forms are built for occupational boundary-drawing, not cross-skill solidarity with routine workers, and are already responding to AI through licensing and unauthorized-practice claims. Whether they can build inclusive rather than exclusionary responses is the open question.

is the sharpest. Inverting the historical incidence of automation threatens the capital-skill alliance that has organized advanced economies for four decades. The populations now most exposed—high-education professionals—have little tradition of collective organization. Whether they further defect toward capital or make common cause with routine workers will depend on the organizational form of labor, with consequences that extend well beyond domestic politics into the geopolitics of technology and the international division of cognitive labor. Testing how the AI inversion plays out means moving beyond occupational exposure measures to coalitional behavior—union positions, voting, elite discourse—across countries with different labor-market institutions, where early European evidence already hints at divergent responses (Thewissen and Rueda 2019; Gingrich 2019).

Demographic decline is the second development. Most research still treats pronatalist policy, immigration, automation, and female participation as separate domains, even though they function as substitute instruments whose joint use reveals a coalition’s priorities. Some societies—Hungary, Italy, Poland—respond to aging by combining restrictive immigration with aggressive, often ineffective, pronatalism while resisting the care infrastructure that would support higher female participation (Brubaker 2017). Others—Japan and South Korea most clearly—lean on automation and selective high-skill immigration while doing little to raise native birth rates (Chung 2020). Still others, especially the Nordic countries, pursue more balanced combinations of Build and Make alongside managed immigration (Esping-Andersen 1990). These portfolios are not random. They encode distinct settlements over whose interests are protected and whose are subordinated, and over whether the membership boundary itself is treated as a labor-supply instrument.

These two developments are connected through the same underlying politics of labor supply. How societies choose among Make, Take, Buy, Build, and Replace will shape both the distribution of economic gains and the boundaries of political membership—and through both, the character of international order. Factoral models capture the distributive dimension but miss the membership dimension that increasingly structures it. Work on technology and demographic policy often treats each domain in isolation, missing the substitution and complementarity effects that link them. Theories of coalition politics frequently take labor’s organizational form as fixed rather than as a variable that shapes whether expansion produces exclusion or inclusion.

These same shifts carry consequences for international order. The migration architecture that organizes labor mobility, the trade-in-services regime that offshored cognitive work to Bangalore and Manila, and the assumption that automation is politically neutral all rested on a portfolio built around Buy—and that portfolio is now moving toward Make, Build, and Replace. Employers who can substitute toward traded goods or automation stop lobbying for open immigration, so the coalition behind the migration architecture erodes even as the architecture itself remains in place (Peters 2017, 2019). The same reversal is underway in services trade, where artificial intelligence substitutes directly for the offshored back office (Baldwin 2016), and in automation itself, where control over the frontier models and computing power involved is concentrated enough that export controls now do some of the work immigration restriction once did (Farrell and Newman 2019). The question is no longer only whose labor may cross a border, but whose technology may.

Placing the five strategies in a single two-dimensional space offers a more integrated way to analyze how these developments will interact and which coalitions are likely to emerge. The central question is no longer simply how much labor a polity can secure, but what kind of political community it becomes in the process of securing it.

References

- Abbott, Andrew. 1988. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: University of Chicago Press.
- Acemoglu, Daron, and Pascual Restrepo. 2019. "Automation and New Tasks: How Technology Displaces and Reinstates Labor." *Journal of Economic Perspectives* 33(2): 3–30.
- Acemoglu, Daron, and Pascual Restrepo. 2020. "Robots and Jobs: Evidence from US Labor Markets." *Journal of Political Economy* 128(6): 2188–2244.
- Adserà, Alicia, and Carles Boix. 2002. "Trade, Democracy, and the Size of the Public Sector: The Political Underpinnings of Openness." *International Organization* 56(2): 229–262.
- Andersen, Jørgen Goul, and Tor Bjørklund. 1990. "Structural Changes and New Cleavages: The Progress Parties in Denmark and Norway." *Acta Sociologica* 33(3): 195–217.
- Autor, David H. 2015. "Why Are There Still So Many Jobs? The History and Future of Workplace Automation." *Journal of Economic Perspectives* 29(3): 3–30.
- Autor, David H., Frank Levy, and Richard J. Murnane. 2003. "The Skill Content of Recent Technological Change: An Empirical Exploration." *Quarterly Journal of Economics* 118(4): 1279–1333.
- Autor, David H., David Dorn, and Gordon H. Hanson. 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States." *American Economic Review* 103(6): 2121–2168.
- Autor, David, David Dorn, Gordon Hanson, and Kaveh Majlesi. 2020. "Importing Political Polarization? The Electoral Consequences of Rising Trade Exposure." *American Economic Review* 110(10): 3139–3183.
- Baldwin, Richard. 2016. *The Great Convergence: Information Technology and the New Globalization*. Cambridge, MA: Belknap Press of Harvard University Press.
- Bhattacharya, Tithi, ed. 2017. *Social Reproduction Theory: Remapping Class, Recentering Oppression*. London: Pluto Press.
- Blackmon, Douglas A. 2008. *Slavery by Another Name: The Re-Enslavement of Black Americans from the Civil War to World War II*. New York: Doubleday.
- Bonacich, Edna. 1972. "A Theory of Ethnic Antagonism: The Split Labor Market." *American Sociological Review* 37(5): 547–559.
- Bosniak, Linda. 2006. *The Citizen and the Alien: Dilemmas of Contemporary Membership*. Princeton, NJ: Princeton University Press.
- Boustan, Leah Platt. 2017. *Competition in the Promised Land: Black Migrants in Northern Cities and Labor Markets*. Princeton, NJ: Princeton University Press.
- Brenner, Robert. 1976. "Agrarian Class Structure and Economic Development in Pre-Industrial Europe." *Past & Present* 70: 30–75.
- Brubaker, Rogers. 1992. *Citizenship and Nationhood in France and Germany*. Cambridge, MA: Harvard University Press.
- Brubaker, Rogers. 2017. "Between Nationalism and Civilizationism: The European Populist Moment in Comparative Perspective." *Ethnic and Racial Studies* 40(8): 1191–1226.

- Brynjolfsson, Erik, Danielle Li, and Lindsey R. Raymond. 2025. "Generative AI at Work." *Quarterly Journal of Economics* 140(2): 889–942.
- Castles, Stephen, and Godula Kosack. 1973. *Immigrant Workers and Class Structure in Western Europe*. London: Oxford University Press.
- Chung, Erin Aeran. 2020. *Immigrant Incorporation in East Asian Democracies*. Cambridge: Cambridge University Press.
- Clemens, Michael A., Ethan G. Lewis, and Hannah M. Postel. 2018. "Immigration Restrictions as Active Labor Market Policy: Evidence from the Mexican Bracero Exclusion." *American Economic Review* 108(6): 1468–1487.
- Coase, Ronald H. 1937. "The Nature of the Firm." *Economica* 4(16): 386–405.
- Collins, William J. 1997. "When the Tide Turned: Immigration and the Delay of the Great Black Migration." *Journal of Economic History* 57(3): 607–632.
- Cusack, Thomas, Torben Iversen, and David Soskice. 2007. "Economic Interests and the Origins of Electoral Systems." *American Political Science Review* 101(3): 373–391.
- De Genova, Nicholas P. 2002. "Migrant 'Illegality' and Deportability in Everyday Life." *Annual Review of Anthropology* 31: 419–447.
- De Vries, Catherine E., and Sara B. Hobolt. 2020. *Political Entrepreneurs: The Rise of Challenger Parties in Europe*. Princeton, NJ: Princeton University Press.
- Domar, Evsey D. 1970. "The Causes of Slavery or Serfdom: A Hypothesis." *Journal of Economic History* 30(1): 18–32.
- Du Bois, W. E. B. 1935. *Black Reconstruction in America, 1860–1880*. New York: Harcourt, Brace.
- Eloundou, Tyna, Sam Manning, Pamela Mishkin, and Daniel Rock. 2024. "GPTs are GPTs: Labor Market Impact Potential of LLMs." *Science* 384(6702): 1306–1308.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton, NJ: Princeton University Press.
- Esping-Andersen, Gøsta. 1999. *Social Foundations of Postindustrial Economies*. Oxford: Oxford University Press.
- European Values Study (EVS). 2022. *European Values Study Trend File 1981–2017*. Cologne: GESIS. ZA7503, Data file Version 3.0.0. <https://doi.org/10.4232/1.14021>.
- Farrell, Henry, and Abraham L. Newman. 2019. "Weaponized Interdependence: How Global Economic Networks Shape State Coercion." *International Security* 44(1): 42–79.
- Felten, Edward W., Manav Raj, and Robert Seamans. 2021. "Occupational, Industry, and Geographic Exposure to Artificial Intelligence: A Novel Dataset and Its Potential Uses." *Strategic Management Journal* 42(12): 2195–2217.
- Folbre, Nancy. 2001. *The Invisible Heart: Economics and Family Values*. New York: New Press.
- Foner, Eric. 1970. *Free Soil, Free Labor, Free Men: The Ideology of the Republican Party before the Civil War*. New York: Oxford University Press.
- Fraser, Nancy. 2016. "Contradictions of Capital and Care." *New Left Review* 100: 99–117.

- Freeman, Gary P. 1995. "Modes of Immigration Politics in Liberal Democratic States." *International Migration Review* 29(4): 881–902.
- Freidson, Eliot. 1994. *Professionalism Reborn: Theory, Prophecy, and Policy*. Chicago: University of Chicago Press.
- Frey, Carl Benedikt, and Michael A. Osborne. 2017. "The Future of Employment: How Susceptible Are Jobs to Computerisation?" *Technological Forecasting and Social Change* 114: 254–280.
- Garrett, Geoffrey. 1998. "Global Markets and National Politics: Collision Course or Virtuous Circle?" *International Organization* 52(4): 787–824.
- Gingrich, Jane. 2019. "Did State Responses to Automation Matter for Voters?" *Research & Politics* 6(1): 1–9.
- Goldin, Claudia, and Lawrence F. Katz. 2002. "The Power of the Pill: Oral Contraceptives and Women's Career and Marriage Decisions." *Journal of Political Economy* 110(4): 730–770.
- Goldin, Claudia, and Lawrence F. Katz. 2008. *The Race between Education and Technology*. Cambridge, MA: Belknap Press of Harvard University Press.
- Goodman, Sara Wallace. 2014. *Immigration and Membership Politics in Western Europe*. Cambridge: Cambridge University Press.
- Goodman, Sara Wallace. 2023. "Citizenship Studies: Policy Causes and Consequences." *Annual Review of Political Science* 26: 135–152.
- Goodman, Sara Wallace, and Thomas B. Pepinsky. 2021. "The Exclusionary Foundations of Embedded Liberalism." *International Organization* 75(2): 411–439.
- Haerpfer, Christian, Ronald Inglehart, Alejandro Moreno, Christian Welzel, Kseniya Kizilova, Jaime Diez-Medrano, Marta Lagos, Pippa Norris, Eduard Ponarin, and Bi Puranen, eds. 2022. *World Values Survey Trend File (1981–2022) Cross-National Data-Set*. Madrid and Vienna: World Values Survey Association. Dataset version 4.1.0. <https://doi.org/10.14281/18241.27>.
- Hainmueller, Jens, and Daniel J. Hopkins. 2014. "Public Attitudes Toward Immigration." *Annual Review of Political Science* 17: 225–249.
- Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Hiscox, Michael J. 2001. "Class versus Industry Cleavages: Inter-Industry Factor Mobility and the Politics of Trade." *International Organization* 55(1): 1–46.
- Hiscox, Michael J. 2002. *International Trade and Political Conflict: Commerce, Coalitions, and Mobility*. Princeton, NJ: Princeton University Press.
- Hochschild, Arlie Russell. 2000. "Global Care Chains and Emotional Surplus Value." In *On the Edge: Living with Global Capitalism*, ed. Will Hutton and Anthony Giddens, 130–146. London: Jonathan Cape.
- Hollifield, James F. 2004. "The Emerging Migration State." *International Migration Review* 38(3): 885–912.
- Hopkin, Jonathan. 2020. *Anti-System Politics: The Crisis of Market Liberalism in Rich Democracies*. New York: Oxford University Press.
- Howard, Marc Morjé. 2009. *The Politics of Citizenship in Europe*. New York: Cambridge University Press.

- ILO (International Labour Organization). 2022. *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. Geneva: International Labour Office.
- Inglehart, Ronald, and Pippa Norris. 2016. “Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash.” Harvard Kennedy School Faculty Research Working Paper RWP16-026.
- Jones, Ronald W. 1971. “A Three-Factor Model in Theory, Trade, and History.” In *Trade, Balance of Payments, and Growth: Papers in International Economics in Honor of Charles P. Kindleberger*, ed. Jagdish N. Bhagwati et al., 3–21. Amsterdam: North-Holland.
- Joppke, Christian. 1998. “Why Liberal States Accept Unwanted Immigration.” *World Politics* 50(2): 266–293.
- Kaufmann, Chaim D., and Robert A. Pape. 1999. “Explaining Costly International Moral Action: Britain’s Sixty-Year Campaign Against the Atlantic Slave Trade.” *International Organization* 53(4): 631–668.
- Leblang, David, and Margaret E. Peters. 2022. “Immigration and Globalization (and Deglobalization).” *Annual Review of Political Science* 25: 377–399.
- Lewis, Ethan G. 2011. “Immigration, Skill Mix, and Capital-Skill Complementarity.” *Quarterly Journal of Economics* 126(2): 1029–1069.
- Mann, Michael. 2005. *The Dark Side of Democracy: Explaining Ethnic Cleansing*. New York: Cambridge University Press.
- Mares, Isabela. 2003. *The Politics of Social Risk: Business and Welfare State Development*. Cambridge: Cambridge University Press.
- Mansfield, Edward D., and Diana C. Mutz. 2009. “Support for Free Trade: Self-Interest, Sociotropic Politics, and Out-Group Anxiety.” *International Organization* 63(3): 425–457.
- Marshall, T. H. 1950. *Citizenship and Social Class*. Cambridge: Cambridge University Press.
- Mink, Gwendolyn. 1986. *Old Labor and New Immigrants in American Political Development: Union, Party, and State, 1875–1920*. Ithaca, NY: Cornell University Press.
- Mudde, Cas. 2019. *The Far Right Today*. Cambridge: Polity.
- Mundell, Robert A. 1957. “International Trade and Factor Mobility.” *American Economic Review* 47(3): 321–335.
- Norris, Pippa, and Ronald Inglehart. 2019. *Cultural Backlash: Trump, Brexit, and Authoritarian Populism*. New York: Cambridge University Press.
- Noy, Shakked, and Whitney Zhang. 2023. “Experimental Evidence on the Productivity Effects of Generative Artificial Intelligence.” *Science* 381(6654): 187–192.
- Olson, Mancur. 1982. *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven, CT: Yale University Press.
- Ottaviano, Gianmarco I. P., and Giovanni Peri. 2012. “Rethinking the Effect of Immigration on Wages.” *Journal of the European Economic Association* 10(1): 152–197.
- Owen, Erica, and Noel P. Johnston. 2017. “Occupation and the Political Economy of Trade: Job Routineness, Offshorability, and Protectionist Sentiment.” *International Organization* 71(4): 665–699.

- Peri, Giovanni. 2012. "The Effect of Immigration on Productivity: Evidence from U.S. States." *Review of Economics and Statistics* 94(1): 348–358.
- Peters, Margaret E. 2017. *Trading Barriers: Immigration and the Remaking of Globalization*. Princeton, NJ: Princeton University Press.
- Peters, Margaret E. 2019. "Immigration and International Law." *International Studies Quarterly* 63(2): 281–295.
- Pevehouse, Jon C. 2020. "The COVID-19 Pandemic, International Cooperation, and Populism." *International Organization* 74(S1): E191–E212.
- Polanyi, Karl. 1944. *The Great Transformation: The Political and Economic Origins of Our Time*. New York: Farrar & Rinehart.
- Rho, Sungmin, and Michael Tomz. 2017. "Why Don't Trade Preferences Reflect Economic Self-Interest?" *International Organization* 71(S1): S85–S108.
- Robinson, Cedric J. 1983. *Black Marxism: The Making of the Black Radical Tradition*. London: Zed Press.
- Rogowski, Ronald. 1989. *Commerce and Coalitions: How Trade Affects Domestic Political Alignments*. Princeton, NJ: Princeton University Press.
- Rudra, Nita. 2002. "Globalization and the Decline of the Welfare State in Less-Developed Countries." *International Organization* 56(2): 411–445.
- Rueda, David. 2007. *Social Democracy Inside Out: Partisanship and Labor Market Policy in Industrialized Democracies*. Oxford: Oxford University Press.
- Ruggie, John Gerard. 1982. "International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order." *International Organization* 36(2): 379–415.
- Ruhs, Martin. 2013. *The Price of Rights: Regulating International Labor Migration*. Princeton, NJ: Princeton University Press.
- Samuelson, Paul A. 1971. "Ohlin Was Right." *Swedish Journal of Economics* 73(4): 365–384.
- Shachar, Ayelet. 2009. *The Birthright Lottery: Citizenship and Global Inequality*. Cambridge, MA: Harvard University Press.
- Smith, Rogers M. 1997. *Civic Ideals: Conflicting Visions of Citizenship in U.S. History*. New Haven, CT: Yale University Press.
- Stolper, Wolfgang F., and Paul A. Samuelson. 1941. "Protection and Real Wages." *Review of Economic Studies* 9(1): 58–73.
- Swenson, Peter A. 2002. *Capitalists against Markets: The Making of Labor Markets and Welfare States in the United States and Sweden*. New York: Oxford University Press.
- Tadman, Michael. 2000. "The Demographic Cost of Sugar: Debates on Slave Societies and Natural Increase in the Americas." *American Historical Review* 105(5): 1534–1575.
- Thewissen, Stefan, and David Rueda. 2019. "Automation and the Welfare State: Technological Change as a Determinant of Redistribution Preferences." *Comparative Political Studies* 52(2): 171–208.
- Tichenor, Daniel J. 2002. *Dividing Lines: The Politics of Immigration Control in America*. Princeton, NJ: Princeton University Press.

- Webb, Michael. 2020. “The Impact of Artificial Intelligence on the Labor Market.” Working paper, Stanford University.
- Weber, Max. 1978 [1922]. *Economy and Society: An Outline of Interpretive Sociology*. Edited by Guenther Roth and Claus Wittich. Berkeley: University of California Press.
- Weil, David. 2014. *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It*. Cambridge, MA: Harvard University Press.
- Western, Bruce. 1997. *Between Class and Market: Postwar Unionization in the Capitalist Democracies*. Princeton, NJ: Princeton University Press.
- Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.
- Wright, Gavin. 2006. *Slavery and American Economic Development*. Baton Rouge: Louisiana State University Press.
- Zolberg, Aristide R. 2006. *A Nation by Design: Immigration Policy in the Fashioning of America*. New York: Russell Sage Foundation.

Appendix A. Data and construction for the within-person bundle figure

This appendix documents the data and specification behind Figure 2 in the main text. The figure draws on the Integrated Values Surveys (IVS), which pool the World Values Survey Trend File 1981–2022, v4.1 (Haerpfer et al. 2022) with the European Values Study Trend File 1981–2017, ZA7503 v3.0.0 (EVS 2022). The two files are combined using the official EVS/WVS-to-IVS merge syntax, with no substantive line of harmonization altered. The headline regression sample comprises 397,142 respondents across 104 countries and 283 country-waves; the TFR-interaction sample comprises 392,710 respondents across 279 country-waves (the four marginal country-waves were dropped due to missing total fertility rate data from UN World Population Prospects).

The predictor is a reproductive-nationalism scale (*rn_scale*), constructed as the within-panel z-score of the mean of up to eight standardized items capturing pronatal duty (the item asking whether having children is a duty to society, available only in the most recent wave), gender-traditional dispositions (woman-needs-children, family importance, men’s job priority, housewife fulfillment, men as better political leaders, university for boys), and national pride. Each item is pre-oriented so that higher values indicate stronger pronatal, traditional, or national-pride dispositions; respondents with at least two non-missing items are retained. Cronbach’s alpha on the eight-item scale is 0.61, which is moderate; we report it honestly. The items are related but do not collapse onto a single tight dimension—pronatal duty, gender-traditionalism, and national pride share an underlying disposition without fully merging—and the scale should be read as capturing that broader disposition rather than a single latent factor.

The dependent variable (*ai_jobs_z*) is the within-survey z-score of the WVS/EVS item asking whether, when jobs are scarce, employers should give priority to natives over immigrants, recoded so that higher values indicate stronger anti-immigration sentiment. Standardization is within the survey because the raw scale differs across waves.

Panel A reports the within-country-year specification: *ai_jobs_z* is regressed on *rn_scale* with country-by-wave fixed effects (*cy*), survey weights (the IVS design weight *S017*), and standard errors clustered at the country-wave level. The country-by-wave fixed effects absorb all between-country and between-wave

variation; identification of the slope is within the same country and survey wave, so the comparison runs across respondents in the same place at the same time. The binscatter plots twenty equal-survey-weight bins of the residualized predictor against the residualized outcome; by the Frisch–Waugh–Lovell theorem, the fitted line’s slope equals the regression coefficient. Panel B adds a multiplicative interaction between `rn_scale` and the country’s total fertility rate (UN World Population Prospects, merged by ISO-3 country and year); TFR’s main effect is absorbed by the country-wave fixed effects. The marginal effect of `rn_scale` at a given TFR is computed from the linear combination $\beta_0 + \beta_1 \cdot \text{TFR}$, with the 95 percent confidence ribbon derived from the variance of that combination. Country anchors are plotted at each country’s within-panel mean TFR.