

Culture, Policy, and Economic Development*

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Abstract

Culture shapes how policies are made and how people react to them. This chapter explores how culture and development policy affect each other. First, we provide evidence that cultural mismatch – specifically a mismatch between project manager background and the location of project implementation – is associated with the reduced success of World Bank projects. Second, drawing on historical and ethnographic work, we show that disregarding local cultural norms can undermine well-intentioned development policies. Third, we review economic research demonstrating that cultural practices systematically shape policy effectiveness, often leading to heterogeneous or unintended effects. Fourth, we discuss evidence that policies themselves can reshape cultural norms, sometimes in unexpected ways. Finally, we discuss research on tailoring interventions to the local context and conclude with lessons for future research.

Keywords: Culture, Policy, Heterogeneous treatment effects, Mismatch

JEL Classification: Z1, N10

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1. Introduction

Culture shapes many important economic outcomes, such as governance, human capital investment, labor force participation, and cooperation. A growing literature in cultural economics has sought to understand the drivers of variation in culture and the consequences of various cultural practices for key economic outcomes. Today, economists and policymaking institutions have begun to recognize that the efficacy of policy is shaped by the cultural context ([World Bank 2015](#)), and policies in turn affect cultural practices. This chapter provides an overview of research highlighting how culture interacts with policy, with a focus on developing country contexts. To allow readers to identify cross-cutting themes and quickly locate work on specific traditions, in Appendix Table [A1](#), we list the papers discussed in the chapter by cultural trait and policy.

What do we mean when we talk about “culture?” We define culture as the set of socially transmitted beliefs and values held by individuals. This definition is similar to the definition in [Fernández \(2008\)](#), but like the definitions from anthropology, emphasizes the social learning aspect of culture ([Boyd and Richerson 1985, 2005](#)).¹ This definition encompasses a variety of ways that culture affects economic decision-making, including as a “decision-making heuristic” or “rule of thumb” ([Nunn 2012, 2022](#)); as beliefs that transmit across generations within a social group ([Guiso et al. 2006](#)); as a way of shaping the “rules of the game” (e.g., if individuals face social sanctions from departing from a cultural tradition); or as a determinant of equilibrium selection (as in, for example, [Greif 1993](#)).

While economists and policymakers have historically ignored the role of culture in determining the effects of policy – as well as the effect of policy on culture – an emerging economics literature has begun to recognize the crucial interactions between culture and policy. Indeed, the 2015 World Bank World Development Report, *Mind, Society, & Behavior*, includes language stating that, “paying attention to... how history and context shape thinking (the influence of society) can improve the design and implementation of policies and interventions that target human choice and action” (p. 2). We begin the chapter in Section [2](#) by providing motivating evidence that taking culture into account when designing policy is indeed important. We provide two types

¹[Fernández \(2008\)](#) gives the definition from the Merriam Webster Dictionary: “the customary beliefs, social forms, and material traits of a racial, religious, or social group” and “the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations.” [Boyd and Richerson \(1985\)](#) and [Boyd and Richerson \(2005\)](#) define culture as, “information capable of affecting individuals’ behavior that they acquire from other members of their species through teaching, imitation, and other forms of social transmission.”

of evidence. Using data on World Bank projects and the identity of the project manager, we document the extent of the match between the location of development projects and the country of origin of project managers. By match we mean that the project manager is from the location where the project is being implemented. We find that a match between project location and project manager region of origin is positively associated with project success. This is suggestive evidence that having a “match” between the cultural background of project managers and the location of implementation leads to better implemented projects. While match may be less important for domestic policymaking – although it may still matter when policymaking or implementation are dominated by specific social groups – it may be particularly important for work in international development, where a global set of policy managers at multilateral institutions, such as the World Bank or IMF, design and implement policies. Cultural distance between the policymaker and the target audience may increase the likelihood that policies or their method of implementation are not well-suited to the cultural context.

We then turn to examples from other disciplines such as sociology, anthropology, and history, which document how a misunderstanding of culture can undermine policy success. This section provides qualitative evidence that even policymakers and researchers who are not inherently interested in cultural economics must take culture into account to design and evaluate effective policies. Many of these examples illustrate perhaps the most fundamental reason culture matters for policy-making: culture shapes incentives. Culture affects the social sanctions and payoffs of different actions, as well as the economic returns to actions.² Thus, across multiple policy domains, culture may lead policies to have heterogeneous effects across individuals with varied cultural backgrounds who face different incentives.

In Section 3, we review a growing literature within economics that demonstrates how culture shapes incentives and leads policies to have heterogeneous – and sometimes unintended – effects across different cultural groups. These studies reveal that when policies interact with entrenched cultural traditions, seemingly well-designed interventions can falter or even produce negative outcomes. Policymakers who ignore how culture shapes incentives, as well as the interpretation of policies by their intended recipients, may be puzzled when scaled-up policies generate different effects than pilot programs. Hence, a key lesson from this literature is that policy design and

²For example, cultural institutions may determine networks of obligations or relational contracts that provide social insurance (e.g., [Banerjee et al. 2024](#)), or in some cultures, individuals respond more to psychological motivators rather than monetary incentives ([Medvedev et al. 2024](#)).

evaluation must account for the enduring role of culture.

The following section, Section 4, shows that policies do not just interact with a static cultural context – they can also dynamically reshape cultural norms over time. In addition to their static effects on economic decision-making, cultural traditions persist and dynamically evolve. In Section 4, we discuss examples of policies that have generated cultural change, often leading to unexpected changes in key economic variables. Thus, while culture may be difficult to change and can be very persistent in some contexts (Fernández and Fogli 2009; Alesina et al. 2013), there is now increasing evidence of instances of fairly rapid cultural change.³ Since culture evolves in response to the environment, policies that change the payoffs to different actions may also have unintended consequences for cultural change. This growing body of work highlights that in order to understand the full set of costs and benefits of different policies, policymakers and researchers must take into account the effects of policy on culture.

Finally, understanding culture is also important for policy because culture may serve as a powerful lever for policy: with a deep understanding of the cultural context, policymakers may be able to design policy to take advantage of that context. For example, by targeting areas where there is cultural mismatch – cases where the existing cultural trait is no longer optimal in the environment as noted by Nunn (2022) – relatively small policies may generate outsized positive effects. In Section 5, we discuss the still small literature that explicitly accounts for culture in policy design and implementation. By providing examples where culturally aware strategies have been deployed successfully, we offer a blueprint for designing policies that are both context-sensitive and effective.

We conclude the chapter by discussing key implications from the growing body of evidence on culture and policy and highlighting avenues for future research. Moving forward, future research should aim to further improve our understanding of how cultural traits shape policy effectiveness and how policy can, in turn, influence cultural evolution. Additionally, we underscore the potential benefits of interdisciplinary collaborations, with economists working alongside anthropologists and sociologists to design more nuanced, context-sensitive policies and to generate more valuable evidence from randomized controlled trials and other research projects. By incorporating some of these lessons, researchers can more effectively design and

³Examples include Bau (2021) on pension plans and cultural traditions of children cohabitating with parents, Fernández and Parsa (forthcoming) on social acceptance of gay rights, La Ferrara et al. (2012) and Jensen and Oster (2009) on the effects of media on attitudes, and Fernández (2013a) on female labor force participation.

evaluate interventions that take cultural context into account, maximizing the positive impacts of development initiatives.

2. Motivating Examples

2.1. *World Bank Project Success and Project Manager Cultural Background*

To motivate the importance of culture for policy, we examine how the cultural identity of project managers (“Task Team Leaders” in the language of the World Bank) affects the efficacy of development projects. We use data that geo-locates World Bank projects approved between 1995 and 2014. These data cover more than \$630 billion in commitments ([AidData 2017](#)). To measure the match between project manager origin and project location, we ask GPT-4o to predict country of origin for each project manager based on their name.⁴ For detailed information on the process, see [Appendix B](#).

These novel data allow us to report several new facts. First, we present descriptive statistics on where projects are implemented and where the project managers are from.⁵ This allows us to explore the scope for match effects between projects’ locations and the cultural background of implementing project managers.

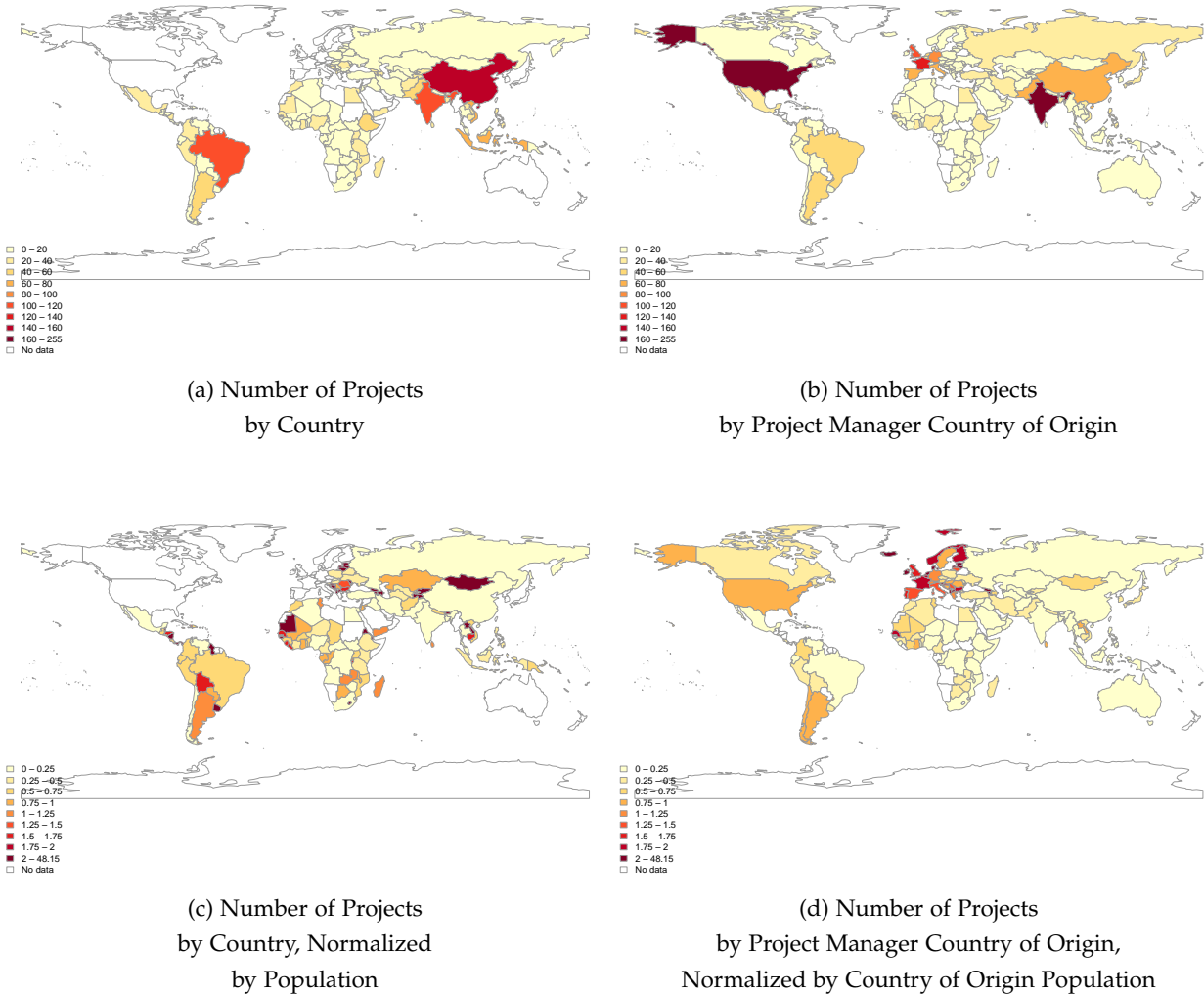
We visualize these data in [Figure 1](#). The map of projects (a) shows the number of World Bank projects by country in which the project was implemented, highlighting areas with the highest concentration of projects. Map (b) presents the number of World Bank projects by country of origin of the project manager. These maps show that, while projects are frequently implemented in China, India, and parts of South America, project managers tend to be from North America, Europe, and India.

To account for differences in population size, we also present maps that normalize by population. The project density map (c) presents the number of projects divided by a country’s population in millions. The project manager density map (d) presents the number of projects divided by the project manager’s country of origin’s population. Despite the normalization, these maps still reveal stark geographic disparities between where projects are implemented and

⁴For a subset of observations (444), we match names to LinkedIn and code up the country of an individual’s undergraduate degree. This provides some validation of the AI’s predictions, though we note that undergraduate country may not be perfectly informative if individuals migrate for higher-education. We find that the country identity assigned by GPT matches the LinkedIn information 61% of the time.

⁵See [Table A3](#) for information on number of projects by country.

Figure 1: World Bank Projects By Project Location & Project Manager Origins



Notes: The maps present (a) the number of World Bank projects by the country of project implementation and (b) the country of origin of the project manager, as well as (c) the number of projects by country of implementation normalized by population of the country in 2020 (in millions), and (d) the number of projects by the country of origin of the project manager normalized by population of the country of origin in 2020 (in millions). The project manager's country is assigned using AI (see more details in [Appendix B](#)). The data are from [AidData \(2017\)](#).

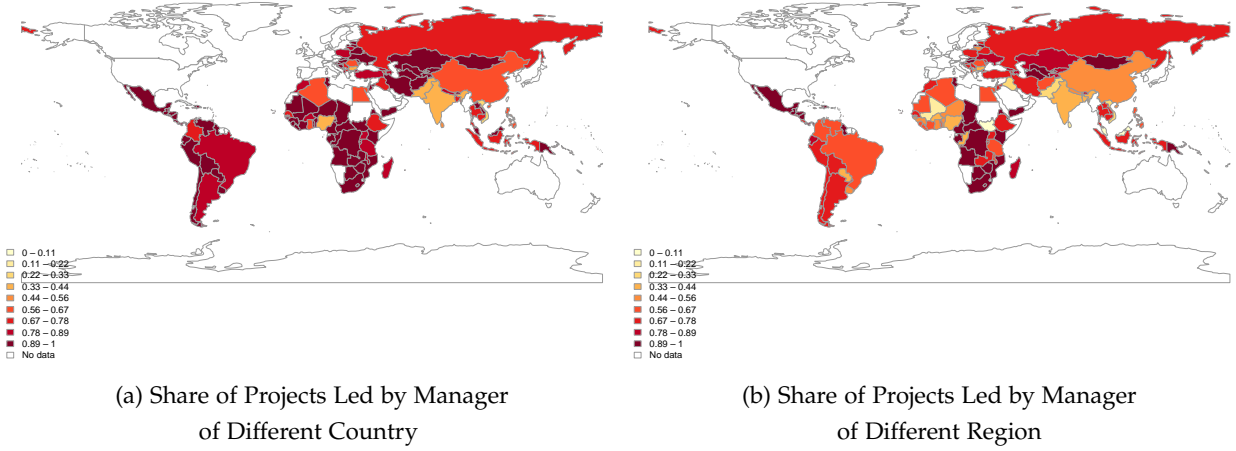
the cultural origin of project managers. Project managers are disproportionately from Western countries, particularly Europe. We complement the country of origin maps with maps that present region of origin in Appendix Figure A1. The region-level maps reveal similar patterns to the country-level maps.

These visualizations underscore the scope for cultural match to matter. Projects may be more successful if the background of the project manager aligns with the local context of the project site because project managers may be less likely to misunderstand or be unaware of details of the cultural context. We present the share of projects where the identity of the project manager does not match the project location in Figure 2 for both the country and region-level classifications of manager origin. This figure more directly highlights that in many cases, the background of project managers and the location of implementation do not match. This issue appears to be particularly pronounced in sub-Saharan Africa, Central America, South America, and parts of Asia, where over 89 percent of projects are implemented by project managers that are not from the region.

We also plot the evolution of project location-manager matches over time. Appendix Figure A2 shows that the total number of projects where the manager's country or region of origin matches the project location has remained relatively stable over time. Appendix Figure A3 examines the share of projects with matches over time, revealing an upward trend, particularly for regional matches, since 2005. While the absolute number of matched projects did not increase substantially over the study period, their proportion has grown. This may indicate a shift in project assignment practices or a greater emphasis on cultural familiarity in project management, though other factors like growth in the pool of potential project managers from low-income settings may also contribute.

We next explore whether match is associated with the success of projects. To test this, we use information on the project ratings that are available for a subset of projects in combination with the "match" information. Ratings are drawn from the *Implementation Completion and Results Report Reviews*, which are reviews of *Implementation Completion and Results Reports* by the World Bank's Independent Evaluation Group (IEG). The ratings assess the extent to which the project's stated objectives were achieved efficiently, effectively, and with relevance to the development context (World Bank 2024a), with six categories: 1 = *Highly Unsatisfactory*, 2 = *Unsatisfactory*, 3 = *Moderately Unsatisfactory*, 4 = *Moderately Satisfactory*, 5 = *Satisfactory*, and 6 = *Highly Satisfactory*.

Figure 2: Mismatch Between Project Manager Origin and Project Location



Notes: The maps present (a) the share of World Bank projects led by managers whose country of origin is different than the country of implementation, by country of project implementation, and (b) the share of World Bank projects led by managers whose region of origin is different than the region of the country of implementation, by country of project implementation. The project manager's country of origin is assigned using AI (see more details in [Appendix B](#)). The region of origin corresponds to the United Nations' official sub- and intermediate-regions and is coded directly from the project manager's assigned country of origin. The data are from [AidData \(2017\)](#).

To estimate the association of cultural match between project managers and project locations and project success, we estimate the following regression:

$$Project\ Rating_{pm} = \tau Match_{pm} + \mathbf{X}_{pm}\Phi + \gamma_{r(p)} + \epsilon_{pm} \quad (1)$$

where the dependent variable $Project\ Rating_{pm}$ is the World Bank project rating, which takes integer values from 1 to 6 for each project p managed by project manager m . The key independent variable, $Match_{pm}$, is an indicator variable that equals 1 if the project manager's country of origin matches the project's country of implementation and 0 otherwise. The vector \mathbf{X}_{pm} includes controls for project manager characteristics (years of experience and its square) and project characteristics (fixed effects for the project's transaction start year and project sector). Region fixed effects, $\gamma_{r(p)}$, account for unobserved heterogeneity across regions where projects are implemented. Standard errors are clustered at the country level. We caution that the results of this regression are not necessarily causal. Rather, our goal is to show suggestive associations that motivate further research into the importance of culture for policy.

The coefficient of interest in our empirical specification is τ , which captures the association between match and project success. A positive and statistically significant estimate of τ suggests

that the match between the project manager’s origin and the project’s location is correlated with improved project ratings. While our estimates do not have a causal interpretation, match could matter causally for at least two reasons. First, a cultural match may facilitate greater cooperation between the project manager and local stakeholders. A manager who shares cultural or institutional knowledge with the local population may be better equipped to navigate social norms and foster engagement with community leaders. Second, such managers might have a more nuanced understanding of local governance structures, economic conditions, and informal institutions, allowing them to adapt project design and implementation strategies to better fit the local context.

However, there are also reasons why τ might not be positive. Historically, World Bank policies discouraged country nationals from leading projects in their own countries to mitigate risks of corruption or political capture. Additionally, in lower-income countries with constrained human capital, assigning project leadership based on origin might come at the cost of technical expertise, particularly in sectors requiring specialized knowledge. These trade-offs highlight that while cultural familiarity may enhance project effectiveness, its association with project success is ex-ante unclear.⁶

We present the results of estimating equation (1) in Table 1.⁷ A match between the project manager country of origin and the location of implementation is associated with an improved project outcome rating (column (1)). The results in column (1) include fixed effects for project start years, project sectors, and regions. Subsequent columns show results that include additional controls. Column (2) controls for leader experience—years in the World Bank and its square—to account for potential sorting of more seasoned managers to familiar destinations. Column (3) further controls for managers overseeing projects in multiple locations within a country. Finally, column (4) drops projects that took place after 2006. These projects are less likely to have ratings because many had not yet been completed at the time the data were collected (and ratings are therefore available for projects that were selectively completed faster). The estimate remains stable

⁶We also note another important caveat to our analysis. While project managers may not be from the country or region of the project, projects tend to be developed and implemented in teams. Thus, there are likely individuals from the country of implementation represented on the project, regardless of the identity of the project manager. We are unable to account for this in our analysis.

⁷Projects were implemented in 124 countries. For our country-level match, the “match rate” varies from 0 to 0.67 across countries. The average match rate is 0.11, and 52 percent of countries have a match rate of 0.

and statistically significant across specifications that include additional controls.⁸ The results suggest that assigning managers to projects in their countries of origin is consistently linked to better project performance, even after accounting for time, sector, region, and manager-level characteristics.

Additionally, Appendix Table A5 reports the association of project manager match with the sub-components of the overall project rating. Interestingly, manager match is most associated with higher scores on the borrower performance rankings. This is consistent with the idea that manager matches are particularly important for on-the-ground implementation and relationships with stakeholders.

Table 1: Association Between Project Country-Manager Match and Project Success

	Dependent Variable: <i>World Bank Project Rating (1-6)</i>			
	(1)	(2)	(3)	(4)
<i>Match (Country, GPT)</i>	0.121** (0.048)	0.127*** (0.048)	0.132*** (0.048)	0.129*** (0.049)
Start year FE	Y	Y	Y	Y
Region FE	Y	Y	Y	Y
Sector FE	Y	Y	Y	Y
Leader Exp. Controls	N	Y	Y	Y
Multi-location FE	N	N	Y	Y
Drop >2006	N	N	N	Y
Outcome Mean	4.09	4.09	4.09	4.11
Adjusted R ²	0.048	0.049	0.049	0.048
Observations	2,902	2,902	2,902	2,747
Clusters	132	132	132	130

Notes: The dependent variable is the *World Bank Project Rating*, which ranges from 1 (highly unsatisfactory) to 6 (highly satisfactory). *Match (Country, GPT)* is a binary variable that equals 1 if the project manager is from the country of implementation. “GPT” indicates that the project manager’s country is assigned using AI (see more details in Appendix B). The regressions are conducted at the project level and estimated using ordinary least squares. Leader experience controls correspond to project manager experience in years and years squared. The regions used as fixed-effects correspond to the region of project implementation and are based on the UN official sub-regions definition (see more details in Appendix B.2). Standard errors are clustered at the country-level. Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

Taken together, the patterns in the data show that cultural match between project managers

⁸We also report results using the region of origin of project managers to define matches in Appendix Table A4. We find directionally similar patterns – projects led by managers from the project’s region perform better – but the estimates are smaller and less precise.

and local populations is associated with better project outcomes. It is possible that projects overseen by project managers from different cultural backgrounds may face greater implementation challenges, leading to inefficiencies or unintended consequences. However, we caution that these results are purely correlational. We cannot rule out, for example, that particular types of individuals are more likely to be assigned to projects in their country or region of origin.⁹ Nonetheless, these patterns help motivate a discussion of empirical evidence on whether more culturally attuned approaches in development projects, potentially by leveraging local knowledge or increasing the representation of local project managers in supervisory roles, may lead to better development outcomes.

2.2. Motivating Results from Other Disciplines

To further motivate the importance of taking culture into account in the design and study of policy, we now discuss findings from outside of economics. In development policy, the failure to consider local cultural contexts can lead to unintended and often counterproductive outcomes. From cash transfer programs to agricultural interventions, policies that ignore the cultural context of the communities they aim to serve can face resistance, mistrust, or outright rejection. In this subsection, we describe cases where failing to take cultural context into account led to significant challenges. We organize our discussion around policy types, with each policy type denoted by a bold heading.

Social Welfare and Insurance Policies: Cash transfers are a popular and well-studied social welfare policy in low and middle-income countries. Over the last two decades, the World Bank has been involved with cash transfer programs totaling 14.3 billion USD across 22 countries ([World Bank 2024b](#)). Economists often view unconditional cash transfers as a simple and effective policy tool, allowing recipients the freedom to choose how best to use the funds to improve their lives. The appeal lies both in the policy’s straightforwardness – the administrative ease of providing direct financial assistance without conditions or restrictions – and the flexibility it provides recipients to spend on their greatest needs. However, while the economic benefits of such programs are well-documented ([Haushofer and Shapiro 2016](#)), they can face unexpected barriers in certain contexts. [Schmidt \(2022\)](#) examines the surprisingly high refusal rates of cash

⁹For example, a potential confounder is that high human capital types – a lot of experience or very effective people skills – are more likely to be allowed to work on a project in their country of origin.

transfers in some areas of Kenya. He finds that these refusals are deeply rooted in the local cultural understanding of social relationships. In many communities, economic transactions are seen as part of a relational system where the acts of giving, accepting, and reciprocating are bound by social obligations. The unconditional and anonymous nature of cash transfers disrupts these norms, making the idea of receiving “free money” ethically troubling and even potentially suspicious for some recipients.¹⁰ Hence, failing to account for culture in the design of cash transfer programs can lead to resistance and diminish their effectiveness.

Medical Campaigns and Health Interventions: Health policies and in particular, vaccination campaigns, can provoke substantial distrust and resistance when they fail to take into account the historical and cultural context of the target population. This is particularly true in Sub-Saharan Africa, where a history of coercive colonial medical practices tied to population control has led to deep medical mistrust and the perception that modern medical interventions are linked with forced sterilization (Kaler 2004). In this vein, Feldman-Savelsberg et al. (2000) examine the 1990 anti-tetanus vaccination campaign in Cameroon, which was met with widespread resistance due to rumors that the vaccines were intended to sterilize young girls. The impact of these fears was profound: schoolgirls fled from vaccination teams, and the campaign was eventually aborted. Long-standing mistrust of government health initiatives, exacerbated by memories of colonial interventions, led to a significant drop in vaccination rates, which had lasting negative effects on public health in the region. Similar episodes have been documented in other settings. Masquelier et al. (2012) describe vaccine resistance associated with the fear that the polio vaccine sterilized girls in Niger, and Yahya (2007) describes a polio vaccine boycott in Nigeria grounded in the belief that the vaccine was contaminated with HIV and sterility-causing agents. Hence, the design of vaccination policies and other medical interventions in these settings may need to take these fears into account and foster greater trust.

Policies Aimed at Boosting Agricultural Productivity: Agricultural policies, such as those aimed at improving livestock productivity, are often viewed by economists and policymakers as a straightforward means to boost rural incomes and food security. These policies typically focus on enhancing the economic value of livestock through better management practices, veterinary services, or improved breeding techniques. However, these interventions may sometimes over-

¹⁰Henrich et al. (2001) document similar surprising behavior in ultimatum games in contexts where gift-giving creates social obligations.

look the cultural significance of livestock within the communities they aim to help, leading to unexpected outcomes. A landmark study by [Ferguson \(1985\)](#) explored how cattle are not just economic assets but are also deeply embedded in the social and cultural fabric of rural Lesotho. Ferguson argues that livestock, particularly cattle, hold symbolic and social value far beyond their economic worth. In Lesotho, cattle are tied to notions of power, masculinity, and social status, and are often used in important social rituals, such as marriage negotiations. The study highlights that policies focusing solely on the economic utility of livestock fail to capture these broader cultural meanings, which can lead to resistance or misinterpretation of policy goals. For instance, policymakers observed that individuals held many cattle – and believed that individuals did not sell the cattle because there weren't sufficient markets. However, this approach completely misunderstood the social value of cattle in this setting. In fact, policies aimed at creating markets for the sale of cattle for cash income might cause resistance because selling cattle may be seen as diminishing one's social standing.

Just as policies that disregard the cultural significance of livestock can backfire, agricultural interventions in other domains, such as crop production, have also faced significant challenges when local cultural practices are ignored. As noted in [Nunn \(2019\)](#), seminal work by [Lansing \(2009\)](#) provides a vivid example of how ignoring local cultural practices in policymaking can lead to unintended negative consequences. [Lansing \(2009\)](#) focuses on the implementation of Green Revolution policies in Bali during the mid-1970s. The Green Revolution brought new agricultural techniques and technologies to increase crop yields, but these innovations clashed with Bali's traditional water management system, which was deeply intertwined with religious practices. In Bali, water management was organized through a network of temples that coordinated planting schedules based on religious calendars, a system that had evolved to optimize water usage and pest control. When the Green Revolution policies encouraged farmers to abandon these traditional practices in favor of more intensive farming techniques, the result was a surge in pest infestations and a decline in agricultural productivity. Lansing's work highlights the critical importance of understanding cultural practices – including studying why those practices may have evolved – when designing development policies. Without recognizing the role of cultural practices in organizing production, even well-intentioned policies can do more harm than good, disrupting finely tuned systems that developed over centuries.

Similarly, land titling efforts in various regions have also faced challenges when they fail to

account for traditional land use practices. These omissions can lead to conflicts and unintended consequences. This is illustrated by the struggles over land rights in the Río Plátano Biosphere Reserve in Honduras (Mollett 2006), where the Miskito Indians, the Reserve's largest indigenous group, have resisted state-led efforts to prioritize titling private property and have demanded formalization of their customary land rights. A similar dynamic has played out in Kenya, where land tenure reforms have clashed with customary practices (Shipton 1988; Easterly 2007; Haugerud and Mwangi 2024). Among the Luo in western Kenya, land was traditionally allocated through a system of seasonal exchanges and communal access, which provided flexibility in land use. The introduction of private titles replaced these customary arrangements with rigid legal ownership, leading to disputes over who should be granted legal ownership – those historically cultivating the land or those formally registered under new titling regimes – and creating new uncertainties rather than securing tenure (Shipton 1988). These examples underscore how land tenure policies can have unintended consequences if their design fails to appreciate pre-existing cultural institutions related to land use and ownership.

These examples from diverse disciplines all highlight the importance of understanding the cultural context when designing and implementing policy. Misunderstanding the context can lead to the wrong policy prescription – such as the need for cattle markets in Lesotho – or even to outright resistance, as is the case for vaccination campaigns in a setting of medical distrust. We next turn to work in economics, which measures quantitatively how the success of policies varies with cultural context.

3. Heterogeneity by Culture and Unintended Consequences

Motivated by evidence from the anthropological and qualitative literature that culture plays an important role in determining policies' effects, rather than considering a one-size-fits-all approach, a growing literature in economics now focuses on how these effects vary with underlying cultural practices. Importantly, this literature does *not* infer that there is no external validity from one context to another due to cultural differences but instead seeks to understand specifically how culture shapes incentives and economic behavior, directly informing the extent to which results from one setting are informative for another. In this section, we discuss examples of recent work examining how the effects of various policies and development interventions vary based on the

underlying cultural context. As in Section 2.2, we organize our discussion around different policy types, with each policy type denoted by the bold heading.

Social Welfare and Insurance Policies: Policymakers and researchers often expect the benefits of cash transfers and pension programs to be concentrated in treated households. Yet, work in anthropology and sociology suggests that how transfers “spill over” may depend on underlying patterns of social obligation and exchange. Moscona and Seck (2024) explore how the effects of cash transfers and pensions vary based on social organization. In the context of Kenya and Uganda, there are ethnic groups that practice age sets, in which young men of similar ages undergo an initiation ritual together. Work in anthropology suggests that age sets lead men to feel obligations to those within their age set. The authors contrast groups with age sets to those based on kinship networks, which are networks of extended family members. They hypothesize that the spillover benefits of cash transfers and pensions may vary based on the social structure, with those in the same age cohort benefiting in age set societies, while those in the same family or clan benefit in kinship-based societies.

They test these hypotheses in two parts. First, they leverage a cash transfer experiment implemented in Kenya, in which there is variation in the presence of age sets, whether a location is assigned to a treatment group that receives a cash transfer, and eligible vs. non-eligible populations. The authors combine this information in a triple difference approach. They find that, among age set societies, transfer-ineligible households experience an increase in consumption in treatment locations relative to control locations as the share of treated individuals from the same age cohort increases. This relationship is not present for those from kin-based societies. Furthermore, they find that the effect is very specific to those individuals within the same age cohort; there are no spillover effects for those in older or younger cohorts. In the second part of their analysis, they examine the effects of a pension program for individuals over 65 in Uganda. While the pension program targets older individuals, the Ugandan government expected that the program would benefit grandchildren. Using a triple difference strategy that leverages pilot relative to non-pilot districts, the potential pension exposure of households, and age set relative to kin-based social structures, the authors find evidence of spillovers to grandchildren in kin-based societies but not in age set societies. The authors interpret the results as consistent with social structures systematically affecting financial transfers in these societies and suggest that this has important implications for the expected effects of the programs. Their results highlight how social

structures, which affect obligations across households, have implications for who benefits from policies.

Medical Campaigns and Health Interventions: Even the best-designed health programs can run aground if they collide with local beliefs about disease causation and treatment. Medical anthropologists have long noted that interpretations of disease and misfortune, as well as the perceived best methods to address them, differ widely across cultures ([Foster 1976](#)).¹¹ Thus, people's willingness to accept—or reject—a medical campaign hinges on deeper, culturally grounded theories of illness. This may be particularly true in developing contexts, where learning about effective medical treatments is challenging, and individuals often rely heavily on oral histories and personal experiences.

Recent work has begun to highlight how differences in cultural views of medicine, often shaped by historical experiences, influence the success of modern health interventions. [Lowes and Montero \(2021\)](#) explore the long-term impacts of French colonial medical campaigns in Central Africa, which were organized by the French military and often aimed at treating and preventing sleeping sickness. Sleeping sickness is a lethal disease spread by the Tsetse fly, which is only present in sub-Saharan Africa.

The study uses archival data documenting the location and intensity of the French colonial campaigns in five Central African countries – Cameroon, Gabon, the Republic of Congo, Chad, and the Central African Republic – between 1921 and 1956. As documented by anthropologists and historians, the campaigns were characterized by coercion and the use of medications with harmful, and sometimes lethal, side effects. The authors hypothesize that these colonial medical interventions have had enduring negative effects on local populations' trust in modern medicine. They show that exposure to these campaigns significantly affects present-day health outcomes, lowering vaccination rates of children and trust in modern medicine, as proxied by consent to a blood test for HIV or anemia. Moreover, the paper highlights that this historical mistrust in medicine also correlates with the lower success rate of modern health interventions, such as World Bank health projects, in the same regions. In addition, the authors find that those exposed

¹¹[Foster \(1976\)](#) identifies three broad frameworks through which people understand disease. In “personalistic” systems, disease is seen as the result of intentional actions by agents—be they human, nonhuman, or supernatural—shifting the focus from anatomy or biology to understanding who or what caused the illness. “Naturalistic” approaches attribute disease to natural forces such as climate or imbalances in the body's humors, with medical efforts concentrated on understanding the condition's origin and finding appropriate treatments. Finally, in “bio-medical” (Western) conceptions, disease is viewed through the lens of biology and chemistry, with an emphasis on diagnosis and treatment.

to the medical campaigns are more likely to use traditional medicine, and those who believe in the supernatural origins of illness are more likely to use traditional medicine ([Lowes and Montero 2019](#)). These findings highlight that historical context can shape how effective health policies are in settings with mistrust in medicine and alternative (traditional) medicine systems.

The legacy of medical interventions extends beyond Central Africa and can be observed in different forms across the globe. [Ramos-Toro \(2023\)](#) explores the long-term inter-generational consequences of social exclusion on social preferences and take-up of anti-parasitic medicine, focusing on the case of the Agua de Dios leper colony in Colombia. Between 1871 and 1961, those believed to have leprosy were forcibly relocated to and isolated in a leper colony. At the colony, they were mistreated by state officials and by medical doctors. The study asks how ancestral exposure to the leper colony shaped the behaviors and attitudes of their descendants, who do not suffer from the disease or its associated stigma. Employing a lab-in-the-field approach and surveys conducted between 2018 and 2021 in the region surrounding the former leper colony, the paper shows that descendants of the individuals from the colony display significant mistrust toward doctors, a legacy of the historical medical mistreatment their ancestors endured. Additionally, they are less likely to take up anti-parasitic medications. These results, along with [Lowes and Montero \(2021\)](#), highlight the potential for misguided policies to have long-lasting effects across generations, undermining subsequent health efforts.

While we primarily focus on policies in developing countries, the Tuskegee Syphilis Study is an important and infamous example in the medical mistrust literature. The Tuskegee Study, which ran from 1932 to 1972, denied effective treatment for syphilis to Black men with syphilis under the guise of medical research. The goal of the study was to understand the course of the disease; even when effective treatment for syphilis became available, the study withheld that treatment from participants. The disclosure of the study to the general population led to widespread mistrust in the healthcare system among African Americans. [Alsan and Wanamaker \(2018\)](#) investigate the long-term effects of the disclosure of the Tuskegee Study in 1972 on the health behaviors of Black men in the United States. They compare changes in health utilization and outcomes between older Black men and other demographic groups before and after 1972, with a focus on geographic proximity to Tuskegee, Alabama. Their findings reveal that the revelation of the Tuskegee Study significantly reduced healthcare utilization among older Black men. The paper underscores the profound impact that historical injustices can have on contemporary health

behaviors and outcomes, illustrating how cultural and historical context shape the effectiveness of public health interventions.

Mistrust in medical institutions is not only a product of historical experiences but can also be triggered by modern interventions with immediate and profound consequences. [Martinez-Bravo and Stegmann \(2022\)](#) examine the impact of a controversial CIA operation that used a vaccination campaign as a cover to capture Osama Bin Laden on immunization rates in Pakistan. In 2011, it was revealed that the CIA had used a fake vaccination drive to collect DNA samples to locate Bin Laden. This revelation led to a propaganda campaign by the Taliban claiming that vaccination campaigns were part of a Western conspiracy against Muslims, leading to widespread distrust of vaccines. The authors use a difference-in-differences strategy to analyze vaccination data across different cohorts and districts in Pakistan, focusing on areas with varying levels of support for Islamist groups, who were more likely to believe and propagate the Taliban's anti-vaccine messages. The study finds that vaccination rates in districts with high Islamist support significantly declined; this drop in vaccination coverage also led to an increase in polio cases, illustrating the severe public health consequences of the loss of trust in vaccines.

Policies Aimed at Boosting Agricultural Productivity: Ethnographers have documented that land in many societies is more than an input – it's a symbol of ancestry, social status, or communal identity (e.g., [Fortes 2018](#)). Such cultural attachments shape not just who can farm but what investments are socially acceptable or desirable.¹² Thus, cultural norms and social institutions related to land vary significantly across different societies, and these differences may play a critical role in shaping agricultural practices and outcomes.

[Le Rossignol et al. \(2024\)](#) examine how differences in land tenure systems influence the success of land policies. The authors test the hypothesis that longer fallow requirements – the time needed to leave land uncultivated to restore fertility – lead to a higher prevalence of communal property rights. The intuition is that in places that have longer fallow requirements, there are higher protection costs for land during this longer fallow period. Therefore, communal land rights are likely to be more beneficial, because they make the community responsible for the protection of the land during these periods. Using an ecological measure of the optimal fallow length for a location given the maximum caloric suitable crop, the authors first find that places where land

¹²Furthermore, while models of investment predict that secure property rights encourage farmers to invest in their land, "security" takes very different forms in practice, where communal custodianship, kin-based stewardship, or formal individual title each carries its own expectations and enforcement mechanisms ([Platteau 2006](#)).

needs to be fallowed for longer periods are more likely to have communal property rights both historically and presently. The authors then examine the implications for efforts to title land. Land titling interventions – in which governments and donor organizations attempt to privatize land and grant individual land titles – have been quite common. The authors use data on the success of World Bank projects, some of which are land titling interventions. These projects are rated on how successful they are in reaching project goals. They find evidence that these interventions are less successful in places with longer fallow requirements, suggesting a mismatch between development policy and underlying institutions.

Just as underlying land tenure regimes may shape efforts to privatize land, livelihood systems may also determine how land is used and valued. In particular, in many arid and semi-arid regions pastoralism – rather than agriculture – has long shaped property norms and resource access. Ignoring this form of economic production can therefore lead to unintended and often detrimental consequences of agricultural policies. [McGuirk and Nunn \(2024\)](#) explore the consequences of implementing agricultural development projects in traditionally pastoral regions across Africa. These policies include efforts to privatize land and increase agricultural productivity. The study investigates whether these projects inadvertently increase the risk of conflict in areas traditionally used for pastoralism. By analyzing geocoded data on agricultural projects and conflict events from 1995 to 2014, the authors find that agricultural projects in pastoral areas lead to a significant increase in violence, a pattern not observed when similar projects are implemented in non-pastoral regions. The authors highlight that the mismatch between the development initiative and the local subsistence mode – pastoralism versus agriculture – likely creates tensions over land use, and these often result in conflict.

[Rustagi \(2025\)](#) examines how formal policies around forest access—referred to as “rules” in his paper—interact with civic culture in the management of forest commons in Ethiopia. Leveraging variation across groups in both formal grazing restrictions and experimentally measured civic capital (via public goods games), the study investigates whether and how these two forces complement each other. Forest management outcomes are significantly better (there are more trees present) when both formal rules and strong civic capital are present. In short, rules are only effective when supported by civic capital.

Cultural and historical contexts also play a pivotal role in determining the success of other agricultural initiatives. [Blouin \(2022\)](#) investigates the long-lasting impact of colonial forced labor

policies on inter-ethnic trust and economic cooperation in Rwanda and Burundi. Historians emphasize that the Belgian colonial administration's use of forced labor, specifically the requirement for Hutu farmers to cultivate coffee under the supervision of Tutsi chiefs, significantly shaped ethnic relations in these countries in ways that likely persist until the present. [Blouin \(2022\)](#) uses historical data on land suitability for coffee, family histories of forced labor, and contemporary trust measures, including trust games and real-world agricultural insurance agreements, to explore the effects of these policies. The paper finds that Hutu descendants of those subjected to forced labor by Tutsi chiefs exhibit significantly lower levels of trust towards Tutsi individuals today. This mistrust manifests in reduced willingness to engage in inter-ethnic cooperation via agricultural insurance agreements, which are essential for mitigating risk in this setting. The study underscores how historical policies that fomented ethnic divisions have left a legacy of distrust, impacting the take-up of agricultural insurance in the region.

Education Policies: Cultural norms also shape incentives to invest in human capital and therefore responses to educational policies, as shown by [Ashraf et al. \(2020\)](#), who examine whether the effects of an important set of development policies — school construction programs — depend on cultural traditions. The authors hypothesize that a widespread cultural tradition, bride price, whereby grooms make payments to the brides' parents at the time of marriage, may incentivize female human capital investment by allowing brides' parents to capture a larger portion of the returns to their daughters' education. To understand the effects of this tradition, the authors build an equilibrium marriage market model with bride price and human capital investment, where educated women are in short supply and education rates are low, mirroring the environment in many low-income settings. This model generates several testable predictions, including that bride price payments should increase in female education, female education rates should be higher among ethnic groups with cultural traditions of bride price, and crucially, female education should increase more in response to school construction programs among bride price groups.

Matching data on ethnicity-level cultural traditions from the *Ethnographic Atlas* ([Murdock 1967](#)) and district-time varying information on school construction to survey data from Indonesia and Zambia, the authors test these predictions separately in two very distinct countries. Notably, in Indonesia, the authors exploit the same natural experiment generated by the INPRES school construction program, one of the largest school construction programs recorded, studied in the seminal paper of [Duflo \(2001\)](#). Despite the fact that Indonesia and Zambia are very different

contexts — Indonesia is predominantly Muslim for instance, while Zambia is predominantly Christian — the results match the model predictions in both settings. The authors show that in both cases, higher levels of female education are associated with higher bride price payments, even conditioning on groom quality, and girls from groups with bride price traditions are more likely to be enrolled in school. School construction programs have no statistically significant effect on the average woman’s educational attainment, but this null result masks important heterogeneity. Among groups that practice bride price, school construction programs have meaningful positive effects on female education. The authors conclude that both the evaluation and targeting of policy must take the cultural context into account. While targeting will also depend on policymakers’ other objectives, the policy would have more effectively increased female education if it were targeted toward areas where bride price is more prevalent. Moreover, evaluations that do not take cultural heterogeneity into account would have falsely concluded that the school construction programs had little effect on female education.

Financial Interventions: Financial inclusion efforts often include commitment savings tools under the assumption that these tools universally help people with self-control, allowing them to save for productive uses while reducing “temptation” spending. However, what counts as a “productive” use of money versus “temptation” spending depends on local practices. In many rural or subsistence contexts, cash also serves communal or status-related functions. An interesting example comes from [Godoy et al. \(2021\)](#), who implement a randomized controlled trial among the Tsimane in the Bolivian Amazon, where they introduce a savings technology — lockboxes — that has been used in other contexts to successfully increase savings (e.g., [Ashraf et al. 2006](#); [Dupas et al. 2019](#); [Aggarwal et al. 2023](#)). The authors find that the introduction of these lockboxes leads to an increase in alcohol consumption, which confers social prestige in this setting. In this context, the intervention was intended to increase savings and reduce “temptation” spending, but it was not well-matched to a cultural context where one of the few uses of money is to buy alcohol.

State Institutions and Laws: State laws do not operate in a vacuum. Their effectiveness is affected by prevailing social norms. [Bargain et al. \(2024\)](#) examine how the effects of a legal reform in Indonesia differ by norms regarding post-marital residence — i.e. matrilocality relative to patrilocality. The legal reform increased women’s access to the legal system by decreasing

legal fees, increasing physical access to courts, and by increasing the range of services available. Thus, the reform may have made it easier for women to divorce. The authors hypothesize that the effects of the reform may differ by post-marital residence norms because matrilocal women receive greater support from their families and may therefore be better able to take advantage of the legal reform. Using time and ethnic variation, the authors find that matrilocal women divorce more after the reform. Taking advantage of spatial variation in access to the courts, they find that the results are largest for those matrilocal women living far from courts initially.

Another paper in India shows that a well-intentioned legal intervention aimed at improving the status of women can have negative unintended consequences. [Calvi and Keskar \(2023\)](#) study the effect of amendments that strengthened India's dowry prohibition act in 1985 and 1986. These amendments applied to Hindus but not Muslims, allowing for a difference-in-differences analysis comparing changes in the two groups' outcomes from the pre- to the post-period. While these prohibitions were intended to improve the outcomes of women, the authors show that the passage of these amendments, which *did* reduce the practice of dowry, also reduced female bargaining power and increased domestic violence. [Calvi and Keskar \(2023\)](#) rationalize this result with a non-cooperative bargaining model with incomplete information where, in line with earlier work by [Bloch and Rao \(2002\)](#), exiting a marriage is heavily stigmatized for women, resulting in a low outside option. The authors highlight that their findings do not mean that attempts to curb or end dowry are necessarily bad but rather that the introduction of such policies requires additional elements to mediate their unintended consequences.

Inheritance Policies: Inheritance customs — from eldest-son primogeniture to equal-sharing regimes — shape who controls family assets and how they're transferred ([Goody 1976](#)). Consequently, reforms that redraw inheritance rules may interact with these norms and generate heterogeneous outcomes. [Bahrami-Rad \(2021\)](#) studies the 2005 reform of inheritance laws in India, which applied to Hindus but not to Muslims or Christians. The reform made daughters the joint heirs to family property; until the reform, in 29 states, only males inherited. Similar to [Calvi and Keskar \(2023\)](#), this allows for a difference-in-differences analysis, exploiting variation in exposure across religion and over time. [Bahrami-Rad \(2021\)](#) hypothesizes that female inheritance will increase cousin marriage, which is often associated with more restrictive marriage norms, because households prefer to keep the inheritance "in the family." He also suggests that the law may reduce female employment, particularly in areas where female employment is heavily

stigmatized, by increasing females' non-employment resources. Focusing on 29 states that had not passed any inheritance reforms prior to 2005, [Bahrami-Rad \(2021\)](#) finds results consistent with both hypotheses. As before, failure to consider the cultural context led a well-intentioned policy to undercut female empowerment on at least some dimensions.

[Bhalotra et al. \(2020\)](#) document an even more extreme example of the negative impacts of inheritance reforms in India on women. The authors suggest that inheritance reforms establishing greater female inheritance may have increased sex-selection against daughters because they increased the perceived cost of daughters. To test this, they exploit the staggered introduction of reforms across states from 1976 (in Kerala) to the 2005 national reform, which superseded state-level rules. This allows for a difference-in-differences approach, exploiting the location and timing of the reforms. The authors further interact this variation with variation in the sex of the first child since sex selection for first children is rare. Hence, they hypothesize that women who have a daughter already may be more likely to engage in sex selection for their second child following the reform. This appears to be the case. Families with a firstborn daughter are 4 percentage points less likely to have a second-born daughter following the reform.

Inheritance reforms also have context-dependent consequences outside of India. [La Ferrara and Milazzo \(2017\)](#) study the unintended consequences of an inheritance reform in Ghana. In Ghana, there is variation in whether groups practice matrilineal or patrilineal kinship. In matrilineal groups, men do not inherit land from their fathers but instead inherit from their maternal uncles. However, in 1985, the Ghanaian government introduced the Intestate Succession Law (ISL), which mandated a minimum share of land that parents should pass on to their children. This policy had a greater impact for the matrilineal Akan — shifting inheritance from the matriclan towards male sons. In contrast, in patrilineal groups, sons were already inheriting from their fathers, so the law did not have large effects on inheritance outcomes. Using a difference-in-differences strategy across age-cohorts and ethnic groups, the authors find that Akan men of schooling age who are exposed to the reform experience a reduction in years of schooling; they find no equivalent effect for Akan women. Akan parents appear to reduce human capital investment in their sons once they are required to transmit property to them. The effect is driven by households that own land and that could therefore substitute between physical and human capital investments. The paper highlights the unintended consequences of land reform and how kinship structures shape investment in human capital.

Fertility-Related Policies: Fertility policies can also interact with cultural norms related to family formation and gender relations. The “One Child Policy” in China is a particularly dramatic example of a fertility-related policy having unintended consequences. The policy, instituted by the Chinese Communist party in 1980 to combat dramatic population growth and concerns about a ‘Malthusian Collapse,’ severely restricted the fertility of Chinese families. It placed limits of one child, with exceptions allowing a second child if the first was a daughter in some rural areas (the “1.5 Child Policy”) and for two or three children in very remote areas ([Ebenstein 2010](#)). Following the institution of the One Child Policy, sex ratios in China became substantially male-skewed ([Sen 1990](#); [Das Gupta 2005](#)). While part of this difference is likely due to the under-reporting of female births to circumvent the law, skewed sex ratios also appear to be driven by prenatal sex selection via ultrasound ([Yi et al. 1993](#); [Hull 1990](#)). Exploiting variation in the timing of the policy and uneven policy restrictions and enforcement across space, [Ebenstein \(2010\)](#) shows that the One Child Policy causally increased male-to-female sex ratios, particularly following an increase in both enforcement and widespread availability of ultrasounds in the 1990s. This unintended consequence of the policy reflects a strong cultural preference for having at least one male child, perhaps at least in part due to cultural traditions where sons care for parents in old age ([Ebenstein and Leung 2010](#); [Ebenstein 2014](#)). While the One Child Policy officially ended in 2016, its effects on the sex ratio — which reached 118 male births to 100 female births in 2005 ([World Bank 2024c](#)) — will take decades to resolve. Indeed, the unintended consequences of the policy may continue far into the future. For example, [Gao \(2021\)](#) speculates that the policy led to a persistent decline in the desired number of children today.

4. Policy Changing Culture

While much of the literature has emphasized how culture shapes policy effectiveness, an emerging body of work demonstrates that policy can also change culture — sometimes by design but often through unintended consequences. Indeed, policymakers rarely take into account the consequences of policies for cultural practices and attitudes, which may critically alter their costs and benefits.¹³ In this section, we begin by discussing the growing literature showing that policies

¹³For the purposes of this chapter, we focus on cases where policy is linked with cultural change. For an accounting of other potential causes of cultural change, see [Bau and Fernández \(2023\)](#), which discusses how other shocks, such as technological change, information, and religious institutions can result in cultural change in the context of the family, or [Lowes \(2023\)](#) which presents an overview of the work on culture and cultural change in an historical context.

change culture. We then contrast these findings with cases where policies explicitly intended to change culture were ineffective (e.g., dowry bans in India), discussing lessons for when we may expect culture to change policy. In the last part of this section, we discuss the still small economics literature on how to design policies with the explicit goal of changing culture.

Social Welfare and Insurance Policies: To illustrate how policies can affect culture, we begin with examples from social welfare and insurance policies. These policies make up a large fraction of government spending in high-income countries and are frequently introduced and expanded with economic development. [Bau \(2021\)](#) explores how a specific welfare policy – the adoption of pension programs in Ghana and Indonesia – can lead to cultural change. As in many lower-income countries, parents typically rely on adult children, who live near or with them after marriage, to support them in their old age. She hypothesizes that pension plans crowd out the need for informal cultural practices of old-age support and will therefore reduce co-residence traditions in which either daughters (matrilocal) or sons (patrilocal) live with their parents after marriage. She further predicts that this will lead to declines in educational investment in the children who previously would have supported parents in their old age, since parents now benefit less from the returns to those investments.

Using each country as a separate experiment, she tests the key hypothesis that the pension programs led to cultural change in census data. A nice aspect of this research question is that, unlike many cultural variables, the practices of matrilocality and patrilocality can be inferred in most census datasets from relationships in the household roster. In Indonesia, [Bau \(2021\)](#) exploits cross-cohort variation induced by the timing of the pension introduction, intensity of exposure due to the placement of program offices, and cross-ethnicity variation in cultural traditions in triple-differences regressions to show that the introduction of the pension program crowded out the practice of matrilocality among traditionally matrilocal groups. In Ghana, using difference-in-differences regressions exploiting cross-ethnicity variation in traditions and the timing of the pension program, she finds symmetric results. The pension program crowds out the practice of patrilocality by traditionally patrilocal groups in Ghana. Moreover, results from the same identification strategies show that the introduction of pension programs reduces educational investment by parents in the children who would have supported them in their old age.

These results point to potentially surprising costs and benefits of pension programs, which

would be difficult to anticipate without taking into account the cultural context. On the one hand, these programs crowd out educational investment for certain groups, potentially slowing economic development. On the other hand, by undermining cultural institutions that may have inhibited migration, they may enable economic development. An intriguing broader implication of [Bau \(2021\)](#) is that the adoption of policies associated with “modernization” by lower-income countries, such as increased formal social welfare and the reliance on markets instead of informal social institutions, may result in cultural change.

Echoing these findings in a high-income setting, [Fetter et al. \(2022\)](#) document how the introduction of Social Security in the United States similarly influenced inter-generational living arrangements and economic behaviors. They test the hypothesis that Social Security acts as a substitute for in-kind transfers that adult children may provide to their parents. The authors exploit variation in the timing of the rollout of Social Security within occupations across industries in a difference-in-differences strategy and investigate the effect of parents’ receipt of Social Security on adult children’s outcomes. Similar to [Bau \(2021\)](#), the authors find that the introduction of Social Security reduced the likelihood that adult children lived in the same location as their parents. The authors also show that the children of parents affected by the social security rollout earned more and moved to higher socioeconomic status zip codes. They suggest that their results may be driven by adult children being able to migrate to better-matched labor markets.

Welfare policies can also affect traditional gender roles. [Bastian \(2020\)](#) investigates the effects of the Earned Income Tax Credit (EITC) on female labor force participation and evolving gender attitudes. [Bastian \(2020\)](#) seeks to explain why the U.S. has such a high share of working mothers despite few family-friendly work or child care policies. The EITC, which was introduced in 1975, incentivizes low-income workers to work by imposing a negative tax rate on low levels of income. Using a dynamic difference-in-differences approach that compares working mothers to non-mothers before and after the introduction of the EITC, [Bastian \(2020\)](#) shows that the EITC has substantial effects on whether women work. While this does not immediately imply that the EITC led to cultural change, since it directly incentivizes work, [Bastian \(2020\)](#) supplements these results by examining whether attitudes toward working women improved more following the introduction of the EITC in states that were predicted to have a larger increase in working women due to the EITC. Interestingly, this change in attitudes is not confined to women — who are directly affected by the EITC — but also affects men. This finding corroborates other

work suggesting that exposure to working women improves attitudes toward working women (e.g., [Fernández et al. \(2004\)](#) or [Gay \(2023\)](#)). In addition, it suggests that policies that incentivize certain behaviors can increase the social acceptability of those behaviors, possibly amplifying the effect of the original policy in the long-term (for a theoretical and empirical treatment of the case of attitude change and female labor force participation, see [Fernández \(2013b\)](#)). Policy design and evaluation must take into account not only policies' direct effects but also indirect effects due to changing the cultural environment.

State Institutions and Laws: The institutional environment in which laws and policies are enacted may also be important for shaping cultural outcomes. [Campa and Serafinelli \(2019\)](#) study the effects of a broad set of institutional differences due to state socialism that gave rise to policies deliberately aimed at promoting women's economic inclusion. The authors exploit the partition of Germany in 1945 to estimate the effect of state socialism on gender attitudes. East Germany implemented policies to encourage women's labor force participation; in contrast, West Germany encouraged women to stay home after they had children or to transition to part-time work. The authors compare attitudes towards work in the German Socioeconomic Panel along the inner-border created by the partition. Using this spatial RD-style approach, they find that women from East Germany (but not men) are substantially more likely to report that career success is important. Additionally, gender role attitudes for both men and women are less traditional in the East. The effects on attitudes are concentrated in areas where female labor force participation changed more, in line with the subsequent findings of [Bastian \(2020\)](#) in the U.S., documented above. While this paper focuses on a broader set of policies and institutions, as opposed to the specific policies studied by [Bau \(2021\)](#), [Fetter et al. \(2022\)](#), and [Bastian \(2020\)](#), a similar theme arises to [Bastian \(2020\)](#). Policies that promote female labor force participation appear to change attitudes toward working women.

However, legal reforms can also provoke cultural resistance. [Wheaton \(2022a\)](#) explores how social policy laws affect beliefs and attitudes among the public in the US. The author uses a difference-in-differences strategy and data on beliefs to examine how the Equal Rights Amendments of the 1970s, which aimed to legislate equality between men and women, affected views on gender equality. He finds that women become more likely to believe in gender equality but that men become much less likely to believe in gender equality. These views are transmitted to men's children. The author also finds similar backlash effects for other laws, including the Civil

Rights Acts of the 1960s, legalization of abortion in the 1970s, the relaxation of gun control in the 1980s, the Defense-of-Marriage Acts of the 1990s, the legalization of marijuana in the 2000s, and the legalization of gay marriage in the 2010s. In all of these cases, the author finds evidence of backlash. The paper highlights the unintended cultural consequences of legislation that attempts to regulate and enforce protections for particular populations.

Formalizing Property Rights: Formalizing property rights may also lead to significant shifts in attitudes and worldviews. [Di Tella et al. \(2007\)](#) explore the impact of land titling on belief formation in an informal settlement in Buenos Aires, Argentina. They analyze how receiving legal land titles affects individuals' beliefs about markets, individualism, and trust. The study finds that individuals that received legal titles adopt more individualistic and market-oriented beliefs, such as placing greater importance on money for happiness and believing that success can be achieved without collective support. The findings suggest that formal property rights can lead to significant changes in cultural beliefs, highlighting the potential for policy to reshape cultural norms, even in low-income, informal settlements in developing countries.

Integration and Affirmative Action Policies: Turning to policies focused on social integration and inclusion, several studies show that exposure to diverse peers and institutional mandates can shift attitudes and behaviors, though outcomes depend critically on context. [Rao \(2019\)](#) studies the impact of socioeconomic integration in elite private schools in Delhi, India, where a policy change mandated the inclusion of students from low-income households. The paper uses a combination of administrative data and field and lab experiments to measure the effects of integrating poor students on the social behavior of wealthy students. Exposure to low-income peers increases the generosity and prosocial behavior of affluent students and reduces their willingness to discriminate against economically disadvantaged classmates. Notably, these effects are driven by personal interactions between students, such as being assigned to work in study groups. Hence, policies targeting increased diversity can lead to cultural change, promoting more inclusive social attitudes.

At a larger scale, [Okunogbe \(2024\)](#) examines the impact of Nigeria's National Youth Service Corps program on fostering national integration. The program randomly assigns young adults who have completed university to serve in a different region of Nigeria for one year. The program is mandatory for college graduates in Nigeria. Using survey data collected seven years after a

cohort's participation in the program, the study finds that those posted outside their ethnic region have more inter-ethnic relationships and exhibit greater national pride. However, immersion in a different region also strengthens ethnic identity and pride, suggesting that ethnic and national identity can coexist rather than conflict. This paper highlights the potential for complex cultural change arising from national integration policies. While these policies can promote national unity, they may simultaneously reinforce subgroup identities.

[Beaman et al. \(2012\)](#) study the effects of political gender quotas, an affirmative action policy aimed at increasing representation of underrepresented groups, on female aspirations. This is a rare setting where the authors can exploit random as opposed to quasi-experimental variation in policy exposure. The authors study the effects of a 1993 law that reserved leadership positions for women in randomly selected village councils. Exploiting the fact that affected village councils were randomized each election, the authors use data collected by the research team to show that parents and adolescents in villages that were more intensively treated with the gender quota (receiving it twice as opposed to once or zero times) had smaller gender gaps in aspirations. The authors argue this was due to a role model effect since economic opportunities for women were not substantially different in treated villages. Intriguingly, changes in self-reported attitudes appear to translate into changes in behavior, with meaningful declines in the adolescent gender gap in educational attainment and in time spent by teenage girls on chores vs. school. This paper highlights a promising strategy for studying the link between policy and cultural change. While key cultural or attitudes variables often aren't collected in existing observational data, researchers can design data collection to exactly capture these variables and combine these data with random or quasi-random policy variation.

However, the success of diversity-focused policies may depend critically on local context and the extent of interactions between groups. When cultural and social fragmentation is pronounced, diversity policies can instead backfire, as shown by [Algan et al. \(2016\)](#). The authors investigate the effects of ethnic diversity on social relationships and public goods provision in public housing projects in France. Exploiting a natural experiment where tenants are exogenously allocated to public housing blocks without regard to ethnicity, the authors find that increased diversity within housing units leads to lower levels of cooperation and collective action among residents. Specifically, higher diversity is associated with higher levels of neglect and vandalism in common areas, poorer maintenance of housing facilities, and lower satisfaction with housing conditions.

Interestingly, diversity does not increase violent confrontations but instead fosters a state of “social anomie” — a breakdown in social norms and reduced willingness to sanction destructive behavior. These results indicate that while diversity policies have the potential to foster inclusion, they may also undermine cooperation and local public goods when implemented in contexts with low baseline trust or social cohesion.

Designing Policy to Change Culture: Thus far, we’ve examined how policies inadvertently or indirectly reshape culture. But what about deliberate efforts? Can policy be designed explicitly to alter cultural practices—and even succeed where bans or mandates have failed?

The fact that specific policies (gender quotas, pension programs, or the EITC) can lead to cultural change may be surprising in light of a well-established literature showing that culture is highly persistent (for relatively early examples, see [Fernandez \(2007\)](#) and [Giuliano \(2007\)](#)). Just as policies can lead to rapid cultural change, even if unintentional, interventions that aim to enact cultural change often fail. This is the case, for example, for dowry bans in India, where the prevalence of dowry has only grown since it was banned ([Chiplunkar and Weaver 2023](#)), and polygyny bans in Sub-Saharan Africa ([Tertilt 2006](#)). We speculate that simply banning a cultural practice may be ineffective for at least two (non-mutually exclusive) reasons and that policies that take these concerns into account are more likely to be successful. First, deviating from a prevalent cultural institution may be costly and hence fostering cultural change requires coordinated deviations. When there are complementarities in individuals’ behaviors, multiple stable equilibria may be possible, and incentivizing individual deviations is difficult even though an alternative cultural equilibrium may exist (and behavior may converge to that equilibrium if enough deviations occur). In this case, cultural change may require a “big push” in the parlance of [Murphy et al. \(2000\)](#). Second, cultural institutions are likely to have arisen for a reason ([Boyd and Richerson 1985](#)), and these reasons may remain relevant today. For example, matrilocality and patrilocality help parents coordinate on which children will provide old-age support in contexts with limited formal savings mechanisms and state support. Dowry has been hypothesized to provide parents with a way of leaving inheritance to daughters without inducing moral hazard problems for sons who stay and work on the family farm ([Botticini and Siow 2003](#)). Attempts to ban cultural practices without addressing their benefits or root causes are therefore likely to be ineffective and may even generate backlash or have negative effects, as in the case of the Green Revolution in Bali discussed earlier.

While alternative policies may be more successful at changing culture than outright bans, we note that there is a long and decidedly mixed history of governments deliberately using policy as a tool for cultural change. A large literature across fields highlights the role of the education system as a tool of the state in nation-building, instilling values, and assimilating immigrants in both high-income and colonial settings ([Meyer et al. 1979](#); [Cohn 1996](#); [Bassey 1999](#); [Bandiera et al. 2019](#); [Paglayan 2024](#)). Within economics, [Bandiera et al. \(2019\)](#) show that the adoption of compulsory education laws occurred earlier in states with more European immigrants with lower exposure to “civic values” in their home countries; these migrants had lower demand for U.S. schools prior to the compulsory laws. Similarly, [Paglayan \(2022\)](#) argues that education expansions occurred in response to elites’ fear of violence as a way to instill a value of obedience in the populace. Tribal residential schools, where indigenous youth were taken from their families and placed in boarding schools in North America and Australia ([Feir 2016](#)), provide an even more extreme and troubling example of a government attempting to change culture and identity through the education system.

A series of papers show that curricular changes can affect values, attitudes, self-reported identity, and even ultimately, economic behavior through these channels. [Martínez-Marquina \(2024\)](#) examines how an education policy implemented by the Spanish dictatorship altered women’s family and labor market decisions. The Social Service program, which ran from 1940 until its abolition in 1978, was a mandatory six-month education initiative that aimed to instill traditional gender roles and conservative values among young women. The paper uses historical attendance records from the province of Avila and exploits the sudden abolition of the program to estimate its causal impact. The results show that women exposed to the Social Service married and had children at younger ages and were significantly more likely to be housewives after childbirth, compared to those who were just young enough to avoid enrollment. Further, the program had lasting effects on political affiliations, with participants more likely to be affiliated with conservative parties.

Similarly, [Cantoni et al. \(2017\)](#) use a difference-in-differences approach exploiting the staggered rollout of a new school curriculum to study a Chinese curriculum change intended to promote Chinese Communist Party Ideology. The program successfully improved views of the government, increased skepticism toward “unconstrained” democracy, and increased skepticism toward free markets. Likewise, [Chen et al. \(2023\)](#) use a birthdate regression discontinuity to

show that the introduction of new textbooks in Taiwan led affected cohorts to be more likely to identify as Taiwanese (vs. Chinese or Taiwanese and Chinese). [Clots-Figueras and Masella \(2013\)](#) provide evidence that an educational reform that transitioned Catalan schools to a bilingual model (incorporating Catalan alongside Spanish) increased self-reported Catalan feelings. Tanzania provides an even more extreme case of an educational intervention with the goal of nation-building. In the case of the Ujamaa policy, curricular changes were paired with coercive policies that relocated diverse families into planned villages. [Carlitz et al. \(2024\)](#) show that these policies did indeed lead to persistent changes in national identity and perceptions of state legitimacy, although perhaps understandably, they undercut calls for democratic accountability.

Propaganda and messaging are other, closely-related tools used by governments to shape attitudes and promote nation-building.¹⁴ While there is relatively less work on this area in the economics literature, [Blouin and Mukand \(2019\)](#) provide one example of propaganda changing culture. The authors study the impact of government radio in the post-genocide period in Rwanda. The authors exploit Rwanda's hilly terrain, which induces variation in the access to radio broadcasts, in conjunction with a lab-in-the-field experiment, to show that radio exposure increased inter-ethnic trust, reduced the salience of ethnicity, and increased willingness to interact face-to-face across ethnic lines.

Altogether, while some of the outcomes of the policies described above may have been desirable, these episodes also highlight the inherent dangers of the state enacting policies as an instrument for cultural change. Neither states nor policymakers need be benign actors, present values may appear anachronistic by future standards, and attempts to change culture in the past have often been coercive.

Today, the still-small literature on designing policies to enact cultural change focuses on policies without the same coercive elements as the past. Highlighting again the importance of the education system, [Dhar et al. \(2022\)](#) investigate the effects of a specific policy designed to change culture. The authors study a randomized in-school intervention implemented by an Indian NGO with adolescents in India aimed at improving gender attitudes. The intervention lasted two years and engaged both male and female adolescents in discussions about gender equality. The authors show that the intervention improved attitudes toward gender equality, with persistent effects even two years after the end of the program, and made self-reported behaviors

¹⁴For more discussion of nation-building policies, see [Rohner and Zhuravskaya \(2024\)](#).

more gender equal. These results point to the scope for scalable policies, delivered through the school system during the critical juncture of adolescence, to instigate cultural change.

[Gulesci et al. \(2023\)](#) focuses on the broader question of how to make policies intended to foster cultural change more effective. There is relatively little work on this question, even though such policies are becoming widespread. The authors introduce and both theoretically and empirically investigate the idea of “stepping stones” — a concept that may be useful for policy design. The paper considers the case of harmful social practices, such as female genital cutting (FGC), which is widespread in Somalia. The authors hypothesize that eliminating these norms outright might be challenging because individuals find it very costly to deviate too far from the prevalent cultural norm, even if it is intrinsically harmful. However, they propose that individuals may be willing to deviate to a less harmful practice (here, from a highly invasive to less invasive form of FGC), and once the less harmful practice is prevalent, they may be able to deviate again — since the deviation is now less extreme — to fully eliminate the norm. In their context, they provide evidence that the less invasive form of FGC may be an absorbing state rather than a stepping stone, but their estimates also suggest that changing the behavior of a small portion of the population could lead to convergence to non-cutting, suggesting a role for policy. Their model and empirical findings therefore may suggest a role for one-off interventions, such as conditional cash transfers, in permanently changing cultural practices. In other contexts, policymakers could introduce or promote stepping stones with the idea of dynamically fostering cultural change.

An alternative approach to fostering cultural change is to first try to understand the economic rationale behind persistent traditions. [Bau et al. \(2023\)](#) examine dowry in India, which remains widespread despite legal bans. They propose that dowry facilitates income-sharing between migrant sons and their parents, helping to sustain family support as traditional co-residence declines. Using a collective household model and newly-collected data, they show that dowry is more likely to be claimed by grooms’ parents when sons migrate, especially when parents have veto power over the marriage. Moreover, migration patterns respond to dowry-related incentives, suggesting that dowry helps resolve frictions in inter-generational transfers. While the paper does not evaluate a specific policy, it highlights that reducing reliance on dowry may require alternative mechanisms — such as pensions — that address the underlying economic need.

Taken together, these studies illustrate that policies—even those designed with economic rather than cultural objectives—can profoundly shape beliefs and behaviors. Understanding these dy-

namics is essential not only for anticipating unintended consequences but also for designing more effective and context-sensitive interventions. This growing literature opens several promising avenues for future research: evaluating the effects of embedding policy interventions within school systems; designing culturally sensitive alternatives to harmful traditions to lower the cost of deviation; and uncovering the economic or social foundations of persistent cultural norms in order to develop effective substitutes, such as targeted welfare policies. At the same time, historical examples of coercive or self-serving state interventions underscore the need for caution. Even well-intentioned efforts to reshape culture can have unintended or adverse consequences.

5. Accounting for Culture in Policy Design

Finally, recent research, which we discuss below, has started to investigate whether incorporating culture into policy design can enhance policies' effectiveness. While economics research in this area has been limited thus far, this is a promising avenue for future work.

Medical Campaigns and Health Interventions: As detailed in Section 3, mistrust in medicine, exacerbated by historical experiences, as well as modern events, can significantly impact the success of health systems and thereby, health outcomes. Recent research has increasingly focused on how policies specifically designed to address these trust deficits can significantly improve health outcomes.

[Alsan et al. \(2019\)](#) provide evidence that aligning healthcare delivery with the cultural context of the community can significantly enhance the effectiveness of health interventions. This study is conducted in the United States, but the policy design may also have lessons for low and middle-income countries, where medical mistrust is likely to be as or more important. The authors examine how the racial concordance between African American male patients and their doctors affects the take-up of preventive health services. The study randomized over 1,300 Black men to either Black or non-Black male doctors and observed their decisions to accept preventive medical services before and after meeting their assigned doctor. The findings are striking: while there was no significant difference in the pre-consultation decisions between the groups, African American men who were assigned to Black doctors were significantly more likely to agree to all preventive services — especially invasive procedures like diabetes and cholesterol screenings — after the consultation. The study suggests that having a racially concordant doctor enhances

communication, builds trust, and leads to better health outcomes among African American men, who are often skeptical of the medical establishment due to historical (e.g., [Alsan and Wanamaker 2018](#)) and contemporary experiences of discrimination. The study underscores the importance of designing healthcare policies that consider the cultural and social identities of the target population.

Relatedly, [Bau et al. \(2024\)](#) study the effects of an intervention specifically designed to address a common form of medical mistrust in Sub-Saharan Africa — that contraceptives cause infertility. As discussed in Section 2, this mistrust is likely rooted in a history of coercive colonial medical campaigns ([Lowes and Montero 2021](#)) and often coercive policies geared toward population control ([Kaler 2004](#)). The authors designed an intervention with the aim of persistently reducing the (incorrect) belief that contraceptives cause infertility in a context where these beliefs are likely highly persistent and culturally-reinforced. In the treatment, women from a similar background to participants shared stories about using contraceptives and then having children after stopping. The use of personal stories reflects the research of [Graeber et al. \(2024\)](#) showing that narratives have more persistent effects than statistics, while the use of individuals from a similar background to deliver information created “information resonance” ([Malmendier and Veldkamp 2022](#)), where information is better retained when it is delivered by a source with whom the participant identifies. The authors used a randomized controlled trial in Zambia to test the intervention in a particularly interesting population, university students. This population had high rates of sexual activity, inconsistent condom usage, and a high return to delaying first pregnancy, yet despite access to hormonal contraceptives, take-up was puzzlingly low. The authors show that the intervention changed beliefs even six months later and persistently increased the use of contraceptives by 40% over the subsequent 6 months. As in [Alsan et al. \(2019\)](#), taking into account the cultural background of participants aided in designing an effective policy to combat the negative consequences of medical mistrust.

Policies Promoting Sustainability: A new line of work explores how integrating cultural and religious beliefs into environmental policy can enhance the effectiveness of conservation efforts. In the context of severe water scarcity in Jordan, [Buccione \(2023\)](#) conducted a field experiment among women attending religious classes that leveraged Islamic teachings that already promote water conservation. The study randomly assigned women to either receive religious messaging on the sanctity of water in Islam or attend classes on unrelated religious topics. The effects were

striking: women exposed to the religious messaging significantly reduced their household water consumption by 17% over the following three months. This reduction was driven by changes in behavior rooted in religious beliefs, as the messages resonated deeply with the participants' existing cultural and religious frameworks. The study underscores the potential of harnessing local cultural beliefs to drive meaningful behavioral change in environmental conservation.

Work by [Deopa and Rinaldo \(2024\)](#) points to another religious system with features that could align well with policies promoting sustainability. [Deopa and Rinaldo \(2024\)](#) ask how religious belief systems affect forest conservation efforts, focusing on African Traditional Religions (ATR) in the case of Benin, where ATR adherence is widespread. According to indigenous belief systems in Benin, forests are sacred. This is manifested in the belief that the natural and spiritual world are closely entwined and that respecting the spiritual world also requires respecting the environment. Forests in particular are viewed as sacred, as this is where ancestors are buried and where spirits and deities may live. They find that an increase in ATR adherence is associated with improvements in the five-year average annual change in forest cover. In an additional analysis, the authors also examine the correlation between ATR and sustainable agricultural practices. They find that households that practice ATR are also more likely to adopt sustainable agricultural practices, such as the use of organic fertilizer and inter-cropping. Hence, while the paper does not explicitly evaluate a conservation policy, it highlights an interesting opportunity to design culturally-informed forest conservation policies. For example, those with traditional beliefs may be more willing to take up inducements to engage in conservation or may be more responsive to small payments. And as in [Buccione \(2023\)](#), it may be possible to use messaging that touches on or emphasizes those beliefs to increase conservation efforts.

Community Driven Development Policies: Community-driven development (CDD) projects also stand to gain from tailoring their design to the social structures of the communities they serve. Despite their potential to empower local communities, CDD projects often struggle with issues like corruption and elite capture. However, integrating traditional institutions into the design of these projects may enhance their effectiveness. [Lowes et al. \(2024\)](#) investigate the impact of incorporating traditional age-set structures into the design of community-driven development projects in the Democratic Republic of the Congo (DRC). Age sets, which are culturally significant groupings of men of similar age who undergo initiation rituals together, form strong horizontal ties that lessen vertical allegiances to family or village leaders. Anthropologists have noted the

power of these age-set groups in maintaining social cohesion and acting as a check on the power of village elites. The authors hypothesized that leveraging these traditional age-set structures could improve the performance of CDD projects by increasing accountability and reducing corruption among local leaders.

To test this, the authors explicitly account for the cultural practice of interest — age sets — in the design of their project. They work in villages that have age sets and villages that do not have age sets. They partnered with a local NGO to implement a CDD project, in which the chief is given a cash grant to purchase health products from project vendors at a subsidized price. They also form oversight committees to monitor how the chief uses the cash grant. Villages are randomly assigned to either diverse oversight committees, which are the common approach in CDD programs, or to committees composed exclusively of young men. The logic is that committees of young men may be particularly effective in places where age sets play a role in holding leaders accountable.

The authors find that in age set villages where committees were composed of young men, there was better oversight and execution of project tasks and less capture of resources by well-connected individuals. Although there was no significant impact on health outcomes or on missing funds, the study demonstrated that integrating traditional social structures into project design could improve the effectiveness of CDD initiatives by promoting stronger accountability.

Correcting Misinformation About Others' Beliefs: Another potential approach for designing effective policies is to focus on cases where individuals overestimate the social costs of choosing a privately preferred action. As noted by [Nunn \(2022\)](#), this can occur when the environment and therefore the payoffs to choosing a given action change, but the traditions that individuals rely on for decision-making have not yet caught up. In these cases, individuals may behave according to what they believe others think rather than what others actually think because their misperceptions lead them to overestimate the cost of deviating from the traditional action. This can create opportunities for policy, where relatively small informational policies can generate large positive impacts. [Bursztyn et al. \(2020\)](#) investigate how correcting incorrect beliefs about support for female labor force participation can alter household decisions and labor market outcomes for women in Saudi Arabia. In this context, where female labor force participation is low, the authors find that while most young married men privately support women working outside the home, they significantly underestimate the extent to which others hold similar views.

To test whether correcting this misperception can influence behavior, the authors conducted a series of field experiments with 500 Saudi men, as well as a follow-up recruitment experiment. They find that providing accurate information on the true level of support for working outside the home increased men's willingness to let their wives apply for jobs, which translated into a significant increase in job search and interview activities for their wives three to five months after the intervention. Similarly, when women were informed of the true extent of male support, they were more likely to choose outside-the-home jobs over home-based work. These findings highlight the potential for low-cost information interventions to change behavior in cases where individuals are trapped in a self-reinforcing "bad equilibrium," in which they do not have the opportunity to learn social sanctions are low because they do not take up privately preferred actions for fear of those sanctions.

Graduation Programs: A growing literature in development economics finds that "multi-faceted graduation programs" — combining cash transfers, training, and psychosocial support — can yield lasting poverty-reduction and welfare gains (e.g., [Banerjee et al. 2015, 2022](#)). However, most psychosocial interventions aiming to increase agency and empowerment implicitly have an individualistic view of agency, even though many communities have more collective norms. In an important recent contribution that bridges cultural psychology and development economics, [Thomas et al. \(2024\)](#) show that tailoring the psychosocial component to align with community norms can substantially improve both the economic and well-being outcomes of multi-faceted programs in rural Niger.

Building on qualitative research showing that women's economic decision-making in these communities is fundamentally interdependent — anchored in social harmony, respect, and collective advancement — the authors designed two interventions: (i) a "Personal Initiative" arm, which emphasized self-direction, individual goal-setting, and autonomous planning, or (ii) an "Interpersonal Initiative" arm, which emphasized collaborative decision-making, negotiation with household members, and the cultivation of communal networks. Both interventions were delivered in the context of a larger multi-faceted safety-net program that included regular cash transfers, savings-group formation, entrepreneurial training, and group coaching.

Although both interventions produced comparable improvements in intrapersonal beliefs — such as self-efficacy, optimistic future expectations, and overall well-being — only the interdependent ("Interpersonal Initiative") approach generated statistically significant increases in

downstream economic outcomes, such as household consumption, food security, and women's business engagement, one year after delivery. The authors turn to mechanisms and find that the gains were mediated by both enhanced self-efficacy and by strengthened relational outcomes. The latter are measured as improved household dynamics, elevated social standing, and greater social support — precisely the channels hypothesized to be more salient in an interdependent setting. By contrast, the “Personal Initiative” intervention, which mirrored a Western-oriented model of individual agency, failed to produce significant downstream economic effects despite raising women's intrapersonal motivation. Taken together, these findings underscore the value of aligning psychosocial interventions with locally predominant cultural models of agency. In contexts where collective decision-making and social reciprocity are paramount, interventions that explicitly foster relational support can unlock behavioral and economic change more effectively than those that target individual aspirations alone.

6. Conclusion & Lessons for Future Research

The emerging literature described in this chapter shows that policymakers and researchers alike must take culture into account in the design and evaluation of policy. Failing to account for the mismatch between policy design and culture can lead to negative unintended consequences, while failing to account for cultural heterogeneity in policies' effects may lead evaluators to incorrectly conclude that a policy is ineffective.

Going forward, what lessons can researchers learn from the growing literature on culture and policy? First, we suggest that, where possible, research design should take into account potentially important cultural heterogeneity from a project's inception. For example, randomized controlled trials could stratify treatment based on key cultural heterogeneity informed by the anthropological literature and qualitative research. Explicitly accounting for culture ensures that the trials are sensitive to cultural variations that may influence outcomes. For example, [Lowes et al. \(2024\)](#) stratify on the presence of age sets in their treatment assignment. Importantly, when possible, trials should be powered adequately to detect differences across culturally distinct subgroups, enabling more precise identification of heterogeneous treatment effects. In addition, when the goal of an experiment is to identify scalable policies, experiments must be able to identify effects across groups with very different cultural traits. Collecting data on cultural

variables is essential in this regard, as it not only aids in tracking unintended policy effects but also helps diagnose why certain policies may fail.

Second, while it is ideal to anticipate and incorporate cultural heterogeneity at the design stage, the importance of cultural variation may be difficult to anticipate. A benefit of field work is that it offers researchers an opportunity to learn about how culture interacts with policy, providing critical insights. Hence, we also argue for an approach to pre-analysis plans and pre-registration that is sufficiently flexible to allow for learning in the field, in line with the recommendations of [Banerjee et al. \(2020\)](#). Heterogeneity analysis should not be ruled out merely because it is not pre-registered, particularly if there exists a strong justification for those analyses from field experiences or qualitative work. Randomized controlled trials are expensive in terms of both direct costs and time, and we should maximize the opportunities to learn from these projects if only to yield the largest return to a dollar spent on economic development.

Third, we see potentially substantial benefits from pairing field work with qualitative research by anthropologists or sociologists that can inform choices about heterogeneity analysis and additional outcomes. A deep understanding of the local cultural context and dynamics is likely to improve project and research design. Additionally, while a critical lesson from this chapter is that cultural heterogeneity is crucial for policy design and evaluation, this does not necessarily recommend a research approach of simply interacting policy variation with a host of cultural variables from anthropological sources to estimate heterogeneous effects. Leaving aside concerns about multiple hypothesis testing, applying estimates of policies' effects from one country or region to another requires understanding how and why cultural heterogeneity shapes those policies' effects. Understanding the economic mechanisms and incentives at play — not just whether cultural variation in policy effects exists — is therefore key to arriving at externally valid policy conclusions. With this in mind, the anthropological literature, qualitative work, and economic theory can all play an important role in hypothesis generation and testing.

Fourth, as the examples in Section [2.2](#) illustrate, policy failures provide opportunities for learning and re-design. As has been recognized, the “file drawer problem,” where null results are not disseminated or published, is highly problematic because it leads to an overestimation of policies' average effects. A second, more subtle issue is that the file drawer problem deprives researchers of the opportunity to learn about why or for whom policies did not work. A classic and influential counterexample from [Glewwe et al. \(2009\)](#), where researchers did successfully

learn from a policy failure in economics, shows the value of this approach. The authors find that textbooks in classrooms do not increase student learning because of the mismatch between the elite-focused colonial-era curriculum and students' preparation. This paper played an early, important role in demonstrating the importance of instructional mismatch, which is now recognized as a key issue in education-development. We therefore argue for a greater emphasis on learning from what does not work.

With these lessons in mind, we now turn to avenues for future research. The literature on the interaction between culture and policy is still early in its development. In mature fields, it is possible to point to gaps in the literature. But because this field is so new, most of the picture has yet to be filled in. There are more "gaps" than areas of understanding. To the extent that relatively larger gaps exist in some areas versus others, work so far in this nascent literature has mainly focused on heterogeneity in policy effects based on cultural traits. While advancing research in this area remains important, work on the effects of policy on culture has been even more limited. This may in part reflect several key barriers: (1) a lack of large-scale data measuring cultural variables across time and space, (2) the need for long time-scales to observe cultural change, and (3) challenges to identification due to reverse causality, where changing cultural practices lead to the introduction of policies rather than vice versa. Hence, addressing barriers #1-2 may require generating new data that spans longer periods. Methods to do so may include transforming existing anthropological data into quantitative data that can be analyzed, collecting cultural variables directly, or identifying creative ways to measure cultural change in existing data, such as censuses. One actionable item would be adding more cultural variables to existing longitudinal data collection efforts like the *Demographic and Health Surveys*, which have already helped advance the literature on culture and development enormously. At the same time, to address barrier #3, researchers will need to be creative in identifying policy variation and careful in understanding the sources of that variation to help rule out threats from reverse causality.

Our motivating findings in Section 2.1 also directly point to some areas for future work. They provide suggestive evidence that the identity of policy implementers matters, but more work is needed to identify the causal effects of cultural match and to understand what culturally-matched implementers do differently to ensure project success. One promising direction is to study the role of diversity among implementers and flexibility in how projects are implemented, along the lines of the findings of [Alsan et al. \(2019\)](#) in medicine. Culturally-aligned implementers may

better tailor policies to local contexts and may have a better understanding of how culture may influence policy effects. Local implementers and researchers can help identify subtle cultural dynamics that might otherwise go unnoticed and develop solutions that resonate more deeply with the target populations.

We close by noting that the importance of multidisciplinary collaboration cannot be overstated. Economists, anthropologists, sociologists, and practitioners from diverse backgrounds bring complementary strengths to the table. Reading and communicating across disciplines can lead to a more nuanced understanding of how culture shapes policies' effects and how policy affects culture. While interdisciplinary collaborations remain rare, the collaboration between economists and qualitative sociologists in the Moving to Opportunity Project (see for example, [Turney et al. 2013](#)), economists and anthropologists on corruption in the Democratic Republic of the Congo ([Sanchez de la Sierra et al. 2022](#)), and economists and psychologists in rural Niger ([Thomas et al. 2024](#)) show that such research models can yield novel insights. As the papers summarized in this chapter show, understanding the intersection of culture, policy, and economics is crucial. Embracing cultural and methodological diversity can help maximize the positive impact of development initiatives worldwide.

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ONLINE APPENDIX FOR:

Culture, Policy, and Economic Development

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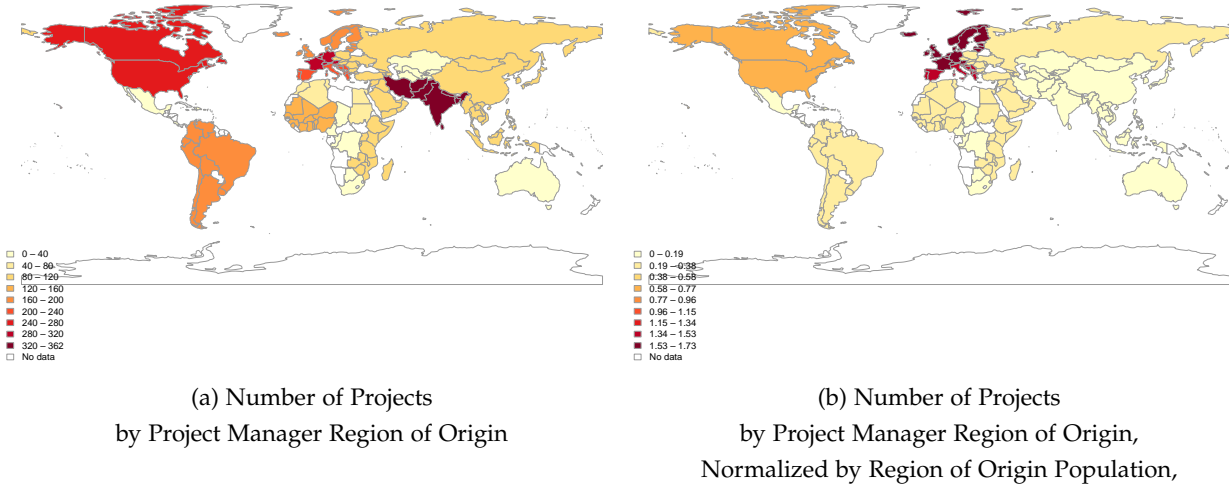
Sara Lowes
UC San Diego

Eduardo Montero
University of Chicago

16 June 2025

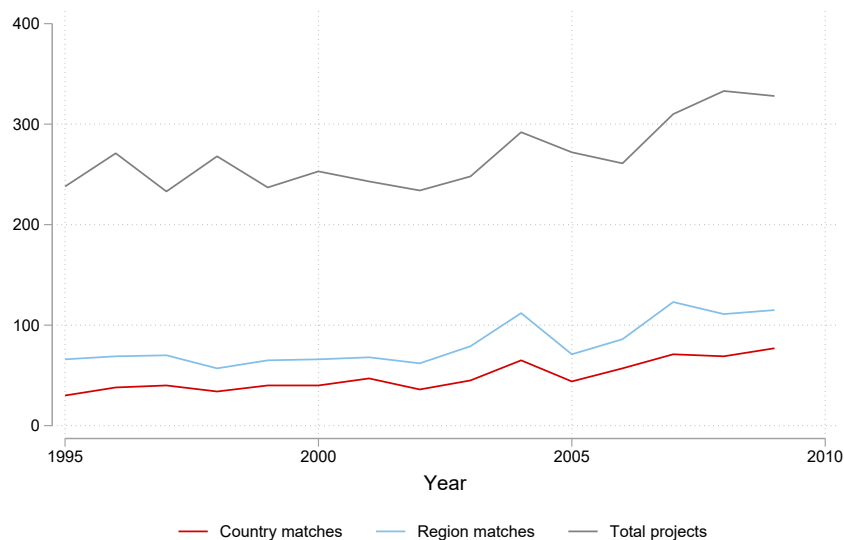
Appendix A. Additional Tables and Figures

Figure A1: World Bank Projects By Project Manager Region of Origin



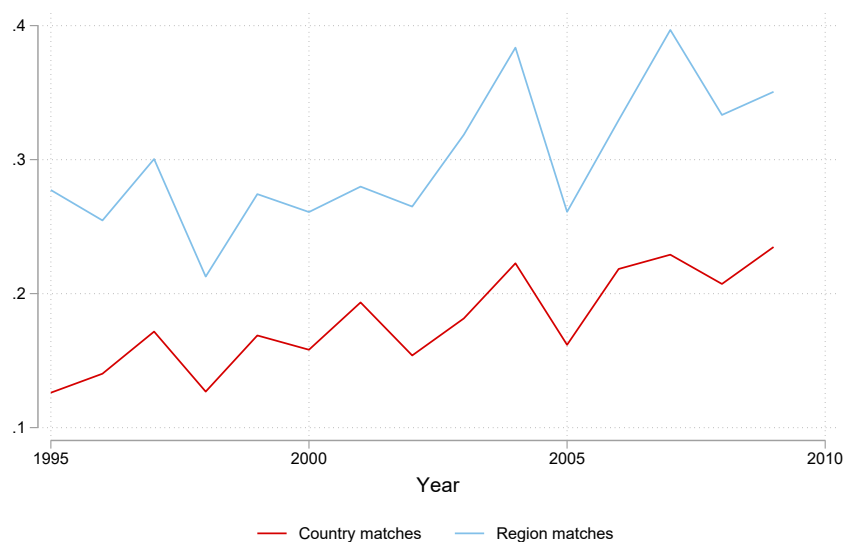
Notes: The maps present (a) the number of World Bank projects by the region of origin of the project manager, and (b) the number of projects by the region of origin of the project manager (normalized by population of the region in 2020 in millions). The region of origin corresponds to the United Nations' official sub- and intermediate-regions and is based directly on the project manager's assigned country of origin. The project manager's country of origin is assigned using AI (see more details in [Appendix B](#)). The data are from [AidData \(2017\)](#).

Figure A2: Count of Project Location-Manager Matches by Year of Start of Transaction



Notes: The figure presents the number of World Bank projects (in gray) and the number of projects that had a project manager categorized as originating from the region (in blue) and country (in red) where the project was implemented across years. The project manager's country of origin is categorized using AI and used for the regional assignment (see more details in [Appendix B](#)). The data are from [AidData \(2017\)](#).

Figure A3: Share of Project Location-Manager Matches by Year of Start of Transaction



Notes: The figure presents the share of World Bank projects that had a project manager categorized as originating from the region (in blue) and country (in red) where the project was implemented across years. The project manager's country of origin is categorized using AI and used for the regional assignment (see more details in [Appendix B](#)). The data are from [AidData \(2017\)](#).

Table A1: Summary of Papers

Broader Cultural Trait	Specific Cultural Trait	Paper	Chapter	Policies (Subsections)
Cultural Value of Economic Assets	Communal/Traditional Land Tenure Rights	Mollett (2006)	2.2. Motivating Results from Other Disciplines	Policies Aimed at Boosting Agricultural Productivity
	Communal/Traditional Land Tenure Rights	Le Rossignol et al. (2024)	3. Heterogeneity by Culture and Unintended Consequences	Policies Aimed at Boosting Agricultural Productivity
	Reciprocity/Gift Culture	Schmidt (2022)	2.2. Motivating Results from Other Disciplines	Social Welfare and Insurance Policies
	Religious Value of Environment (Forest)	Deopa and Rinaldo (2024)	5. Accounting for Culture in Policy Design	Policies Promoting Sustainability
	Religious Value of Environment (Water)	Buccione (2023)	5. Accounting for Culture in Policy Design	Policies Promoting Sustainability
	Status & Prestige	Godoy et al. (2021)	3. Heterogeneity by Culture and Unintended Consequences	Financial Interventions
Gender Norms	Symbolic/Cultural Value of Cattle	Ferguson (1985)	2.2. Motivating Results from Other Disciplines	Policies Aimed at Boosting Agricultural Productivity
	Traditional Water Management Practices	Lansing (2009)	2.2. Motivating Results from Other Disciplines	Policies Aimed at Boosting Agricultural Productivity
	Attitudes Towards Women Working	Bastian (2020)	4. Policy Changing Culture	Social Welfare and Insurance Policies
	Attitudes Towards Women Working	Bursztyn et al. (2020)	5. Accounting for Culture in Policy Design	Correcting Misinformation About Others' Beliefs
	Female Genital Cutting	Gulesci et al. (2023)	4. Policy Changing Culture	Designing Policy to Change Culture
	Gender Attitudes/Attitudes Towards Women Working	Campa and Serafinelli (2019)	4. Policy Changing Culture	State Institutions and Laws
Kinship, Marriage, and Family	Gender Attitudes/Female Aspirations	Beaman et al. (2012)	4. Policy Changing Culture	Integration and Affirmative Action Policies
	Gender Roles/Gender Attitudes	Dhar et al. (2022)	4. Policy Changing Culture	Designing Policy to Change Culture
	Gender Roles/Gender Attitudes	Martinez-Marquina (2024)	4. Policy Changing Culture	Designing Policy to Change Culture
	Gender-Specific-Inheritance/Sex-Selection/Son-Preference	Bhalotra et al. (2020)	3. Heterogeneity by Culture and Unintended Consequences	Inheritance Policies
	Sex-Selection/Son-Preference	Ebenstein (2010)	3. Heterogeneity by Culture and Unintended Consequences	Fertility-Related Policies
	Age Sets	Moscona and Seck (2024)	3. Heterogeneity by Culture and Unintended Consequences	Social Welfare and Insurance Policies
Nation-building and Ideology	Age Sets	Budillon et al. (2024)	5. Accounting for Culture in Policy Design	Community Driven Development Policies
	Bride Price	Ashraf et al. (2020)	3. Heterogeneity by Culture and Unintended Consequences	Education Policies
	Cousin Marriage/Inheritance	Bahrami-Rad (2021)	3. Heterogeneity by Culture and Unintended Consequences	Inheritance Policies
	Dowry	Bloch and Rao (2002)	3. Heterogeneity by Culture and Unintended Consequences	State Institutions and Laws
	Dowry	Calvi and Keskar (2023)	3. Heterogeneity by Culture and Unintended Consequences	State Institutions and Laws
	Dowry	Bau et al. (2023)	4. Policy Changing Culture	Designing Policy to Change Culture
Social Values & Preferences	Dowry	Chipplunkar and Weaver (2023)	4. Policy Changing Culture	Designing Policy to Change Culture
	Patrilineality and Matrilineality	La Ferrara and Milazzo (2017)	3. Heterogeneity by Culture and Unintended Consequences	Inheritance Policies
	Patrilineality and Matrilineality	Bargain et al. (2024)	3. Heterogeneity by Culture and Unintended Consequences	State Institutions and Laws
	Patrilineality and Matrilineality	Bau (2021)	4. Policy Changing Culture	Social Welfare and Insurance Policies
	Patrilineality and Matrilineality	Fetter et al. (2022)	4. Policy Changing Culture	Social Welfare and Insurance Policies
	Polygyny	Tertilt (2006)	4. Policy Changing Culture	Designing Policy to Change Culture
Trust	Beliefs About Markets and Democracy	Cantoni et al. (2017)	4. Policy Changing Culture	Designing Policy to Change Culture
	Civic Values	Rustagi (2025)	3. Heterogeneity by Culture and Unintended Consequences	Policies Aimed at Boosting Agricultural Productivity
	Ethnic/National Identity	Chen et al. (2023)	4. Policy Changing Culture	Designing Policy to Change Culture
	Ethnic/National Identity	Clois-Figueras and Masella (2013)	4. Policy Changing Culture	Designing Policy to Change Culture
	Ethnic/National Identity	Okunogbe (2024)	4. Policy Changing Culture	Integration and Affirmative Action Policies
	Ethnic/National Identity/State Legitimacy	Carlitz et al. (2024)	4. Policy Changing Culture	Designing Policy to Change Culture
Traditional Economic Production	Nation-Building/Civic Values	Bandiera et al. (2019)	4. Policy Changing Culture	Designing Policy to Change Culture
	Nation-Building/Civic Values/Obedience	Paglayan (2022)	4. Policy Changing Culture	Designing Policy to Change Culture
	Nation-Building/Ethnic Identity	Feir (2016)	4. Policy Changing Culture	Designing Policy to Change Culture
	Trust/Ethnic Cohesion	Algan et al. (2016)	4. Policy Changing Culture	Integration and Affirmative Action Policies
	Trust/Ethnic Cohesion	Blouin and Mukand (2019)	4. Policy Changing Culture	Designing Policy to Change Culture
	Cultural Backlash	Wheaton (2022b)	4. Policy Changing Culture	State Institutions and Laws
Trust	Inclusive Social Attitudes	Rao (2019)	4. Policy Changing Culture	Integration and Affirmative Action Policies
	Individualism/Beliefs About Markets	Di Tella et al. (2007)	4. Policy Changing Culture	Formalizing Property Rights
	Agency	Thomas et al. (2024)	5. Accounting for Culture in Policy Design	Psychosocial Interventions
	Pastoralism	McGuirk and Nunn (2024)	3. Heterogeneity by Culture and Unintended Consequences	Policies Aimed at Boosting Agricultural Productivity
	Medical Mistrust	Feldman-Savelsberg et al. (2000)	2.2. Motivating Results from Other Disciplines	Medical Campaigns and Health Interventions
	Medical Mistrust	Alsan and Wanamaker (2018)	3. Heterogeneity by Culture and Unintended Consequences	Medical Campaigns and Health Interventions
Trust	Medical Mistrust	Lowes and Montero (2021)	3. Heterogeneity by Culture and Unintended Consequences	Medical Campaigns and Health Interventions
	Medical Mistrust	Martinez-Bravo and Stegmann (2022)	3. Heterogeneity by Culture and Unintended Consequences	Medical Campaigns and Health Interventions
	Medical Mistrust	Ramos-Toro (2023)	3. Heterogeneity by Culture and Unintended Consequences	Medical Campaigns and Health Interventions
	Medical Mistrust	Alsan et al. (2019)	5. Accounting for Culture in Policy Design	Medical Campaigns and Health Interventions
	Medical Mistrust	Bau et al. (2024)	5. Accounting for Culture in Policy Design	Medical Campaigns and Health Interventions
	Medical Mistrust	Christensen et al. (2020)	5. Accounting for Culture in Policy Design	Medical Campaigns and Health Interventions
Trust	Mistrust in Other Groups	Blouin (2022)	3. Heterogeneity by Culture and Unintended Consequences	Policies Aimed at Boosting Agricultural Productivity

Table A2: Descriptive Statistics by Region

Region	Population	Agents	Projects	Sh. Projects Match
Australia and NZ	30.798	2	0	.
Caribbean	43.362	4	155	0.01
Central America	177.163	33	297	0.08
Central Asia	76.972	10	187	0.12
Eastern Africa	464.320	110	726	0.24
Eastern Asia	1,650.631	120	272	0.48
Eastern Europe	289.857	100	292	0.30
Melanesia	12.171	0	32	0.00
Micronesia	0.535	0	10	0.00
Middle Africa	190.268	16	188	0.07
Northern Africa	255.221	73	177	0.27
Northern America	370.415	265	0	.
Northern Europe	106.008	183	34	0.32
Polynesia	0.705	0	33	0.00
South America	434.788	164	618	0.32
South-eastern Asia	675.309	97	470	0.36
Southern Africa	67.985	9	35	0.09
Southern Asia	1,989.835	362	662	0.60
Southern Europe	151.858	215	299	0.27
Western Africa	418.543	144	695	0.37
Western Asia	289.438	97	390	0.21
Western Europe	198.456	307	0	.

Notes: Population is reported in millions of people. Agents denotes number of agents from a region, and Projects denotes number of projects in a region. Share of Projects Match corresponds to the share of projects implemented in each region that were led by project managers from countries belonging to that same region. The regions correspond to the United Nations' official sub- and intermediate-regions and are assigned based on the project's country of implementation (see more details in [Appendix B](#)).

Table A3: Project Count and Share of Matches by Country

Country	Projects	Sh. Projects Match*	Country	Projects	Sh. Projects Match
Afghanistan	67	0.04	Lesotho	25	0.00
Albania	63	0.24	Liberia	28	0.00
Algeria	17	0.24	Lithuania	14	0.14
Angola	15	0.00	Macedonia	48	0.25
Antigua and Barbuda	1	0.00	Madagascar	60	0.22
Argentina	101	0.12	Malawi	54	0.07
Armenia	55	0.24	Malaysia	2	0.00
Azerbaijan	61	0.16	Maldives	12	0.00
Bangladesh	113	0.27	Mali	54	0.06
Barbados	2	0.00	Marshall Islands	2	0.00
Belarus	13	0.00	Mauritania	34	0.06
Belize	4	0.00	Mauritius	17	0.06
Benin	47	0.06	Mexico	92	0.11
Bhutan	18	0.00	Micronesia, Federated States of	3	0.00
Bolivia	51	0.00	Moldova	54	0.04
Bosnia and Herz.	69	0.06	Mongolia	37	0.03
Botswana	3	0.00	Montenegro	18	0.00
Brazil	199	0.20	Morocco	68	0.09
Bulgaria	32	0.28	Mozambique	70	0.04
Burkina Faso	58	0.17	Myanmar	8	0.13
Burundi	37	0.11	Namibia	2	0.00
Cabo Verde	29	0.00	Nepal	55	0.33
Cambodia	38	0.26	Nicaragua	57	0.00
Cameroon	39	0.13	Niger	47	0.02
Central African Republic	15	0.00	Nigeria	69	0.48
Chad	31	0.00	Pakistan	108	0.54
Chile	19	0.00	Panama	27	0.00
China	231	0.48	Papua New Guinea	18	0.00
Colombia	85	0.13	Paraguay	17	0.00
Comoros	15	0.00	Peru	64	0.06
Congo, Dem. Rep. of	47	0.06	Philippines	63	0.35
Congo, Rep. of	24	0.00	Poland	30	0.17
Costa Rica	8	0.00	Romania	54	0.31
Cote d'Ivoire	36	0.03	Russian Federation	46	0.28
Croatia	49	0.22	Rwanda	54	0.13
Djibouti	28	0.00	Samoa	16	0.00
Dominica	6	0.00	Sao Tome and Principe	12	0.00
Dominican Republic	30	0.00	Senegal	67	0.27
Ecuador	25	0.00	Serbia	26	0.08
Egypt	47	0.40	Seychelles	6	0.00
El Salvador	20	0.00	Sierra Leone	44	0.00
Eritrea	15	0.00	Slovak Republic	6	0.00
Estonia	4	0.00	Slovenia	4	0.00
Ethiopia	83	0.28	Solomon Islands	14	0.00
Gabon	5	0.00	South Africa	3	0.00
Gambia, The	19	0.00	South Sudan	5	0.00
Georgia	69	0.13	Sri Lanka	56	0.39
Ghana	86	0.23	St. Kitts and Nevis	4	0.00
Grenada	13	0.00	St. Lucia	15	0.00
Guatemala	33	0.00	St. Vinc. Gren.	6	0.00
Guinea	34	0.00	Swaziland	2	0.00
Guinea-Bissau	20	0.00	Tajikistan	55	0.07
Guyana	13	0.00	Tanzania	96	0.18
Haiti	45	0.02	Thailand	16	0.19
Honduras	56	0.00	Timor-Leste	12	0.00
Hungary	9	0.11	Togo	23	0.04
India	224	0.60	Tonga	13	0.00
Indonesia	137	0.25	Trinidad and Tobago	4	0.00
Iran	9	0.11	Tunisia	45	0.02
Iraq	7	0.14	Turkey	69	0.28
Jamaica	29	0.00	Turkmenistan	2	0.00
Jordan	31	0.00	Tuvalu	4	0.00
Kazakhstan	38	0.03	Uganda	70	0.20
Kenya	62	0.15	Ukraine	48	0.13
Kiribati	5	0.00	Uruguay	35	0.00
Korea, Republic of	4	0.00	Uzbekistan	29	0.14
Kosovo	22	0.00	Venezuela	9	0.00
Kyrgyz Republic	63	0.10	Vietnam	140	0.54
Laos	54	0.19	Yemen	74	0.07
Latvia	16	0.13	Zambia	50	0.12
Lebanon	24	0.29	Zimbabwe	4	0.25

Notes: Share of Projects Match corresponds to the share of projects implemented in each country that were led by project managers from the same country. The match variable used in this table correspond to the definition in Table 1.

Table A4: Association Between Project Region-Manager Match and Project Success

	Dependent Variable: World Bank Project Rating (1-6)			
	(1)	(2)	(3)	(4)
<i>Match (Region (UN), GPT)</i>	0.067 (0.045)	0.071 (0.045)	0.075* (0.045)	0.067 (0.047)
Start year FE	Y	Y	Y	Y
Region FE	Y	Y	Y	Y
Sector FE	Y	Y	Y	Y
Leader Exp. Controls	N	Y	Y	Y
Multi-location FE	N	N	Y	Y
Drop >2006	N	N	N	Y
Outcome Mean	4.09	4.09	4.09	4.11
Adjusted R ²	0.047	0.048	0.048	0.047
Observations	2,902	2,902	2,902	2,747
Clusters	132	132	132	130

Notes: The dependent variable is the World Bank Project Rating, which ranges from 1 (highly unsatisfactory) to 6 (highly satisfactory). Match Region is a binary variable that equals 1 if the project manager is from the region of implementation. “GPT” indicates that the project manager’s country is assigned using the AI country assignment (see more details in [Appendix B](#)). The regressions are conducted at the project level and estimated using ordinary least squares. Leader experience controls correspond to project manager experience in years and years squared. The regions used as fixed-effects correspond to the region of project implementation. The regions are assigned following the official UN sub-regions definition (see more details in [Appendix B.2](#)). Standard errors are clustered at the country-level. Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

Table A5: Association Between Project Country-Manager Match and Project Success:
Evaluation Sub-Components

Dependent Variable: Other IEG Ratings				
	Borrower Performance (1-6)			Project's Monitoring and
	Government (1)	Imp. Agency (2)	Overall (3)	Evaluation Quality (1-4) (4)
<i>Match (Country, GPT)</i>	0.098* (0.059)	0.083* (0.048)	0.146*** (0.052)	0.063 (0.047)
Start year FE	Y	Y	Y	Y
Region FE	Y	Y	Y	Y
Sector FE	Y	Y	Y	Y
Leader Exp. Controls	Y	Y	Y	Y
Multi-location FE	Y	Y	Y	Y
Drop >2006	Y	Y	Y	Y
Outcome Mean	4.24	4.28	4.17	2.15
Adjusted R ²	0.069	0.050	0.060	0.026
Observations	2,656	2,700	2,743	1,386
Clusters	130	130	130	120

	World Bank Performance (1-6)			ICR Report
	Quality at entry (5)	Quality of supervision (6)	Overall (7)	Quality (1-6) (8)
<i>Match (Country, GPT)</i>	0.039 (0.060)	0.047 (0.052)	0.061 (0.052)	-0.017 (0.045)
Start year FE	Y	Y	Y	Y
Region FE	Y	Y	Y	Y
Sector FE	Y	Y	Y	Y
Leader Exp. Controls	Y	Y	Y	Y
Multi-location FE	Y	Y	Y	Y
Drop >2006	Y	Y	Y	Y
Outcome Mean	4.12	4.45	4.26	3.81
Adjusted R ²	0.066	0.074	0.078	0.007
Observations	2,743	2,718	2,746	2,630
Clusters	130	130	130	130

Notes: Dependent variables: (1) Local Government Performance, (2) Local Implementing Agency Performance, (3) Overall Borrower Performance, (4) Monitoring and Evaluation Quality, (5) World Bank Quality At Entry, (6) World Bank Quality Of Supervision, (7) Overall World Bank Performance, and (8) Implementation Completion and Results Report Quality. The dependent variables are the World Bank Project Rating Sub-Components, which range from 1 (unsatisfactory) to 6 (satisfactory), except in column (4), which ranges from 1 to 4. Match (Country, GPT) is a binary variable that equals 1 if the project manager and the recipient are from the same country. The regressions are conducted at the project level and estimated using ordinary least squares. Standard errors are clustered at the country level. Significance at the 1%, 5%, and 10% levels is indicated by ***, **, and *, respectively.

Appendix B. Variables Creation

B.1. Manager Country Variable (GPT)

The AI tool we use is a large language model (LLM) from the Generative Pre-trained Transformer (GPT) family developed by OpenAI ([OpenAI 2024](#)). We used OpenAI's GPT model version "gpt-4o-2024-08-06". We set the temperature to zero, so that the model becomes deterministic, and the maximum number of tokens allowed is 200. We fed the model iteratively with the full names of all managers in our database, one by one. For each manager name we prompted the model with the following text:

```
"Please imagine yourself as a senior expert in global culture and languages.
I will provide you with a series of names from individuals, and I need you to
predict their country of origin based on these names. More precisely, I want
you to do 3 things with it: (1) Give me the country you believe this person is
from; (2) Explain me why you chose this country; (3) Give me a score X for your
degree of certainty (from 0% to 100% certain). The name is this <Manager Full
Name>. Please write the output with this format, with each string in between
double asterisks (**string**) an after the corresponding number (1, 2, and 3).
Example: (1) **country** ; (2) **explanation** ; (3) **X%**"
```

We planned to implement the certainty score as a confidence measure in our statistical analysis but found (i) that GPT tended to be highly-confident and (ii) that scores were very inconsistent across GPT versions (as opposed to country assignments). Hence, we decided not to use the certainty score. We standardized the country names returned by the AI manually, in order to make them internally consistent and comparable to the United Nations' official classifications. For 25 managers (1%), the AI selected two or three countries instead of one. These are all cases for which the names and surnames indicate mixed origins. For these cases, we assigned the match dummy variable to be equal to one if any of the countries associated with the name corresponded to the country of the project.

B.2. Region Variables

One region variable was created for the projects and one for the managers. Both derive directly from the country variable and follow the United Nations¹⁵ in its official sub-regions and, when available, intermediate regions. Intermediate regions are disaggregations available only for some specific sub-regions that are too general, namely Sub-Saharan Africa, and Latin America and the Caribbean. The Latin America and the Caribbean sub-region is disaggregated into the following intermediate regions: Caribbean, Central America, and South America. The Sub-Saharan Africa sub-region is disaggregated into the following intermediate regions: Eastern Africa, Middle Africa, Southern Africa, and Western Africa.

B.3. Match Variables

The match variables used in the main exhibits of this paper were created by comparing the country or region where projects were implemented to the country or region of the manager leading the project. The country (region) match variable is an indicator that takes a value of 1 if the country (region) where the project took place is the same as of the manager leading the project. The country of the manager is not directly available, so we created this variable using GPT as described above.

B.4. IEG Ratings Variable

All projects financed by the World Bank (WB) must complete an Implementation Completion and Results Report (ICR) within six months of project completion. Once produced, each ICR is submitted to the Independent Evaluation Group (IEG), which leverages the project documents and, when necessary, interviews the TTL (Task Team Leader) or other project staff to finalize its own independent ICR Review (ICRR). For roughly 20 percent of the projects, IEG compiles an expanded review, known as a RAP (Results Assessment Paper). Because virtually all ICRs lead to an ICRR, there is minimal concern about selectivity in these project assessments.

In practice, WB staff produce these ICRs following a standardized format and guidelines similar to those used by the Independent Evaluation Group (IEG). Although it may be relatively

¹⁵UN conversion table for country codes downloaded from <https://unstats.un.org/unsd/methodology/m49/>.

common for project teams to request a waiver for delayed submission (beyond six months), the absence of an ICR for completed projects seems to be rare.

Within each ICRR (and RAP, if applicable), IEG produces its own set of project ratings. Although these ratings often align with those proposed in the ICR, agreement is not guaranteed, reflecting IEG's independent appraisal. Our main analysis uses the "Overall Outcome Rating," which rates the extent to which the major goals of the project were accomplished. It is important to note that we use the ratings published by IEG, which are drawn from the ICRRs and RAPs – not the ones produced by the WB staff and published in the ICRs. Apart from that, we also use eight other ratings issued by IEG: (1) Local Government Performance, (2) Local Implementing Agency Performance, (3) Overall Borrower Performance,¹⁶ (4) Monitoring and Evaluation (M&E) Quality, (5) World Bank Quality At Entry, (6) World Bank Quality Of Supervision, (7) Overall World Bank Performance, and (8) Implementation Completion and Results Report Quality. Rating (8) is the only one produced only by IEG (i.e it is not available in the ICRs), and it evaluates the quality of the ICR itself. Rating (4) is the only metric on a 1–4 scale. All other metrics are on a 1–6 scale. For more details, see [World Bank \(2024a\)](#).

¹⁶Both the WB staff and IEG assign ratings to local governments and other implementing agencies, grading their performance throughout the project cycle. These correspond to ratings (1)-(3) in this paragraph. However, these local government ratings were discontinued in 2017 in both the ICR and ICRR templates. Consequently, any references to government or agency performance ratings in our dataset only extend through 2017.