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An Institutional Perspective on the Economics of the Family

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An Institutional Perspective on the Economics of the Family^{*}

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Abstract

An institutional perspective emphasizes the fact that behaviour is shaped by *rules* that humans superimpose on their economic environment. In the context of the family, such rules govern vital processes such as family formation, dissolution, and inter-generational property transmission. Here we outline such a perspective, showing that it has important implications for policy and represents a relatively under-explored area of research in the economics of the family. We first document the extensive and systematic variation in family rules that exists both contemporaneously and historically. We then show that understanding this variation is important, yet under-appreciated, by drawing together a broad range of research that studies the far reaching consequences of family rules. We proceed with a structured review of existing research that attempts to understand the origins of various family rules. The institutional perspective makes clear that much important and exciting work remains to be done in terms of understanding the origin of the rules that govern family-related behaviour.

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1 Introduction

Behaviour associated with the family-the who, how and when of marriage, typical household composition, inter-generational property transmission, and so on-displays systematic and consequential variation across societies.¹ How should this be understood? This chapter promotes an *institutional* perspective on this question. By this we mean an explicit appreciation that individual behavior is shaped by *rules* that humans superimpose on the economic environment (i.e. endowments, technology and preferences).

Rules take a variety of forms, including customs, laws, and conventions. A rule may have been explicitly devised (e.g. by a state or religious body) or instead the result of autonomous forces (e.g. competitive selection).² Compliance may be enforced by specialized agents (e.g. police and courts), by beliefs in supernatural forces (e.g. gods, ancestors), or in a more decentralized manner by the sanctions or stigma imposed by neighbors, colleagues, customers, employers or other acquaintances. The unifying feature is that rules originate from human activity and shape the decision problem facing individuals by influencing the perceived consequences of actions.³

If rules are to matter anywhere it is within the realm of the family. One need not look beyond marriage, where the process is subject to a constellation of rules that affect everything from who one may marry and where the couple is expected to reside to the conditions under which separation may occur and the rights to marital property upon dissolution. These and related rules clearly originate from human activity and would not be in existence if they had no power to sway behaviour.

Given this, one might imagine that efforts to understand family-related behaviours would center on an attempt to understand the various rules that mediate family life. Yet, this is not so. Much of the extensive literature on the family, spurred by the seminal work of Becker (1973, 1974), deliberately strips down rules in order to cleanly understand behaviour as the result of the economic environment. This literature has clearly offered a great deal of insight into family formation and function, but, we argue, has directed much attention away from rules and their origins.

¹Sections 2 and 3 are devoted to the 'systematic' part and section 4 to the 'consequential' part.

 $^{^{2}}$ We elaborate on these possibilities in section 5.2. Similarly, we draw connections to 'culture' in section 5.1.

³This notion of an 'institutional perspective' is essentially that offered by North (1990), with three very minor clarifications. First, we do not insist that rules are humanly-*devised* (i.e. deliberate design effort is not necessary, for instance when evolutionary forces are dominant). Second, we avoid the ambiguity arising from formal and informal usage of 'game' by explicitly referring to decision problems (as North seems to have intended given his description informal institutions). Third, we avoid the ambiguity arising from formal and informal usage of 'constraint' (we emphasize the consequences, rather than the feasibility, of actions).

To offer a concrete example that illustrates the difference in perspective, consider polygynous behaviour (husbands being simultaneously married to more than one wife). A standard approach, e.g. based on Becker (1974), might explain polygyny as a consequence of inequality among males or female-skewed sex ratios. Becker (1974) offers (p.S19):

"I do not have a satisfactory explanation of why polygyny has declined over time in those parts of the world where it was once more common. The declines in income inequality and the importance of agriculture presumably have been partly responsible. Perhaps the sex ratio has become less favorable ... Perhaps monogamous societies have superior genetic and even cultural natural selection."

An institutional view suggests a more mundane explanation for the decline of polygyny: the emergence of rules that explicitly do not allow it.⁴ Indeed, if monogamy is a precondition for a valid marriage, then polygynous marriages are simply a logical impossibility.

This standard approach is not ignorant of rules, but simply does not emphasize them as objects of analysis. Becker (1974) notes: "The decline in polygyny is usually "explained" by religious and legislative strictures" (sneer quotes in original), but then is interested only in pointing out the insightful and counterintuitive claim that such rules will not tend to benefit women.⁵ The point is not that the institutional view provides a more satisfying answer to the question of declining polygyny. It doesn't. Rather, the point is that the institutional view reorients us toward a range of interesting, important, and relatively unexplored questions. Why do some societies have rules that do not permit certain practices, such as polygyny? Who, if anyone, creates such rules? For what purpose? Were the rules an attempt to help women, or were they strategically imposed by self-interested men? How are these rules enforced, and how do they interact with other rules governing family behaviour? If not deliberately created, how do rules emerge and change? Such questions introduce political economy and evolutionary concerns into the study of family economics, suggesting large scope for fruitful interaction between these fields.

Perhaps the strongest case for developing an enriched institutional perspective is that it has important implications for policy. Suppose that a policy-maker would like to elimi-

 $^{{}^{4}}$ See Table 2 for an overview of laws against polygyny across the globe.

⁵This follows simply from noting that restrictions on polygyny can act to lower the demand for women as wives. However, a stronger concern for the institutional details of marriage would have made potential holes in this logic clear. For instance, Tertilt (2006) notes that women are not the recipients of brideprice (their male relatives are).

nate a certain behaviour, perhaps in a developing country context (e.g. child marriage, female genital mutilation (FGM), dowry). If the behaviour is driven by the economic environment, then perhaps providing resources, a new technology or information about the behaviour will be optimal. If instead the behaviour is driven by adherence to rules, then the optimal policy will depend on the nature of such rules. If the rule arises from the actions of a tyrannical local elite, then policy might want to focus on empowerment of non-elites. If instead the policy-maker fails to understand that the rule is part of a complex web of regulations that are calibrated (perhaps by selection) in order to best deal with some existing set of transaction costs, then the policy-maker could easily do more harm than good. Alternatively the transaction costs may have long ceased to be relevant, yet the rule persists because of a coordination problem of some sort. Here, sharing information about the true sentiments of others might be the optimal course of action (Bursztyn et al. (2020b)). The general point here is that an institutional perspective pushes policy analysis further by turning our attention to, and discriminating between, the various possible ways that rules could be driving behaviour.

We begin by motivating our focus on rules by outlining the historical use of family rules across a diverse range of early societies (section 2). We then document some empirical patterns in the data which demonstrate great variation in rules, both contemporaneously and historically (section 3). We then show that understanding this variation is important, but under-appreciated, by drawing together a broad range of research, in the fields of labour, behavioural, development, historical, and macro economics, that studies the far reaching consequences of family rules (section 4). We proceed to review existing research that aims to explain the variation in family rules, contrasting this with the far more extensive body of research that focuses on the economic environment as the driver of family-related behaviour (section 5).

It becomes clear that much important future research still remains to be done in terms of understanding the causes and consequences of family institutions. To aid in this endeavour we outline connections to the far more mature literature that emphasizes the institutional perspective on comparative economic development (Section 6). We discuss future research directions throughout, and conclude in Section 7.

2 Historical Motivation

To motivate our focus on family institutions as rules, this section briefly describes some of the laws originating in very early societies. Our purpose is not to provide an extensive historical overview of the variation and evolution of family laws but rather to give a flavour of their critical importance. Rules defining marriage and descent patterns are arguably some of the most fundamental institutions to the development of civilisation. Their origins date to those of the early hunter-gatherer societies. Anthropologists interpret the prevalence of brideprice in those societies as evidence that marriage involved arrangements and regulations that created normative obligations of exchange across families (Walker et al. (2011)). With the Neolithic Revolution and the birth of sedentary agricultural and ultimately complex hierarchical societies, the purpose of marriage transforms to include guarding relative economic, social, and political status. New regulations regarding marital property, inheritance, and child custody correspondingly evolved.

The oldest surviving written laws, the code of Hammurabi, developed during the reign of King Hammurabi of the Amorite First Dynasty of Babylon (1792 – 1750 BCE), is a set of 282 rules carved into stone, 60 of which pertain directly to the family. The code defined rules regarding: marriage, divorce, adultery, incest, marriage payments, child custody, marital property rights, inheritance, and polygyny. Non-adherence to these codes could be punishable by death. Marriages were arranged between relatives of the young couple and regarded as a legal contract, which stipulated dowry and brideprice amounts (Greengus (1969), Stol (1995)). Marriage dissolution was similarly determined by official procedures. Divorce was generally the husband's option, but he had to restore the dowry, and if there were children, the wife had custody, but the husband was obliged to provide for them and their mother. Remarriage was permitted for both men and women (Stol (2016)).

In contrast to several of the earliest civilizations, women in Ancient Egypt enjoyed independent identity and property rights and it was there that the legal notion of "joint property", property acquired by a married couple during their marriage, was first developed (Dué (1964)). The husband had use of joint property, without his wife's permission, but if he sold or disposed of any portion of it, he was legally liable to provide his wife with something of equal value (Pestman (1961)). In contrast to the later Greek and Aramaic Jewish marriage contracts, which also designated certain social responsibilities, in Ancient Egypt, they were more like annuity contracts, concerned only with with economic affairs (Johnson (1994)).

Ancient Greek legislators considered marriage to be a matter of public interest and a social responsibility (Cox (2010)). An example of the legal importance can be found in the laws of Lycurgus of Sparta which required criminal proceedings to be taken against those who married too late, unsuitably, or never at all (Cantarella (2010)). A legal marriage was only between citizens: a citizen could not marry a foreigner but proximity by blood or consanguinity was not a bar to marriage (Wolff (1944)). Similar

family laws developed in Ancient Rome. There, marriage was strictly monogamous and only dowries were transferred (Saller (1994)). Women legally passed from the authority of their father to that of their husband (Dixon (2010), Gardner (1991)). Endogamy within ranks was enforced - marriages between senators and freed women, and slaves and citizens were illegal (Shaw and Saller (1984)). Divorce by either party severed the lawful family alliance and remarriage could create a useful set of economic or political alliance ((Rawson, 1991)). Like Ancient Greece, the state encouraged marriage, laws were passed to levy fines on unmarried individuals who were also not allowed to inherit (Wallace-Hadrill (1981)).

One of the earliest marriage prohibitions in Ancient China (dating to the Chou dynasty, 122 - 255 BCE) was forbidding individuals of the same surname to marry (Baber (1934), Chen (2013), Chen et al. (2018)). This is akin to the clan exogamy observed in most tribal societies. A legal marriage contract required the consent of the parents on both sides along with stipulating brideprice and dowry amounts, the latter of which the wife retained control over (Jiang and Sánchez-Barricarte (2012)). Rights to divorce in China have been in existence at least since 253 BCE (Bryan (1920)). It is thought that Confucius himself divorced his young wife (Baber (1934)).

The nomadic tribal institutions of pre-Islamic Arabia could be unfavourable to women. Consent on their behalf was not required and women were often forced into marriage by capture or purchase (via a brideprice) (Radford (2000), Rehman (2007)). The Qur'an (dating to 610 CE) introduced marriage as a contractual agreement which required the consent from the families of both parties and was legally enforced (Esposito (1975)). The contract stipulated the amount of dower, which grooms were to pay their wives upon divorce, and men were obligated to financially maintain their wife throughout marriage, regardless of her personal wealth (Nasir (2002)). Polygyny was permitted but the number of wives was limited to four (Rehman (2007)).

The Steppe Empires of Asia were also nomadic tribes and the most prominent examples of non-sedentary polities - the most famous being the Mongols. According to Mongol laws, women could divorce and own property. Like the hunter-gatherers, Mongol marriages were typically exogamous (outside one's clan group) and a brideprice was transferred (Holmgren (1986)). Similar to the nomadic tribes of Arabia, consent on behalf of women was also not required and the custom of abducting women from rival tribes into forced marriages was common among poorer groups. Bride capture or kidnapping is still observed in the Caucasus and Central Asia (Handrahan (2004), Kleinbach and Salimjanova (2007)). The Russian Empire and later USSR made the ancient practice of the nomadic tribes illegal, but the custom was somewhat revived with the fall of the Soviet Union (Werner (2009)). There is suggestive evidence that half of marriages in Kyrgyzstan involve a form of bride capture (Steiner and Becker (2019)).

This rich variation in family laws we observe in these early societies continued to evolve across time and space. In most societies, divorce had historically been allowed, but typically with greater initiation rights granted to men. An exception is Ancient Hindu law where there was no concept of divorce, as marriage was viewed as an insoluble union (Holden (2016)). The Qur'an introduced strict restrictions on divorce rights for women, whereby women had no initiation privileges, whereas men did not have to provide any justification (Mashhour (2005)). On the other hand, Canon law (dating to 1054 CE) forbade the dissolution of marriage for both spouses (Thurston (1904)).

In a similar vein, many early complex societies allowed for inheritance to daughters. Dowries in Mesopotamia, Ancient Rome and China, were a form of pre-mortem inheritance that remained the property of women in the case of dissolution (Goody (1973), Quale (1988)). In 7th century Arabia, the Qur'an established the right of women to inherit from their parents and were allocated half the amount given to sons (Esposito (1975), Chowdhury (1964)), whereas Jewish Law, dating to the Rabbinic Sages, gave equal inheritance to daughters and sons (Tobi (1994)). But once again variation is abundant. Male ultimogeniture inheritance rules were common among many groups of Mesoamerica (Romney (1967), Nutini (1968), Robichaux (1997)) and also could be observed amongst Saxon (Faith (1966)) and Mongol clans (Bosworth (1962)). Normans practiced primogeniture (Le Patourel (1971)), which would later become a defining law in Medieval Europe (Dvornik (1962), Kern (1948)). The matrilineal belt of south-central Africa dates to very early horticultural societies (Holden and Mace (2003), Glassman (2017)).

3 Patterns in the Data

The examples of the previous section illustrate the diversity and complexity in family laws which have existed for most of human history. Understanding their purpose and evolutionary patterns has long intrigued social scientists across disciplines, but has been relatively under-studied by economists.⁶ To further the case that a focus on family rules remains relevant, we next document some empirical patterns in the data which demonstrate the extent of variation in family laws still persisting today.

We begin by highlighting differences we observe across the globe with regards to con-

⁶Refer to, for example, the work of Goody (1973, 1983, 1990), Quale (1988), Fortunato (2011, 2012a, 2015), Murdock and White (1969), and Harrell (1997), Fox (1967), Shenk et al. (2016).

temporary laws that govern divorce, marriage, and inheritance. In particular, we emphasize the enormous gender disparities that remain persistent. We rely heavily on two databases created by the OECD Development Centre and the World Bank.⁷ Both data sets cover most countries in the world and are regularly updated. They endeavor to present comparative data on legal, cultural, and traditional practices that discriminate against women and girls. Our focus is on indicators that speak directly to gender inequalities with regards to family laws.

Table 1 describes those that govern divorce. The table reports the mean (and standard deviation in parentheses) of four country-specific dummy variables, averaged up to a global regional level. The first variable (in the first column), Equal Divorce Rights, is equal to one if women have the same legal rights to initiate divorce and the same requirements to finalise divorce or annulment as men. It is equal to zero if women have fewer legal rights than men either through statutory or customary laws in place in a given country. Equal Custody Marriage is equal to one if women and men have the same right to legal guardianship of a child during marriage, and zero if the law instead discriminates against women; Equal Custody Divorce refers to analogous rights after divorce. The variable *Community Property* is a measure of the default marital property regime, which governs the property relationship of every married couple (unless they opt for an alternative) – it defines how each spouse can use, buy, or sell property. Community Property refers to a regime where all assets and income brought into the marriage, as well as those acquired during it, apart from inheritance or gifts to one spouse, are considered joint property. This regime implicitly recognizes non-monetary contributions to the marriage and grants spouses joint rights to property. At the time of marital dissolution, all joint property is equally divided. This contrasts with Separate Property where all property acquired before and during marriage remains separate property, each spouse has sole control over their assets under this regime. At the time of dissolution each spouse retains ownership of their own assets. The variable *Community Property* is equal to one if the default marital property regime in a given country is community property and zero if it is separate property.

Table 1 groups countries into regions. Western Europe includes it's legal offshoots: the U.S., Canada, Australia, and New Zealand. We see from the first column that women have fully equal rights to men with regards to initiating divorce only in the countries of Latin American, the Caribbean and East Asia. The examples from Europe (and it's western offshoots), where this is not the case, include Greece, Sweden, Albania,

 $^{^7 \}rm These data are compiled from an extensive set of secondary sources as well as from in-depth reviews of country case studies. Refer to: https://stats.oecd.org/Index.aspx?DataSetCode=GIDDB2019 and https://wbl.worldbank.org/en/wbl.$

Region	Equal Divorce Rights	Equal Custody Marriage	Equal Custody Divorce	Community Property
Western Europe	0.91 (0.29)	0.95(0.21)	0.95(0.21)	0.73(0.45)
Eastern Europe	0.80 (0.41)	1 (0)	1 (0)	1 (0)
Latin America	1 (0)	0.76(0.44)	0.82(0.39)	0.80(0.41)
Caribbean	1 (0)	0.80(0.45)	1.00(0)	0.31(0.48)
North Africa	0.17(0.41)	0(0)	0 (0)	0(0)
Sub-Saharan Africa	0.54(0.50)	0.45(0.50)	0.41(0.50)	0.44(0.50)
Central Asia	0.40(0.55)	1(0)	1(0)	1(0)
East Asia	1 (0)	0.83(0.41)	1(0))	0.33(0.52)
SE Asia	0.40(0.52)	0.50(0.53)	0.40(0.52)	0.54(052)
West Asia	0.25(0.45)	0.19(0.40)	0.19(0.40)	0.18(0.39)
South Asia	0.14 (0.38)	0.17(0.41)	0.29(0.49)	0 (0)

Table 1: Contemporary Laws Governing Divorce

Data Sources: Gender, Institutions, and Development Database 2014 (GID-DB). Coverage is 162 countries. Women, Business, and the Law Data 2018 (World Bank). Coverage is 190 countries.

Armenia, Azerbaijan, and Belarus. In this set of countries, the legal rights are such that women and men have equal rights by statutory law but this law does not apply to all groups of women where instead discriminatory customary laws can apply. It is these discriminatory customary laws that are prevalent throughout the rest of the world. It is also the case for 24 countries, predominately in the Muslim dominated regions of South and West Asia and North Africa, where women also have fewer rights to initiate divorce under statutory law. With regards to child custody rights in marriage, women have fewer rights by customary law in 29 countries and by statutory law in 32 countries, similar proportions exist for custody rights in the case of divorce. These gender biases occur primarily in the regions of North and Sub-Saharan Africa, and SE, West, and South Asia. With regards to marital property rights, women are the least protected in the countries of North Africa and South and West Asia.

The two world maps below describe better the country-level variation we observe for some of these variables. Figure 1 illustrates whether it is customary or statutory laws which drive the legal inequities for women to initiate divorce.

Figure 2 depicts in more detail the variation that exists in the default marital property regime. Some countries subscribe to only community property, then others do so partially, and then some are fully separate. The darker shades of green therefore inherently reflect less protection of property rights for women, particularly for those who do not earn their own independent income, in the case of divorce.

Using similar data sources, Table 2 describes the laws which apply to marriage and inheritance. Child marriage (age 18 or below) is illegal for girls only in 47% of countries across the world. Polygyny is legal in a majority of countries in North and Sub-Saharan

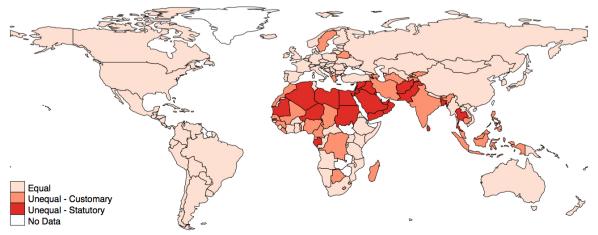


Figure 1: Equality of Divorce Rights for Women and Men

Data Source: Gender, Institutions, and Development Database 2014 (GID-DB).



Figure 2: Default Marital Property Regimes

Data Source: Women, Business, and the Law Data 2018 (World Bank).

Africa, and South and West Asia. In a subset of countries, primarily those which are Muslim dominated, women are required by law to obey their husbands. This is the case for 19 countries and is most common in West Asia and North Africa. Daughters have equal inheritance rights to sons only in the majority of countries in Europe (and it's legal offshoots) and East Asia. In other parts of the word, there exist discriminatory customary laws which apply to certain groups of women (66 countries) or statutory laws that apply to all women (32 countries). Similar patterns apply to widows, who for the majority of countries do not have equal inheritance rights compared to widowers.

Once again, the two world maps below describe better some of the country level variation observed in the data. Figure 3 describes who has the legal rights to administer marital property during marriage. The lightest shade of blue reflects countries where both spouses must agree to how marital property is administered. A somewhat more

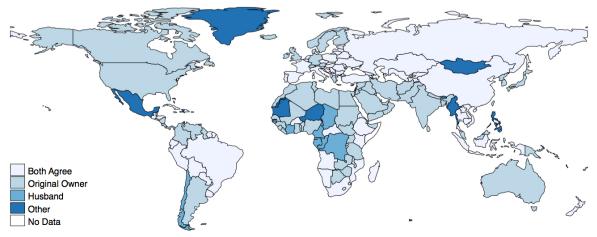
Region	Child Marriage Illegal	Equal Inheritance Daughters	Equal Inheritance Widows	Do not Obey Husband	Polygyny Illegal
Western Europe	0.77 (0.43)	0.91(0.29)	0.91 (0.29)	1 (0)	1 (0)
Eastern Europe	0.80 (0.41)	0.79(0.42)	0.67(0.48)	1(0)	1(0)
Latin America	0.59(0.51)	0.47(0.51)	0.47(0.51)	1(0)	1(0)
Caribbean	0.20(0.45)	0.60(0.55)	0.60(0.55)	1(0)	1(0)
North Africa	0.67(0.52)	0 (0)	0 (0)	0.67(0.52)	0.17(0.41)
Sub-Saharan Africa	0.41(0.50)	0.02(0.16)	0.09(0.30)	0.87(0.33)	0.33(0.48)
Central Asia	0.60(0.55)	0.40(0.55)	0.20(0.45)	1 (0)	1 (0)
East Asia	0.50(0.55)	0.83(0.41)	0.67(0.52)	1(0)	1(0)
SE Asia	0.50(0.53)	0.10(0.32)	0.10(0.32)	0.82(0.40)	0.54(0.52)
West Asia	0.25 (0.45)	0.19(0.40)	0.19(0.40)	0.47(0.51)	0.29(0.47)
South Asia	0.29 (0.49)	0.14(0.38)	0.14(0.38)	0.87(0.35)	0.12(0.35)

Table 2: Contemporary Laws Governing Marriage and Inheritance

Data Sources: Gender, Institutions, and Development Database 2014 (GID-DB). Coverage is 162 countries. Women, Business, and the Law Data 2018 (World Bank). Coverage is 190 countries. Hallward-Driemeier and Hasan (2013).

common alternative is that the original owner of the property in question has the rights to administration, whereas for a smaller set of countries, only the husband has the legal authority to decide how marital property is used.

Figure 3: Administration of Marital Property



Data Source: Women, Business, and the Law Data 2018 (World Bank).

Figure 4 illustrates the global variation in whether daughters have equal rights to sons to their parents' inheritance. Like Figure 1, it makes clear in which countries it is customary as opposed to statutory laws which drive these gender inequities in the legal system.

As illustrated with the data above, much of the discriminatory nature in the contemporary legal codes stem from allowing for the co-existence of customary laws to apply to certain groups of people, typically defined by religion or ethnicity. For many countries, with significant Muslim populations, marriage, divorce and other family matters are governed by Islamic law, which tends to be highly unfavourable to women with regards

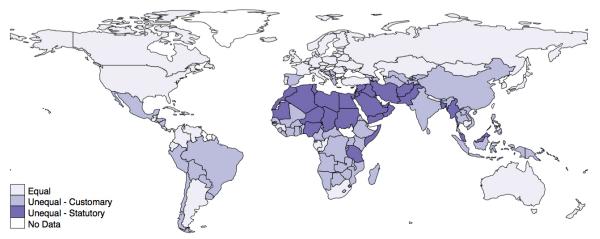


Figure 4: Equality of Inheritance between Daughters and Sons

Data Source: Gender, Institutions, and Development Database 2014 (GID-DB)

to divorce and inheritance rights, including the classical legal norm "House of Obedience" (bayt al-ta'a) of the Shari'a courts, whereby wives are legally required to obey their husbands. For other countries, customary laws are targeted towards protecting traditional customs for particular ethnic groups. For example, aside from Muslim dominated countries, many ethnic groups in Sub-Saharan Africa have traditionally allowed for polygyny and at times acceptance of this custom is reflected in the legal codes of the country where these ethnic groups reside.

We now turn to more historical data to illustrate the global variation that existed, and in turn partly explain the variation in customary laws that persist today. Tables 3 and 4 use data from the *Ethnographic Atlas*, a worldwide ethnicity-level database constructed by George Peter Murdock that contains ethnographic information for approximately 1300 ethnic groups (Murdock (1957, 1967)). Information for each society comes from the earliest observers of these cultures and captures the characteristics of a given ethnic group prior to European contact (and before industrialization). We focus on the societal rules which centered around marriage and the family. The Atlas groups the sample into six main regions of the world which we follow in Tables 3 and 4.

Table 3:	Historical	Family	Rules
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Region	Patrilocal	Matrilocal	Patrilineal	Matrilineal
Africa	$\begin{array}{c c} 0.82 & (0.38) \\ 0.85 & (0.36) \\ 0.84 & (0.37) \end{array}$	0.03(0.16)	0.68(0.46)	0.17(0.38)
Circum-Mediterranean	0.85(0.36)	0(0)	0.66(0.47)	0.06(0.24)
East Eurasia	0.84(0.37)	0.08(0.27)	0.69(0.46)	0.07(0.26)
Insular Pacific	0.65(0.48)	0.12(0.33)	0.31(0.46)	0.15(0.36)
North America	0.55(0.50)	0.21(0.41)	0.15(0.36)	0.13(0.34)
South America	$\begin{array}{c} 0.65 \ (0.48) \\ 0.55 \ (0.50) \\ 0.40 \ (0.49) \end{array}$	0.37(0.49)	0.19(0.39)	0.08(0.28)

Data Sources: Murdock Ethnographic Atlas (1967). 1256 Societies.

The first two variables of Table 3 reflect residence of the married couple, either with the kin of the husband (*Patrilocal*) or with the wife (*Matrilocal*). The alternative is that a given society has no such rule. We see that the majority of societies are patrilocal, with the exception of ethnic groups located in South America. The last two variables reflect descent and inheritance patterns. There are two basic forms of unilineal descent: *Patrilineal*, where children are members of their father's kin group and inherit their father's property upon his death; and *Matrilineal*, where kin membership is traced instead through the uterine line, so that children belong to their mother's kinship. In a matrilineal society, a man's heirs are thus his sister's children, not his own. Patrilineality is more common in the regions that correspond to Africa, Asia, and Europe today. Whereas amongst the indigenous tribes of the Pacific, North and South America, they were comparatively less likely to follow a unilineal descent system.

	No First				
Region	Brideprice	Dowry	Cousin Marriage	Endogamy	Exogamy
Africa	$\parallel 0.95 \ (0.21)$	0 (0)	0.65(0.48)	0.35(0.48)	0.46(0.50)
Circum-Mediterranean	0.76(0.43)	0.12(0.32)	0.34(0.48)	0.31(0.46)	0.24(0.43)
East Eurasia	0.74(0.44)	0.10(0.30)	0.32(0.47)	0.26(0.44)	0.34(0.47)
Insular Pacific	0.46(0.50)	0.01(0.11)	0.68(0.47)	0.48(0.50)	0.25(0.44)
North America	0.35(0.48)	0 (0)	0.84(0.37)	0.16(0.37)	0.27(0.45)
South America	0.52(0.50)	0(0)	$0.37 \ (0.49)$	0.37(0.49)	0.22(0.42)

Table 4: Historical Marriage Rules

Data Sources: Murdock Ethnographic Atlas (1967). 1256 Societies.

Marriage payments were required across most societies at some point in their history (Anderson (2007)). Those societies that did not, mainly amongst the indigenous tribes of the Pacific, and North and South America, often practiced an alternative reciprocal arrangement of bride exchange (across kin or clan groups) or bride-service (where the groom worked for the bride's family for a fixed amount of time). Marriage payments come in two broad forms: *Brideprice* which is a transfer from the groom's family to the bride's family at the time of marriage; and *Dowry* refers to the reverse. We see from Table 4 that brideprice is by far the more common practice, but dowries have been prominent in most of historical Europe and Asia, where the majority of the world's population preside. Dowries remain a prevalent phenomenon in South Asia and brideprices are so in contemporary Sub-Saharan Africa.⁸ Dowers, which are a payment from the groom directly to the bride (not her family), are required by Muslim law. Societies also had strict rules about who could marry whom. For one, many had rules against first cousin marriage. We see from Table 4, this was not so much the case in Europe, Asia, or South America. Societies also varied by whether they practiced

⁸Refer to Anderson (2007) for further elaboration.

endogamy or exogamy. Endogamy is a common feature of stratified societies whereby one marries within one's social class or caste. Exogamy is more common in clan or tribe societies, whereby spouses marry outside of their kin group, clan, or tribe.

4 Consequences of Family Institutions

The discussion above underscores the significant variation in the societal regulations governing the family that we observe over time and space. This variation suggests two central questions. Are these rules consequential for human welfare? If so, how do we explain their origins and evolution? In this section we turn to the very broad economics literature that has aimed to address this first question. The subsequent section addresses the second question.

As we have seen, many of the rules and regulations that define family institutions restrict the rights and choices of women. From this perspective, the relevance of the variation in these rules for the well-being of women, in particular, seems paramount. Economists have contributed significant empirical work aimed at carefully identifying these channels. This section illuminates the numerous individual-level economic and behavioural outcomes that are directly affected by individuals following these rules. Outcomes can range from risk taking behaviour, domestic violence, labour supply, and contraception use.

It is also the case that these rules significantly impact outcomes well beyond the individual behaviours they are aimed at constraining. That is, family institutions impact society in a much broader sense. There is substantial support for economic institutions as a fundamental source of prosperity (Acemoglu, Johnson, and Robinson (2005)). The main argument is that growth is promoted under inclusive institutions: e.g. those that (i) protect private property, and (ii) allow broad segments of the population to utilize their talents. Family institutions play an under-appreciated role in all this. For instance, the persistence of wealth (and thus de facto power) depends crucially on inheritance rules. Likewise, incentives to invest depend on the expropriation risk, but also on what that wealth can achieve: e.g. whether wealth helps attract a desirable spouse (for oneself or offspring) and whether wealth can be transmitted intergenerationally. In this sense, restrictions on who can marry who can be a direct barrier to inclusivity. Endogamy, for example, where members of the same kin group, or same class/caste inter-marry, is a common feature of marriage patterns throughout the history of civilization and potentially has far reaching consequences in this regard.

More generally, the state is a relatively recent institution: instead the social, economic,

and political organization of society was commonly determined by kin-based institutions, such as clans, which pre-dominated throughout much of history. These kin-based institutions controlled the means of production and were responsible for solving problems of collective action, conflict, and the provision of public goods. The corresponding marriage and inheritance rules, which determine who constitutes a kin group, were therefore instrumental. This section discusses the economics literature that demonstrates how family institutions directly impact these broader societal outcomes like: cooperation, governance, wealth inequality, and migration patterns.

We proceed to describe the economic research specific to a range of rules governing the family. We categorize these rules into three broad groupings: those that pertain to family formation; those that regulate behaviour within families; and those that stipulate conditions for family dissolution.

4.1 Rules on Family Formation

4.1.1 Marriage Payments

Marriage payments were required across a majority of societies at some point in their history (Anderson (2007)). Dowries, transfers from the bride's family to that of the grooms, were necessary under Roman Law and thus historically pervasive in much of Europe, as well as parts of Latin America governed by Spanish and Portuguese colonial family law (Nazzari (1991), Saller (1984)). Dowries (*stridhan*) were likewise codified into Hindu Law, and still prevail in much of South Asia (Tambiah (1973)). A valid marriage contract under Islamic law requires a dower (*mahr*), transfers from the groom promised to the bride (Bianquis (1996)). Brideprices, transfers from the groom's family to that of the brides, are characteristic of most tribal societies and often signalled the legality of a marriage (Murdock (1967), Goody (1973)). Classical China required the negotiation of a brideprice for the validity of marriage. There dowries were also transferred but were not compulsory (Ebrey (1993), Engel (1984)).

From a welfare perspective, the direction and magnitude of these payments are relevant. They potentially determine investment and savings decisions of parents, and also intrahousehold decisions within the conjugal couple.

The dowry system places significant financial burden on the bride's family, whereas brideprice and dower payments are incurred by the grooms' side. Anukriti, Kwon, and Prakash (2020) demonstrate the significant impact of anticipated dowry expenses for daughters on parents' saving behaviour in the poorer parts of India. Botticini and Siow (2003) examine marital contracts in Medieval and Renaissance Tuscany, where dowry was a condition for marriage and represented very large intergenerational transfers of wealth from brides' households to grooms' households. In this context, dowries provided a complementary role for groom work effort towards extending the family wealth. In China, where brideprice was typically the negotiated marriage payment, Wei and Zhang (2011) link higher savings rates to increasing male biased sex ratios, citing increased competition in the marriage market as the key mechanism whereby groom families bear the main marital costs and payments. They argue this factor alone could explain half of the increase in household savings rate between 1990-2007 in China.

Corno, Hildebrandt, and Voena (2020) demonstrate the implications of these savings burdens for child marriage. Parents delay their daughter's marriage as a strategy to cope with unexpected droughts to avoid paying dowries in India, whereas the reverse occurs in the brideprice paying societies of Africa, where rates of child marriage increase in times of unexpected income shocks. Ashraf et al. (2020) demonstrate the effects for human capital investment decisions. They consider the consequences of large-scale school construction programs in both Indonesia (in the 1970s) and Zambia (in the 1990s). They find evidence that female education increased, due to the greater access to schools, only for those girls from brideprice paying ethnic groups. Thus, providing suggestive evidence of increased returns to female education investments via the marital payment institution in place.

More sinister outcomes relate dowry payments in India to female infanticide and sexselective abortion (Alfano (2017), Borker et al. (2017), Bhalotra, Chakravarty, and Gulesci (2020)). Later in life, "dowry deaths" and "bride burning" refer to the violence suffered by women from their husbands and in-laws over dowry payment disputes. Typically, a portion of the required marriage payment remains in arrears, and wives are tortured and burned to extract further transfers (Bloch and Rao (2002), Srinivasan and Bedi (2007), Sekhri and Storeygard (2014), Calvi and Keskar (2021b)). Recent legislation on Dowry Prohibition in India appears to have been marginally successful. Researchers have exploited variation in women's year of marriage and religion, to demonstrate how these legal amendments in India appeared to have somewhat lowered the magnitude of payments (Calvi and Keskar (2021b)) and consequently reduced the male gender-bias in fertility decisions (Alfano (2017)).

On the other hand, in patrilocal settings, marital transfers from the bride's side to the groom (and his family) can influence a wife's relative bargaining position. Zhang and Chan (1999) demonstrate a positive relationship between dowry payments and wife's relative household allocation in Taiwan. Directly related results are found for China (Brown (2009)), Pakistan (Makino (2019)) and India (Calvi and Keskar (2021a)). In

a similar vein, Lowes and Nunn (2017) find that larger brideprices in the Democratic Republic of the Congo, are associated with better marital outcomes, where women are happier with their marriages and less likely to believe that domestic violence is acceptable.

4.1.2 Number of Spouses

According to the anthropological record, approximately 85% of societies have permitted polygynous marriage (Henrich, Boyd, and Richerson (2012)). Laws prohibiting the practice date first to classical Greece and Rome (Scheidel (2009)). The medieval Catholic church banned polygyny which subsequently influenced marital law in most modern societies which grew out of the Christian Middle Ages (Betzig (1995)). Polygyny is prohibited under Hindu Law whereas Sunni and Shia Islamic marital jurisprudence allow for it. Polygyny was permitted in historical China and not formally outlawed until the Marriage Law of 1950 (Engel (1984)). As we see from Table 2, polygyny remains legal in a large set of countries located in Africa and Asia.

Tertilt (2005, 2006) asks whether a ban on polygyny in Sub-Saharan Africa could play a role in explaining the regions' underdevelopment. Calibrating an overlappinggenerations model, she demonstrates how such a ban would decrease fertility and consequently increase savings. Rossi (2019) demonstrates how competition between co-wives drives fertility upwards in Senegal and emphasizes how polygyny undermines the fertility transition in Sub-Saharan Africa by incentivizing women to desire many children. In related work, Arthi and Fenske (2018) show a positive relationship between polygyny and child mortality among the Igbo in Nigeria.

Other work focuses on behaviour within the household. Barr et al. (2019) consider the willingness for husbands and wives to cooperate in public goods games conducted in Kwara State, Nigeria. Compared to monogamous households, polygynous ones exhibited less cooperation (both between husbands and wives, and also between co-wives). They were also less altruistic. These latter results are echoed in Akresh et al. (2012, 2016), who also show a weakening of altruism in polygynous households in Burkina Faso. There is some corresponding evidence demonstrating a positive association between intimate partner violence (IPV) prevalence and polygyny (Heath et al. (2020)).

On the other hand, Dessy et al. (2021) explore the effects of polygyny on consumption smoothing mechanisms. The authors demonstrate how polygynous households are more resilient to drought-induced crop failures, as they are better able to diversify their income sources.

4.1.3 Partner Choice

Throughout history, societies have restricted who can marry whom (refer to Table 4). Anthropologists contrast the two central notions of exogamy and endogamy. Exogamy, where one marries outside one's social group (village, clan, or tribe) is characteristic of clan (shared kinship or descent) based societies, whereas endogamy, where one marries within one's social group (class or caste), is common in more hierarchical societal structures (Goody (1971)). Related to the notion of endogamy, are formal laws restricting mixed marriages by race or religion. Often, the ruling ethnic group is prohibited to intermarry the groups they politically dominate. For example, the ruling Goths of the Visigothic Kingdom followed a legal code that forbade them to marry with the indigenous Iberians and Romans (Hodgett (2005)). Relatedly, there have been rules to prevent marriage with "outsiders", like the Tang government who promulgated a decree in 836 forbidding Chinese to have any relations with people of "color" (including Iranians, Sogdians, Arabs, Indians, Malays, and Sumatrans) (Kang (1999)). A similar strategy was often followed by European colonists, whereby white European settlers were not permitted to intermarry with non-European native populations or former slaves (Stoler (1989)).

Anti-miscegeneration laws (forbidding marriage across racial lines) were first enacted in the Chesapeake colonies (now Maryland and Virginia) in late seventeenth century, and subsequently imposed in a total of 38 states of the U.S.. There is state-level variation as to when these laws were gradually abandoned over the following centuries, and they were only formally repealed in all states after a U.S. Supreme Court ruling (Loving v. Virginia) in 1967 (Fryer (2007)). The Prohibition of Mixed Marriages Act (1949) was among the first pieces of South African apartheid legislation passed in 1948, to be formally repealed in 1985. An anti-miscegeneration law was enacted in Nazi Germany (between 1935 and 1945) forbidding marriages between Germans and Jews (Voigtländer and Voth (2013)).

Whether the legal marriage ceremony is civil or religious is also relevant. For example, medieval Canon law, where marriage fell under the authority of the Roman Catholic Church, forbade intermarriage between Christians and Jews (Brundage (2009)). Today, there is no civil marriage in many Middle Eastern and North African countries, instead all marriages are conducted by religious authorities and it is typically the case that marriage is only legally recognized when spouses share the same religion. Same-kin marriage is even more limiting.

These restrictive matching rules can determine pre-marital investments in children, the wealth distribution across families, and inter-generational inheritance patterns. On the

one hand, a reduction in competition for mates in the marriage market, can reduce incentives for pre-marital investments (Peters and Siow (2002)). On the other hand, Fernández and Rogerson (2001) link growth and social mobility to marital sorting. Banerjee et al. (2013) demonstrate how a strong preference for same caste marriage in urban India, leads to a willingness to sacrifice significant levels of education in a spouse. Munshi and Rosenzweig (2009) demonstrate how the reliance on same-caste marriage networks in rural India can explain the exceptionally low rates of rural-tourban migration. In fact, within caste endogamy is essential to preserve the inherent hierarchical ordering of the Indian caste system, as children directly inherit the caste of their parents. These tight within-caste networks are persistently salient in all aspects of life in India, from labour market opportunities to election outcomes (Munshi (2019)).

Greif (2006a) emphasizes how restrictions, like the prohibition of consanguineous marriage, instituted by the medieval church, were a core determinant of the rise of corporations and the consequent development of western Europe. These marital laws undermined kinship group structures which had prevailed in the early medieval period, after the conquest of the Western Roman Empire by Germanic tribes.⁹ Greif (2006b) emphasizes how the subsequent decline in large kinship groups transpired during a period in Europe when the state was also disintegrating and the church's secular authority was diminishing. He points out how consequent individualistic cultural beliefs subsequently hindered the development of effective private order institutions based on collective punishment. In response, to solve problems of conflict and cooperation, individuals began to form self-governing and voluntary corporations. By the late medieval period, economic and political corporations dominated Europe and fostered economic growth.

Recent empirical research provides some direct evidence for these links. Schulz (2020) demonstrates how legislation against incest fostered the formation of self-governing communes in medieval Europe (in the domain of the Carolingian Empire) and also a robust negative relationship between cousin-marriage preference and pre-industrial democratic institutions, using the more global sample of pre-colonial societies from the Ethnographic Atlas. Schulz et al. (2019) first link the decline in cousin marriage to exposure to the medieval church in Europe, which in turn determines individualistic psychological and behavioural measures today. Turning to a later period in history, Ghosh, Hwang, and Squires (2021) exploit historical time variation across U.S. states with regards to first-cousin marriage bans implemented in the late 19th and early 20th centuries. Although Table 4 shows that a majority of pre-colonial societies had rules

 $^{^{9}}$ Goody (1983) hypotheses that these law changes were to the financial benefit of the church, whereby, by undermining kin groups, individuals were more likely to leave bequests to the church.

against first cousin marriage, today there are formal legal bans only in China, North and South Korea, the Philippines and 32 states in the U.S.. Ghosh et al. (2021) exploit this U.S. historical state-level variation and find consequent increased urbanization rates and greater educational attainment today.

Even further reaching consequences of restrictive marriage matching practices include crime and corruption. Akbari, Bahrami-Rad, and Kimbrough (2019) consider this relationship for a few measures of endogamy. They first demonstrate a robust positive correlation between rates of consanguinity (among second cousins or closer) and corruption measures across countries today. Using records of Papal dispensations for consanguineous marriages kept in the Vatican archives, they also show a positive effect on associative crimes (criminal conspiracy and mafia associations) dating from pre-war Italy. Another more restrictive marriage practice, lineage endogamy, which is parallel cousin marriage between children of two brothers who are both members of their father's lineage, which is a relevant practice for several patrilineal societies, is also shown to be positively related to corruption using information from the pre-colonial societies in the Ethnographic Atlas.

Less constrained matching can also be the result of introducing individual consent, which was another dimension mandated by the medieval Catholic Church, whereby the church prohibited unions that the bride did not explicitly consent to. Edlund and Lagerlöf (2006) theoretically demonstrate how, in the context of brideprices, a shift from parental to individual consent could redistribute resources from the older to the younger generation and also from men to women. They demonstrate how only individual consent allows for growth because older men have incentives to transfer resources to their sons in order to buy wives. Since sons also care about the next period's family income, part of the transfer is allocated to quality investment in the next generation. Tertilt (2006) similarly shows how transferring the right of choosing a husband from fathers to daughters could increase capital stock and hence GDP per capita. Such a policy decreases the return of wives for men and thereby raises the incentives to invest in alternative assets.

Related to individual consent is the legal age at marriage. Proponents in favour of age of consent laws argue that forcing parents to delay marriage will increase female schooling attainment and reproductive control (Field and Ambrus (2008)). Though, as seen in Table 2, child marriage is still legal for girls in more than half the countries of the world. Even twelve states in the U.S. do not enforce a minimum age at marriage (Blank et al. (2009)). Bharadwaj (2015) studies a 1957 amendment to marriage law in Mississippi aimed at delaying marriage for both men and women. Using a difference-in-differences approach, he finds that crude birth rates decreased and school enrollment increased after the passage of the law. Beginning in 2000, Ethiopia's semi-autonomous regions raised the legal age of marriage from 15 to 18. Leveraging both a difference-in-differences and event study framework, McGavock (2021) likewise demonstrates a consequent delay in fertility and some positive effects on female empowerment indicators.

Analysing the direct impacts of other liberating legal changes, like the easing of restrictions against mixed marriage (by race or religion) has not been a focus of economists. There is, however, some related work on extending the inclusiveness of marriage to samesex couples. Here the matching implications are somewhat distinct. Becker's prediction of positive assortative matching on non-labour traits follows from the assumptions of strong complementarities across the sexes in household production. Among same-sex couples, positive assortative matching is not as apparent (Allen and Lu (2017), Ciscato et al. (2020), and Black et al. (2007).)

Following the example of the Netherlands in 2001, there are now 31 countries where same-sex marriage is legal. Chen and van Ours (2018, 2020, 2022) have a series of papers which analyse the impacts of this first policy change using a difference-in-differences method. In particular, they find that same-sex partnerships in the Netherlands were less likely to dissolve (Chen and van Ours (2020)) and experience higher levels of mental health and well-being (Chen and van Ours (2018, 2022)). Aksov et al. (2020) show more generally that the subsequent adoption of legal same-sex relationship recognition policies across Europe lead to significant improvements in attitudes towards sexual minorities. There are several studies which exploit the state-level variation in the legalization of same-sex marriage across the U.S. between 2004 and 2014, after which all states had marriage equality in 2015. Sansone (2019) found that these law changes led to an increase in the probability of being employed among same-sex couples. The paper provides further evidence to suggest that these employment changes were driven by lower levels of discrimination in the workplace. Using a similar empirical strategy, Carpenter et al. (2021) confirm that access to legal marriage did significantly increase marriage rates in same-sex households and also coincided with increased access to health insurance and care. Hansen et al. (2020) further disaggregate the analysis by sex and show that lesbian women reduce their annual labour supply in response to marriage equality, however gay men do not. Lesbian partners appear to reallocate work hours into care labour.

4.2 Rules within the Family

4.2.1 Marital Location

The majority (approximately 70%) of societies have been patrilocal, where sons remain in their natal households after marriage, and daughters correspondingly join that of their in-laws (Burton et al. (1996)). Patrilocality is considered to be one of the oldest family institutions (Ember (1978)), there exists some evidence to suggest its prevalence even amongst extinct species of humans (Lalueza-Fox et al. (2011)).

A consequence of patrilocality is that the private returns to investing in sons, who remain in their parents' household, are expected to be higher than for daughters. Bau (2021) finds empirical evidence in support of this mechanism by interacting marital residential practices with pension policies. She compares the establishment of pension plans in Ghana and Indonesia. In Indonesia, matrilocal daughters who are exposed to the pension plan for longer receive less education; in Ghana, patrilocal sons show the same pattern. The expansion of the pension plans seemed to have crowded out the educational investment of children who parents would have otherwise expected to reside with in their old age. In related research, Ebenstein (2014) demonstrates a positive relationship between patrilocality and male biased sex ratios at birth across a large set of countries. Delving into the mechanisms, like in the work of Bau (2021), he also demonstrates how these biased sex ratios responded negatively to more generous pensions reforms in both South Korea and in China (Ebenstein and Leung (2010)).

Tur-Prats (2019) compares historical family types in Spain dating to the Middle Ages. In the western regions of the country, centralized monarchs had an interest in restricting the development of powerful landholding families and consequently introduced compulsory sharing of inheritance among all children, which in turn led to the practice of nuclear families. Among the eastern kingdoms, the powerful feudal nobility were instead focused on maintaining their landholdings intact through indivisible inheritance (a single heir) which led to patrilineal stem families (where one son inherits all the land and remains in the parental home). Tur-Prats (2019) demonstrates that territories with stem family structures present in the past, currently exhibit lower rates of IPV and more gender-equal attitudes. She hypothesizes that co-residence with a mother-in-law enables wives to work outside of the household, thus increasing their relative bargaining power. Bertocchi and Bozzano (2015) make a related comparison for historical Italy, where they relate family structures to the education gender gap, whereby higher female to male school enrolment today is associated with the incidence of historical nuclear family structures, which also corresponded to equal partition of inheritance. Khalil and Mookerjee (2019) compare women's status in patrilocal and

nuclear households in set of countries in South Asia. In this region, patrilocality is associated with lower relative female decision making, less freedom of movement, but also less domestic abuse (as similarly found by Tur-Prats (2019)).

4.2.2 Lineage

Closely linked to marital location rules are those pertaining to lineage. There are two basic forms of unilineal descent. Patrilineal descent, where children are members of their father's kin group and inherit their father's property upon his death, typically goes hand in hand with patrilocality. Matrilineal descent, where kin membership is traced instead through the uterine line so that children belong to their mother's kinship, is often associated with matrilocal residence rules (Radcliffe-Brown (1935)).

Research from behavioural economics has demonstrated how these unilineal descent rules can impact experimental outcomes. Gneezy et al. (2009) compare outcomes across individuals from two distinct societies: the Maasai (a patrilineal society from Tanzania) and the Khasi (a matrilineal society from north-eastern India). Paired subjects engaged in a ball-throwing (into a bucket) task and are asked to choose whether they wanted to be remunerated per successful shot relative to the other participant or not. If they chose to be competitive, the remuneration was three times if they out-performed the other participant, compared to just being rewarded for their own shot. Consistent with findings from western-industrialized societies, Masai men opted to compete at twice the rate of Masai women. By contrast, the results are reversed for the Khasi - women chose the more competitive environment compared to men. In related work, Gong and Yang (2012) compare experimental outcomes of members from two neighbouring ethnic groups in China, the matrilineal Mosuo and the patrilineal Yi. They find that in both societies, women are more risk averse than men, but that the gender gap is smaller in the matrilineal Mosuo. Lowes (2020) compares members of matrilineal and patrilineal ethnic groups in the Democratic Republic of the Congo (DRC) and finds that women from the matrilineal groups cooperate less with their spouses in a lab experiment. Hoffman, Gneezy, and List (2011) compare two tribes in Northeast India, the Khasi and Karbi, who share a genetic background and similar economic practices but differ in their lineage rules. As one might expect, the authors find that in the matrilineal Khasi tribe, women are better educated and more likely to own property. What they also discover is that the relative performance in a spatial ability task across women and men is also higher amongst members of the matrilineal Khasi compared to those from the patrilineal Karbi.

More generally, lineage rules can determine levels of cooperation within a society, which can have far reaching consequences (Henrich (2020)). Moscona, Nunn, and Robinson

(2017) demonstrate how individuals, belonging to ethnic groups following certain segmentary lineage rules across sub-Saharan Africa exhibit a more limited scope of trust. Segmentary lineage societies, follow unilineal descent (either patrilineal or matrilineal), where sub-sets (segments) of lineages function as coherent corporate groups. The authors show that segmentary lineage rules are associated with a larger gap between the trust of one's relatives compared to non-relatives. Moscona et al. (2020) extend these comparisons to the incidence of conflict, testing the hypothesis from anthropology that segmentary lineage groups facilitate the mobilization of combatants. The authors do find a persistent positive link to contemporary conflict.

Greif and Tabellini (2017) show how lineage rules determine corresponding moral systems.¹⁰ They compare the patrilineal clan organizations of pre-modern China to the corporations of late medieval Europe. They discuss how cooperation inside a clan exploits reciprocal moral obligations and personal interactions, whereas corporations rely on weaker moral obligations supplemented by impersonal enforcement. The authors document how these distinct lineage structures at a critical historical juncture, facilitated the emergence of different social organizations which in turn fostered the development of complementary private and public order institutions, a divergence that persists in modern times, in the form of legal and market institutions.

4.2.3 Inheritance

Directly connected to lineage rules are inheritance rules, which are paramount in determining the wealth distribution across societies.¹¹ They influence individual's incentives for wealth creation, social mobility, and access to opportunities. There is tremendous diversity in such rules: from primogeniture (inheritance by the eldest son) and ultimogeniture (inheritance by the youngest son) to equal distribution among potential heirs Goody (1983, 1990, 2000). Whether the set of potential heirs also includes daughters tends to vary as well.

Miller (1980) discusses the extensive writings of classical economists, like Smith, Mill, and Malthus, on the incentives and institutions created by different inheritance systems. This thinking directly influences more recent empirical work. Bertocchi (2006) focuses on medieval Europe to establish a connection between inheritance systems to society's economic and political structures. At this time, feudalism was the agrarian basis for Europe's political order. In an overlapping-generations model where political power is acquired through land wealth, Bertocchi (2006) demonstrates how primogeniture, and the consequent indivisibility of the estates of feudal lords, is crucial to maintain

 $^{^{10}}$ Refer also to Enke (2019).

¹¹Refer to, for example, Kotlikoff (1988), Kotlikoff and Summers (1981) and De Nardi (2004).

social stability, as well as the wealth and power of their families. Once primogeniture is removed, a fragmented ownership structure ensues, promoting income and wealth equalization. Eventually the economy moves towards a standard factor-specific model where the dynamics are determined by capital and the price of land, and an altruistic bequest motive induces the partition of family wealth, and class stratification defined by land holding disappears. Wegge (1999) establishes a connection between 19th century German emigration to the Americas and inheritance rules. He shows that impartible (to one child), compared to partible (equal among children), inheritance laws led to greater rates of emigration, due to a consequent relative lack of economic opportunities. Alston and Schapiro (1984) focus on colonial America, where Southern Colonies adopted the British law of primogeniture, whereas New England and Middle Colonies were more likely to follow multigeniture. The authors establish a correlation between primogeniture and large agricultural units that could capture economies of scale and foster the concentration of assets and political power.

We see from Table 2 that gender bias in inheritance legislation persists amongst a majority of countries outside of Europe, East Asia, and the Caribbean. Casari and Lisciandra (2016) study the evolution of inheritance regulations governing land ownership over a period of six centuries in the Alps of Northern Italy. They document a shift from an egalitarian to a patrilineal system starting in 1525, whereby daughters gradually lose their rights to inheritance. They find that this institutional change had implications for marriage strategies (daughters were more likely to marry outside the village where her husband had access to land), and as a consequence there occurred less in-migration and lower population growth. The authors also find that a movement to patrilineality corresponded with a higher per capita value of land.

Deininger, Goyal, and Nagarajan (2013) explore the impact of reforms that strengthened women's inheritance rights in India. Under traditional Hindu law, women had almost no rights to property ownership. The Hindu Succession Act of 1956 improved the inheritance rights of women (to allow for rights to a portion of the separate property of their fathers). In later years, states continued to amend these rights to daughters to also include access to joint family property. Deininger, Goyal, and Nagarajan (2013) exploit the timing of this state-wise variation and demonstrate how the amendments significantly increased daughters' inheritance and subsequently girl's educational attainment. Other outcomes that changed were increases to female labour supply and autonomy (Heath and Tan (2020)) and also higher dowries (Roy (2015)). Some unintended consequences included an increase in female child mortality (Rosenblum (2015)) and higher relative suicide rates for married women (Anderson and Genicot (2015)). In related work, La Ferrara and Milazzo (2017) exploit the introduction of the 1985 Intestate Succession Law in Ghana, that imposed a minimum quota of land that parents should devolve to their children. In this case, this reform was most consequential for children from matrilineal groups who now had the rights to inherit directly from their fathers (by comparison patrilineal groups were largely unaffected by the new law). The authors find that boys of the matrilineal ethnic groups subsequently received a reduction in education, suggesting that prior to the reform, matrilineal groups over-invested in education to substitute for land inheritance - thus demonstrating a causal link from inheritance rules to human capital accumulation.

Harari (2019) studies an amendment to a statutory law in Kenya granting women equal inheritance rights in 1981, regardless of ethnic or religious affiliation. In 1990, an exemption was granted to Muslims, who were allowed to revert to the Koranic succession law, which entitles women to half the inheritance share that goes to each of their brothers. Exploiting the timing of these legal changes as well as cross-sectional variation in religious affiliation, the author finds that women exposed to the full reform experienced higher level of educational attainment and were also less likely to undergo genital mutilation.

Dillon and Voena (2018) exploit variation in inheritance rights to widows in Zambia. There rural farmland is governed by customary law, rather than formal statutory law, whereby the village headman plays a central role in land allocation decisions. Deference to local determination was codified in the Lands Act of 1995 and village leaders were to decide who inherits customary land. The authors focus on agricultural investment outcomes (like fertilizer use, leaving land fallow, and tillage intensity) as a function of whether a widow is allowed to inherit land. All of the outcomes are significantly lower if they are not, consistent with households' lower incentives to invest in long-run productivity when there is an increased risk to losing the land in the future.

4.3 Rules on Family Dissolution

4.3.1 Divorce

Researchers have estimated divorce rates amongst hunter-gatherer societies (Blurton Jones et al. (2000)) and in most societies, divorce was permitted. Though, often it was more the husbands' option than wives. With the influence of Christianity, came more restrictions on divorce, which were codified into Canon law in the 11th century (Thurston (1904)). The Protestant Reformation of the 16th century led to the secularization of marriage and the eventual establishment of civil family courts (Wood (1947)). Although divorce became legalized, the grounds for it remained limited and inequality between

men and women persisted. It was not until the no-fault divorce clauses were enacted beginning in the 20th century, that gender equality before the law developed (Leeson and Pierson (2017)). As we see from Table 1, however, discriminatory laws in rights to divorce still persist in much of the world.

Considering that almost one third of ever-partnered women worldwide have been subjected to some form of violence by their intimate partner, the dire consequences of restrictive marriage laws that limit a woman's ability to leave an abusive marriage seem obvious. We have seen from Table 1, that generally women do not have equal rights to men to initiate divorce, equal access to marital property in the case of divorce, nor maintain equal custody rights over their children. Stevenson and Wolfers (2006) make a direct causal link between divorce law reform in the U.S. and violence. Prior to the 1960s, state regulation allowed divorce only under mutual consent. During the 1970s and 1980s, states varied in their timing with regards to instituting unilateral divorce, thus creating a quasi-experimental design to exploit. Stevenson and Wolfers (2006) consider the possibility that violent relationships were more likely to end through suicide or homicide prior to unilateral divorce. Their results show that states early to adopt unilateral divorce witnessed large declines in both domestic violence and female suicide rates. García-Ramos (2021) similarly exploits state-level variation in the timing of introducing unilateral and no-fault divorce in Mexico. She shows that IPV does not significantly change in the short-term, but that there does appear to be long-term increases. The author suggests, that in this context, these results are consistent with husbands using IPV to prevent their wives from leaving the marriage, when the costs to doing so have fallen.

Whether more liberal divorce laws actually increase rates of divorce is subject to some debate amongst economists. Wolfers (2006) reviews this literature for the U.S. and concludes that divorce rates temporarily increased but that this effect seems to disappear after ten years. Evidence from Europe and Mexico seems to suggest that similar legal reforms did increase divorce rates by a sizeable effect (González and Viitanen (2009), Hoehn-Velasco and Penglase (2021)). Either way, this realization of the threat point is not necessary for behaviour to change, and there is notable evidence that household decisions were significantly altered.

Fernández and Wong (2014a,b) explore the link to female labour force participation. They test the intuition that if engaging in the workforce leads to better outside options for wives, then married women may choose to do so when their perceived risk of marital dissolution has risen, due to an easing of divorce laws. The authors find support for this hypothesis using U.S. data. Bargain et al. (2012) examine the impact of legalizing divorce in Ireland in 1996 and also find significant increases to female labour supply at the extensive margin.

Stevenson (2007) explores how the more liberal divorce laws in the U.S. impacted the incentives to invest in marriage-specific capital. If divorce reform raises the divorce rate, then spouses might lose their incentives to jointly invest. On the other hand, taking into account intrahousehold bargaining, then changes in divorce laws could shift relative bargaining power, particularly if spouses differ in their preferences for marital investments. Stevenson (2007) focuses on newlyweds and finds that individuals are less likely to support their spouse in gaining additional education and also observes a decrease in household specialization: in the sense that both spouses are more likely to be in full-time work, that wives are systematically more likely to be in the labour force, and that couples are less likely to have a child. Bellido and Marcén (2014) relatedly demonstrate how more liberal divorce laws led to a negative and permanent effect on fertility across 18 European countries. They conjecture their results are primarily due to selection effects, where there is an improvement in marriage match quality in response to the reforms which in turn alters the incentives to have children.

In a completely different setting, Ambrus, Field, and Torero (2010) analyse amendments to divorce laws in Bangladesh in the context of marriage payments. Two amendments, which both increased the relative costs to divorce for men, have differential impacts on the two relevant components of the marriage transfer in this context. The stipulated Muslim dower portion (a payment conditional on termination of the marriage) declines, whereas the groom price component, dowry, rises in response. The authors conclude that their findings highlight the role of religious and legal institutions in influencing trends in marriage payments and marital separation, and the effect they have on private contracts.

4.3.2 Property Division

As important are divorce laws to individual welfare, so too are laws deciding the division of marital property upon dissolution. As seen in Table 1, a core distinction is community marital property (from Civil Law) compared to separate marital property (from Common Law). Historically, the former had implicitly treated women more equitably, by considering all assets and income brought into the marriage, as well as those acquired during it, as joint property, to be divided equally upon divorce (Glendon (1989)).

Voena (2015) reconsiders the variation across U.S. states in the introduction of unilateral divorce laws, but further takes into account three different state-specific pre-existing marital property regimes ranging from: individual: assets allocated according to ownership; equitable: a division of property that favours the biggest contributor; to equality: equally divided irrespective of ownership (akin to the community property regime as described in Table 1). Voena (2015) demonstrates how the interaction of these laws influences the couple's accumulation of assets and the labour supply of married women. In states where assets are equally divided, the introduction of unilateral divorce leads to higher accumulated assets and a lower labour supply for wives. These latter findings are consistent with Gray (1998) who further shows that it is wives' increased commitment to home production which drives the result.

Turning to entirely different outcomes, but still a focus on conditions of marital dissolution, Anderson (2018) compares the impacts of different marital property regimes on sexual behaviour and consequent female HIV rates across Sub-Saharan Africa. There the variation stems from the legacy of colonial rule, whereby former British colonies (with Common Law) maintained a system of separate marital property, which traditionally did not recognize women's non-monetary contributions to family income and only protected her independent property in the case of divorce (as described in Table 1). Former continental European colonies (with Civil Law) instead have community marital property, which prescribes joint ownership of all marital property and protects women upon marriage dissolution, whereby joint marital property is equally split. Exploiting the fact that ethnic group homelands cross present-day national borders with different marital property regimes, Anderson (2018) demonstrates how women under separate marital property regimes are less able to negotiate safe sex practices and are thus more vulnerable to HIV, compared to those under community marital property regimes. Women who share an ethnic group, but reside on the common-law side of the national border as compared to the civil-law side, are also more likely to experience IPV and to condone the violence (Anderson (2021)).

In another context, Rangel (2006) analyses the effects of an extension of alimony law to the dissolution of stable cohabitations (those couple living together but not formally married) in Brazil. Exploiting time variation and using a difference-in-differences identification strategy, comparing differences across cohabiting and married couples (those not affected by the law), the author finds that cohabiting women increase their consumption of leisure, by reducing their time allocated to housework and also a redistribution of household resources towards schooling of first-born girls. These effects are stronger for less educated women, who are more likely to be dependent on alimony should dissolution occur. The law change appears to have represented a positive shift in women's outside options, where she has better financial protection in the case of separation. In related work, Chiappori et al. (2017) demonstrate how legal reform granting alimony rights to cohabiting couples in Canada affected couples differently based on when their relationship began relative to the enactment of the new laws. For couples already together, women tended to lower their labour supply, in couples that formed after the law, and men were less likely to work full-time (choosing to study instead).

5 Origins of Family Institutions

Having established that rules associated with the family display systematic variation across societies and reported on research establishing that such variation is highly consequential for a variety of important outcomes, we now turn to the origins of such rules. We begin with an overview of relevant issues before delving into examining the origins of specific rules. We first discuss the challenges in distinguishing the importance of rules compared to the economic environment. We then lay out a framework to structure our thinking on the origins of rules. This preliminary discussion illuminates how 'culture' fits into the picture. The rest of this section follows with a detailed description of how the economics literature has contributed to our understanding of the origins of specific classes of family rules.

5.1 Separating Family Rules from the Economic Environment

As we noted in the introduction, the standard approach to family economics is not oriented toward an understanding of the rules governing the family. Rather, the focus is on how family behaviour is shaped by the economic environment–i.e. endowments, technology and preferences. Whilst we emphasize the importance of appreciating this distinction, we do not pretend that evaluating (or even conceptualizing) the relative importance of each is a straightforward task. There are at least two reasons for this.

First, rules and the economic environment are deeply interconnected. The state of technology presents a set of problems that rules mitigate, and the array of rules in place govern and direct technological change. Endowments influence which groups are powerful enough to impose rules, and rules are central to the future distribution of endowments. The distribution of preferences in a society influence the optimal rules, and existing rules influence the distribution of preferences, either through selection or differential attempts at inculcation by parents. The complex nature of this interdependence must be appreciated if attempting to attribute behaviour to rules or the economic environment.¹²

 $^{^{12}}$ Of course, this interconnection is not limited to the family context. For the effect of technology on rules see, for instance, Sánchez de la Sierra (2020) and Hornbeck (2010); and for the effect of rules on technology see, for instance, Landes (2006) and Kuran (2018). The interplay between rules and endowments is central, for example, in Acemoglu and Robinson (2000, 2001), and the interplay between rules and preferences is studied, under the description "culture and institutions", for instance,

Second, notions such as 'culture'-an amalgam of values, beliefs and norms-span both rules and the economic environment. For instance, suppose that we were certain that societal differences in some behaviour (e.g. female labour supply) were entirely due to societal differences in culture (e.g. attachment to traditional gender roles). Without further detail, one is unsure if culture is operating via rules or the economic environment (preferences). If a strong attachment to traditional gender roles merely imposes a high psychological cost of deviating from traditional gender roles, then culture operates via preferences. If instead a strong attachment merely means that a deviation from traditional gender roles invites social sanctions, then culture operates via rules. Of course, reality likely lies somewhere in between. For instance, Asadullah and Wahhaj (2019) ask whether female seclusion in Bangladesh is due to preferences or rules and find in favour of rules. Does distinguishing between these two aspects of culture really matter? Yes; if for no other reason, the distinction informs optimal policy. Indeed, the strength of the case for cultural intervention depends on whether culture is operating via preferences or rules.

5.2 A Taxonomy for Family Rules

In order to structure our thinking about the origins of family rules, we borrow and adapt a general institutional taxonomy from Acemoglu et al. (2005). Although the taxonomy was not originally created with family behaviour in mind, it proves a highly useful starting point.

5.2.1 The Efficient Institutions View

This view sees rules as being designed and adopted in order to maximize social surplus. The key justifying assumption supporting this view is that the process of making compensating transfers is relatively costless. The idea is that if rules did not maximize surplus then a feasible Pareto-improving allocation exists and would be exploited. This view thus emphasizes the 'pie enlarging' role of rules.

Here the economic environment is relevant because it creates the inefficiencies (e.g. those stemming from externalities, imperfect and incomplete information) that rules are called upon to mitigate. As a result, this view attributes variation in family rules to variation in the 'imperfections' inherent in the economic environment (e.g. ability to ascertain paternity, observability of actions, etc.).

This view leaves little scope for external policy intervention. This is not because rules are irrelevant, but because existing rules are already the best response to the envi-

in Tabellini (2008), Bidner and Francois (2011), and Bisin and Verdier (2017).

ronment. Under this view, external policy-makers see a role for interventions only because they fail to fully understand the local economic environment. The key theoretical exercise under this view is uncovering the features of the economic environment that rationalize the observed rules as surplus-maximizing. A model under this view is convincing to the extent it attempts to justify the assumption of costless surplus division, and to explain why the observed rules are the *best* way to regulate the problems stemming from the environment.

5.2.2 The Social Conflict View

This view sees rules as being designed and imposed in order to benefit particular groups (e.g. males, the rich, patriarchs, the Church etc.). The key justifying assumption is that surplus division is costly. The idea is that self-interested rule-makers will fail to maximize social surplus if they are unable to extract a sufficiently large slice of this enlarged surplus. This view thus emphasizes the 'pie-dividing' aspect of institutional choice and is intimately tied with political economy issues.

Here the economic environment is relevant because it determines the relative power of interest groups and their preferences. As a result, this view attributes variation in family rules to variation in who is powerful and how such power is best maintained.

There is clearly a much richer scope for external policy intervention under this view since, relative to rule-makers, external policy-makers harbour greater concern for the well-being of the less powerful (e.g. women, the poor).

Under this view, the key theoretical exercise is understanding the relevant interest groups, their preferences, the determinants of power and how these shift over time. A model under this view is convincing to the extent it attempts to justify the costly nature of surplus division and is useful to the extent that the potentially complex set of dynamic interactions are dealt with in a tractable manner. On the first point, Acemoglu (2003) illuminates some of the many reasons why surplus division is especially costly in the context of institutional design. On the second point, the seminal work of Acemoglu & Robinson (2000; 2001) is a large reason for why the social conflict view has come to dominate among economists in the study of comparative economic development.¹³ As we shall see, the extent of this dominance is far less clear within family economics.

¹³Whilst this work catalyzed the social conflict view by operationalizing it via tractable formal models that capture the dynamics of economic and political power, the view itself was already long appreciated. For instance, North (1981) adopts the view, abandoning his prior embrace of the efficient institutions view.

5.2.3 The Autonomous Institutions View

The hallmark of this view is the *non-deliberate* nature of the rule formation process.¹⁴ Importantly, the position here is not that individuals fail to appreciate the significance of rules, but rather that they are relatively powerless to manipulate rules in the face of other forces. The theoretical issues revolve around identifying such forces. Here we emphasize two broad types of forces.

The first class of forces, which we might call *endogenous norms*, arise when a systematic pattern of behaviour arises within some group because members share exposure to the same economic environment.¹⁵ For instance, the average age of marriage increases among Western Europeans in response to a shock to the labour-to-land ratio (Voigtländer and Voth (2013)). Everyone comes to anticipate that group members will adopt the behaviour, and over time the behaviour may come to serve as a signal of adherence to the entire suite of rules that apply within the group. At this point, abandoning the behaviour acts as a sign of deviance and invites social sanctions. The behaviour is now supported by rules, and indeed the initial conditions in the economic environment may have long disappeared.¹⁶

The second class of forces are those we might call *competitive selection*.¹⁷ By this we mean the proposition that the rules we see today are those that gave adopting groups an advantage in the past. Like natural selection, competitive selection results in 'fit' specimens (rules) without the necessity of deliberate design.

One possibility here, inspired by Nunn (2012), is that 'fit' rules are those that offer adherents an advantageous behavioural heuristic. The advantage comes from saving on decision-making costs in complex and uncertain environments. That is, adhering to the rule produces sufficiently good decisions relative to the costs of precisely determining optimal decisions. Interestingly, a rule can be selected for in this way without adherents having any idea why the behaviour generated by the rule is optimal.

¹⁴Acemoglu et al. (2005) call this the *Incidental* Institutions View. They characterize the view as understanding rules as "the by-product or unintended consequences of other social interactions or historical accidents." Our characterization is consistent with this, but less readily suggests that the process is haphazard or that humans under-appreciate the significance of rules.

¹⁵That is, 'correlated effects' in the language of Manski (1993).

¹⁶This account of endogenous norms is distinct from "conventions" (Young (1996, 2011)) since there is no inherent coordination problem, and it is also distinct from "herding" (Banerjee (1992), Bikhchandani et al. (1992)) since there is no common learning. It shares features with the behavioural prescriptions and proscriptions associated with identities (Akerlof and Kranton (2000)), but offers an account of why specific behaviours are associated with specific identities. See Bursztyn and Jensen (2017) for an overview of the literature on image concerns.

¹⁷This class is subsumed under more general labels, such as cultural evolution or cultural group selection. Attempts to draw literal connections to biological evolution and natural selection seem to invite controversy for reasons that are orthogonal to our purposes here. For instance, see https://www.edge.org/conversation/the-false-allure-of-group-selection.

Another possibility is that 'fit' rules are those that offer adherents an advantage because of explicit competition between groups.¹⁸ More related to our purposes, Henrich (2020) proposes that many of the rules governing the family in WEIRD¹⁹ societies today–e.g. restrictions on kin marriage and polygamy, norms of neolocal residence, mutual consent, and so on–were the result of the "accidental genius of Western Christianity". In his telling, the Church "bumbled across an effective recombination of supernatural beliefs and practices ... At the same time, other religious groups experimented with their own combinations of customs, supernatural beliefs, and religious taboos. Then, equipped with their different cultural packages and divine commitments, these groups competed for adherents" (p.176-7).

The autonomous institutions view admits important scope for policy. This is particularly true for the endogenous norms class, whereby group members may find their behaviour bound by rules, enforced by social sanction, even if no individual is inherently concerned with the behaviour. In this sort of situation, there is a wedge between the behaviour that one privately disapproves of and the behaviour that one is willing to punish. As such, this sort of situation naturally leads to individuals holding misperceptions about what others really care about. Recent work has bolstered the empirical relevance of this consideration, especially in the realm of gender (Bursztyn et al. (2020b), Bursztyn and Yang (2021)). Policy is also relevant within the cultural competition class as there is no guarantee that such competition will inevitably lead to desirable (e.g. Pareto efficient) rules.

With this taxonomy in hand, we now turn to a discussion of specific family rules.

5.3 Why Marriage?

Despite considerable variation in the details, at its core, marriage is the formalization of a relationship between a set of individuals and their families. The formalization entails a series of rules, each impinging on decision problems facing the involved parties. But to what broad end are such rules aimed? The idealized Beckerian environment offers few insights here because it is largely silent on why cohabitants would bear the costs of formalizing their relationship as a marriage (Matouschek and Rasul (2008), Edlund (2013), Lundberg et al. (2016)).

Existing approaches to understanding marriage among economists have largely taken

¹⁸This general idea, albeit under different guises, has a long history in economics. For instance Alchian (1950) applies the idea to firms, proposing that assumptions of literal profit-maximizing behaviour are unnecessary. Firms that adopt rules that turn out to be profitable proliferate at the expense of those adopting rules that turn out to be unprofitable.

¹⁹WEIRD stands for "Western, Educated, Industrialized, Rich, and Democratic".

the efficient institutions view, offering explanations under the general principal that "marriage is a response to transaction cost problems arising from attempts to capture the gains from cohabitation" (Allen (1990)). We begin by describing the different emphases economists have placed on this notion—which problems, which gains and which responses?

The most prominent class of explanations emphasize the role of marriage in placing constraints on the ability of individuals to exit the relationship. Matouschek and Rasul (2008) outline and test two economic explanations from this class. One explanation emphasizes the signaling value of marriage. The model assumes that the man's type– the value he places on the relationship–is his private information. The costly nature of exit means that marriage acts as a credible signal of the man's type. The other model emphasizes the commitment value of marriage. This model considers relationship-specific investments, modelled as an infinitely repeated prisoners' dilemma. Marriage is valuable because exit costs reduce the attractiveness of defection and therefore acts as a means to support greater spousal cooperation. Matouschek and Rasul (2008) find empirical support, based on responses to law changes that reduce the cost of exit, only for the commitment model.

Although a repeated prisoner's dilemma is a reasonable starting point for modeling the issue of commitment in marriage, the nature of marriage suggests a far more specific form of commitment problem. This problem arises from the asymmetric timing of contributions, whereby women contribute heavily early on by raising children and thus forgoing later earning potential. More generally, a woman's value on the marriage market tends to decline more rapidly relative to a man.²⁰ This makes the issue one of *husband* commitment. Marriage is valuable (generates more surplus) if it resolves the natural hold-up problem. That is, if it allows the husband to credibly commit to supporting the wife once she has made her early investment. Cohen (1987) provides an early statement of this idea in the Law and Economics literature and illuminates the trade-offs involved with various institutional remedies. The husband commitment motivation for marriage lies at the heart of a wide variety of applications, including Ambrus et al. (2010), Lundberg et al. (2016), Lafortune and Low (2017, 2020), and Anderson et al. (2021).

The other prominent view of the role of marriage relates to its role in regulating reproduction and inter-generational wealth transfers. In this view, the key issue is paternity uncertainty. Edlund (2013) proposes that marriage is valuable because it addresses a

 $^{^{20}}$ See Cohen (1987) for a series of underlying reasons supporting this claim. To be sure, this is not a claim about the sign of the male-female difference in marriage market value. It merely says that this difference tends to increase over time.

missing market for children. In this setting, marriage carries a paternity presumption and this facilitates mutually beneficial exchanges in which women offer custody rights over their offspring and men offer a share of their material resources. Bethmann and Kvasnicka (2011) emphasize a male concern for producing biological offspring and the resulting *societal-level* problem arising from negative externalities. In short, males produce more biological offspring by mating broadly but in doing so, reduces the paternity certainty enjoyed by other males. Females too are interested in mating broadly, in order to attract resources from potential fathers of her children. In their setting, marriage acts to impose costs on mating broadly and thereby it helps to resolve a prisoner's dilemma situation in which individuals–both males and females–have socially excessive incentives to mate broadly.

This efficient institutions perspective on marriage is a valuable complement to the standard economic approach to the family, powerfully enhancing economists' contribution to social scientists' attempts to understand the family. Yet, this perspective does not squarely explain why religion is so intimately tied with marriage nor why both Church and State have generally attempted to actively promote marriage.²¹ One intriguing possibility, grounded in the social conflict perspective, emerges in Fernández-Villaverde et al. (2014). Complex societies have organizations—such as the Church and the State that are responsible for supporting the poor. Since poverty reliably followed from children that do not receive support from fathers, such organizations had cost-saving incentives to ensure that sex be confined to those bound by rules that committed the male to financially support any resulting offspring.

Of course, there is great variation in the suite of rules that aim at achieving these broad ends. Such rules can be classified according to whether they regulate how a family is formed, how a family functions, and how families are dissolved. We outline some of these in turn.

5.4 Rules on Family Formation

5.4.1 Marriage Payments

We have discussed how in most societies, marriage has involved the expectation of wealth transfers. Not only has there been variation in which family makes the transfer but who maintains property rights over the transfer during marriage, and also who

²¹Religion may be important for enforcement in the presence of low state capacity if spiritual punishments are effective substitutes for worldly punishments. But then why does religion not play a more prominent role in the enforcement of all forms of contracts? The state or church may have an interest in promoting fertility, but why is promoting marriage the best way to achieve this? Indeed, attempts at fertility control such as China's famous One Child Policy did not attempt to dissuade marriage.

retains rights to the transfer in the case of marriage dissolution.

By focusing on the economic environment, standard settings permit a relatively narrow focus on explaining the size and direction of transfers. In such settings marriage payments are the result of marriage market clearing, so dowry is understood as the means through which brides compete for scarce high-quality grooms and brideprice reflects the reverse (Becker (1973, 1974)).

The institutional perspective adds much explanatory power to this framework. For instance, by incorporating rules that restrict the set of potential marriage partners, Anderson (2003) illuminates why dowry persists in India (where the caste system imposes strong restrictions on potential spouses) yet declined in Europe (where restrictions on potential spouses were far weaker). Similarly, Aldashev and Wahhaj (2019) note that marriage rules also incorporate the *timing* of marriage payments relative to the timing of marriage and human capital investments. They show how variation along this important dimension can be understood by taking rules of patrilocal residence seriously and relaxing the assumption of perfect contracting over investment in daughters. In this way they offer insights into how marriage payments, age at marriage, and arranged marriage are co-determined and the exogenous factors that are relevant in this process.

The institutional perspective also opens up an alternative, non-market, role for dowry: as a pre-mortem bequest to daughters. Here the theoretical challenge is understanding why parents would make lump-sum transfers to daughters at the time of their marriage yet transfer their remaining estate to sons at the time of parents' death. Again here, the literature enhances our understanding by explicitly considering other family rules, such as patrilocal residence patterns and costly divorce. Patrilocality implies that parents benefit from the work effort exerted by their married sons. As such, parents increase surplus by giving their sons the entire remaining estate at the time of death (and thus give daughters their share as a lump sum at an earlier date) since this boosts a son's incentives to exert effort (Botticini and Siow (2003)). Similarly, rules that stipulate a high cost of divorce render promises of future parental transfers to the couple noncredible. This is especially true for the bride's side since they have a vested interest in their co-residing sons. The family of the bride thus makes their contribution up front. thereby explaining the timing of dowry (Do et al. (2013)). When daughters leave home to live with their in-laws, an inability to contract over future divisions of household wealth implies that their bargaining power within the new household is particularly weak. This provides additional motivation to provide daughters with resources at the time of marriage (Zhang and Chan (1999)).

Although bequest and price motives are typically analyzed in isolation, the two interact

in a natural manner. Bargaining implies that grooms benefit from the bequest received by brides. Thus a higher bequest has the additional virtue of attracting a wealthier husband. This is even more true when the dowry is given to the groom directly rather than as a bequest to the bride (again, bargaining means that brides will still benefit from such a transfer). Thus marriage rules also incorporate the allocation of dowry between the bride and the groom. Anderson and Bidner (2015) study an equilibrium model of the marriage market with this feature and show how the nature of dowry-bequest vs price-evolves with the development process. The analysis explains the otherwise puzzling observation that women lose property rights over the dowry-there is a shift from bequest to price-as the result of a development process that otherwise empowers women.

If for no other reason, incorporating bequest motives into the analysis of marriage payments is insightful because it offers a reminder that dowry is *not* synonymous with a negative bride-price. Similarly, a dower is *not* synonymous with a positive brideprice. Dower, being the property of the bride (rather than her kin), is not merely a means by which grooms compete for scarce high-quality brides. The dower is especially important in societies where women would otherwise have low household bargaining power owing to rules that restrict their ability to work outside the home. Islamic marriage involves a particularly interesting version of dower whereby part of the dower is paid up front at the time of the wedding and part can be deferred. The deferred component typically becomes due upon divorce (Ambrus et al. (2010), Anderson et al. (2021)) and therefore lowers the attractiveness of divorce for husbands. In this light, the deferred component of dower is instrumental in addressing the husband commitment problem described above.

To summarize, the above body of work shows the numerous ways in which departures of the economic environment from an idealized benchmark produce specific behaviour associated with marriage payments. The autonomous institutions view suggests ways in which such behaviours are (or can come to be) the result of rules. For instance, a common behaviour eventually sets expectations for 'how things are done' and departures from the behaviour then act as a signal of deviancy which is met with social punishment (i.e. endogenous norms). We do not know of any attempt to empirically ascertain the extent to which marriage payments are shaped by rules, but such efforts would be clearly valuable for understanding appropriate policy responses. We are also unaware of attempts to use other institutional views to understand marriage payment rules. For instance, the social conflict view raises the possibility that marriage payments are mandated by high status groups as a means to restrict entry into elite circles.

5.4.2 Number of Spouses

As discussed, many societies have rules that limit the number of spouses that one can be simultaneously married to. As we alluded to in the introduction, the standard approach instead treats the number of spouses as the result of competitive forces in the marriage market equilibrium. For instance, Becker (1974) emphasizes inequality among males, generalizing the hypotheses of Boserup (1970). Empirical support for this is provided by Jacoby (1995), using data from Cote d'Ivoire. Departing from a static environment, Tertilt (2005) notes that inequality among males is not necessary for polygyny if men marry younger women and there is population growth. The experience of modern industrialized societies, where polygamy is notably absent despite substantial inequality among potential husbands, presents a puzzle to Gould et al. (2008). They argue that the growing importance of human capital induced inequality among *women* and this in turn reduced the extent of polygyny in marriage market equilibrium.

Being more exotic from a modern perspective, these analyses are naturally framed around understanding polygyny and its' decline. Yet, from an institutional perspective, it is *monogamy* that calls for an explanation. Whereas the standard approach seeks conditions under which it is individually optimal to marry no more than one spouse, an institutional perspective instead seeks to understand how a society has come to be bound by rules against multiple spouses.

A surprisingly small number of papers take an institutional perspective and explicitly analyze the origins of rules against polygyny. Adopting the social conflict view, Lagerlöf (2010) proposes that rules against polygyny are set by elite males in an attempt to stave off threats from non-elite males. Absent an institutional constraint on the number of spouses, elite men would marry many wives which leaves many non-elite men without spouses. This situation encourages rebellion among the non-elite, posing a threat to elite males. In short, elite males impose monogamy rules *upon themselves* as a means to pacify the non-elite.

Remaining in the social conflict view, De La Croix and Mariani (2015) propose that rules against polygyny are set by weighted majority voting. The rules shape an individual's marital prospects, in a way that depends on gender and wealth. Rich males prefer polygyny, whereas poor males and rich females prefer monogamy. The preferences of poor females depend on the population composition, prefering monogamy to polygyny when rich men are relatively abundant.

Combining theory and empirics, Tertilt (2005, 2006) quantitatively evaluates the impact of a rule against polygamy by estimating a structural model. Although not her main focus, this exercise provides valuable insight into why such rules exist in some places but not others. In particular, the substantial welfare gains that are estimated to accrue from a rule against polygyny suggests, under the social conflict view, that monogamy rules are set by a small group of beneficiaries rather than via an inclusive set of political forces. The analysis of transitional dynamics in Tertilt (2006) allows us to quantitatively assess how various groups fare as a counterfactual rule against polygyny is introduced. The results suggest that older men will fare the worst from the rule, since a ban on polygyny lowers the brideprice (which accrues to the older male relatives of the bride). Furthermore, this sort of analysis is vital in terms of providing policy-relevant insight into which groups are likely to most strongly resist rule changes.

Outside of economics, monogamy has been studied by evolutionary anthropologists. This approach lies within the autonomous institutions view and emphasizes competitive selection. For instance Fortunato and Archetti (2010) propose that monogamy arises due to inefficiencies arising from the partitioning of estates. Henrich et al. (2012) instead emphasize explanations that fall under four broad categories: monogamy suppresses intrasexual competition, dampens the competition for younger brides, shifts male incentives toward investing in offspring, and increases relatedness within households. The authors spell out the various advantages that each of these features offer and provides supporting empirical evidence.

5.4.3 Partner Choice

Another important class of family rules are those that place restrictions on who one is allowed to marry. One prominent example from recent decades in the West are rules concerning same-sex marriage (Newton (2016)). A broader class of rules are those of endogamy, whereby marriage is limited to those within a well-defined social (e.g. racial, religious, class) or kin group.²² These rules generate particular matching patterns in which spouses share similar characteristics. The standard setting rationalizes such patterns without invoking rules. For instance, Becker (1973) demonstrates the central role played by the nature of the household production technology, whereby equilibrium will display positive assortative matching on characteristics that are complementary. This analysis has been fruitfully generalized in various directions, including imperfectly transferable utility (Legros and Newman (2007)) and search costs (Shimer and Smith (2000)). For instance, Burdett and Coles (1997) (among others) show how search frictions can result in equilibrium matching patterns that resemble an endogamous class system.

 $^{^{22}}$ A smaller body of work instead seeks to understand rules requiring marriage outside of the group (exogamy). Focusing on small scale societies, Dow et al. (2016) take the efficient institutions perspective and emphasize the benefits of inter-community marriage in the presence of community-specific productivity shocks.

This literature offers powerful insights into matching patterns in modern societies where marital rules that limit partner choice are largely absent. This literature however has less to offer in terms of understanding the rules proscribing who one may marry.²³ To illustrate, consider the Indian caste system. One's caste is exogenously determined by the caste identity of parents, and inter-caste marriages face serious social repercussions. From the institutional perspective, the relevant issue shifts from one of understanding why the economic environment generates only intra-caste marriages to one of understanding how groups came to be possess rules against marrying outside of their caste.

More specifically, under the efficient institutions view, the issue becomes one of understanding why caste members care about the spousal choices of other caste members. Bidner and Eswaran (2015) propose an explanation for endogamy that relies on another central feature of caste: affiliation with an occupation. In short, household production suffers when the wife's natal family were not involved in her husband's occupation. Spousal choice is also affected by an idiosyncratic preference ('love') shock. Privately optimal spouse choice would therefore sometimes result in inter-caste marriages. Yet such marriages impose an externality on members of the wife's caste (since the pool of 'occupational-optimal' wives shrinks). The occupation that suffers the most from spousal skill mismatch will find that the private benefits of out-caste marriage will, on average, be less than the social costs imposed on other caste members. As such, this group benefits from an ex ante agreement that punishes marriage outside the caste. The next most skill-sensitive occupation then finds themselves in a similar position and they too now find it optimal to enforce caste endogamy, and so on until the lone remaining caste is involuntarily endogamous because no other caste allows marriage outside the caste.

Beyond the caste system, a body of work is concerned with understanding kin marriage. Rosenzweig and Stark (1989) suggest kin marriage serves an insurance role, and use this to explain marriage-related migration patterns of wives in India. Hotte and Marazyan (2020) presents evidence from Senegal supporting the insurance-motivation for kin marriage. Do et al. (2013) and Mobarak et al. (2013) propose that kin marriage is a rational response to marriage market failure: an inability to make marriage payments up-front promotes marriage to those where payments are more easily collected ex post. Jacoby and Mansuri (2010) consider the related practice of bride exchange (*watta satta*), whereby families exchange daughters as wives for sons. This practice is understood as a means to mitigate the non-contractible threat of violence against

 $^{^{23}}$ We know of no research in economics that focuses on the origin (or termination) of rules forbidding same-sex marriage or marriage across racial, religious, or class lines. This area seems fertile for future research, as we elaborate upon in section 6 below.

wives.

While this body of work emphasizes contracting imperfections in understanding kin marriage, it does not directly speak to the 'rule' aspect of kin marriage. In contrast, recent work focused on Islam emphasizes male *imposition* of kin marriage. Edlund (2018) understands kin marriage as an imposition that arises as a response to Islamic marriage payments (*mahr*). These payments, unlike brideprice, become the property of the wife. The argument is that males effectively enter into an agreement whereby they contribute women (daughters, sisters) to a pool in exchange for the right to draw brides from the same pool. The allocation of brides thereby avoids the price mechanism, resulting in lower mahr payments. Similarly, Bahrami-Rad (2021) sees kin marriage as an imposition that serves to mitigate the inefficiencies caused by the Islamic institution of mandatory inheritance for women. The argument is that, in the presence of imperfect land markets, female inheritance risks inefficient land fragmentation. Kin marriage is then the result of an attempt to keep land assets 'in the family'.

These sorts of arguments make clear that rules limiting who one may marry are closely related to rules specifying who must give consent to marriage. The social conflict perspective provides at least three possibilities. First, consent rules could be understood as resulting from conflicting preferences of males and females over marriage partners (Edlund (2018)). Second, consent rules could be understood as resulting from conflicting preferences of parents and offspring over suitable partners.²⁴ Bidner and Eswaran (2015) argue that arranged marriage is a natural consequence of endogamy rules since caste members have limited ability to socially sanction women that marry into a different caste (since she will reside in her new community). Sanctioning her *parents* is relatively easy as they remain within the community and thus arranged marriage arises because parents have a direct stake in ensuring their children–especially daughters–follow the caste's endogamy rules. Third, consent rules can be understood as resulting from the interests of powerful organizations. A body of work suggests that the Church promoted individual consent as part of a broader program of weakening kin ties (Goody (1983), Greif (2006a), Henrich (2020)).

 $^{^{24}}$ For instance, Huang et al. (2012) provides evidence that parents care more about a potential partner's wealth than does the individual. Parents also plausibly care more about less tangible characteristics such as reputation and family status (Bidner and Knowles (2020)).

5.5 Rules within the Family

5.5.1 Rights of Family Adults

Marriage entails rules that specify the rights enjoyed by each spouse. Relative to husbands, wives have most commonly enjoyed fewer rights–e.g. with respect to property ownership, the ability to enter into contracts, child custody and access to divorce. Yet, this pattern seems to weaken with development and prior to women obtaining political rights. A handful of papers attempt to understand this phenomenon by taking a social conflict perspective, and in particular assume that it is *males* that choose rules. These papers each propose reasons why males would wish to concede rights to women. Weak rights for wives harm the interests of males because this entails insufficient incentives for wives to exert effort (Geddes and Lueck (2002)), insufficient incentives for households to invest in human capital (Doepke and Tertilt (2009)), and an implicit tax on transmitting wealth to daughters (Fernández (2014)). These concerns become more pressing with economic development (in terms of physical capital accumulation, an increased return to human capital, and a decline in fertility respectively).

This line of research offers excellent examples of how an institutional perspective can enrich our understanding of the economics of the family. The social conflict view offers particularly useful insights here, for example by forcing us to take a stand on who makes the rules and thereby reorienting us toward important questions such as why men would find it in their interest to grant rights to women.

5.5.2 Rights of Family Children: Inheritance and Lineage

In understanding inheritance patterns, economists have generally focused on the economic environment rather than rules. That is, explanations focus on the motives of parents who are unconstrained in their ability to allocate their inheritance. Such motives, descriptions of which go back at least to Adam Smith, include for instance the inefficiencies of land fragmentation (Alston and Schapiro (1984), Bertocchi (2006)) and the strive to avoid lineal extinction (Chu (1991)). Other motives arise out of incomplete contracts, and emphasise providing incentives for offspring (Bernheim et al. (1985)), and signaling parental affection (Bernheim and Severinov (2003)). Any of these motives could, via the autonomous institutions view, potentially form the basis of an explanation for particular inheritance rules although such attempts are uncommon among economists.

The institutional perspective enriches this analysis by acknowledging that inheritance is subject to rules and that such rules are malleable. For instance, such rules determine the extent to which individuals have discretion over how their property is divided, which offspring are considered legitimate, and whether restrictions are imposed on the basis of birth order or gender.

Inheritance rules in Western Europe were significantly shaped by the dictates of the Medieval Church via its influential role in promoting notions of legitimacy and the freedom of the testator over customary inheritance rules (Goody (1983), Ch. 6). Henrich (2020) (Chapter 5) offers a fascinating account of how the Church managed to become the largest landowner in Europe, discussing practices such as priests at deathbeds and how bequeathing wealth to the Church allowed the wealthy to circumvent the 'eye of a needle' problem. More generally, inheritance rules were influenced by the Church as a result of the Church's package of family rules–e.g. concerning kin marriage, polygamy, divorce, and consent–that resulted in greatly weakened kinship ties (Goody (1983) Chapter 5, Greif (2006b) Chapter 8). In understanding the origins of family rules, it is important to determine whether the Church designed such rules for self-serving ends (the social conflict view) or whether the rules merely 'caught on' for other reasons (the autonomous institutions view). We know of no attempt to rigorously distinguish these possibilities empirically.

Similarly, inheritance rules in the Middle East were significantly shaped by a bundle of rules embedded in Islam. Economists have emphasized the 'egalitarian' nature of Islamic inheritance rules, but have mostly focused on the consequences of these rules for economic development (e.g. Kuran (2018)). In understanding the origins, Michalopoulos et al. (2016) take the efficient institutions view and propose that the rules of Islam (including those related to inheritance) emerge as a response to inefficiencies that arise as a response to inequalities brought about by geography and trade. This approach is clearly more satisfactory than one resting on assertions that Islam embodied particularly progressive attitudes²⁵ since the latter approach merely shifts the question of institutional origins to one of cultural origins.²⁶

Relative to work that analyzes the consequences of gender asymmetries in inheritance rules (e.g. Bahrami-Rad (2021)), there are relatively few attempts at understanding the origins of such asymmetries. From the autonomous institutions view, Botticini and Siow (2003) offers one rationale for gender-specific inheritance rules. The driving gender difference in this case arises from patrilocal residence patterns, and the gender difference

 $^{^{25}}$ See Meyersson (2014) for evidence of some progressive consequences of political Islam despite appearances to the contrary.

²⁶More generally, Rubin (2017) makes the important case that cultural traits, such as conservatism, are objects to be explained rather than assumed. While not focusing on family institutions, he adopts a social conflict perspective in providing an account of the relative fortunes of Europe and the Middle East based on the different roles that religion played in providing political legitimacy. He argues that these differences are rooted in the differing conditions that prevailed at the conception of Christianity and Islam. See Bisin et al. (2021) for a recent formalization of this process.

in inheritance rules primarily concerns the timing of bequests. A more pressing gender difference to understand concerns the right to inherit at all. This issue, under the social conflict view, is connected to the broader issue of the property rights of wives (Geddes and Lueck (2002), Doepke and Tertilt (2009), Fernández (2014)) since it is presumably less attractive to bequeath property to daughters if her property rights are surrendered upon marriage. Under the efficient institutions view, Casari and Lisciandra (2016) offer and test an interesting explanation for why women are restricted from inheriting rights to communal property. The first part of the argument is that such restrictions prevented overuse of the commons since outsider men could not gain rights to the commons via marriage to an insider woman. The second part of the argument, drawing more on social conflict, is that limiting the rights of women rather than men was the result of male-dominated councils and the existence of conditions suitable for patrilinearity, including the nature of agriculture and paternity certainty.²⁷

In a more general account of inheritance rules, Baker and Miceli (2005) offer an innovative rationale for the use of rules. They adopt the efficient institutions view and emphasize how rules provide parents with valuable commitment power. Relative to parental discretion, the use of fixed rules, such as primogeniture or equal-sharing, limits inefficient rent-seeking competition among siblings but runs a greater risk of an inefficient allocation ex post (e.g. land goes to the less able offspring).

Traditionally, rights to inherit property are closely related to how lineages are traced. At present, the bulk of the research that seeks to understand the origins of lineage rules–specifically matrilineality or patrilineality–is conducted by evolutionary anthropologists (Nunn (2020)). This work tends to adhere to the autonomous institutions view, with a strong emphasis on competitive selection. For instance Fortunato (2012b) connects aspects of matrilineality to polygynous behaviour. In an attempt to bring this work to economists, Nunn (2020) describes other hypotheses including an understanding of matrilineal descent as a response to paternity uncertainty. Economists have contributed more to the rigorous empirical testing of such hypotheses. For instance, BenYishay et al. (2017) test the proposition that marine reef density promotes matrilineal inheritance among groups in the Solomon Islands.

To summarize, there remains a large scope for future research to illuminate the origins of rules that allocate rights within families. This is especially true with respect to rules that shape how property is to be transmitted across generations. The social conflict view appears to offer particularly fertile ground here since there are few explanations for

 $^{^{27}}$ Interestingly, Casari and Lisciandra (2016) claim that paternity was relatively certain because of adherence to the rules promoted by the Church such as monogamy and various measures limiting out-of-wedlock births.

the considerable variation in inheritance rules that are based on a clear understanding of who makes the rules and what their motives are. Research that follows in the spirit of Geddes and Lueck (2002), Doepke and Tertilt (2009), and Fernández (2014) thus seems to hold much potential.

5.6 Rules on Family Dissolution

As we have seen, an important set of rules governing the family pertain to how a family can be dissolved. Such rules include the conditions under which divorce is permitted, if at all, and how property is to be allocated upon divorce.

5.6.1 Divorce and Remarriage

Once again we find that whilst economists have paid extensive attention to the consequences of divorce rules,²⁸ especially in developed countries, there is relatively little work aimed at understanding the variation in divorce rules across the world and throughout history. This is surprising given that exit costs are a central reason for why marriage is valuable, and that divorce rules are central in determining such costs.

From a social conflict perspective, De La Croix and Mariani (2015) analyze the emergence of rules permitting divorce. In their framework, prevailing rules are determined by a vote. The trade-off is that divorce is costly (both privately and socially) but allows for the dissolution of bad matches. Under monogamy, the wealthy (both males and females) always prefer the option to divorce; they can afford the cost and have good post-divorce marital prospects. The poorer generally prefer to have no divorce. For poor males this is always true, and for poor females it is true unless rich males are sufficiently common. Thus, in their framework, the right to divorce arises as a consequence of economic development.

In a setting where divorce is always permitted, Hiller and Recoules (2013) instead focus on the conditions under which rules of unilateral or mutual consent arise. Their approach is interesting in that it combines the social conflict view with cultural evolution. Specifically, the model features majority voting over divorce rules, but preferences over divorce rules depend on a type that is subject to cultural (preference) evolution. One preference type experiences disutility from divorce whereas the other type does not. The composition of preferences in the economy evolves from the inter-generational transmission of types *and* the divorce status of parents. One main result is that mul-

²⁸The emphasis on the consequences of divorce rules is perhaps natural given the dominance of the Beckerian approach. The absence of transaction costs, via the Coase Theorem, produces a prediction that divorce rules will not matter. Of course, if transaction costs are non-trivial then the Coase Theorem makes no such prediction.

tiple steady states may exist. One steady state features high divorce rates, relatively few individuals that suffer a psychological cost of divorce, and unilateral divorce rules. The other features low divorce rates, relatively many individuals that suffer a psychological cost of divorce, and mutual consent divorce laws. This analysis is tractable yet provides rich insight into the interaction between rules, behaviour and the distribution of preferences.

5.6.2 Property Division

Even if divorce and remarriage are freely available, the rules regarding how property is to be divided upon separation will have a consequential impact on behaviour. Although such rules are, ideally, off the equilibrium path they shape incentives for women to enter the formal labour market, affect the conditions under which intra-household bargaining occurs, and affect the willingness of family members to make specific investments in the family. The optimal design of such rules need to take these effects into account, in addition to any concerns for fairness.

Cohen (1987) provides an early discussion of some of these ideas in the Law and Economics literature and discusses the pros and cons of various property division rules in the context of modern developed economies. Yet, the analysis is not aimed at identifying the conditions under which particular households would find specific rules optimal. Identifying these conditions is a crucial step in understanding the variation in property division rules. Anderson et al. (2021) provide some insight in this direction by analyzing the *optimal* property division rules from the perspective of a household and show how this optimal division is affected by prevailing gendered norms. In that model, property division is relevant because it shapes the degree of marital commitment experienced by each spouse. In particular, it is not the case that men prefer rules that allow them to keep all marital property upon divorce: this benefits them ex post but destroys marital surplus ex ante.²⁹ The model predicts that optimal property division shifts toward the wife as gendered norms in the private sphere shift in favour of women and as gendered norms in the public sphere shift in favour of men.

Deriving household preferences over property division rules is the first step in understanding the origins of such rules from either the efficient institutions view (whereby rules will take the preferences of all households into account) or the social conflict view (whereby rules will respond only to the preferences of the rule-makers). There are, to our knowledge, no formal models that attempt to tackle this broader issue. Future research in this direction would be valuable given the extensive consequences of property

 $^{^{29}}$ In fact, a husband and wife will agree on the optimal division because of ex ante transfers.

division rules.

To summarize, there clearly remains much valuable research to be done in understanding the origins of rules governing family dissolution. For instance, the little work that does exist assumes rules are set by voting, leaving a large scope for analyses in which rules are instead imposed by the powerful. The case for this approach is clear, for instance, from the history of the Medieval Church's constrictive rules surrounding divorce and remarriage and the extent to which such rules raised significant revenue and even impinged on the desires of monarchs (Henrich (2020), Chapter 6). In other contexts, the powerful group may be more difficult to identify. One indirect way of approaching this issue is to use structural models in order to evaluate the beneficiaries of rule changes (e.g. Fernández and Wong (2017)). This approach provides valuable suggestive evidence about which groups are likely influential in shaping rules. Whilst economists have devoted attention to the relative merits of unilateral and mutual consent divorce, there is notable scope for formal work that aims to explain gender asymmetries in access to divorce that have predominated history and still persist today in many parts of the world.

5.7 Summary and Scope for Future Research

This section has outlined economists' attempts at understanding the origins of family rules. Here we bring together some observations that emerge from this exercise.

First, it is clear that, across all of the specific domains in question, economists have devoted considerably less attention to the origins of family rules relative to the consequences of such rules. This is natural and appropriate–after all, origins are only important to the extent that rules are consequential. Yet our ability to design and apply effective policy is greatly hindered without a solid understanding of origins. There is thus an abundance of opportunity for important future research.

Second, a considerable amount of the research outlined above shows how departures from idealized settings provide insight into various family behaviours (nature of marriage payments, inheritance, and so on). But an account of behaviour alone is an incomplete account of a family *rule*. That is, perhaps the behaviour is merely a best response to the economic environment. The autonomous institutions view offers various mechanisms through which such behaviour is (or becomes) the result of rules. Yet there is very little research that has engaged this crucial last step of both empirically establishing the relevance of rules and carefully identifying which specific 'autonomous institutions' mechanism is at play. Such work would be valuable because, from a policy perspective, there is a world of difference between a behaviour being merely a best response to current conditions and a behaviour that is subject to rules that arose from historical conditions. The volume of work that establishes the persistent effect of historical events gives us much confidence that rules are indeed relevant in the cases we have reviewed in this section, but establishing the specific mechanism behind this persistence is not a trivial task.³⁰

Third, the social conflict view holds great promise in enriching our understanding of family rules. There is room for future work that incorporates political economy themes along the lines of Doepke and Tertilt (2009), Lagerlöf (2010), Fernández (2014), and De La Croix and Mariani (2015). There is wide scope to adopt an approach that also incorporates an element of cultural (preference) evolution, as in Hiller and Recoules (2013), and see the recent interest in the broader topic of 'co-evolution of culture and institutions' as a promising catalyst. A difficulty in identifying the relevant powerful groups is often challenging, but the use of structural models (Tertilt (2006), Fernández and Wong (2017)) to identify winners and losers from rule changes has proved a useful tool in making progress on this issue.

6 Comparison with Economic Institutions

We have argued that there is great variation in the rules governing the family, that these rules are consequential for a variety of outcomes, and that economists have paid relatively little attention to understanding why rules vary across space and time.³¹ In order to support progress in this area we now briefly draw connections to the literature on comparative development where the institutional perspective has been highly influential (e.g. Acemoglu and Robinson (2012)). We have already drawn upon this literature in terms of borrowing a taxonomy with which to organize existing work on the origins of family rules (section 5.2), and have highlighted some of the many ways in which family rules are consequential for comparative development (section 4). Here we begin with a speculation about further ways in which an institutional perspective on the family might contribute to the broader issue of comparative development. We then turn to some of the ways in which an institutional perspective on the family introduces issues that do not receive broad treatment in the comparative development literature.

³⁰For instance, the 'endogenous norms' argument is in no way automatically applicable. One needs an argument as to how the behaviour holds up as a signal in equilibrium. Similarly the 'competitive selection' argument must not merely show why a rule was advantageous in a particular setting, but would ideally argue why an even better rule failed to out-compete it. There would ideally also be an attempt to explain why has there been no successful attempts for a powerful group to engineer the rules in their favour.

 $^{^{31}}$ Fernández (2018) sees an important role for the New Institutional Economics to contribute to the understanding of marriage, gender and culture and presents a vision of what this might look like.

6.1 Family Economics and Comparative Development

The institutional perspective on comparative development stresses the importance of *inclusive* institutions: rules that allow broad segments of the population to utilize their talents, for instance via the of protection private property. Family rules seem to play an under-appreciated role in supporting inclusive institutions. For instance, the persistence of wealth, and thus de facto power, depends crucially on inheritance rules. Likewise, incentives to invest in physical capital depend on the security of property rights, but *also* on how the resulting returns can be utilized: e.g. whether wealth helps attract a desirable spouse (for oneself or descendants) and whether wealth can be transmitted across generations. Similarly, family rules shape the ability of kin groups to amass the resources and influence required to challenge those holding political power. Family rules shape the cohesion of kin groups and the nature of alliances formed between them as well as the identity of authority figures. These forces can have significant effects on the functioning of de jure democracies, for instance by affecting the strength and perceived legitimacy of clientelist networks.

6.2 Family Institutions: New Issues

While the analysis of family institutions parallels the analysis of economic institutions, a number of new issues arise. These issues stem from the fact that rules of the family make greater contact with the personal lives of individuals relative to rules that outline economic and political rights. Family rules shape the very composition of our households and establish expectations for each member in a variety of domains. Family rules thus represent a *foundational* structure upon which the rest of our economic lives are built. As such, individuals hold these rules tightly and indeed are often inclined to view them as sacred or steeped in morality.

This observation suggests a more central role for the autonomous institutions view when analyzing family rules. This is because the personal nature of family rules makes the deliberate design and implementation of family rules far more challenging than, say, adjusting the tax code. Both competitive selection and endogenous norms offer plausible origin stories for a variety of family rules, and much valuable future work lies in fleshing out the theoretical details and providing empirical validation.

The observation also suggests an enrichment of the social conflict view along at least three dimensions. First, the analysis of family rules will benefit from an explicit consideration of the constraints embodied in prevailing customs.³² Analyzing the interaction

 $^{^{32}}$ For instance, Amirapu et al. (2020) discuss difficulties in promoting child marriage laws in Bangladesh, and Peng (2010) discusses, in the context of China's One Child Policy, the clash be-

between laws and customs is an active area of research (e.g. Aldashev et al. (2011), Aldashev et al. (2012a,b), Platteau and Wahhaj (2014), Fernández-Villaverde et al. (2014), Acemoglu and Jackson (2017), Wahhaj (2018)) and seems an especially fruitful direction for future work that aims to understand the origin of family rules.

Second, family rules have a far greater scope to interact with prevailing social attitudes. For instance, anti-miscegenation laws and bans on same-sex marriage have reflected the social attitudes of powerful groups. Yet it also seems plausible that these powerful groups are motivated, at least in part, by the 'expressive' value of such rules in bolstering acceptance of and adherence to their particular attitude.³³ This sort of twoway interaction between family rules and social attitudes offers great scope to produce insights into, for instance, the unravelling of social norms (Bursztyn et al. (2020a)).

Finally, the social conflict view can be extended to accommodate the *coexistence* of organizations that claim authority over family rules at any given moment; e.g. the State, religious authorities, and local elders. This is inconsequential under the efficient institutions view, but is of central importance under the other views. Under the social conflict view, the rules chosen by each authority will reflect strategic interactions as part of the strive to attract adherents.³⁴ This layer of 'conflict' is not prominent in the comparative development literature, where 'conflict' primarily refers to the competition to become the single rule-making authority.³⁵

7 Conclusions

Our goal has been to outline a perspective of the family that emphasizes *rules*. This 'institutional' perspective contrasts with the more common approach, grounded in the seminal work of Becker, that seeks to show the relevance of the economic environment– technology, endowments and preferences–for understanding a range of family-related behaviour. By instead emphasizing the role of rules in shaping family behaviour, the institutional perspective directs our attention to the processes through which rules emerge. Developing a clear understanding of such processes is crucial if we are to

tween anti-natalist state institutions and pro-natalist linage traditions.

³³The 'expressive' role of law has mainly been discussed by legal scholars (e.g. Sunstein (1996), Cooter (1998), McAdams (2015)), but recent work among economists includes Dewan and Wolton (2019) and Wheaton (2020).

 $^{^{34}}$ Coexistence may also matter under the efficient institutions view because the different authorities likely have different opinions on how to achieve any given objective. Accomoglu et al. (2005) call this situation the *ideology* view.

 $^{^{35}}$ Coexistence may also matter under the autonomous institutions view. It is clearly important for competitive selection, and would be relevant for endogenous norms if the desire to signal allegiance to one authority is sensitive to the existence of other authorities. For instance, an individual may wish to signal their alignment with Hindus *only* because of the existence of Islam as a competing authority.

design and implement policies that effectively and efficiently change behaviour.

Economists are well-tooled to illuminate the origins of family rules, but we have seen that much exciting and important research remains to be done. We hope that our attempts to clarify the scope and significance of a rules-based perspective (section 1), to document the relevance of rules across the globe and through history (sections 2 and 3), to establish the significant consequences of family rules (section 4), to provide a framework for thinking about existing research on the origins of family rules (section 5), and to draw comparisons with the institutional perspective on comparative development (section 7) prove useful in promoting this line of research.

References

- ACEMOGLU, D. (2003): "Why Not a Political Coase Theorem? Social Conflict, Commitment, and Politics," *Journal of Comparative Economics*, 31, 620–652.
- ACEMOGLU, D. AND M. O. JACKSON (2017): "Social Norms and the Enforcement of Laws," *Journal of the European Economic Association*, 15, 245–295.
- ACEMOGLU, D., S. JOHNSON, AND J. A. ROBINSON (2005): "Institutions as a Fundamental Cause of Long-Run Growth," in *Handbook of Economic Growth*, ed. by P. Aghion and S. N. Durlauf, Elsevier, 385–472.
- ACEMOGLU, D. AND J. A. ROBINSON (2000): "Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective," *The Quarterly Journal of Economics*, 115, 1167–1199.
- (2001): "A Theory of Political Transitions," *American Economic Review*, 91, 938–963.
- (2012): Why Nations Fail: The Origins of Power, Prosperity and Poverty, New York: Crown, 1st ed.
- AKBARI, M., D. BAHRAMI-RAD, AND E. O. KIMBROUGH (2019): "Kinship, Fractionalization and Corruption," Journal of Economic Behavior & Organization, 166, 493–528.
- AKERLOF, G. A. AND R. E. KRANTON (2000): "Economics and Identity," *The Quarterly Journal of Economics*, 115, 715–753.
- AKRESH, R., J. J. CHEN, AND C. T. MOORE (2012): "Productive Efficiency and the Scope for Cooperation in Polygynous Households," *American Journal of Agricultural Economics*, 94, 395–401.

— (2016): "Altruism, Cooperation, and Efficiency: Agricultural Production in Polygynous Households," *Economic Development and Cultural Change*, 64, 661–696.

- AKSOY, C. G., C. S. CARPENTER, R. DE HAAS, AND K. D. TRAN (2020): "Do laws shape attitudes? Evidence from same-sex relationship recognition policies in Europe," *European Economic Review*, 124, 103399.
- ALCHIAN, A. A. (1950): "Uncertainty, Evolution, and Economic Theory," *Journal of Political Economy*, 58, 211–221.
- ALDASHEV, G., I. CHAARA, J.-P. PLATTEAU, AND Z. WAHHAJ (2012a): "Formal Law as a Magnet to Reform Custom," *Economic Development and Cultural Change*, 60, 795–828.
- (2012b): "Using the Law to Change the Custom," Journal of Development Economics, 97, 182–200.
- ALDASHEV, G., J.-P. PLATTEAU, AND Z. WAHHAJ (2011): "Legal Reform in the Presence of a Living Custom: An Economic Approach," *Proceedings of the National Academy of Sciences*, 108, 21320–21325.
- ALDASHEV, G. AND Z. WAHHAJ (2019): "Marriage Timing and Forward Contracts in Marriage," Working Paper 20, ECARES.
- ALFANO, M. (2017): "Daughters, Dowries, Deliveries: The Effect of Marital Payments on Fertility Choices in India," *Journal of Development Economics*, 125, 89–104.
- ALLEN, D. AND S. LU (2017): "Matching, marriage, and children: differences across sexual orientations," *Rev Econ Household*, 15, 527–547.
- ALLEN, D. W. (1990): "An Inquiry Into the State's Role in Marriage," Journal of Economic Behavior & Organization, 13, 171–191.
- ALSTON, L. J. AND M. O. SCHAPIRO (1984): "Inheritance Laws Across Colonies: Causes and Consequences," *Journal of Economic History*, 277–287.
- AMBRUS, A., E. FIELD, AND M. TORERO (2010): "Muslim Family Law, Prenuptial Agreements, and the Emergence of Dowry in Bangladesh," *The Quarterly Journal of Economics*, 125, 1349–1397.
- AMIRAPU, A., M. N. ASADULLAH, AND Z. WAHHAJ (2020): "Can Child Marriage Law Change Attitudes and Behaviour? Experimental Evidence From an Information Intervention in Bangladesh," Working Paper 2001, University of Kent.

- ANDERSON, S. (2003): "Why Dowry Payments Declined With Modernization in Europe but Are Rising in India," *Journal of Political Economy*, 111, 269–310.
- —— (2007): "The Economics of Dowry and Brideprice," *Journal of Economic Perspectives*, 21, 151–174.
- (2018): "Legal Origins and Female HIV," *American Economic Review*, 108, 1407–39.
- (2021): "Intimate Partner Violence and Female Property Rights," *Nature Hu*man Behaviour, 1–6.
- ANDERSON, S. AND C. BIDNER (2015): "Property Rights Over Marital Transfers," The Quarterly Journal of Economics, 130, 1421–1484.
- ANDERSON, S., C. BIDNER, AND C. SADANIA (2021): "Marriage, Commitment and Unbundling Gendered Norms," Working paper, Simon Fraser University.
- ANDERSON, S. AND G. GENICOT (2015): "Suicide and Property Rights in India," Journal of Development Economics, 114, 64–78.
- ANUKRITI, S., S. KWON, AND N. PRAKASH (2020): "Saving for Dowry: Evidence From Rural India," Working Paper 9453, The World Bank.
- ARTHI, V. AND J. FENSKE (2018): "Polygamy and Child Mortality: Historical and Modern Evidence from Nigeria's Igbo," *Review of Economics of the Household*, 16, 97–141.
- ASADULLAH, M. N. AND Z. WAHHAJ (2019): "Female Seclusion from Paid Work: A Social Norm or Cultural Preference?" Working Papers ECARES 2019-10, ULB – Universite Libre de Bruxelles.
- ASHRAF, N., N. BAU, N. NUNN, AND A. VOENA (2020): "Bride Price and Female Education," *Journal of Political Economy*, 128, 591–641.
- BABER, R. E. (1934): "Marriage in Ancient China," *The Journal of Educational Sociology*, 8, 131–140.
- BAHRAMI-RAD, D. (2021): "Keeping It in the Family: Female Inheritance, Inmarriage, and the Status of Women," *Journal of Development Economics*, 153, 102714.
- BAKER, M. AND T. J. MICELI (2005): "Land Inheritance Rules: Theory and Cross-Cultural Analysis," Journal of Economic Behavior & Organization, 56, 77–102.

- BANERJEE, A., E. DUFLO, M. GHATAK, AND J. LAFORTUNE (2013): "Marry for What? Caste and Mate Selection in Modern India," *American Economic Journal: Microeconomics*, 5, 33–72.
- BANERJEE, A. V. (1992): "A Simple Model of Herd Behavior," *The Quarterly Journal* of *Economics*, 107, 797–817.
- BARGAIN, O., L. GONZÁLEZ, C. KEANE, AND B. ÖZCAN (2012): "Female Labor Supply and Divorce: New Evidence From Ireland," *European Economic Review*, 56, 1675–1691.
- BARR, A., M. DEKKER, W. JANSSENS, B. KEBEDE, AND B. KRAMER (2019): "Cooperation in Polygynous Households," American Economic Journal: Applied Economics, 11, 266–83.
- BAU, N. (2021): "Can policy change culture? Government Pension Plans and Traditional Kinship Practices," American Economic Review, 111, 1880–1917.
- BECKER, G. S. (1973): "A Theory of Marriage: Part I," *Journal of Political Economy*, 81, 813–846.
- (1974): "A Theory of Marriage: Part II," Journal of Political Economy, 82, S11–S26.
- BELLIDO, H. AND M. MARCÉN (2014): "Divorce Laws and Fertility," Labour Economics, 27, 56–70.
- BENYISHAY, A., P. GROSJEAN, AND J. VECCI (2017): "The Fish Is the Friend of Matriliny: Reef Density and Matrilineal Inheritance," *Journal of Development Economics*, 127, 234–249.
- BERNHEIM, B. D. AND S. SEVERINOV (2003): "Bequests as Signals: An Explanation for the Equal Division Puzzle," *Journal of Political Economy*, 111, 733–764.
- BERNHEIM, B. D., A. SHLEIFER, AND L. H. SUMMERS (1985): "The Strategic Bequest Motive," *Journal of Political Economy*, 93, 1045–1076.
- BERTOCCHI, G. (2006): "The Law of Primogeniture and the Transition From Landed Aristocracy to Industrial Democracy," *Journal of Economic Growth*, 11, 43–70.
- BERTOCCHI, G. AND M. BOZZANO (2015): "Family Structure and the Education Gender Gap: Evidence From Italian Provinces," *CESifo Economic Studies*, 61, 263– 300.

- BETHMANN, D. AND M. KVASNICKA (2011): "The Institution of Marriage," *Journal* of Population Economics, 24, 1005–1032.
- BETZIG, L. (1995): "Medieval Monogamy," Journal of Family History, 20, 181–216.
- BHALOTRA, S., A. CHAKRAVARTY, AND S. GULESCI (2020): "The Price of Gold: Dowry and Death in India," *Journal of Development Economics*, 143, 102413.
- BHARADWAJ, P. (2015): "Impact of Changes in Marriage Law Implications for Fertility and School Enrollment," *Journal of Human Resources*, 50, 614–654.
- BIANQUIS, T. (1996): "The Family in Arab Islam," in A History of the Family, ed. by A. Burguière, C. Klapisch-Zuber, M. Segalen, and F. Zonabend, Cambridge: Polity Press, vol. 1 of Distant Worlds, Ancient Worlds, 601–47.
- BIDNER, C. AND M. ESWARAN (2015): "A Gender-Based Theory of the Origin of the Caste System of India," *Journal of Development Economics*, 114, 142–158.
- BIDNER, C. AND P. FRANCOIS (2011): "Cultivating Trust: Norms, Institutions and the Implications of Scale," *Economic Journal*, 121, 1097–1129.
- BIDNER, C. AND J. KNOWLES (2020): "Marital Matching and the Distribution of Innate Ability," Working paper, Simon Fraser University.
- BIKHCHANDANI, S., D. HIRSHLEIFER, AND I. WELCH (1992): "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades," *Journal of Political Economy*, 100, 992–1026.
- BISIN, A., J. RUBIN, A. SEROR, AND T. VERDIER (2021): "Culture, Institutions & the Long Divergence," Working Paper 28488, National Bureau of Economic Research.
- BISIN, A. AND T. VERDIER (2017): "On the Joint Evolution of Culture and Institutions," Working Paper 23375, National Bureau of Economic Research.
- BLACK, D. A., S. G. SANDERS, AND L. J. TAYLOR (2007): "The Economics of Lesbian and Gay Families," *Journal of Economic Perspectives*, 21, 53–70.
- BLANK, R. M., K. K. CHARLES, AND J. M. SALLEE (2009): "A Cautionary Tale About the Use of Administrative Data: Evidence From Age of Marriage Laws," *American Economic Journal: Applied Economics*, 1, 128–49.
- BLOCH, F. AND V. RAO (2002): "Terror as a Bargaining Instrument: A Case Study of Dowry Violence in Rural India," *American Economic Review*, 92, 1029–1043.

- BLURTON JONES, N., F. MARLOWE, K. HAWKES, AND J. F. O'CONNELL (2000): "Hunter-Gatherer Divorce Rates and the Paternal Provisioning Theory of Human Monogamy," in Adaptation and Human Behavior: An Anthropological Perspective, ed. by L. Cronk, N. Chagnon, and W. Iron, New York: Aldine de Gruyter, 65–84.
- BORKER, G., J. EECKHOUT, N. LUKE, S. MINZ, K. MUNSHI, AND S. SWAMI-NATHAN (2017): "Wealth, Marriage, and Sex Selection," Working paper, ?
- BOSERUP, E. (1970): Women's Role in Economic Development, New York: St. Martin's Press.
- BOSWORTH, C. (1962): "A Turco-Mongol Practice Amongst the Early Ghaznavids?" Central Asiatic Journal, 237–240.
- BOTTICINI, M. AND A. SIOW (2003): "Why Dowries?" American Economic Review, 93, 1385–1398.
- BROWN, P. H. (2009): "Dowry and Intrahousehold Bargaining Evidence From China," Journal of Human Resources, 44, 25–46.
- BRUNDAGE, J. (2009): Law, Sex, and Christian Society in Medieval Europe, ACLS Humanities E-Book, University of Chicago Press.
- BRYAN, R. T. (1920): "The Divorce Law of China," American Bar Association Journal, 6, 218–223.
- BURDETT, K. AND M. G. COLES (1997): "Marriage and Class," *The Quarterly Jour*nal of Economics, 112, 141–168.
- BURSZTYN, L., G. EGOROV, AND S. FIORIN (2020a): "From Extreme to Mainstream: The Erosion of Social Norms," *American Economic Review*, 110, 3522–48.
- BURSZTYN, L., A. L. GONZÁLEZ, AND D. YANAGIZAWA-DROTT (2020b): "Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia," American Economic Review, 110, 2997–3029.
- BURSZTYN, L. AND R. JENSEN (2017): "Social Image and Economic Behavior in the Field: Identifying, Understanding, and Shaping Social Pressure," Annual Review of Economics, 9, 131–153.
- BURSZTYN, L. AND D. Y. YANG (2021): "Misperceptions about Others," Working Paper 29168, National Bureau of Economic Research.

- BURTON, M. L., C. C. MOORE, J. W. WHITING, A. K. ROMNEY, D. F. ABERLE, J. A. BARCELO, M. M. DOW, J. I. GUYER, D. B. KRONENFELD, J. E. LEVY, ET AL. (1996): "Regions Based on Social Structure," *Current Anthropology*, 37, 87– 123.
- CALVI, R. AND A. KESKAR (2021a): "Dowries, Resource Allocation, and Poverty," Journal of Economic Behavior & Organization, 192, 268–303.
- (2021b): "Til Dowry Do Us Part: Bargaining and Violence in Indian Families," Working paper, CEPR Discussion Papers.
- CANTARELLA, E. (2010): "Greek Law and the Family," in A Companion to Families in the Greek and Roman Worlds, ed. by B. Rawson, Blackwell Publishing Ltd, 331–345.
- CARPENTER, C. S., S. T. EPPINK, G. GONZALES, AND T. MCKAY (2021): "Effects of Access to Legal Same-Sex Marriage on Marriage and Health," *Journal of Policy Analysis and Management*, 40, 376–411.
- CASARI, M. AND M. LISCIANDRA (2016): "Gender Discrimination in Property Rights: Six Centuries of Commons Governance in the Alps," *Journal of Economic History*, 76, 559–594.
- CHEN, B., C. CAMPBELL, AND H. DONG (2018): "Interethnic Marriage in Northeast China, 1866–1913," *Demographic Research*, 38, 929–966.
- CHEN, S. AND J. C. VAN OURS (2018): "Subjective Well-being and Partnership Dynamics: Are Same-Sex Relationships Different?" *Demography*, 55, 2299–2320.
- (2020): "Symbolism matters: The effect of same-sex marriage legalization on partnership stability," *Journal of Economic Behavior Organization*, 178, 44–58.
- (2022): "Mental health effects of same-sex marriage legalization," *Health Economics*, 31, 42–56.
- CHEN, X. (2013): "To Explore the Marriage Ban Conditions on the Sight of Social Reformation of the Tang and Song Period," in 2013 International Conference on Advances in Social Science, Humanities, and Management (ASSHM-13), Atlantis Press, 771–776.
- CHIAPPORI, P., M. IYIGUN, J. LAFORTUNE, AND Y. WEISS (2017): "Changing the Rules Midway: The Impact of Granting Alimony Rights on Existing and Newly Formed Partnerships," *The Economic Journal*, 127, 1874–1905.

- CHOWDHURY, A. S. A. (1964): "The Problem of Representation in the Muslim Law of Inheritance," *Islamic Studies*, 3, 375–391.
- CHU, C. C. (1991): "Primogeniture," Journal of Political Economy, 99, 78–99.
- CISCATO, E., A. GALICHON, AND M. GOUSSÉ (2020): "Like Attract Like? A Structural Comparison of Homogamy across Same-Sex and Different-Sex Households," *Journal of Political Economy*, 128, 740–781.
- COHEN, L. (1987): "Marriage, Divorce, and Quasi Rents; Or," I Gave Him the Best Years of My Life"," *The Journal of Legal Studies*, 16, 267–303.
- COOTER, R. D. (1998): "Expressive Law and Economics," *The Journal of Legal Studies*, 27, 585–608.
- CORNO, L., N. HILDEBRANDT, AND A. VOENA (2020): "Age of Marriage, Weather Shocks, and the Direction of Marriage Payments," *Econometrica*, 88, 879–915.
- Cox, C. A. (2010): "Marriage in Ancient Athens," in A Companion to Families in the Greek and Roman Worlds, ed. by B. Rawson, Blackwell Publishing Ltd, 231–244.
- DE LA CROIX, D. AND F. MARIANI (2015): "From Polygyny to Serial Monogamy: A Unified Theory of Marriage Institutions," *The Review of Economic Studies*, 82, 565–607.
- DE NARDI, M. (2004): "Wealth Inequality and Intergenerational Links," *The Review* of *Economic Studies*, 71, 743–768.
- DEININGER, K., A. GOYAL, AND H. NAGARAJAN (2013): "Women's Inheritance Rights and Intergenerational Transmission of Resources in India," *Journal of Human Resources*, 48, 114–141.
- DESSY, S., L. TIBERTI, M. TIBERTI, AND D. ZOUNDI (2021): "Polygyny and Farm Households' Resilience to Climate Shocks," Working Paper 9663, The World Bank.
- DEWAN, T. AND S. WOLTON (2019): "A Political Economy of Social Discrimination," MPRA Paper 94394, University Library of Munich, Germany.
- DILLON, B. AND A. VOENA (2018): "Widows' Land Rights and Agricultural Investment," *Journal of Development Economics*, 135, 449–460.
- DIXON, S. (2010): "From Ceremonial to Sexualities: A Survey of Scholarship on Roman Marriage," in A Companion to Families in the Greek and Roman Worlds, ed. by B. Rawson, Blackwell Publishing Ltd, 245–261.

- Do, Q.-T., S. IYER, AND S. JOSHI (2013): "The Economics of Consanguineous Marriages," *Review of Economics and Statistics*, 95, 904–918.
- DOEPKE, M. AND M. TERTILT (2009): "Women's Liberation: What's in It for Men?" The Quarterly Journal of Economics, 124, 1541–1591.
- DOW, G. K., C. G. REED, AND S. WOODCOCK (2016): "The Economics of Exogamous Marriage in Small-Scale Societies," *Economic Inquiry*, 54, 1805–1823.
- Dué, P. H. (1964): "Origin and Historical Development of the Community Property System," *Louisiana Law Review*, 25, 78.
- DVORNIK, F. (1962): The Slavs in European History and Civilization, Rutgers University Press.
- EBENSTEIN, A. (2014): "Patrilocality and Missing Women," Working paper, Hebrew University of Jerusalem.
- EBENSTEIN, A. AND S. LEUNG (2010): "Son Preference and Access to Social Insurance: Evidence From China's Rural Pension Program," *Population and Development Review*, 36, 47–70.
- EBREY, P. B. (1993): The Inner Quarters: Marriage and the Lives of Chinese Women in the Sung Period, University of California Press.
- EDLUND, L. (2013): "The Role of Paternity Presumption and Custodial Rights for Understanding Marriage Patterns," *Economica*, 80, 650–669.
- (2018): "Cousin Marriage Is Not Choice: Muslim Marriage and Underdevelopment," in AEA Papers and Proceedings, vol. 108, 353–57.
- EDLUND, L. AND N.-P. LAGERLÖF (2006): "Individual Versus Parental Consent in Marriage: Implications for Intra-Household Resource Allocation and Growth," AEA Papers and Proceedings, 96, 304–307.
- EMBER, C. R. (1978): "Myths About Hunter-Gatherers," *Ethnology*, 17, 439–448.
- ENGEL, J. W. (1984): "Marriage in the People's Republic of China: Analysis of a New Law," *Journal of Marriage and the Family*, 955–961.
- ENKE, B. (2019): "Kinship, Cooperation, and the Evolution of Moral Systems," *The Quarterly Journal of Economics*, 134, 953–1019.
- ESPOSITO, J. L. (1975): "Women's Rights in Islam," Islamic Studies, 14, 99–114.

- FAITH, R. J. (1966): "Peasant Families and Inheritance Customs in Medieval England," The Agricultural History Review, 14, 77–95.
- FERNÁNDEZ, R. (2014): "Women's Rights and Development," Journal of Economic Growth, 19, 37–80.
- (2018): "Family and Gender: Questions for the New Institutional Economics," in A Research Agenda for New Institutional Economics, ed. by C. Ménard and M. M. Shirley, Edward Elgar Publishing, 189–195.
- FERNÁNDEZ, R. AND R. ROGERSON (2001): "Sorting and Long-Run Inequality," *The Quarterly Journal of Economics*, 116, 1305–1341.
- FERNÁNDEZ, R. AND J. WONG (2014a): "Unilateral Divorce, the Decreasing Gender Gap, and Married Women's Labor Force Participation," *American Economic Review*, *Papers and Proceedings*, 104, 342–47.
- FERNÁNDEZ, R. AND J. C. WONG (2014b): "Divorce risk, wages and working wives: A quantitative life-cycle analysis of female labour force participation," *The Economic Journal*, 124, 319–358.

— (2017): "Free to Leave? A Welfare Analysis of Divorce Regimes," *American Economic Journal: Macroeconomics*, 9, 72–115.

- FERNÁNDEZ-VILLAVERDE, J., N. GUNER, AND J. GREENWOOD (2014): "From Shame to Game in One Hundred Years: An Economic Model of the Rise in Premarital Sex and its De-stigmatization," *Journal of the European Economic Association*, 12, 25–61.
- FIELD, E. AND A. AMBRUS (2008): "Early Marriage, Age of Menarche, and Female Schooling Attainment in Bangladesh," *Journal of Political Economy*, 116, 881–930.
- FORTUNATO, L. (2011): "Reconstructing the History of Marriage Strategies in Indo-European-Speaking Societies: Monogamy and Polygyny," *Human Biology*, 87–105.

— (2012a): "The Evolution of Matrilineal Kinship Organization," Proceedings of the Royal Society B: Biological Sciences, 279, 4939–4945.

——— (2012b): "The evolution of matrilineal kinship organization," *Proceedings of the Royal Society B: Biological Sciences*, 279, 4939–4945.

—— (2015): "Evolution of Marriage Systems," in International Encyclopedia of the Social & Behavioral Sciences, ed. by J. Wright, Elsevier, vol. 14, 611–619, 2 ed.

- FORTUNATO, L. AND M. ARCHETTI (2010): "Evolution of monogamous marriage by maximization of inclusive fitness," *Journal of Evolutionary Biology*, 23, 149–156.
- Fox, R. (1967): Kinship and Marriage, Penguin.
- FRYER, ROLAND G., J. (2007): "Guess Who's Been Coming to Dinner? Trends in Interracial Marriage over the 20th Century," *Journal of Economic Perspectives*, 21, 71–90.
- GARCÍA-RAMOS, A. (2021): "Divorce Laws and Intimate Partner Violence: Evidence From Mexico," *Journal of Development Economics*, 150, 102623.
- GARDNER, J. F. (1991): Women in Roman Law and Society, New York: Indiana University Press, reprint ed.
- GEDDES, R. AND D. LUECK (2002): "The Gains From Self-Ownership and the Expansion of Women's Rights," *American Economic Review*, 92, 1079–1092.
- GHOSH, A., S. I. M. HWANG, AND M. SQUIRES (2021): "Economic Consequences of Kinship: Evidence From US Bans on Cousin Marriage," Working paper, University of British Columbia.
- GLASSMAN, R. M. (2017): The Origins of Democracy in Tribes, City-States and Nation-States, Springer.
- GLENDON, M. A. (1989): The Transformation of Family Law: State, Law, and Family in the United States and Western Europe, University of Chicago Press.
- GNEEZY, U., K. L. LEONARD, AND J. A. LIST (2009): "Gender Differences in Competition: Evidence From a Matrilineal and a Patriarchal Society," *Econometrica*, 77, 1637–1664.
- GONG, B. AND C.-L. YANG (2012): "Gender Differences in Risk Attitudes: Field Experiments on the Matrilineal Mosuo and the Patriarchal Yi," *Journal of Economic Behavior & Organization*, 83, 59–65.
- GONZÁLEZ, L. AND T. K. VIITANEN (2009): "The Effect of Divorce Laws on Divorce Rates in Europe," *European Economic Review*, 53, 127–138.
- GOODY, J. (1971): "Class and Marriage in Africa and Eurasia," *American Journal of Sociology*, 76, 585–603.
- (1973): "Bridewealth and Dowry in Africa and Eurasia," in *Bridewealth and dowry*, ed. by J. Goody and S. J. Tambiah, Cambridge University Press, 1–58.

(1983): The Development of the Family and Marriage in Europe, Cambridge University Press.

(1990): The Oriental, the Ancient and the Primitive: Systems of Marriage and the Family in the Pre-industrial Societies of Eurasia, Cambridge University Press.

— (2000): The European Family, Wiley-Blackwell.

- GOULD, E. D., O. MOAV, AND A. SIMHON (2008): "The Mystery of Monogamy," American Economic Review, 98, 333–57.
- GRAY, J. S. (1998): "Divorce-Law Changes, Household Bargaining, and Married Women's Labor Supply," *The American Economic Review*, 88, 628–642.
- GREENGUS, S. (1969): "The Old Babylonian Marriage Contract," Journal of the American Oriental Society, 505–532.
- GREIF, A. (2006a): "Family Structure, Institutions, and Growth: The Origins and Implications of Western Corporations," *AEA Papers and Proceedings*, 96, 308–312.
- (2006b): Institutions and the Path to the Modern Economy: Lessons From Medieval Trade, Cambridge University Press.
- GREIF, A. AND G. TABELLINI (2017): "The Clan and the Corporation: Sustaining Cooperation in China and Europe," *Journal of Comparative Economics*, 45, 1–35.
- HANDRAHAN, L. (2004): "Hunting for Women: Bride-kidnapping in Kyrgyzstan," International Feminist Journal of Politics, 6, 207–233.
- HANSEN, M. E., M. E. MARTELL, AND L. RONCOLATO (2020): "A labor of love: The impact of same-sex marriage on labor supply," *Review of Economics of the Household*, 18, 265–283.
- HARARI, M. (2019): "Women's Inheritance Rights and Bargaining Power: Evidence From Kenya," *Economic Development and Cultural Change*, 68, 189–238.
- HARRELL, S. (1997): Human Families, Boulder: Westview Press.
- HEATH, R., M. HIDROBO, AND S. ROY (2020): "Cash Transfers, Polygamy, and Intimate Partner Violence: Experimental Evidence From Mali," *Journal of Development Economics*, 143, 102410.
- HEATH, R. AND X. TAN (2020): "Intrahousehold Bargaining, Female Autonomy, and Labor Supply: Theory and Evidence From India," *Journal of the European Economic* Association, 18, 1928–1968.

- HENRICH, J. (2020): The WEIRDest People in the World: How the West Became Psychologically Peculiar and Particularly Prosperous, Farrar, Straus and Giroux.
- HENRICH, J., R. BOYD, AND P. J. RICHERSON (2012): "The Puzzle of Monogamous Marriage," *Philosophical Transactions of the Royal Society B: Biological Sciences*, 367, 657–669.
- HILLER, V. AND M. RECOULES (2013): "Changes in Divorce Patterns: Culture and the Law," *International Review of Law and Economics*, 34, 77–87.
- HODGETT, G. (2005): A Social and Economic History of Medieval Europe, Economic History, Routledge.
- HOEHN-VELASCO, L. AND J. PENGLASE (2021): "Does unilateral divorce impact women's labor supply? Evidence From Mexico," *Journal of Economic Behavior & Organization*, 187, 315–347.
- HOFFMAN, M., U. GNEEZY, AND J. A. LIST (2011): "Nurture Affects Gender Differences in Spatial Abilities," *Proceedings of the National Academy of Sciences*, 108, 14786–14788.
- HOLDEN, C. J. AND R. MACE (2003): "Spread of Cattle Led to the Loss of Matrilineal Descent in Africa: A Coevolutionary Analysis," *Proceedings of the Royal Society of* London. Series B: Biological Sciences, 270, 2425–2433.
- HOLDEN, L. (2016): Hindu Divorce: A Legal Anthropology, Routledge.
- HOLMGREN, J. (1986): "Observations on Marriage and Inheritances Practices in Early Mongol and Yüan Society, With Particular Reference to the Levirate," *Journal of* Asian History, 20, 127–192.
- HORNBECK, R. (2010): "Barbed Wire: Property Rights and Agricultural Development," *The Quarterly Journal of Economics*, 125, 767–810.
- HOTTE, R. AND K. MARAZYAN (2020): "Demand for Insurance and Within-Kin-Group Marriages: Evidence From a West-African Country," *Journal of Development Economics*, 146, 102489.
- HUANG, F., G. Z. JIN, AND L. C. XU (2012): "Love and Money by Parental Matchmaking: Evidence From Urban Couples in China," *American Economic Review*, Papers and Proceedings, 102, 555–60.

- JACOBY, H. G. (1995): "The Economics of Polygyny in Sub-Saharan Africa: Female Productivity and the Demand for Wives in Côte d'Ivoire," *Journal of Political Econ*omy, 103, 938–971.
- JACOBY, H. G. AND G. MANSURI (2010): "Watta Satta: Bride Exchange and Women's Welfare in Rural Pakistan," *American Economic Review*, 100, 1804–25.
- JIANG, Q. AND J. J. SÁNCHEZ-BARRICARTE (2012): "Bride Price in China: The Obstacle to 'Bare Branches' Seeking Marriage," *The History of the Family*, 17, 2–15.
- JOHNSON, J. H. (1994): ""Annuity Contracts" and Marriage," in *For His Ka: Essays* Offered in Memory of Klaus Baer, ed. by D. P. Silverman, Chicago: Oriental Institute of the University of Chicago, 113–32.
- KANG, X. (1999): "The Fox [hu] and the Barbarian [hu]: Unraveling Representations of the Other in Late Tang Tales," *Journal of Chinese Religions*, 27, 35–67.
- KERN, F. (1948): Kingship and Law in the Middle Ages, tr. SB Chrimes, Oxford: Blackwell.
- KHALIL, U. AND S. MOOKERJEE (2019): "Patrilocal Residence and Women's Social Status: Evidence From South Asia," *Economic Development and Cultural Change*, 67, 401–438.
- KLEINBACH, R. AND L. SALIMJANOVA (2007): "Kyz Ala Kachuu and Adat: Nonconsensual Bride Kidnapping and Tradition in Kyrgyzstan," *Central Asian Survey*, 26, 217–233.
- KOTLIKOFF, L. J. (1988): "Intergenerational Transfers and Savings," *Journal of Economic Perspectives*, 2, 41–58.
- KOTLIKOFF, L. J. AND L. H. SUMMERS (1981): "The Role of Intergenerational Transfers in Aggregate Capital Accumulation," *Journal of Political Economy*, 89, 706–732.
- KURAN, T. (2018): "Islam and Economic Performance: Historical and Contemporary Links," *Journal of Economic Literature*, 56, 1292–1359.
- LA FERRARA, E. AND A. MILAZZO (2017): "Customary Norms, Inheritance, and Human Capital: Evidence From a Reform of the Matrilineal System in Ghana," *American Economic Journal: Applied Economics*, 9, 166–85.
- LAFORTUNE, J. AND C. LOW (2017): "Tying the Double-Knot: The Role of Assets in Marriage Commitment," American Economic Review, Papers and Proceedings, 107, 163–67.

— (2020): "Collateralized Marriage," Working Paper 27210, National Bureau of Economic Research.

- LAGERLÖF, N.-P. (2010): "Pacifying Monogamy," Journal of Economic Growth, 15, 235–262.
- LALUEZA-FOX, C., A. ROSAS, A. ESTALRRICH, E. GIGLI, P. F. CAM-POS, A. GARCÍA-TABERNERO, S. GARCÍA-VARGAS, F. SÁNCHEZ-QUINTO, O. RAMÍREZ, S. CIVIT, ET AL. (2011): "Genetic Evidence for Patrilocal Mating Behavior Among Neandertal Groups," *Proceedings of the National Academy of Sciences*, 108, 250–253.
- LANDES, D. S. (2006): "Why Europe and the West? Why Not China?" Journal of Economic Perspectives, 20, 3–22.
- LE PATOUREL, J. (1971): "The Norman Succession, 996-1135," *The English Historical Review*, 86, 225–250.
- LEESON, P. T. AND J. PIERSON (2017): "Economic Origins of the No-Fault Divorce Revolution," *European Journal of Law and Economics*, 43, 419–439.
- LEGROS, P. AND A. F. NEWMAN (2007): "Beauty Is a Beast, Frog Is a Prince: Assortative Matching With Nontransferabilities," *Econometrica*, 75, 1073–1102.
- LOWES, S. (2020): "Matrilineal Kinship and Spousal Cooperation: Evidence From the Matrilineal Belt," Working paper, Stanford University and CIFAR.
- LOWES, S. AND N. NUNN (2017): "Bride Price and the Wellbeing of Women," Working Paper 2017/131, UNU-WIDER.
- LUNDBERG, S., R. A. POLLAK, AND J. STEARNS (2016): "Family Inequality: Diverging Patterns in Marriage, Cohabitation, and Childbearing," *Journal of Economic Perspectives*, 30, 79–102.
- MAKINO, M. (2019): "Marriage, Dowry, and Women's Status in Rural Punjab, Pakistan," *Journal of Population Economics*, 32, 769–797.
- MANSKI, C. F. (1993): "Identification of Endogenous Social Effects: The Reflection Problem," *The Review of Economic Studies*, 60, 531–542.
- MASHHOUR, A. (2005): "Islamic Law and Gender Equality Could There Be a Common Ground: A Study of Divorce and Polygamy in Sharia Law and Contemporary Legislation in Tunisia and Egypt," *Human Rights Quarterly*, 27, 562.

- MATOUSCHEK, N. AND I. RASUL (2008): "The Economics of the Marriage Contract: Theories and Evidence," *The Journal of Law and Economics*, 51, 59–110.
- MCADAMS, R. H. (2015): The Expressive Powers of Law: Theories and Limits, Harvard University Press.
- MCGAVOCK, T. (2021): "Here waits the bride? The Effect of Ethiopia's Child Marriage Law," *Journal of Development Economics*, 149, 102580.
- MEYERSSON, E. (2014): "Islamic Rule and the Empowerment of the Poor and Pious," *Econometrica*, 82, 229–269.
- MICHALOPOULOS, S., A. NAGHAVI, AND G. PRAROLO (2016): "Islam, Inequality and Pre-Industrial Comparative Development," *Journal of Development Economics*, 120, 86–98.
- MILLER, W. L. (1980): "Primogeniture, Entails, and Endowments in English Classical Economics," *History of Political Economy*, 12, 558–581.
- MOBARAK, A. M., R. KUHN, AND C. PETERS (2013): "Consanguinity and Other Marriage Market Effects of a Wealth Shock in Bangladesh," *Demography*, 50, 1845– 1871.
- MOSCONA, J., N. NUNN, AND J. A. ROBINSON (2017): "Keeping It in the Family: Lineage Organization and the Scope of Trust in Sub-Saharan Africa," *American Economic Review*, 107, 565–71.
- ——— (2020): "Segmentary Lineage Organization and Conflict in Sub-Saharan Africa," Econometrica, 88, 1999–2036.
- MUNSHI, K. (2019): "Caste and the Indian Economy," *Journal of Economic Literature*, 57, 781–834.
- MUNSHI, K. AND M. ROSENZWEIG (2009): "Why Is Mobility in India So Low? Social Insurance, Inequality, and Growth," Working Paper 14850, National Bureau of Economic Research.
- MURDOCK, G. P. (1957): "World Ethnographic Sample," American Anthropologist, 59, 664–687.

— (1967): *Ethnographic Atlas*, Pittsburgh: University of Pittsburgh.

MURDOCK, G. P. AND D. R. WHITE (1969): "Standard Cross-Cultural Sample," *Ethnology*, 8, 329–369.

- NASIR, J. J. (2002): The Islamic Law of Personal Status, Brill.
- NAZZARI, M. (1991): Disappearance of the Dowry: Women, Families, and Social Change in São Paulo, Brazil, 1600-1900, Stanford University Press.
- NEWTON, D. (2016): Same-Sex Marriage: A Reference Handbook, 2nd Edition, Contemporary World Issues, ABC-CLIO.
- NORTH, D. (1990): Institutions, Institutional Change and Economic Performance, Cambridge university press.
- NORTH, D. C. (1981): Structure and Change in Economic History, New York: Norton.
- NUNN, N. (2012): "Culture and the Historical Process," *Economic History of Developing Regions*, 27, 108–126.
- (2020): "History as Evolution," Working Paper 27706, National Bureau of Economic Research.
- NUTINI, H. G. (1968): San Bernardino Contla: Marriage and Family Structure in a Tlaxcalan Municipio, University of Pittsburgh Press.
- PENG, Y. (2010): "When Formal Laws and Informal Norms Collide: Lineage Networks versus Birth Control Policy in China," *American Journal of Sociology*, 116, 770–805.
- PESTMAN, P. W. (1961): Marriage and Matrimonial Property in Ancient Egypt, The Netherlands: E.J. Brill.
- PETERS, M. AND A. SIOW (2002): "Competing Premarital Investments," *Journal of Political Economy*, 110, 592–608.
- PLATTEAU, J.-P. AND Z. WAHHAJ (2014): "Chapter 22 Strategic Interactions Between Modern Law and Custom," in *Handbook of the Economics of Art and Culture*, ed. by V. A. Ginsburgh and D. Throsby, Elsevier, vol. 2 of *Handbook of the Economics* of Art and Culture, 633–678.
- QUALE, G. R. (1988): A History of Marriage Systems, New York: Greenwood Press.
- RADCLIFFE-BROWN, A. R. (1935): "Patrilineal and Matrilineal Succession," *Iowa Law Review*, 20, 286.
- RADFORD, M. F. (2000): "Inheritance Rights of Women under Jewish and Islamic Law," Boston College International and Comparative Law Review, 23, 135–184.

- RANGEL, M. A. (2006): "Alimony Rights and Intrahousehold Allocation of Resources: Evidence From Brazil," *The Economic Journal*, 116, 627–658.
- RAWSON, B., ed. (1991): Marriage, Divorce, and Children in Ancient Rome, Oxford University Press.
- REHMAN, J. (2007): "The Sharia, Islamic Family Laws and International Human Rights Law: Examining the Theory and Practice of Polygamy and Talaq," *International Journal of Law, Policy and the Family*, 21, 108–127.
- ROBICHAUX, D. L. (1997): "Residence Rules and Ultimogeniture in Tlaxcala and Mesoamerica," *Ethnology*, 149–171.
- ROMNEY, A. K. (1967): "Kinship and Family," in *Handbook of Middle American Indians*, ed. by M. Nash and R. Wauchope, University of Texas Press, vol. 6, 207– 237.
- ROSENBLUM, D. (2015): "Unintended Consequences of Women's Inheritance Rights on Female Mortality in india," *Economic Development and Cultural Change*, 63, 223–248.
- ROSENZWEIG, M. R. AND O. STARK (1989): "Consumption Smoothing, Migration, and Marriage: Evidence From Rural India," *Journal of Political Economy*, 97, 905– 926.
- Rossi, P. (2019): "Strategic Choices in Polygamous Households: Theory and Evidence From Senegal," *The Review of Economic Studies*, 86, 1332–1370.
- ROY, S. (2015): "Empowering Women? Inheritance Rights, Female Education and Dowry Payments in India," *Journal of Development Economics*, 114, 233–251.
- RUBIN, J. (2017): Rulers, Religion, and Riches: Why the West Got Rich and the Middle East Did Not, Cambridge University Press.
- SALLER, R. P. (1984): "Roman Dowry and the Devolution of Property in the Principate," *The Classical Quarterly*, 34, 195–205.
- (1994): Patriarchy, Property and Death in the Roman Family, vol. 25, Cambridge University Press.
- SANSONE, D. (2019): "Pink work: Same-sex marriage, employment and discrimination," Journal of Public Economics, 180, 104086.

- SCHEIDEL, W. (2009): "A Peculiar Institution? Greco-Roman Monogamy in Global Context," *The History of the Family*, 14, 280–291.
- SCHULZ, J. (2020): "Kin-Networks and Institutional Development," Working paper, George Mason University and CeDEx, available at SSRN: http://dx.doi.org/10.2139/ssrn.2877828.
- SCHULZ, J. F., D. BAHRAMI-RAD, J. P. BEAUCHAMP, AND J. HENRICH (2019): "The Church, Intensive Kinship, and Global Psychological Variation," *Science*, 366.
- SEKHRI, S. AND A. STOREYGARD (2014): "Dowry Deaths: Response to Weather Variability in India," *Journal of Development Economics*, 111, 212–223.
- SHAW, B. D. AND R. P. SALLER (1984): "Close-Kin Marriage in Roman Society?" Man, 432–444.
- SHENK, M. K., M. C. TOWNER, E. A. VOSS, AND N. ALAM (2016): "Consanguineous Marriage, Kinship Ecology, and Market Transition," *Current Anthropology*, 57, S167–S180.
- SHIMER, R. AND L. SMITH (2000): "Assortative Matching and Search," *Econometrica*, 68, 343–369.
- SRINIVASAN, S. AND A. S. BEDI (2007): "Domestic Violence and Dowry: Evidence From a South Indian Village," *World Development*, 35, 857–880.
- STEINER, S. AND C. M. BECKER (2019): "How Marriages Based on Bride Capture Differ: Evidence From Kyrgyzstan," *Demographic Research*, 41, 579–592.
- STEVENSON, B. (2007): "The Impact of Divorce Laws on Marriage-Specific Capital," Journal of Labor Economics, 25, 75–94.
- STEVENSON, B. AND J. WOLFERS (2006): "Bargaining in the Shadow of the Law: Divorce Laws and Family Distress," *The Quarterly Journal of Economics*, 121, 267–288.
- STOL, M. (1995): "Women in Mesopotamia," Journal of the Economic and Social History of the Orient, 123–144.

(2016): Women in the Ancient Near East, De Gruyter.

STOLER, A. L. (1989): "Making Empire Respectable: The Politics of Race and Sexual Morality in 20th-Century Colonial Cultures," *American Ethnologist*, 16, 634–660.

- SUNSTEIN, C. R. (1996): "On the Expressive Function of Law," University of Pennsylvania Law Review, 144, 2021–2053.
- SÁNCHEZ DE LA SIERRA, R. (2020): "On the Origins of the State: Stationary Bandits and Taxation in Eastern Congo," *Journal of Political Economy*, 128, 32–74.
- TABELLINI, G. (2008): "The Scope of Cooperation: Values and Incentives*," *The Quarterly Journal of Economics*, 123, 905–950.
- TAMBIAH, S. J. (1973): "Dowry and Bridewealth and the Property Rights of Women in South Asia," in *Bridewealth and dowry*, ed. by J. Goody and S. J. Tambiah, Cambridge University Press, 59–166.
- TERTILT, M. (2005): "Polygyny, Fertility, and Savings," Journal of Political Economy, 113, 1341–1371.
- (2006): "Polygyny, Women's Rights, and Development," Journal of the European Economic Association, 4, 523–530.
- THURSTON, H. (1904): "The Canon Law of the Divorce," *The English Historical Review*, 19, 632–645.
- TOBI, Y. (1994): "Inheritance Rights of Jewish Women and Moslem Women in Yemen," in *Proceedings of the Seminar for Arabian Studies*, JSTOR, vol. 24, 201–208.
- TUR-PRATS, A. (2019): "Family Types and Intimate Partner Violence: A Historical Perspective," *Review of Economics and Statistics*, 101, 878–891.
- VOENA, A. (2015): "Yours, Mine, and Ours: Do Divorce Laws Affect the Intertemporal Behavior of Married Couples?" *American Economic Review*, 105, 2295–2332.
- VOIGTLÄNDER, N. AND H.-J. VOTH (2013): "How the West "Invented" Fertility Restriction," *American Economic Review*, 103, 2227–64.
- WAHHAJ, Z. (2018): "An Economic Model of Early Marriage," Journal of Economic Behavior & Organization, 152, 147–176.
- WALKER, R. S., K. R. HILL, M. V. FLINN, AND R. M. ELLSWORTH (2011): "Evolutionary History of Hunter-Gatherer Marriage Practices," *PloS One*, 6, e19066.
- WALLACE-HADRILL, A. (1981): "Family and Inheritance in the Augustan Marriage Laws," *The Cambridge Classical Journal*, 27, 58–80.

- WEGGE, S. A. (1999): "To Part or Not to Part: Emigration and Inheritance Institutions in Nineteenth-Century Hesse–Cassel," *Explorations in Economic History*, 36, 30–55.
- WEI, S.-J. AND X. ZHANG (2011): "The Competitive Saving Motive: Evidence From Rising Sex Ratios and Savings Rates in China," *Journal of Political Economy*, 119, 511–564.
- WERNER, C. (2009): "Bride Abduction in Post-Soviet Central Asia: Marking a Shift Towards Patriarchy Through Local Discourses of Shame and Tradition," *Journal of* the Royal Anthropological Institute, 15, 314–331.
- WHEATON, B. (2020): "Laws, Beliefs, and Backlash," Working paper, Harvard University.
- WOLFERS, J. (2006): "Did Unilateral Divorce Laws Raise Divorce Rates? A Reconciliation and New Results," *American Economic Review*, 96, 1802–1820.
- WOLFF, H. J. (1944): "Marriage Law and Family Organization in Ancient Athens: A Study on the Interrelation of Public and Private Law in the Greek City," *Traditio*, 43–95.
- WOOD, N. R. (1947): "Marriage and Divorce Laws," Women Law Journal, 33, 23.
- YOUNG, H. P. (1996): "The Economics of Convention," Journal of Economic Perspectives, 10, 105–122.
- (2011): "The Dynamics of Social Innovation," *Proceedings of the National Academy of Sciences*, 108, 21285–21291.
- ZHANG, J. AND W. CHAN (1999): "Dowry and Wife's Welfare: A Theotrical and Empirical Analysis," *Journal of Political Economy*, 107, 786–808.