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THE FAMILY AS A SOCIAL INSTITUTION

Natalie Bau
Raquel Fernández

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ABSTRACT

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Natalie Bau
Department of Economics
University of California at Los Angeles
Bunche Hall 8283
315 Portola Plaza
Los Angeles, CA 90095
and NBER
nbau@ucla.edu

Raquel Fernández
Department of Economics
New York University
19 West 4th Street, 6th Floor
New York, NY 10012
and NBER
raquel.fernandez@nyu.edu

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Natalie Bau*

Raquel Fernández †

Abstract

This handbook chapter focuses on important interactions between the family and culture. We discuss the wide range of global variation in family institutions, variation which is in part sustained by cultural differences, and important recent changes in family structures. The chapter discusses why different family institutions arise, when they persist, and what forces may lead them to change. Furthermore, it examines changes in key family outcomes, such as the rise of female labor force participation, the decline in marriage, and the increase in divorce. These changes have been accompanied by and interact with cultural change. Finally, we show how cultural institutions related to the family, such as son preference, co-residence traditions, polygyny, and marriage payments, affect decision-making within the family and interact with policy. We conclude that studying the family in a vacuum, without accounting for the role of culture, may lead to misleading conclusions regarding the effects of policies, macroeconomic shocks, or technological change.

1 Introduction

The family is presumably the oldest human institution. It is also the institution with the greatest amount of intersection and interaction between the private and social spheres. The family is central economically not only because it has historically been a locus of production and distribution, but also because it is the main transmitter of the social beliefs upon which all institutions depend. Thus, the study of the family is inextricably linked to the study of culture not only because of the former's central role in transmitting, and hence perpetuating, social beliefs but also because these beliefs then shape decision-making within the family. Although mainstream economics had largely ignored both the role of the family and the role of culture in determining key economic outcomes, this has changed over time. The acknowledgment that it is important to incorporate the family into economic analysis in order to understand micro and macro phenomena ranging from fertility rates to cyclical unemployment preceded by several decades a parallel acknowledgment regarding the role of culture. The importance of social beliefs in explaining economic outcomes as diverse as the

*UCLA, NBER, and CEPR. Contact: nbau@ucla.edu

†NYU, NBER, and CEPR. Contact: raquel.fernandez@nyu.edu

rise of women's labor force participation, human capital decisions, or the misallocation of inputs is a rapidly growing research area starting with the work of Fernández and Fogli (2009), Antecol (2000), Giuliano (2007), and Hsieh et al. (2019).¹

In this handbook chapter, we describe how culture and the family interact in four important ways. First, we document that a wide variety of family institutions exist around the world and have existed throughout history. These family institutions in turn have important implications for both the transmission of beliefs and an array of economic outcomes. As we show, across geographic areas and ethnic groups, there is significant variation in how social unions, such as marriage, are practiced and in co-residence practices between children and parents. The organization of the family unit has also changed substantially over time within geographic areas. The frequency of marriage, the ease and frequency of divorce, and even the sexes that can marry each other have changed radically over time. Both persistence and changes in these organizations are, at least in part, determined by culture and affect its transmission. However, despite the importance of this variation in family institutions, its specific drivers are still not fully-understood and remain a fertile area for research that integrates insights from anthropology, history, and sociology (Fernández, 2018). To provide insights into why different cultural institutions (including family institutions) arise and hence, why they change, we also describe two related frameworks from the anthropological and economics literature. Broadly, anthropologists have hypothesized that different institutions may arise through “learning and rational calculation” and cultural natural selection in response to the different environments in which individuals live (Boyd and Richerson, 1988), while economists have considered the role of informal institutions in solving incomplete contracts or missing markets problems (Greif, 1993).

Second, the family is a key unit for the intergenerational transmission of social beliefs. This transmission leads outcomes to persist over time, even in cases where the environment that gave rise to particular traditions or attitudes is no longer the same. As a result, parental attitudes and beliefs affect a diverse array of children's outcomes. This can be seen in the divergence of outcomes between individuals in the same economic and institutional environment from different cultural origins (and hence with different beliefs) which may persist across multiple generations. In this chapter, we describe a selection of the empirical and theoretical literature on intergenerational persistence, focusing on several examples that are particularly relevant for family economics. We first discuss the persistent effects of culture on female labor force participation and fertility, decisions that have dramatic consequences for both the status of women and the economy. Second, we discuss the cultural transmission of test score gender gaps, motivated by the fact that gender gaps in human capital between siblings are also deeply related to outcomes within the family. Finally, we

¹See Fernández (2011) for a review of the early literature in this field.

discuss the persistent effects of family structures and co-residence patterns.²

Third, the organization of the family is itself a key determinant of economic decision-making in both high and low-income countries. This is because family organization shapes household members' bargaining power and incentives. The fact that the family's organizational structure has an important role for decision-making has long been understood by anthropologists (for example, see Goody (1975)), yet until recently, the effects of variation in family and kinship-related cultural practices have been largely neglected in economics. In this chapter, we describe an illustrative selection of examples from the growing economics literature on the effects of the cultural traditions that determine family organization, noting that many of the cultural traditions discussed – such as dowry, patrilocality, and polygyny – are widely-practiced among populations of more than a billion people. In particular, we document how marriage traditions, co-residence patterns, and son preference affect a variety of outcomes, including human capital investment, fertility patterns, and intimate partner violence.

Fourth, while the family transmits culture, leading practices and attitudes to persist, culture is *not* immutable. Indeed, culture can even change dramatically within relatively short periods, as has clearly been the case for the social acceptability of same-sex relationships (see Fernández et al. (2021)) or the speed of assimilation of immigrants as embodied by the names they choose to give their children (see Abramitzky et al. (2016)). As the environment changes and individuals interact with the environment, their beliefs and incentives also change, changing the practices and attitudes that parents transmit to their children. Changes in the environment can be due (among others) to policy changes, the availability of new technologies or opportunities, or other shocks, such as changes in sex-ratios. They can also be due to changes in information or aspirations when exposed to new models of what makes for a “good” life. To illustrate the importance of cultural change for families, we document several key cases where culture changed in ways that directly affected the status of women (female labor force participation) within the family or family organization (co-residence patterns and same-sex couples).

The remainder of this chapter is organized as follows. Section 2 describes the variation in family institutions over time and space and discusses potential frameworks for explaining this variation. Section 3 discusses key examples of how beliefs and attitudes are transmitted intergenerationally through the family, affecting modern behavior, and Section 4 documents the direct effect of different family institutions on economic outcomes. Section 5 discusses how cultural change affects family organization and the status of different family members. Finally, Section 6 summarizes key lessons and links them to areas for future research.

²The literature on persistence – where intergenerational transmission through the family is often an important mechanism – is large and features outcomes as diverse as trust, risk aversion (see Dohmen et al. (2012) on trust and risk aversion), and rule-breaking (Lowe et al., 2017).

2 Family Organization

In this section, we document variation both in family institutions over space and time and discuss why this variation may occur.

2.1 Variation Across Space

While modern Westerners are most familiar with nuclear families with monogamous parents, these family institutions are not representative of the rich global variation in traditional family organizations. These institutions govern what form social unions such as marriage take, how these unions are legitimized, the division of labor within relationships, who inherits, sexual freedom for women, who supports parents in old age and much more. To illustrate just some of this variation, we draw on the *Ancestral Characteristics* database assembled by Giuliano and Nunn (2018) to show how different traditional family institutions vary geographically.³

The Ethnographic Atlas and Ancestral Characteristics Datasets. The *Ethnographic Atlas* (Murdock, 1967) is a database – assembled by anthropologists – of 1,265 ethnic groups’ pre-industrial cultural practices. Several papers have made use of this data to study questions in political economy, economic history, and the economics of culture.⁴ Giuliano and Nunn (2018) use these data to construct the *Ancestral Characteristics* database, which reports the ancestral cultural characteristics of *current* population groups within countries by combining the *Ethnographic Atlas* with maps of the current distribution of 7,500 language groups from the *Ethnologue* (Gordon Jr, 2009). To arrive at country-level measures of different traits, the authors mapped each language polygon from the *Ethnologue* (Gordon Jr, 2009) to a single ethnic group from the *Ethnographic Atlas*. They then calculated the weighted average of each cultural trait in a country by averaging over its current language polygons, weighting each language polygon by Landscan population data.⁵

Thus, the *Ethnographic Atlas* and the *Ancestral Characteristics* datasets provide researchers with different (but closely related) tools for studying and documenting variation in family institutions. The *Ethnographic Atlas* provides an ethnicity-level source of data that can be matched to other data sources at the language or ethnicity-level and can be used to study how individuals coming from cultures with different traditions behave, even within the same geographic area. The *Ancestral Characteristics* database provides country-level measures of the share of the current population in a country with a given ancestral trait, calculated using a particular aggregation method.

³For simplicity, we use the version of the *Ancestral Characteristics* database that only exploits ethnographic information from the *Ethnographic Atlas* (Murdock, 1967). Giuliano and Nunn (2018) have also produced more comprehensive versions of the database that integrate additional ethnographic sources.

⁴See Giuliano and Nunn (2018) for a review.

⁵The Landscan data is provided by the Oak Ridge National Laboratory and can be found at <https://landscan.ornl.gov>.

We note that while the *Ethnographic Atlas* has been widely used across disciplines to study the effects of cultural and historical institutions on modern behaviors, it also suffers from some limitations, several of which are also discussed by Giuliano and Nunn (2018). First, the *Atlas*'s coverage of Europe is relatively limited. This is because, at the time of the *Atlas* was compiled, the study of Europeans' pre-industrial cultural traits was seen as a task for historians rather than anthropologists. Consequently, the *Ethnographic Atlas* – an anthropological database – contains relatively few European groups. Second, while the *Atlas* aims to ascertain different societies' pre-industrial characteristics, the period of observation for different groups varies from the 1600s to later than 1950. Finally, most observations in the *Atlas* are based on the observations of one or several researchers, almost entirely males of European descent. This in turn could introduce both noisiness and biases to the data, including of course, what variables were considered relevant (Bahrami-Rad et al., 2020).

Cross-Country Variation in Cultural Traits. Figure 1 displays cross-country variation in four non-mutually exclusive measures of family institutions using the *Ancestral Characteristics* data. Figure 1a shows the global variation in traditional patrilocality (in which sons continue to live with their parents after marriage and provide them with old age support), plotting the share of the population whose post-marriage residence tradition is reported as “wife to husband’s group.”⁶ Figure 1b shows the variation in bride price traditions (grooms make payments to the parents of the bride at the time of marriage), plotting the share for whom the marriage payment tradition is “bride price or wealth, to bride’s family.”⁷ Figure 1c shows variation in traditional polygyny, and Figure 1d reports variation in the nuclear family as the predominant, traditional family type. For polygyny, we use the share that practice “independent nuclear, polygyny,” “preferentially sororal, same dwelling,” “preferentially sororal, separate dwellings,” “non-sororal, separate dwellings,” or “non-sororal, same dwelling.”⁸ For nuclear family traditions, we use the share for whom the variable takes either the value “independent nuclear family, monogamous” or “independent nuclear family, polygyny.”⁹

As the figures show, there is substantial variation in all four traditional practices across countries, both within and across continents. Traditional polygyny and bride price are particularly common in Sub-Saharan Africa, whereas patrilocality is a common ancestral trait in much of Asia, as well as parts of Europe and Sub-Saharan Africa. The nuclear family is a predominant ancestral family type in North America but not in much of Africa or Southern Asia.

While the *Ethnographic Atlas* is designed to measure historical rather than current practices, it

⁶We define patrilocality using the *v11* variable in the *Ethnographic Atlas*.

⁷We measure bride price using question *v6*.

⁸To measure polygyny, we use question *v9*. Some groups are recorded as practicing “independent polyandrous families.” However, this is relatively rare and only observed at all in 6 countries.

⁹We use question *v8*.

has also been shown to be predictive of a variety of current practices around the world (Bahrami-Rad et al., 2020). To provide additional evidence that this global variation in traditional family institutions still directly affects family structures for a sizable portion of the global population, we consider the case of polygyny since, unlike some other family institutions, polygyny is particularly observable in modern survey data. We draw on 35 Sub-Saharan African *Demographic and Health Surveys* collected from 23 countries since 2010.¹⁰ Consistent with the earlier findings of Tertilt (2005), polygyny remains widely practiced even in surveys from the last ten years. Across all respondents, 24% of women are in polygynous marriages,¹¹ and the share of marriages that are polygynous ranges from 6% (Burundi) to 49% (Guinea). Thus, while declines in the practice of polygyny have occurred in modern times (Fenske, 2015), it remains widely practiced in large parts of Sub-Saharan Africa, a region with a population of 1.1 billion inhabitants.

Although large-scale, cross-country data is less readily available for other traditional family institutions, there is still evidence that they remain important for substantial parts of the global population. For example, Chiplunkar and Weaver (2019) find that the share of the population practicing dowry (marriage payments from the bride's family to the groom's side or to the couple) in India – a country of 1.4 billion people – has *increased* since the 1930s, with roughly 90% of modern marriages now featuring dowry payments. Ashraf et al. (2020) find that approximately 80% of a sample of *urban* women report practicing bride price in Zambia and that bride price payments are similarly widespread in data from Indonesia.

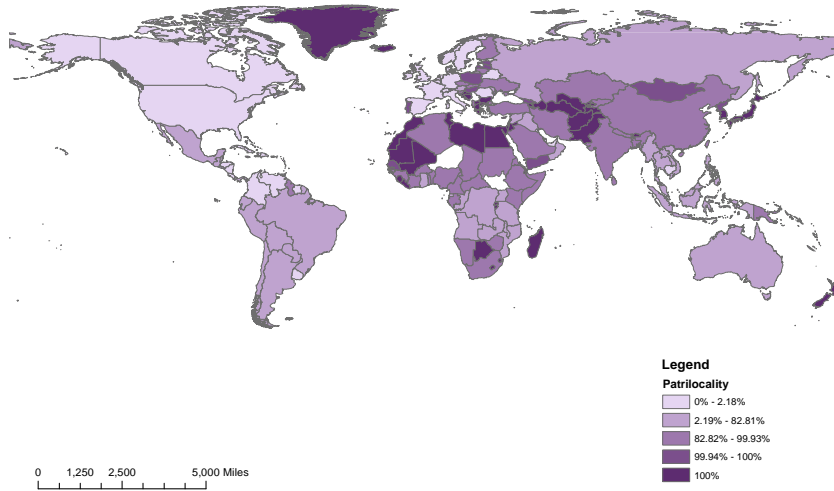
Thus, much of the rich variation in historical family institutions seen in these figures is still present today. In cases where these cultural traditions are still practiced, they are likely to directly affect household decision-making. Section 4 documents several important examples from the literature showing how global variation in family institutions affects decision-making. Additionally, variation in traditional family structures may also still affect behavior in places where traditional practices are no longer followed because these practices still have persistent effects on attitudes and behavior. Section 3 illustrates this point by documenting examples of how historical family institutions affect modern attitudes and behavior even when the institutions themselves have not persisted, as is the case with historic family structures in Europe.

Why do Traditional Family Institutions Vary? Many of the forces that give rise to the variation in traditional family institutions – which in part drives geographic variation in family institutions today – are not entirely understood. Indeed, understanding these forces remains an interesting question for future research. Anthropology and economics do provide us, nonetheless, with two related and complementary frameworks that may aid us in understanding why different institutions arise.

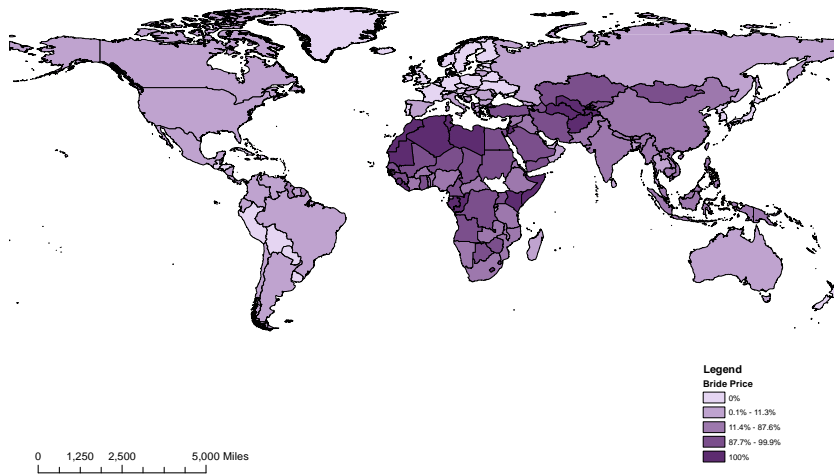
¹⁰Together, these surveys include roughly 500,000 respondents.

¹¹19% are in marriages with 2 wives, and 4% are in marriages with three wives.

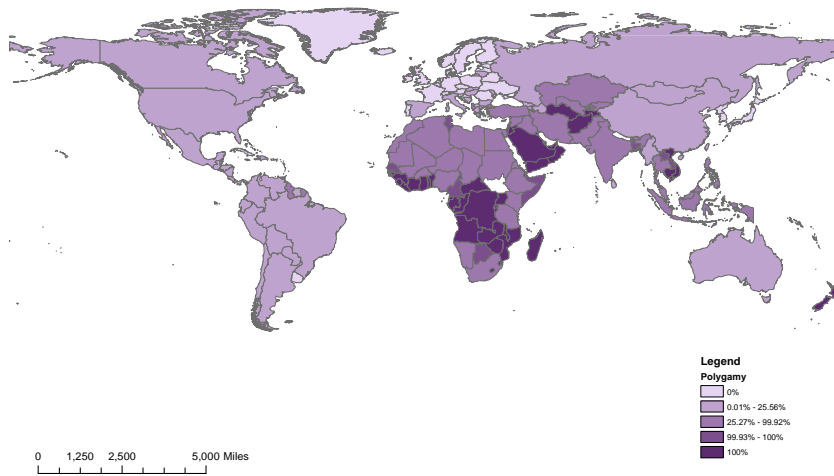
Figure 1: Cross-Country Variation in Cultural Practices



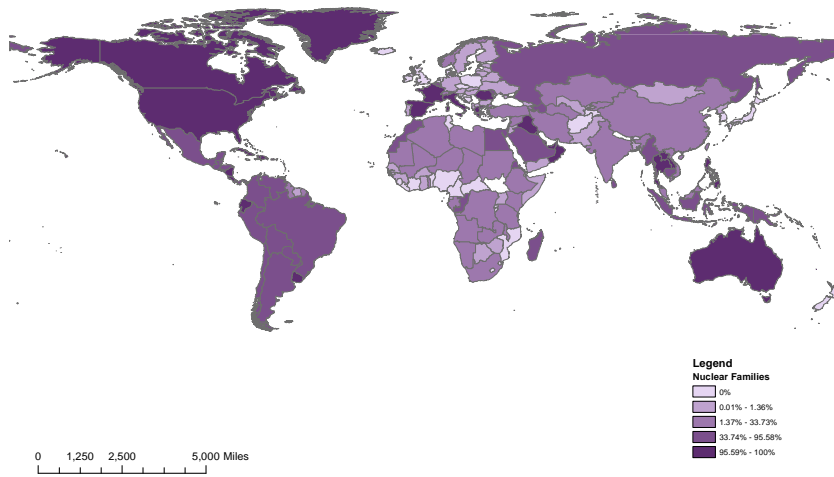
(a) Patrilocality



(b) Bride Price



(c) Polygyny



(d) Nuclear Families

Source: Ancestral Characteristics Database (Giuliano and Nunn, 2018). Countries where information is missing for more than 10% of the population are colored white.

The field of cultural evolution in anthropology views the rise and evolution of cultural institutions as an evolutionary processes (Boyd and Richerson, 1988). Thus, different family institutions may appear because they are a better response to particular environmental features, including agro-climatic conditions/the type of agricultural and subsistence practices employed by a society and the technologies available to that society. Institutions may change as these or other environmental features change. In this vein, in an influential book, originally published in 1970, Boserup (2007) suggests that pre-industrial agricultural technology that favors strength (e.g. the plough) led to male dominance in agriculture and a stronger division of gender roles. Alesina et al. (2013), which we discuss in greater detail in Section 3, provide evidence in favor of this hypothesis. In contrast, in areas that relied on labor-intensive, small-tools agriculture, women played a greater role in agriculture. Boserup (2007) suggests that this in turn leads polygyny and bride price to arise, as female labor was a valuable input into agricultural activity. Consistent with this hypothesis, Jacoby (1995) provides evidence that the demand for wives is greater in parts of Côte d'Ivoire where women's agricultural productivity is higher.

Another explanation for polygyny that is also consistent with cultural evolution and which points to why men “buy” women and not vice versa, comes from the “threshold” model in biology. This model suggests that polygyny will naturally arise under two assumptions: (1) males (but not females) can increase their offspring by acquiring more mates, and (2) there is heterogeneity in the quality of males/their resources but not in the quality of females (Orians, 1969). For humans, quality variation in females could be considered relatively small in contexts where they do not own property (and hence there are no wealth differences among them) and human capital differences are unimportant. This model results in males with more resources practicing polygyny. Consistent with this idea, economists have argued both empirically and theoretically that men with more resources will have more wives, and more unequal societies will be more polygynist (Becker and Becker, 2009; Grossbard, 1976, 1993). Gould et al. (2008) build on this model to provide further insights into when polygyny will be practiced and when it will decline. The authors develop a model showing that more economically developed societies will tend toward monogamy over time. They argue that this transition occurs when human capital becomes a more important driver of male income/resources. In more developed societies, human capital is a relatively more important driver of incomes, and high human capital men have higher incomes/resources. This leads female human capital to be more valuable on the marriage market (e.g. because it is complementary with male human capital in producing high quality children). This in turn drives up the effective price of high human capital wives, leading higher human capital men to match with one high human capital wife instead of multiple lower human capital wives. Thus, as a result of the changing economic environment, polygyny falls out of practice.

In addition to the work on polygyny described above, Becker (2018) provides another example

of how different environmental features can give rise to different family-related traditions. She shows that historical pastoralism leads to more restrictions on women's sexuality, including female genital cutting, since pastoralism led males to be absent from their families for extended periods, exacerbating paternal uncertainty.

A second, complementary view to the idea that cultural institutions arise and change due to evolutionary processes is that different cultural institutions – including family institutions – can help resolve incomplete contracting problem or social insurance problems that traditionally could not be resolved by formal institutions (e.g. Greif (1993)). Botticini and Siow (2003) argue that dowries evolved as a way to leave early bequests to daughters, since sons, who remained working with parents, would be disincentivized from making productive investments (e.g. on the family farm) if their output would later be taxed as part of a daughter's inheritance. Similarly, co-residence norms where sons or daughters live with parents and care for them in their old age may provide parents with a source of old age support in the absence of pension plans or other formal savings mechanisms (Ebenstein, 2014), while also potentially helping to resolve incomplete contracting problems in human capital investment between parents and children (Bau, forthcoming; Bau et al., 2020). Focusing on how family institutions can help provide insurance, Rosenzweig and Stark (1989) show that exogamy (where daughters leave the local area upon marriage) facilitates informal insurance networks between agrarian households in India who are exposed to very different shocks across space.

The literature described above suggests that these two frameworks can provide insights into why different family institutions occur in different places. Similarly, these frameworks may also provide us with insights into why family institutions change over time, as institutions could respond to either changes in the environment or formal contracting space. Nonetheless, we emphasize that more work is needed to fully understand why different family institutions occur and why these institutions change. Such an agenda may in turn lead to the development of new theoretical frameworks.

2.2 Variation Over Time

In addition to the variation in family form in the anthropological data discussed above, there has also been a dramatic evolution in the the formation and stability of the family. Figures 2 and 3 below show the evolution of the proportion of divorced individuals in the census between the ages 30-55 and the proportion that is never married among those of age 40-55 by country. The evolution of these proportions is graphed from 1960 (or the earliest year data is available) to the latest year data is available for a number of countries selected on the basis of data availability from the Minnesota Population Center (2020). The set of potential countries was further narrowed to include all countries in the OECD for which data on marital status was available for most censuses

between 1960 and 2010. We augment this set of countries with Brazil and Uruguay, which both have good coverage for this question and provide a potentially interesting contrast.

As can be seen in Figure 2, divorce (here shown as the share of currently divorced individuals among the sum of all currently married individuals plus those divorced, age 30-55) has increased markedly in all countries. More recently, some countries (e.g., the US and Ireland) have seen some modest decreases in this rate, whereas others (e.g. Hungary) have seen large increases. A partial explanation for the increase in divorce is undoubtedly due to the liberalizing of divorce laws in the mid seventies and eighties, making it easier and less expensive to obtain a divorce. Other factors increasing divorce include the greater ability of women to support themselves and their children and the growing acceptability of divorce. Accompanying the growth of divorce is a changing social view of the morality and general acceptability of this way of dealing with marital unhappiness. For example, in the US in 1954, Gallup found that only 53% said they “believe” in divorce. In 2001, Gallup first asked about the morality of divorce, and 59% thought it was moral. By 2015, this figure topped 70%.¹² These factors tend to reinforce one another: a higher probability of divorce makes working and greater labor market experience more important for women but it also may lead divorce to become easier for both partners.¹³ Increases in divorce also contribute to its greater social respectability, which then again further encourages divorce.

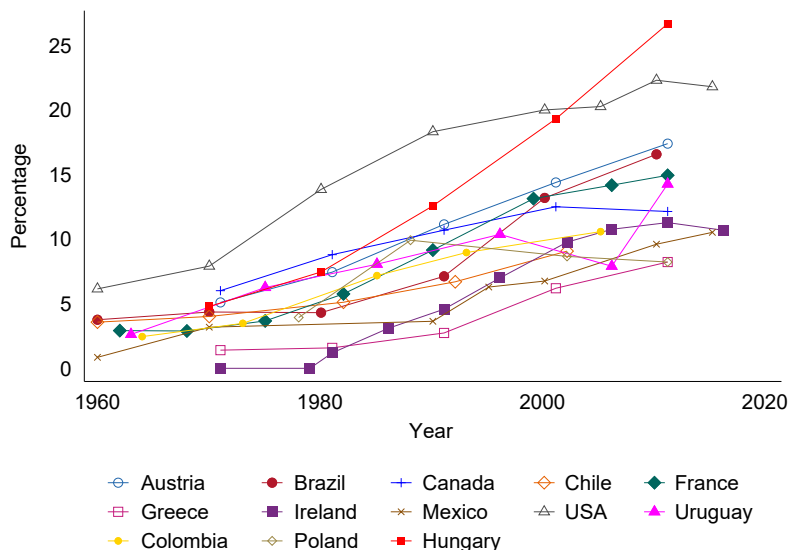
As shown in Figure 3, a growing proportion of individuals aged 40-55 have never married. The pattern for most countries is U-shaped, starting relatively higher in the sixties and then increasing in the nineties to reach even higher rates by the latest years available after 2010. An exception to this pattern is Uruguay, which has seen a mostly decreasing rate throughout the entire time period. Some part of the increase in the percentage of non-married individuals is due to the growing acceptability of cohabitation, as well as changing gender norms and how they affect the desirability of marriage. Important research questions here concern the relative stability of cohabitation versus marriage, the socio-economic divide in the US by education in who marries and who cohabitates, and the intergenerational consequences of these outcomes.¹⁴ In Section 5, we discuss the cultural changes that have driven some of these changes in family institutions over time.

¹²See <https://news.gallup.com/poll/213677/divorce-rate-dips-moral-acceptability-hits-new-high.aspx>.

¹³See Fernández and Wong (2017) for an analysis of how the change in law from mutual consent to unilateral divorce in the US affected labor force participation, assortative matching, the probability and timing of marriage and divorce, all in a quantitative life-cycle model with incomplete capital and insurance markets.

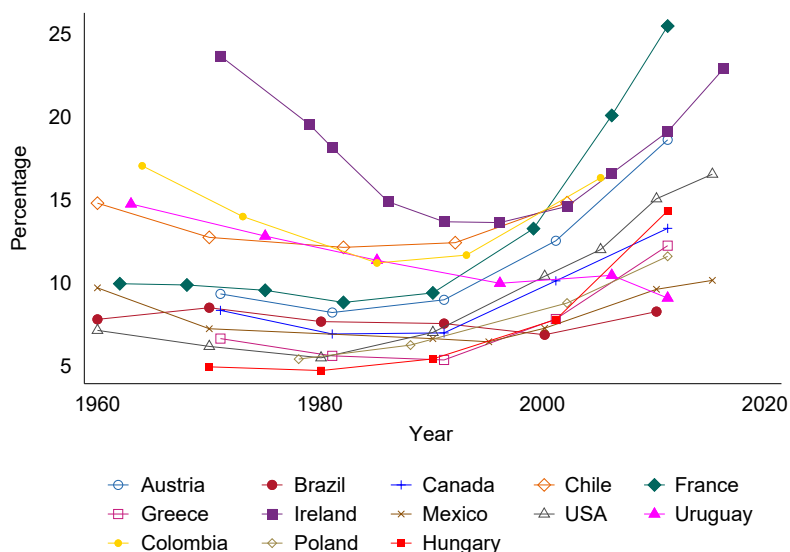
¹⁴See Lundberg et al. (2016) for a review of possible explanations for these facts in the US context.

Figure 2: Percent Currently Divorced of Ever-Married Group, Age 30-55



Source: National census data housed at IPUMS (Minnesota Population Center, 2020). This figure shows the number divorced in the census year, age 30-55, expressed as a fraction of all individuals currently married or divorced in that age group.

Figure 3: Percent Never Married, Age 40-55



Source: National census data housed at IPUMS (Minnesota Population Center, 2020). This figure shows the number never married in the census year, age 40-55, expressed as a fraction of all individuals in that age group.

3 The Family as a Transmitter of Culture

Culture is socially learned. Cultural beliefs are transmitted by society writ large: by families, by the social group(s) to which an individual belongs (voluntarily or otherwise), and by observation of what others do and say in a variety of arenas. These beliefs are maintained not only by transmission and learning but also by the punishment of those who transgress cultural prescriptions. This is not to say that these beliefs are static or equally held by all. On the contrary, the dominant culture in a society is constantly contested, and the strength with which beliefs are held varies across individuals and over time. As we discuss in Section 5, the dominant social culture evolves endogenously as well.¹⁵

In this handbook chapter, we are interested in the interaction between the family and culture, both because of the importance of the family as the primary transmitter of cultural beliefs and because these beliefs fundamentally affect outcomes. The role of the family in transmitting beliefs has been modeled in a variety of ways, mostly by incorporating economic incentives into evolutionary models that endogenize the degree of effort that a family expends on inculcating their children with their own beliefs/traits (see Bisin and Verdier (2001) for the main model in this vein). Parents may transmit practices or beliefs to maximize their own utility and/or their child's welfare. Parents may be imperfectly altruistic and, as they have their own culturally-determined preferences, may choose to inculcate their children with beliefs that do not maximize their children's ex-ante welfare. Moreover, whether parents choose to deviate from prevalent practices may depend both on the costs of transgressing and whether substitute practices are available for which the social sanctions of deviating from the prevalent practice are not too great (Gulesci et al., 2021).¹⁶ Parents may also be limited in choosing to transmit values different from what they hold themselves, as it is difficult to preach what one does not practice (e.g., a mother in a sexist household in which the mother does all the housework may have a hard time conveying a message of empowerment to her daughters or one of gender equality to her sons).

Children, of course, are not merely passive absorbers of culture. They are influenced by their peers in school and in their social neighborhood, as well as by the popular media, in addition to their parents. As emphasized by Akerlof and Kranton (2000), identity (which itself can be affected by culture) can to some extent be chosen by the individual and may be multidimensional.¹⁷ This

¹⁵What determines the original cultural beliefs? See Francois et al. (2018) for a very interesting study of how evolutionary group selection may select pro-social cultural features, as evidenced by greater trust among individuals in sectors/firms with greater competition.

¹⁶In the case of female genital circumcision (FGC), Gulesci et al. (2021) suggest that the introduction of a less damaging version of FGC could have served as a stepping stone for the decline of FGC in Somalia. Parents in the first generation could undertake the less damaging FGC practice without transgressing too much, and once this practice became dominant, parents could again individually stop practicing FGC altogether without deviating too much from the new prevalent norm.

¹⁷On the latter, see Carvalho and Pradelski (2021).

can sometimes lead to intergenerational conflict within the family. For example, as shown in Dahl et al. (2021), a reform that granted immigrant children born in Germany as of January 1, 2000 automatic citizenship actually decreased the welfare of Muslim girls born a few months after the reform relative to those born a few months before the reform. The former reported less satisfaction and were actually less integrated into German society, effects not found for Muslim boys. The authors interpret these results as resulting from family conflict in which conservative parents reacted to their girls' increased opportunities to assimilate by increasing the constraints on them to prevent assimilation.

Thus, the transmission of beliefs from parents to children, as well as the endogenous investments made by parents to prevent changes in attitudes or beliefs, can lead to cultural persistence. The role of cultural beliefs for determining important economic outcomes, such as human capital investment, female labor force participation, or fertility, is easiest to grasp – and to isolate empirically – when similar individuals faced with similar economic and institutional environments choose different actions based on these beliefs. Below we discuss several empirical contributions to this literature, which exploit this strategy, since they demonstrate the central role played by the family in transmitting cultural beliefs.

Female Labor Force Participation & Fertility. Female labor force participation, particularly that of married women, varies significantly across countries. How much of this variation is due to differences in beliefs about women's role and how much is due to variation in institutions by culture and economic factors that affect women's trade-offs between participating in the formal labor market versus the home? This is a tricky question to answer since, as argued in Fernández (2008), institutions as well as economic factors, such as gender wage differentials or the availability of day care, are fundamentally inseparable from cultural beliefs, co-determining one another. Nonetheless, by studying similar women who live in the same economic and institutional environment, it is possible to demonstrate the role played by families in transmitting cultural beliefs.

Fernández and Fogli (2009) study the effect of culture on economic outcomes by examining how it affects the work and fertility behavior of married second-generation American women using what Fernández (2008) calls the “epidemiological approach.”¹⁸ The main hypothesis is that it is possible to exploit the difference in portability between cultural beliefs and institutions to study the influence of culture. Immigrants bring with them a series of beliefs that are likely to reflect those of their country of ancestry. The descendants of these immigrants would be brought up with these beliefs, which would then influence their behavior. Of course, a potential concern is that there are other important characteristics of immigrants that may also be easily portable such as

¹⁸Second-generation Americans refers to individuals who were born in the US but whose parents were born elsewhere. These women are less likely to be affected by language barriers or other transitional shocks due to immigration than first generation immigrants are. On the other hand, they are more likely have assimilated to American culture.

human capital or wealth. A variety of controls can be used to make individuals comparable, thus ensuring, to the extent possible, that the effects of the cultural beliefs that determine how much women work and their fertility can be isolated from other channels such as their own education or the characteristics of their spouse.

The authors use the 1970 US Census (which was the last one to ask individuals where their parents were born) to create a sample of second-generation married Americans within a relatively narrow age range: thirty to forty years old. They proxy for the cultural beliefs in the country of ancestry with the female labor force participation (FLFP) and total fertility rates (TFR) in 1950, as this is the earliest year that is available for all the countries in the sample. Note that these variables capture, in addition to past economic and institutional conditions, the cultural beliefs commonly held about women's role and ideal family size. Given that the women in the 1970 US sample were born and raised in the US, only the cultural beliefs embodied in the variables should be potentially relevant to their work and fertility behavior.

The authors control for the standard metropolitan area in which the couples resides, as well as a variety of individual characteristics of the woman and her spouse, including education and household income. Although these attributes are likely to be influenced by culture as well, they also could be correlated with initial differences across ancestry in terms of parental education, income, and wealth. They show that the cultural proxies of FLFP for work and TFR for fertility have positive and significant explanatory power for women's work hours and number of children, respectively. Importantly, using a different data set, they show that these effects persist when they account for parental education. Furthermore, using census data, they show that effects are not due to the average human capital in the potential ethnic network measured in a variety of ways. Lastly, by conducting a Mincerian wage regression, the authors show that the FLFP cultural proxy is unable to explain differences in wage rates across these women, even after controlling for their age and education, making it unlikely that differences across work hours are driven by unobserved human capital that varies systematically by ancestry. Interestingly, using couples in which the parents of the wife and those of the husband did not come from the same country, they show that both influence the wife's work and the couple's fertility.

An earlier paper by Fernández et al. (2004) had hinted at the potentially important role that culture may play in perpetuating gender roles. The authors found that men whose mothers worked while they were growing up were more likely to end up married to women who also chose to work. Furthermore, they exploited the difference in female labor force participation induced by idiosyncratic variation in the mobilization rate of men across US states during World War II. In states with higher mobilization rates more women entered the labor market. A higher proportion of girls who were the right age to have seen their mothers go to work when young then also increased their labor force participation several decades later in those states which had seen greater

mobilization. This points to an effect on either daughters or sons (or both) because they directly witnessed their mothers working. Alternatively, employers may have changed their beliefs about the suitability of women in the workplace as a result of this experience.

More direct evidence of the family's role in transmitting values comes from Farré and Vella (2013). Using a sample of mother-child pairs from the National Longitudinal Survey of Youth (NLSY) 1979, they show that gender attitudes are highly correlated between mothers and daughters. Furthermore, the mother's gender attitudes affects the daughter's labor supply and, as in Fernández et al. (2004), the labor supply of their sons' wives.

Another paper examining the determinants of female labor force participation by Alesina et al. (2013) explores the hypothesis put forward by Boserup (2007) that differences in cultural attitudes towards gender roles originate in whether an ethnic group traditionally practiced plough versus hoe agriculture. The main difference between the two forms of agriculture is that men have an advantage in plough agriculture as it requires upper body strength and bursts of power to control the animal pulling the plough. Hoe agriculture on the other hand is labor intensive and uses hand-held tools. The hypothesis is that plough agriculture gave rise to a division of labor where men worked in the fields and women specialized in work inside the home in contrast to the hoe, which then gave rise to cultural norms about the appropriate gender division of labor. That said, it would be interesting to know whether men in hoe-oriented agriculture worked more within the home. The authors use pre-industrial ethnographic data from the *Ethnographic Atlas* that reports whether a society used the plough. The authors examine the long-term impact of plough versus hoe use by linking the information from the *Ethnographic Atlas* with the geographic distribution of languages from the Ethnologue. The final variable is the fraction of the population living in a country whose ancestors traditionally practiced plough agriculture. Although there are large and important gaps in the data (e.g., Latin America) as well as very little differentiation in several regions (e.g., within Europe or within sub-Saharan Africa), the authors show that countries with a higher-association with plough use had lower female labor force participation as measured in 2000. Of course, as cautioned earlier, it is not possible to use this strategy alone to differentiate between the effect of culture and institutions. To do so, the authors turn to the epidemiological approach and, following Fernández and Fogli (2009), show that the labor force participation of second generation women (i.e., whose parents were born elsewhere but who themselves were born in the country of residence) in the US or in Europe is lower if their parents came from a country that had ancestral plough use.

Test Score Gender Gap in Math. A growing literature suggests that culture is also an important driver of persistent gender gaps in math scores and that family can play a role in perpetuating these gaps by transmitting culture across generations. In an influential descriptive paper, Guiso et al. (2008) establish that the World Economic Forum's (WEF) Gender Gap Index is highly correlated with cross-country variation in gender gaps in the international PISA exams. Fryer and Levitt

(2010) replicate this result using data from the international TIMSS exams, although they find that it is not robust to the inclusion of several Middle Eastern countries (such as Bahrain and Iran) with highly biased WEF gender gap measures and very small gender gaps in math. Focusing on gender gaps at the top of the distribution in math performance in the NAEP, Pope and Sydnor (2010) also find that gender gaps are highly variant across states within the United States.¹⁹ Pointing to the potential importance of social beliefs, they find that state-level average answers to a General Social Survey question about whether “women are better suited to the home” explain 40% of the variation in these top-of-the-distribution gender gaps in math.

Building on this descriptive work, several papers apply the epidemiological approach from Fernández (2011) described above to determine if culture – rather than other features of a country – has persistent effects on the gender gap in math scores. Using the PISA test, Nollenberger et al. (2016) show that females within the same host country whose parents immigrated from countries with worse WEF gender gap scores perform differentially worse in math. Rodríguez-Planas and Nollenberger (2018) further show that females whose parents immigrated from countries with worse WEF gender gap scores have a lower self-reported preference for math, shedding some light on a potential mechanism underlying the math test score gap.

The evidence on the test score gender gap from the epidemiological approach is consistent with parents perpetuating gender gaps in math by transmitting cultural preferences or beliefs to children. A recent paper by Dossi et al. (2021) further highlights the specific role of the family in cultural transmission using data from public schools in Florida. The authors find that girls’ performance in math on the NLSY is correlated with son preference as evidenced by families whose fertility is larger when their first born is a girl rather than a boy.²⁰ As in Farré and Vella (2013), they use the NLSY to show that biased gender role attitudes are correlated with girls’ lower performance in math but do not affect the performance of boys.

Persistent Effects of Family Structure. Persistence across generations extends to family structure and living arrangements and also appears to be influenced by culture. As described above, Bahrami-Rad et al. (2020) provide initial evidence that this is the case around the world by showing that traditional family structure variation in anthropological data from the *Ethnographic Atlas* is predictive of modern family arrangements. Consistent with the findings of Bahrami-Rad et al. (2020), Bau (forthcoming) also provides evidence that data on matrilocality (daughters co-reside with parents after marriage) and patrilocality from the *Ethnographic Atlas* is predictive of living arrangements within Indonesia and Ghana, using data from censuses and the Indonesia Family Life Survey. Building on these preliminary associations, in line with the epidemiological ap-

¹⁹Intriguingly, states with smaller gender gaps in math also have smaller gender gaps on verbal tests, on which girls typically outperform boys.

²⁰Dahl and Moretti (2008) show that, in the US overall, there is son preference as evidenced by the greater fertility, on average, in families with a female firstborn child.

proach, Bau further shows that ethnicity-level traditions of matrilocality and patrilocality from the *Ethnographic Atlas* are similarly predictive of the practices of individuals who no longer live in their linguistic homelands, helping to isolate the intergenerationally transmitted effect of culture. Further pointing to the importance of the intergenerationally-transmitted, cultural component of family structure, Bau also shows that even within traditionally matrilocal groups in Indonesia, women who grew up in households that practiced matrilocality are much more likely to practice matrilocality themselves as adults.

Other historical family arrangements may still have persistent effects on behavior today, even if the family institutions themselves no longer persist. Todd (1983) classifies European families as having either egalitarian (all children inherit equally) or non-egalitarian inheritance norms and being either authoritarian (children are subject to parents' authority even after marriage) or liberal. The combination of these two traits gives rise to four family types: (1) *absolute nuclear family* (independent living arrangements and lack of strict inheritance rules), (2) *egalitarian nuclear family* (independent living arrangements and egalitarian inheritance), (3) *stem family* (cohabitation and non-egalitarian inheritance), and (4) *communitarian family* (cohabitation and equal inheritance) (Alesina and Giuliano, 2014). Using country-level information on family type and building on a specification from Galasso and Profeta (2018), Alesina and Giuliano (2014) show that these historical classifications relate to responses in the World Values Survey, with individuals from countries with communitarian and authoritarian families reporting higher measures of duty toward their parents. Intriguingly, Galasso and Profeta (2018) argue that these historical family types also affect which pension institutions countries adopt. In egalitarian societies, more children are responsible for supporting parents, leading to the adoption of more generous pension plans. Evidence from cross-country regressions is consistent with this argument. Additionally, Bertocchi and Bozzano (2015) use data from Italy, where there is within-country variation in traditional family types, to investigate the effect of these family types on gender gaps in education. In historical data from 1861-1901, they find that the female-male enrollment ratio is higher in areas where nuclear families and egalitarian inheritance are the traditional norms. By the contemporary period, the nuclear family tradition is no longer predictive of female enrollment, but the association with egalitarian inheritance is more persistent.

4 How Does Culture Affect Family Decision-Making?

While one strand of the literature focuses on cultural transmission – and the role of the family in reinforcing persistence – another strand takes cultural practices as given and examines how they affect decision-making and bargaining power within families. We describe several important examples from this literature below. We further note that for many of the practices we discuss, the effects of a practice often cannot be considered in isolation from other practices or aspects

of the institutional setting that are often bundled with it, such as the underlying cost of divorce. As documented in Section 2, many of the cultural traditions we discuss are widespread and affect substantial fractions of the global population.

Marriage Payments. Payments at the time of marriage are common throughout the world and can typically be classified as *dowry* or *bride price* (Anderson, 2007). Bride price payments are widespread in Sub-Saharan Africa, while dowry is still widely practiced in South Asia, and particularly in India. Dowry payments are payments from the family of the bride to the family of the groom at the time of marriage, while bride price payments are payments from the groom to the parents of the bride. Historically, dowry payments served as a bequest to the bride (Goody et al., 1973; Botticini and Siow, 2003), but in modern India, dowry appears to function at least partially as a groom price, with the groom and his parents claiming a substantial portion of the dowry (Bloch and Rao, 2002). For both dowry and bride price, payments can be large and consequently play an important role in family decision-making. For example, Bloch and Rao (2002) document that dowry payments are on the order of six times annual earnings.

Ashraf et al. (2020) study the effect of bride price payments on parents' human capital investments in daughters. The authors hypothesize that bride price allows parents to capture the marriage market returns to education, incentivizing them to educate their daughters. Indeed, they show that greater female education is associated with higher bride price payments. Moreover, when the authors compare ethnic groups that traditionally practiced bride price to those who did not, they find that daughters from the bride price ethnic groups were more likely to be enrolled in school in both Indonesia and Zambia. Importantly, when they study the effect of large-scale school construction programs in both countries, they find that education increases more among women from ethnic groups with bride price traditions relative to women from groups without these traditions. They conclude that bride price traditions incentivize parents to invest in daughters' education and that researchers and policymakers alike must take into account the cultural context (and family institutions) to understand the effects of development policies.

Gaspart and Platteau (2010) focus on a different (but widespread) aspect of bride price payments – the fact that a woman must return the bride price payment to the groom in the event of a divorce. Thus, large bride prices may force women to stay in marriages that they would otherwise leave by reducing a woman's outside option from separating. Gaspart and Platteau (2010) endogenize bride prices in a sequential game and show that their model produces the counterintuitive prediction that divorce will be *negatively* related to bride price payments. This is because altruistic parents will endogenously ask for smaller bride prices when the probability of divorce is higher. This prediction is borne out in data the authors collected from rural Senegal.

Corno et al. (2020) compare how droughts interact with bride price and dowry in Sub-Saharan Africa and India. Corno et al. find that droughts *increase* the likelihood of child marriage in

Sub-Saharan Africa because bride price payments allow the parents of daughters to consumption smooth, while droughts *decrease* the likelihood of child marriage in India, as droughts make dowry payments effectively even more costly for parents with daughters. Early marriage in turn leads to increased early fertility, particularly in Sub-Saharan Africa. Like Ashraf et al. (2020), Corno et al. (2020) highlight the importance of taking into account underlying cultural institutions to understand the direction of relationships in the data and for the design of policy.

While the literature on the effects of bride price on the family is still relatively small, a larger literature has focused on dowry. Bloch and Rao (2002) model the occurrence of intimate partner violence in India in the presence of dowry. In their model, domestic violence allows men to signal that they are dissatisfied with the marriage, which allows them to extract further transfers from the bride's family. The bride's family is willing to make more transfers in order to avoid separation for their daughter, which is assumed to yield her a very low payoff. Dowry payments reduce the incidence of domestic violence by reducing the value of extracting additional transfers from the perspective of the husband and increasing the cost of additional transfers from the perspective of the wife's family. The authors use data they collected from the potter subcaste in three villages in India to test this hypothesis and find that the level of dowry payment is negatively related to intimate partner violence. Calvi and Keskar (2021) test a similar hypothesis – that higher dowries lead more resources to be allocated to women – although they are agnostic about the mechanism. In addition to OLS regressions, they use two instruments for dowry: (1) the leave-one-out average of dowry payments by state and year of marriage in the Rural Economic and Demographic Survey, which measures prevalent dowry norms at the time of marriage, and (2) gold prices in the year of marriage. The latter instrument affects the value of dowry as it is traditionally paid in gold. Across these different specifications, the authors find that a higher dowry leads women to have a higher share of resources in the household and to be less likely to be living in poverty within the household.

Bhalotra et al. (2020) study the effect of exogenous changes in dowry size on female neonatal deaths, hypothesizing that dowry leads to son preference by making daughters relatively more expensive. Like Calvi and Keskar (2021), the authors exploit the fact that much of dowry is paid in gold, and fluctuations in the price of gold have strong effects on dowry values. Since the price of gold is a random walk, its price when a daughter is born is predictive of her dowry when she marries. They find that prior to 1985, when sex selection technologies were not widely available, positive shocks to the price of gold increase neonatal mortality for girls but not boys and also lead girls to be shorter. After 1985, positive shocks to the price of gold lead to more skewed sex ratios, consistent with parents practicing sex-selective abortion.

Son Preference. A variety of cultural practices or attitudes, in addition to dowry, can contribute to observed male-biased behavior in both high and low-income countries. These practices include

patrilocality (sons live with and care for parents in old age), patrilineality (inheritance and lineage are passed through sons), concerns about female purity, and the importance of sons for performing religious rites at parents' funerals (Jayachandran, 2015; Ebenstein and Leung, 2010). Moreover, cultural traditions may lead birth order, in addition to gender, to be an important determinant of parental investment if firstborn sons are more likely to inherit or care for parents in their old age. In its most extreme form, son preference can lead to sex selective abortion, female infanticide and abandonment, or the relative neglect of daughters, all of which may contribute to skewed male-to-female sex ratios throughout South Asia, West Asia, and China (Sen, 1990; Yi et al., 1993; Gupta, 2005; Lin et al., 2014).

Jayachandran (2017) notes that many of the drivers of son preference described above may lead parents to want at least one or two sons but do not necessarily lead them to prefer sons after they have at least one or two. As a result, when parents can practice sex selection, declining fertility rates can lead to more male-biased sex ratios, even when parents' preference for sons at any given fertility rate is not changing. Using survey data she collected from India, Jayachandran (2017) shows that parents' self-reported desired sex-ratios (conditional on fertility level) for their children's children are indeed more male-biased at lower fertility levels. Almond et al. (2019) find a similar pattern in parents' preferences in China. Based on the Indian data, declines in fertility rates in India paired with sex selection can explain 30-40% of the recent increase in gender bias in India's sex ratios.

Ebenstein (2010) observes a similar phenomenon in China under the one child policy, where sex selective abortion and female infanticide led to 9.3 million missing girls aged 0-18 in the 2000 census. Just as declining fertility exacerbates skewed sex-ratios in India, Ebenstein (2010) finds that the one child policy – which penalizes high fertility – exacerbates them in China. Ebenstein (2010) shows that province-year-ethnicity level variation in fines on excess fertility is positively related to sex ratios after the implementation of the one child policy but not before. Almond et al. (2019) further show that when incomes in China increased due to land reforms, son preference combined with the one child policy led to even more skewed sex-ratios. The authors suggest that this is because using a ultrasound to sex-select is a costly normal good; thus, higher incomes lead parents to sex-select more.

Qian (2008) explores how another set of post-Mao reforms affected sex ratios in China. She compares the effects of reforms that increased orchard production (which favors male labor) and tea production (which favors female labor) in different areas. Using a difference-in-differences strategy, as well as an instrumental variable based on agricultural suitability for tea, she finds that increased tea production reduces male-female sex ratios, while increased orchard production increases them. Since the period she studies mainly pre-dates the availability of sex-selective abortion, she infers this is due to changes in early female mortality. Intriguingly, increased tea

production also increases education for both daughters and sons, while increased orchard production decreases education for daughters and leaves sons' education unchanged. Qian (2008) concludes that this is evidence that tea production doesn't simply increase parents' incentives to have daughters but also, by increasing females' income, increases women's bargaining power within the household.

Sex selection also occurs in high-income countries. Almond et al. (2013) show that sex selection persists among Asian immigrants to Canada. Specifically, the authors show that Asian immigrants who previously had 1 or 2 daughters are more likely to have a son, and this effect appears for second as well as first generation immigrants. Similarly, Abrevaya (2009) finds evidence of sex selection among Asian immigrants to the United States. In particular, she shows that 3rd and 4th births are much more likely to be boys among Indian and Chinese immigrants *after* the technology for sex selective abortion became widely available, but other groups do not display the same pattern.

Parents' desire to reach their ideal number of sons in India can also affect mothers and daughters indirectly by reducing birth spacing. Jayachandran and Kuziemko (2011) show that, since breastfeeding has contraceptive properties, mothers will stop breastfeeding daughters more quickly if they have yet to reach their ideal number of sons. Consistent with this finding, Milazzo (2018) finds that having a first born daughter leads to higher fertility and shorter birth spacing, ultimately resulting in a higher risk of anemia and lower chance of survival for mothers.

Son preference does not just affect sex selection and fertility behavior. It can also affect human capital investment and family structure. Several of the papers on the test score gap we discussed in Section 3 cite son preference as a potential driver of the gap. Jayachandran and Pande (2017) also use son preference to help explain the striking differences in stunting between India and Sub-Saharan Africa. India outperforms Sub-Saharan Africa on most health and development indicators, but at a given level of income, Indians are much shorter than Sub-Saharan Africans. Consistent with the authors' argument that a strong preference for oldest sons in Hindu culture also explains a large portion of the average height/stunting gap between Indian and African children, the height/stunting gradients over birth order are substantially steeper in India than the nearby Muslim countries of Pakistan and Bangladesh, than in Sub-Saharan Africa, and than in traditionally matrilineal areas of India. Strikingly, pre-natal investments are higher for second-born female children with no older brother *before* gender is observed, but post-natal investments *after* gender is observed are lower.

Turning to the effects of son preference on family structure, Dahl and Moretti (2008) estimate the effect of having a firstborn daughter on whether the mother is married, whether she is divorced, and whether the child is in the custody of the father in the case of a divorce. Firstborn daughters increase the probability of the mother never marrying and of divorce and reduce the probability of being in the father's custody. Additionally, in cases where sex was known due to an ultrasound, the

authors find that the mother of a firstborn daughter is less likely to be married (suggesting that the probability of a “shot gun marriage” fell). As a result of these effects, firstborn daughters (and their siblings) are more likely to grow up in households without a father and grow up in settings with fewer financial resources. Dahl and Moretti (2008) cite several pieces of evidence suggesting that this effect is due to gender bias. Mothers in the United States have higher fertility after a firstborn daughter, indicating that parents have more children in an attempt to have a son. This pattern is inconsistent with the alternative explanation for the results that daughters are more expensive to raise. In addition, Gallup polling indicates that men – but not women – report a strong preference for having sons rather than daughters on average.

Polygyny. As documented in Section 2, polygyny is still common in much of Sub-Saharan Africa. We discuss a few examples from a larger literature on the effects of polygyny on intra-household decision-making and household outcomes below. Tertilt (2005) shows that polygamist societies have higher fertility rates and lower savings rates than non-monogamous societies. She argues that these stylized facts are consistent with the fact that polygyny leads to a shortage of women and hence positive bride prices, incentivizing parents to have more children to save rather than formally saving. In this context, bride prices encourage fertility even though they make marriage more costly for sons because parents receive the bride price for their daughters but do not help their sons pay the bride price. Rossi (2019) provides another explanation for high fertility rates in polygamist societies. She finds evidence that co-wives compete with one another for their share of the husband’s resources by having more children.

Intimate Partner Violence The effect of culture on how decisions are made and how control is exercised in the family is a particularly important question for domestic violence, more generally called intimate partner violence (IPV). IPV is one of the more disturbing ways for men (overwhelmingly) to exercise power over their partner to influence outcomes.

IPV is a widespread problem throughout the world. In developed countries such as the US, surveys show that 37% of women say that they have experienced IPV over their lifetimes and it is even more prevalent in developing countries.²¹ In addition to the immediate negative consequences of IPV, women affected by IPV are more likely to develop mental health problems, alcohol and substance abuse, unintended pregnancies, and employment difficulties.²² Children also suffer negative consequences: they tend to have lower birth weights and impose negative externalities on their peers in school.²³

The link between IPV and women’s employment can be used to learn about how decisions are made in the the household. Viewed through the lens of bargaining theory, the predictions

²¹See Doyle and Aizer (2018).

²²See Erten and Keskin (2018) for a review of the literature.

²³See Carrell and Hoekstra (2010).

about the effects of female employment are ambiguous. Greater employment for women may increase their bargaining power by improving their outside options, on the one hand. On the other hand, there are now more resources to be extracted and to do this the man may use the threat and actual imposition of violence as long as the value of the outside option is still too low to be exercised.²⁴ The consequences also depend on whether the violence is considered “expressive” (the abuser enjoys the violence) or instrumental (a way to extract resources).²⁵ Just as importantly, IPV does not happen in a social vacuum. Overall cultural factors, such as how socially, as well as economically, easy it is to walk out on a husband, how working women are looked upon, and how much male identity is tied up in being the sole bread winner also matter. Several papers (in addition to the papers on dowry discussed above) document the role of cultural factors in IPV.

Alesina et al. (forthcoming) show that ancestral traits of different African ethnic groups are correlated with IPV. In line with the argument from Boserup (2007) discussed above, in ethnic groups that originally used the plough, as well as those based on fishing and husbandry, women had a less active role in the economy. The authors tend to find an positive relationship between IPV and ancestral production modes in which women played a less active role.

Tur-Prats (2019) analyzes the relationship between IPV and family types in Spain. The paper distinguishes between patrilineal “stem” families in which one son inherits all the land and stays in the parental home with his family and “nuclear” families in which all children receive a share of the inheritance when they leave the parental home to start their own households. The thesis explored is that IPV should be lower in places with a historical legacy of stem families as the presence of a mother-in-law allowed the wife to contribute more to non-domestic work. Tur-Prats (2019) uses the 1860 Spanish census to compute the average number of married and widowed women per household at the province level and instruments for family type using the establishment of different inheritance laws in different parts of Spain. These laws are taken as exogenous, as they were established many centuries ago in response to the different strengths of the nobility in the West of the country relative to that in the East. Using a host of individual controls, as well as historical and contemporary controls for development, the author finds that territories where the stem family was more prevalent in the past exhibit lower IPV rates today. Using the World Value Survey to study gender attitudes, the paper also finds that individuals that currently live in places that were historically associated with stem families have more gender-equal attitudes. This is indicative of the cultural transmission of attitudes towards domestic violence as the family type in contemporary Spain is overwhelmingly nuclear.

²⁴For example, Heath (2014) finds a positive correlation between IPV and employment in Bangladesh only for women with a low education.

²⁵Expressive violence by domestic partners is studied in the context of football games by Card and Dahl (2011).

5 The Family and Cultural Change

Although the vast majority of the empirical literature on culture and the family has focused on showing that culture has persistent effects, there is also evidence that culture can rapidly change, even within a single generation. Why does culture change? In general, starting from a steady state, cultural change requires a “shock” to technology, institutions, or to knowledge/information that affects beliefs and/or changes incentives to behave in norm-conforming ways.

Information and Learning. The effects of information on social beliefs, provided in the form of different role models via the media, is shown by La Ferrara et al. (2012) and Jensen and Oster (2009). These papers study the effect on attitudes and other outcomes produced by the introduction of certain television programs in Brazil and India. In Brazil, the vast majority of the population watches the 8pm soap opera aired by Rede Globo, which has had a virtual monopoly over their production. Over the period studied by La Ferrara et al. (2012), over 70% of the female characters portrayed had no children and some 20% of them had only one; the average number of children for the population was substantially higher though declining over this time period. The authors hypothesize that exposure to these different family models could affect fertility and examine this thesis by using variation in the timing of the availability of Globo’s signal across geographic areas. They show that, *ceteris paribus*, Globo coverage is associated with a decrease in fertility, especially for households with lower education.

In a related vein, Jensen and Oster (2009) use a three-year, individual-level panel to examine the effect of the introduction of cable television on women’s status in rural India. Cable television offers viewers different programs than those available on government channels. The most popular Indian serials take place in urban settings, featuring women with more progressive attitudes than are prevalent in rural areas. The authors find that those villages that saw cable television introduced in the three-year period experienced significant decreases in the reported acceptability of domestic violence towards women and son preference, as well as increases in women’s autonomy and decreases in fertility. The findings in the two papers show that culture can change quickly and that these changes are bound to have intergenerational consequences, both as a direct consequence of the economic changes associated with the fertility decline and through the potential transmission of beliefs to the next generation.

Taking inspiration from the “S-shaped” curve that characterizes the evolution of married women’s labor force participation in countries with lengthy longitudinal data (e.g., the US, England, and France), Fernández (2013) develops a model of intergenerational learning in which individuals learn from their parents and from observing other people’s work decisions. She uses the model as a lens to study about 120 years of married women’s labor force participation in the US. In the model, individuals learn both from private (noisy) signals, which are then passed on to their chil-

dren and from observing a (noisy) signal of the labor force participation of the prior generation. That is, learning is from both private and social sources. The information concerns the true cost (to a woman's marriage, to her psyche, or to her children's outcomes) of working outside the home, a topic which has long been a source of private and social anxiety. The model generically produces an S-shape in which, if society starts out believing in general that it is bad for women to work outside the home, then female labor force participation is low and beliefs change only slowly at first. The latter evolves very slowly when few women work because of the low accuracy of the public signal. At some point, when enough women are working, beliefs can change rapidly, as does labor force participation. Once beliefs are more positive, learning and changes in work behavior slow down, producing altogether the S-shaped curve. An interesting implication of the model is that policies that push against prevailing cultural beliefs can have positive welfare implications even if the government has the same social beliefs as everyone else. For example, subsidizing female wages when their labor force participation is low can increase welfare not because women earn more, but rather because by encouraging more women to work, intergenerational learning is sped up. Calibrating the model to data moments in the 1990s and 2000s, including the propensity for a woman to work as a function of whether her mother worked, and feeding in the time series of wage distributions for men and women, the author shows that the model does a good job of replicating 120 years of married women's labor force participation. Labor force participation starts out very low in the 1880s and increases very slowly until the mid 19th century, accelerating markedly between 1970 and 1990 and then flattening out. Moreover, making use of of Roper poll data available from 1936 onward regarding the "appropriateness" of a married woman working if she has a husband capable of supporting her, Fernández (2013) shows that the model's median belief on this issue does a good job of tracking the evolution of this time series as well.

Attitudes towards same-sex relationships have undergone remarkably rapid change in a few decades. While in 1973, 80% of the US population thought that same-sex relationships were "always wrong" or "almost always wrong," these proportions were 41% in 2016.²⁶ In many countries, gay couples can now legally marry, have children, and enjoy all the rights previously restricted to opposite-sex couples. This would have been inconceivable a scant thirty years ago. Why did this change occur? In the context of the US, Fernández et al. (2021) show that that after twenty years of stable and very negative attitudes, opinions turned markedly more favorable following the 1992 presidential election.²⁷ The election saw, for the first time, the two main political parties adopt explicitly opposing stands with respect to gay people serving openly in the military, and the debate over this policy continued during most of 1993. This was accompanied by an unprecedented level

²⁶Calculated using GSS poll data.

²⁷The authors show that there was a clear structural break in the evolution of attitudes in 1992 with a significant positive jump that thereafter continued to evolve with greater proportions becoming more positive over time in a process of cultural diffusion.

of media attention on gay-related concerns over the same period. The authors hypothesize that the debate and accompanying salience of gay-related concerns led individuals to debate and reconsider their positions. In keeping with contact theory (Allport et al., 1954), they show that opinion change was greatest in those areas (states and counties) with a larger gay population as measured in a variety of ways. This paper is suggestive of the fact that people learn or rethink their beliefs when an issue becomes more salient and they are exposed to arguments on both sides.

Although the analysis discussed so far depicted individuals changing their actions/beliefs mostly without regard for how others behaved except as a source of learning, in reality the beliefs and actions of local society (e.g., of family, friends, and neighbors) matter for another very important reason. Culture is a social phenomenon and is maintained not only via beliefs but also via carrots and sticks. An individual may be reluctant to change their actions, e.g., work as a married woman with children, if others believe that this makes her a bad mother and ostracize her. An interesting confirmation of the importance of social beliefs is provided in a field experiment by Bursztyn et al. (2020) in the context of contemporary Saudi Arabia. In that country, the percent of women working outside the home is very low and, the authors argue, the custom of male guardianship implies that the latter's approval is needed for a wife to work outside the home. Recruiting samples of 30 young, college-educated married men by neighborhood in Riyadh, the authors show that men's own opinions about their wives working outside the home are positive, whereas their incentivized guesses about the opinions of their 29 neighbors are on average too low. Providing information about the neighborhood average, randomized at the individual level, induces men to sign up their wives to a mobile phone job-matching service rather than choose a \$5 amazon gift card. Hence, in this context, providing individuals with more accurate information about others' beliefs affects their behavior towards the possibility of their wife working outside the home.

Policy Changes. In addition and as a complement to learning, changes in the environment resulting from the introduction of new policies can change incentives and also lead to changes in attitudes and practices over time. Several papers demonstrate this. Bastian (2020) studies the effect of the introduction of the Earned Income Tax Credit (EITC) in 1975 on the labor supply of women with children, particularly unmarried women. Using cross-state demographic heterogeneity to predict the size of the response, the author shows that attitudes towards married women working changed (positively) the most in the states that were predicted to have the largest labor supply response.

Campa and Serafinelli (2019) study the effects of State Socialism – a very large-scale policy change – on gender attitudes, exploiting the partition of East and West Germany. Campa and Serafinelli find that women from East Germany place greater importance on career success and that women and men alike are less likely to hold traditional gender attitudes. In line with the findings of Bastian (2020), the authors find that the changes in attitudes are greater in areas with greater growth in female employment.

Bau (forthcoming) directly studies the effect of policy on cultural traditions that determine family institutions. In particular, she studies a set of cultural traditions that determine whether daughters (matrilocal) or sons (patrilocal) stay with parents after marriage and care for them in their old age. These traditions are particularly valuable for studying cultural change, since co-residence patterns can be observed to some extent in most household survey datasets, including censuses. Bau hypothesizes that these traditions both provide parents with old age support and mitigate incomplete contracting problems in human capital investment by incentivizing parents to invest in the children who will remain in the household as adults. The introduction of pension plans should reduce the value of transmitting cultural traditions of matrilocality/patrilocality to the next generation, reducing the practice of matrilocality and patrilocality among those who were children when the plans were introduced. Consequently, parents should also have less incentive to invest in the education of the children who now no longer care for them in their old age. Consistent with these predictions, in triple-differences regressions that exploit ethnicity-level variation in cultural traditions from the *Ethnographic Atlas*, geographic variation in pension plan exposure, and cohort-level variation in exposure to pension policies, the paper shows that the introduction of a pension plan in Indonesia reduced both traditionally matrilocality women's educational attainment and the probability that they resided with their parents after marriage. The results are symmetric for males from traditionally patrilocal ethnic groups from Ghana. Thus, a specific government policy can lead to culture change – and changes in family structure – within a single generation.

In another example of a policy leading to cultural change with effects on the family, Beaman et al. (2009) exploit random assignment of gender quotas for leadership positions on village councils in West Bengal. They show that after ten years of quotas, women are more likely to stand for, and win, elected positions in councils required to have a female chief councilor in the previous two elections. Furthermore, they show that changed attitudes are a likely channel, as prior exposure to a female chief councilor improves perceptions of female leaders' effectiveness and weakens stereotypes about gender roles in the public and domestic spheres.

Technological Change. Changes in technology can also create incentives for change, as shown by Fernández-Villaverde et al. (2014) in a model that features parents making a costly effort to socialize their daughter to feel shame if she has a child out-of-wedlock with contraceptive technology (the probability that contraception does not fail) improving over time. An out-of-wedlock child reduces the daughter's economic prospects, which is all that parents in the model care about. The daughter cares about this as well but also enjoys sex. The authors calibrate the steady-state of the model to various moments of the data for the US in 2000 and show how technological improvements in contraception reduce the level of effort parents expend on inculcating their children with higher levels of shame and increase the prevalence of premarital sex.

Changes to the Environment. A growing literature examines how accidental variation in sex ratios is correlated with attitudes, showing that culture adapts to a different environment. Grosjean and Khattar (2018) exploit variation across Australian counties that resulted from the British policy of sending convicts (mostly men) there and from the pull, primarily for free men, of opportunities for employment in agriculture and gold mines. The gender imbalance persisted for a long time. The authors show that in places with a historically skewed male-to-female ratios, present-day inhabitants have more conservative gender attitudes, female labor force participation is lower, and women enjoy more leisure. In contrast, Teso (2019) studies the long-run effects of reductions in the male-to-female sex ratio in Sub-Saharan Africa due to the trans-Atlantic slave trade. Even though sex ratios have since normalized, today, women from more affected ethnic groups are more likely to work and are more likely to work in higher ranking jobs. Teso (2019) hypothesizes that this is because the lack of men during the slave trade induced women to work more outside the home. Interestingly, Teso (2019) finds that both a woman’s ethnic group’s experience with the slave trade and her husband’s ethnic group’s experience matter, highlighting that part of the slave trade’s effects may be due to mothers transmitting more positive attitudes toward women working to their sons in line with Fernández et al. (2004). Another natural experiment is provided by exogenous variation across French *departements* in the death rate of soldiers in World War I. Using the epidemiological approach to study the work behavior of migrants within France, Gay (2018) shows that in present-day France, women whose mothers were born in departements that suffered high death rates work more than women whose mothers were born in low death rate departements.

Changes in sex ratios also seem to have left a mark on attitudes towards same-sex relationships. Brodeur and Haddad (2018) in the US trace the prevalence of same-sex couples and positive attitudes towards same-sex relationships to a historical event, namely the gold rush and the related high male to female ratio. Interestingly, in the Australian context, Baranov et al. (2018) show that in areas that were heavily male-biased in the 18th and 19th century, more Australians voted against same-sex marriage. Why there may be differences in reactions in the US vs Australia to a skewed sex ratio remains to be resolved.

6 Conclusion & Directions for Future Research

The literature on culture and the family has important lessons for economists and policymakers alike. As shown in a variety of contexts, the effects of policies, as well as other shocks, depend not only on economic “fundamentals” but also on culture. As discussed previously in Sections 3 and 4, policies such as school construction in Indonesia (Ashraf et al., 2020), the introduction of pension programs in Ghana and Indonesia (Bau, forthcoming), or the granting of citizenship rights for immigrants in Germany (Dahl et al., 2021) affected education and residence patterns in ways that depended on how family institutions varied across groups. Similarly, exogenous shocks to income

affected the prevalence of child marriage but in opposite directions according to the nature of the family institutions (Corno et al., 2020). Ignoring the potential interactions of family institutions, cultural beliefs, and policies by clinging to an outdated belief in an “economic man” that lives in a social vacuum is simply bad economics and can lead interventions to have unexpectedly negative outcomes. We note, however, that this does *not* mean that we cannot learn or draw policy lessons for one context from studies in another context. Rather, to evaluate the external validity of a study or adapt policies across contexts, we must take into account how the cultural institutions and prevailing social beliefs in those contexts differ.

This handbook chapter also highlights several directions for future work. First, as discussed in Section 2, a vast array of family institutions exist globally and have existed over time. Across and within-countries, there is wide variation in marriage payments, post-marital residence, and polygamy. Yet, in many cases, the drivers of this variation are unclear, and the literature may benefit from additional conceptual frameworks for understanding why different institutions arise. In addition to this geographic variation, as has been documented here and elsewhere, the features of the modern family have undergone substantial change around the world, including in high-income countries, in recent decades. Divorce and remaining unmarried (though cohabitating) are both increasingly common, and same-sex unions have dramatically increased. These changes in family structure in turn are likely to have meaningful intergenerational effects. Understanding the drivers of these substantial changes, how these trends vary by education and socioeconomic status, and whether these changes will persist into the future are important questions for future research.

Finally, while several papers, which we discuss in Section 5, analyze how technological change, institutional or policy changes, learning, and exogenous shocks can lead to cultural change, this also remains a fertile area for further study. Looking to the future, it is important to understand how new technological and institutional or legal changes (such as the rise of surrogacy) will interact with and potentially lead to cultural change. The increasing ability to have children later in life and a lengthening of life expectancy may bring dramatic changes to how families are formed and the needs they satisfy. Demographic change and an aging population will pose significant challenges and raise questions about who cares for parents. Along with the increasing cost of housing, falling fertility, and the rise of female-to-male education gaps, these changes may have potentially profound implications for family structures. And, as family institutions change, decision-making and the division of resources within the family are likely to change in important ways as well (see Section 4). Moreover, in both high and low-income countries, as markets and social welfare policies, such as pension programs, continue to fill more of the roles historically satisfied through informal family institutions, family institutions may continue to evolve in ways we cannot yet predict.

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