

Families and the Wealth of Nations
*What Does Family Structure Have to Do with Growth around
the Globe?*

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One of the ironies of contemporary economics is that a discipline that has its roots in the Greek term, *Oikonomikos*, or household rules, has devoted so little attention to the familial origins of contemporary macroeconomic growth. Recent research on the sources of economic growth has instead focused largely on human capital (e.g., education) (Aghion et al. 2009), public policies (e.g., taxes and regulatory burdens) (Padovano and Galli 2001), and social norms (e.g., trust) (Bjornskov 2012; Young 1995) as drivers of growth. Important as these factors may be for growth, however, we believe that the culture, character, and composition of families in a society also matter for growth.

The importance of family composition (i.e., family structure) is the most novel of these claims. It is already recognized that the culture and character of families in different nations matter when it comes to economic growth. The East Asian family emphasis on education, for instance, may help explain the tremendous economic expansion enjoyed by the Asian tigers in the last half-century, insofar as high levels of human capital in countries such as Japan, South Korea, and Taiwan aided their rise (Hofstede and Bond 1988; Marginson 2011; Shin 2012). Undoubtedly, other features of parenting and family life are linked to patterns of economic growth across the globe as well.

We focus here on the role that family structure plays in economic growth, in particular, on how the prevalence of marriage and two-parent families is correlated with economic growth. A stable marriage matters in part because it allows couples to make decisions over time that maximize the economic prosperity of their family unit. Stably married persons have incentives to invest in their marriage and benefit from specialization and economies of

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scale; their households also tend to earn and save more than their peers who are unmarried or divorced (Stevenson and Wolfers 2007; Lerman and Wilcox 2014). Marriage also has a transformative effect on individuals, especially men. It seems to increase men's productivity at and attachment toward work, and reduces men's willingness to engage in risky behaviors, including criminal activity (Akerlof 1998; Nock 1998; Sampson, Laub, and Wimer 2006). What is more, it looks like married parenthood may be especially influential in encouraging men's engagement in the labor force (Killewald 2012). In the aggregate, then, higher levels of marriage, and probably two-parent families, should boost men's labor force participation and reduce criminal violence, both to the benefit of national economies. At the same time, insofar as motherhood tends to reduce women's participation in the labor force (Budig and England 2001), we also explore the possibility that higher rates of marriage and two-parent families reduce growth. Finally, higher rates of intact marriage foster stable two-parent families, which are more likely than single parents to supply children with the human capital they need to thrive first in school and later in the labor force (Lerman and Wilcox 2014; McLanahan and Sandefur 1994). Accordingly, the more children are born and raised in stable, two-parent families, the more a society should experience economic growth.

MARRIAGE, FAMILY, AND ECONOMIC GROWTH

The Noble Laureate, Robert Lucas Jr., has noted that once one starts to think about economic growth, it becomes hard to think about anything else (Lucas 1988). His comment reflects the fact that even small differences in economic growth rates can accumulate into very large differences in standards of living over time. Nations that create even small improvements in economic growth rates will see dramatic improvements in economic prosperity over time.

Previous research suggests that higher levels of household income and savings, male labor force participation, low levels of violent crime, and educational attainment all potentially play a role in fostering the conditions for economic growth. Here, we consider the ways in which marriage and the proportion of two-parent families in a nation may influence these factors. In this analysis, two-parent families include both married and cohabiting couples with children. Our assumption is that any effects of family structure on cross-national economic growth may be mediated in part by these mechanisms. That is, higher rates of marriage and two-parent families may foster more household income and savings, male labor force participation, public safety, and educational attainment among children, and in ways that – in turn –

promote higher rates of economic growth. At the same time, more marriage and a higher proportion of two-parent families might also inhibit growth, insofar as they reduce female labor force participation. In this section, we explore associations between the proportion of children living in two-parent families and these potential mechanisms through which we expect stable families to encourage growth. In the section that follows, we test for net effects of family structure on economic growth, controlling for country-specific fixed effects and time-varying country-level characteristics that are also likely to contribute to economic growth.

Household Income and Savings

Compared to single individuals, married households enjoy greater economies of scale, often access to more income, and higher savings rates. One might note that marriage creates a mechanical bias in household income since there are two potential earners in the family compared with only one potential earnings' stream in households with a single adult. That is exactly the point. Marriage can create two sources of income and allows the household to take advantage of economies of scale (Lerman and Wilcox 2014). Even in married households where only one spouse is in the labor force, the presence of both individuals allow them to specialize to maximize the welfare of the household and provide a natural source of insurance if the primary earner loses his or her job (since the spouse that was previously not working can enter the labor force to provide additional income) (Becker 1993). All these things are conducive to growth because they foster positive economic outcomes at the household level (which can aggregate up to the national level) (Samuelson and Modigliani 1966). They may also promote economic growth by encouraging a stronger work ethic and by reducing the need for government-funded social welfare programs (Plümper and Martin 2003).

Even compared to comparable cohabiting couples, married couples have an economic advantage. Because they enjoy more commitment and, in many cases, more legal recognition and benefits, married couples enjoy more stability. New research from the Social Trends Institute, for instance, indicates both that cohabiting families are less stable than married families in much of Europe and North America, even when they have children together, and that the growth of cohabitation across much of the globe is linked to increased family instability in countries around the world (DeRose et al. 2017). If research in the United States is representative of trends across the globe, marriage's comparative advantage in commitment and stability should

translate into higher levels of savings; married couples are also less likely to incur expenses from a union dissolution, insofar as union instability is markedly higher in cohabiting families than in married families (DeRose et al. 2017). Indeed, stably married Americans typically accumulate more assets than men and women who are single, divorced, remarried, or cohabiting, even controlling for a range of background factors (Lupton and Smith 2003; Wilmoth and Koso 2002). The income, savings, and stability advantages associated with marriage should help to explain any advantages that countries with more married adults and families enjoy, compared to countries with more single or cohabiting adults.

Finally, the links between marriage and economic growth should also be paralleled when we turn our attention to the proportion of two-parent families in a society. Specifically, a greater proportion of two-parent families – especially when such families are stable – should promote economies of scale, income pooling, and higher levels of savings in societies across the globe. That is, we expect that adults in two-parent families are more likely to pool income and devote more money to savings than adults living by themselves or heading up single-parent families.

So, what does the cross-national evidence suggest about the links between marriage, two-parent families, and household economic patterns? We do not have access to data about household income in countries across the globe, but data taken from the World Bank, the Organisation for Economic Co-operation and Development (OECD), and the Demographic and Health Surveys (DHS) indicate an association between family structure and one important economic outcome, the savings rate, conducive to growth. (For a list of the countries and years included in our data analyses for Figures 8.1, 8.3, 8.4, 8.5, as well as for Tables 8.1 and Table 8.2, please see our online Appendix, Table 8A.1: <http://sociology.virginia.edu/media/2696>.) Specifically, Figure 8.1 indicates that the proportion of children living in two-parent families is associated with higher savings rates in nations across the globe. That is, in more than ninety countries, countries that have more children living in two-parent families also have higher rates of savings. This pattern is consistent with our hypothesis that two-parent families foster economic behaviors conducive to economic growth. Marriage is associated with two-parent families, but future research will have to determine if marriage itself has a similar relationship with household saving. However, in general, we suspect that strong and stable families foster patterns of household income and savings, both of which promote economic growth at the national level.

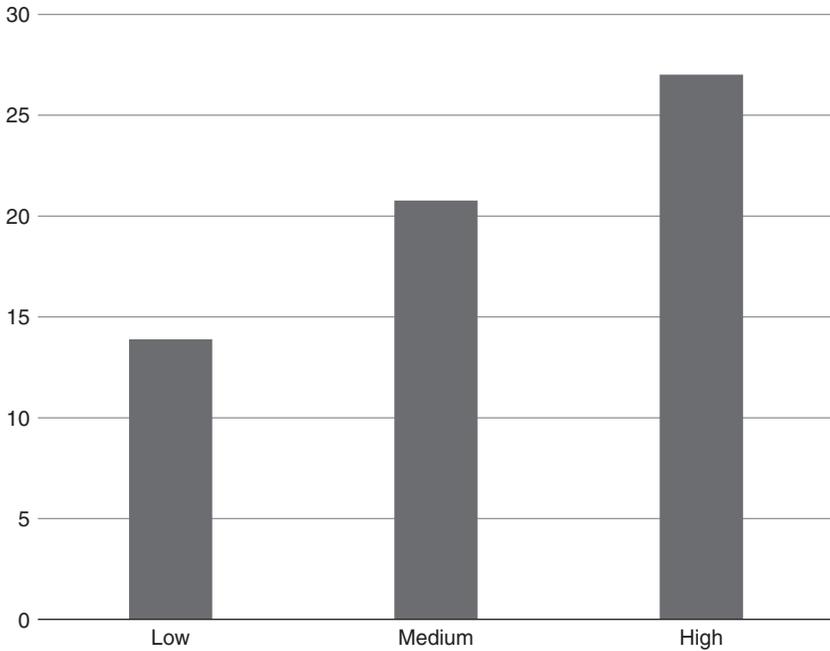


FIGURE 8.1 Gross savings as percentage of GDP, by proportion of children being raised by two parents: 2001–2015

Note: The y-axis in this figure provides the gross saving rates as a percent of GDP (World Bank national accounts data for 2001–2015). The x-axis splits the sample of countries into terciles based on the fraction of children being raised by two parents based on data from the World Bank, OECD, and the DHS. The sample includes 429 country-year observations from 90 countries representing the following regions: Africa (30), the Americas (11), Asia (16), Europe (30), and Oceania (3).

Male and Female Labor Force Participation

The research on men and work in the United States indicates that marriage tends to have a transformative impact on men. After marrying, men tend to work harder, smarter, and more successfully; they also are more likely to steer clear of risky activities (Nock 1998; Lerman and Wilcox 2014). In the words of Nobel laureate George Akerlof (1998, p. 290), “men settle down when they get married,” adding, “Married men are much more attached to the labor force; they have less substance abuse; they commit less crime, are less likely to become the victims of crime, have better health, and are less accident prone.”

The United States experience is instructive here. Over the last forty years, the drop in male labor force participation has been largest among men who are not married (see also Chapter 5). In Figure 8.2, we plot the fraction of men by family status from 1979 to 2013. This figure indicates that married fathers

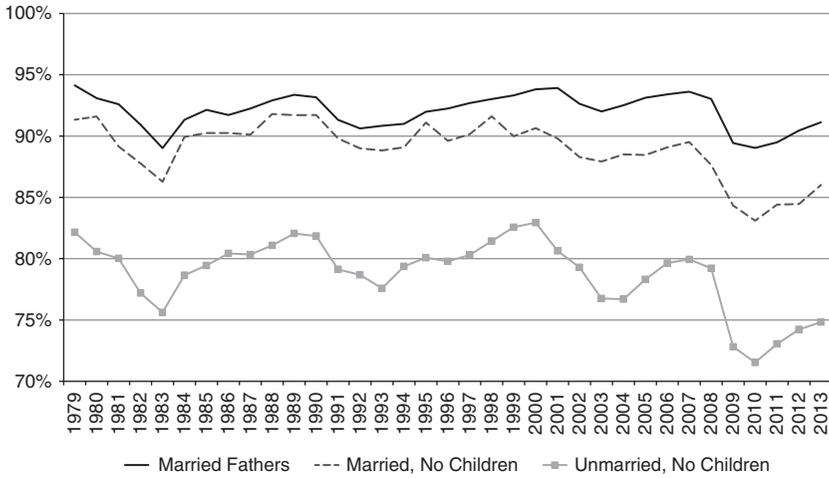


FIGURE 8.2 Percentage of 25–50-year-old men employed, by marital status and fatherhood: 1979–2013

Note: This figure is from Lerman and Wilcox (2014).

had the smallest declines in labor force participation, whereas unmarried men who do not live with children have seen the biggest declines in labor force participation. That is, the fraction of married men with children who are in the labor force has stayed relatively stable during this time period (at about 90 percent), whereas the fraction of unmarried men without children in the home in the labor force has fallen to about 75 percent. Lerman and Wilcox (2014) estimate that about one third of the decline in men's labor force participation since 1979 in the United States is associated with the retreat from marriage in the United States.

To be sure, there is a debate about whether marriage causes higher labor force participation or vice versa. Several recent studies have noted that a contributing factor to lower marriage rates are the lower employment prospects for less-educated men (Carbone and Cahn 2014; Wilson 1987); however, research by economists Ahituv and Lerman (2007) indicates that stable marriage increases men's attachment to the labor force and their income in the United States, even after taking into account background factors like education and job experience. Chapter 5 also shows that less-educated men who are married are much more likely to be working than are less-educated men who are not working.

Men's stronger connection to the labor force is also linked to a marriage premium in personal income. Because men work more hours and work more strategically when they are married, they tend to enjoy higher incomes than

their equivalently credentialed single peers (Lerman and Wilcox 2014). Research in the United States suggests this marriage premium is greater than 10 percent (Lerman 2011). The evidence, then, suggests that marriage is associated with both more work and more income for men in the United States. Cross-national research in fifteen countries in Europe and North America also indicates that married men enjoy an income premium in most of these countries (Geist 2006). However, much of the premium can be attributed to underlying human capital differences between married and unmarried men or to increased engagement or better opportunities at work associated with the transition to adulthood for men – rather than marriage per se (Geist 2006; Killewald and Lundberg 2017). In other words, from this research, it is not clear if marriage exercises a causal role on men's wages or, if instead, men with more human capital or better work opportunities are more likely to get and stay married.

Finally, the link between family structure and men's work seems to be particularly strong for men who are married fathers. Evidence from the United States indicates that men tend to work the most hours and garner the highest income premiums when they are married fathers than when they are in other family statuses (Nock 1998; Killewald 2012). Men may feel particularly strong internal and external pressures to provide when they are married with children to support financially. In other words, married fatherhood is associated with the greatest premium in work hours and income for men, at least in the United States.

If our expectations about marriage and fatherhood are correct, we would expect to find higher levels of labor force participation and income for men in countries with more married men or two-parent families. Here, we look at measures of men's labor force participation by the proportion of children who are in two-parent families. Specifically, we use data from the World Bank and the Demographic and Health Survey to examine the relationship between the proportion of children within two-parent families and male participation in the labor force, hypothesizing that men who are helping raise their children have additional motivation to support their families and seek employment. Contrary to our expectations, Figure 8.3 indicates that men's labor force participation for ages 15 and older is negatively associated with children living in two-parent families. Thus, at least in this international sample of more than ninety countries, we do not see evidence that more two-parent families foster higher paternal labor force participation. This runs counter to our predictions.

There is another way in which strong families, however, might weaken the economy. Strong families may reduce female labor force participation and income, which could serve as a drag on the economy. The evidence in the

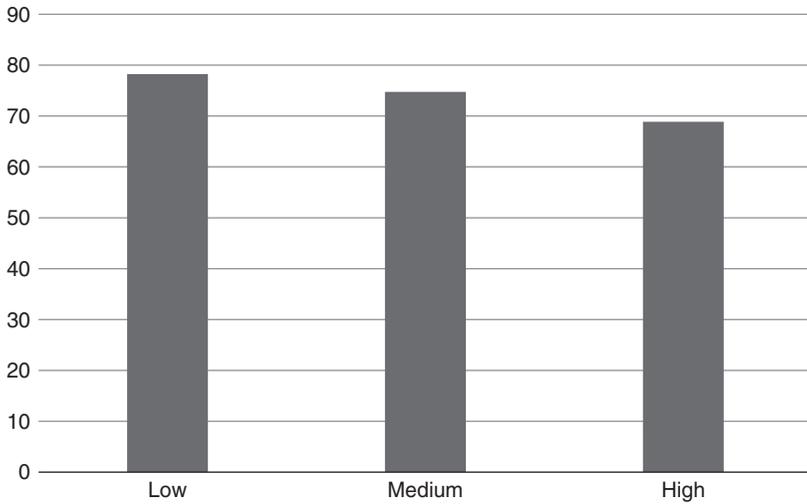


FIGURE 8.3 Male labor force participation, by proportion of children in two-parent families: 2001–2015

Note: The y-axis in this figure provides the average male labor force participation is based on the International Labor Organization database for 2001–2015 available from the World Bank. The x-axis splits the sample of countries into terciles based on the fraction of children being raised by two parents based on data from the World Bank, OCED, and the DHS. The sample includes 443 country-year observations from 97 countries representing the following regions: Africa (35), the Americas (11), Asia (18), Europe (30), and Oceania (3).

United States and Europe is ambiguous about the effect that marriage has upon women's labor force participation and income (Geist 2006; Killewald 2012; Lerman and Wilcox 2014). Motherhood, however, is associated with fewer hours, less work, and lower income for women in many countries in the developed world (Budig and England 2001; Budig, Misra, and Boeckmann 2012; Gash 2009; Harkness and Waldfogel 2003). The maternal penalty is reduced in countries where norms and public policies support mother's work (Budig, Misra, and Boeckmann 2012; Gash 2009), but the broader set of findings in this research lead us to expect that motherhood is generally associated with lower labor force participation, fewer hours, and less personal income for women.

Indeed, our analysis of data taken from the World Bank, the OECD, and DHS indicates that a motherhood penalty exists at the national level when it comes to women's labor force participation. Figure 8.4 indicates that women are less likely to be working when more children live in two-parent families. Accordingly, if

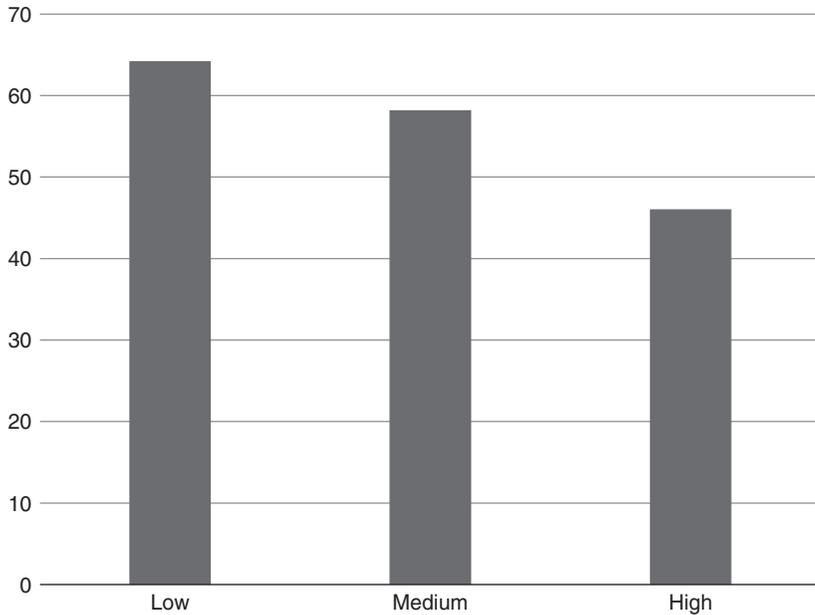


FIGURE 8.4 Female labor force participation, by proportion of children in two-parent families: 2001–2015

Note: The y-axis in this figure provides the average female labor force participation based on the International Labor Organization database for 2001–2015 available from the World Bank. The x-axis splits the sample of countries into terciles based on the fraction of children being raised by two parents based on data from the World Bank, OCED, and the DHS. The sample includes 443 country-year observations from 97 countries representing the following regions: Africa (35), the Americas (11), Asia (18), Europe (30), and Oceania (3).

strong and stable families discourage women from working, this may offset some of the positive effects that strong and stable families have on the economy.

Public Safety

The strength of the family may also influence patterns of crime at the national level. This, in turn, could have implications for the health of the economy, insofar as crime discourages economic growth (Detotto and Otranto 2010). A number of scholars (Akerlof 1998; Nock 1998; Sampson, Laub, and Wimer 2006) have argued that marriage fosters male responsibility and discourages crime. As Sampson, Laub, and Wimer (2006, p. 467) note, marriage discourages crime among men inclined to criminal activity because “it creates interdependent systems of obligation, mutual support, and restraint that impose significant costs for translating criminal propensities into action.” Marriage also encourages men to engage in ordinary work-related routines, rather than deviant activities,

and to spend less time with friends and acquaintances who might encourage criminal activity (Nock 1998; Sampson, Laub, and Wimer 2006). Marriage, then, is an important social control mechanism reducing the likelihood that men engage in delinquent or criminal acts.

Moreover, strong families reduce the odds that children engage in delinquent or criminal behavior as adolescent and young adults. Two-parent families tend to provide more attention and monitoring of children and adolescents (McLanahan and Sandefur 1994), both of which discourage delinquent and criminal activity. Boys, for instance, who are raised in intact-married families are less delinquent, less criminally active, and less likely to be incarcerated, according to research in the United States (Antecol and Bedard 2007; Harper and McLanahan 2004). In Sweden, substance abuse and suicide are higher among children raised in single-parent homes (Weitoff et al. 2003). At the community level, communities with more two-parent families have less violent crime, at least based on research at the neighborhood and state levels in the United States and Canada (Lerman, Price, and Wilcox 2017; Sampson 1987; Wong 2011).

The connections between family structure and crime, both at the individual and the community levels, matter because crime tends to inhibit prosperity. Specifically, high levels of crime discourage male labor force participation (Eberstadt 2016), force businesses to spend more on security, and lead to significant public-sector costs. As the economists Detotto and Otranto (2010) note, “Criminal activity acts like a tax on the entire economy: it discourages . . . direct investments, it reduces firms’ competitiveness, and reallocates resources creating uncertainty and inefficiency.”

How, then, is family structure associated with violent crime? Using data from the United Nations Office on Drugs and Crime (UNODC), we find a strong negative association between the proportion of children raised in two-parent families and violent crime rates. Figure 8.5 indicates that the average homicide rate is more than four times larger in the countries in the bottom third of countries in terms of children living with two parents compared to countries in the top third. This association leads us to hypothesize that strong and stable families foster higher levels of public safety. In turn, we think that lower levels of crime are linked to stronger economic growth, *ceteris paribus*, thereby helping to explain any associations between family structure and economic growth in nations across the world.

Educational Attainment

A long-standing literature suggests that higher levels of human capital increase growth (Aghion et al. 2009). Moreover, research across the developed world

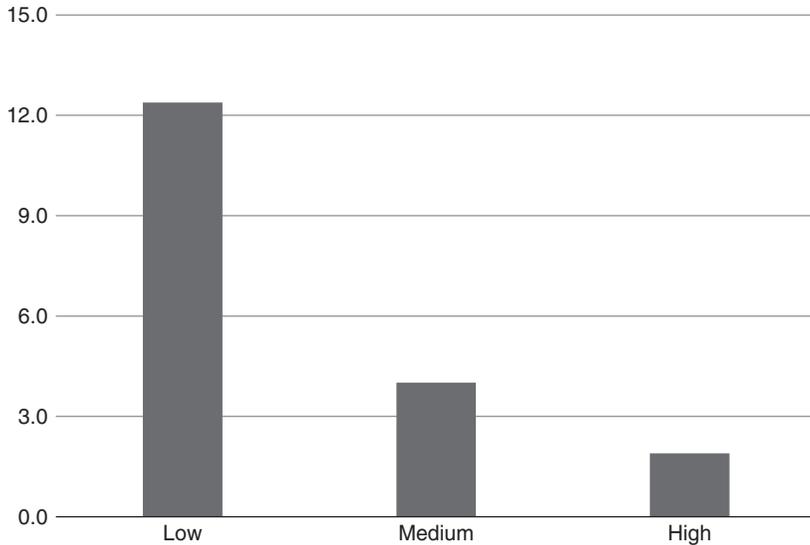


FIGURE 8.5 Homicide rate, by proportion of children in two-parent families:
2001–2015

Note: The y-axis in this figure provides the homicide rate based on data from the United Nations Office on Drugs and Crime for the years 2001–2015. The x-axis splits the sample of countries into terciles based on the fraction of children being raised by two parents based on data from the World Bank, OCED, and the DHS. The sample includes 397 country-year observations from 83 countries representing the following regions: Africa (24), the Americas (11), Asia (16), Europe (30), and Oceania (3).

indicates that children from intact, two-parent families are more likely to flourish in school. Such children usually enjoy access to more income, more parental attention and affection, and more stability in their lives, all of which help them excel in school (e.g., McLanahan and Sandefur 1994). In other words, higher rates of marriage and children being raised in two-parent families might produce greater human capital in countries around the globe.

For instance, research in the United States indicates that children from intact, married families are more likely to complete a high school diploma and graduate from college, compared to children from intact families (Duncan and Duncan 1969; Kearney and Levine 2017; Rumberger and Larson 1998; Sandefur, McLanahan, and Wojtkiewicz 1992). Moreover, the economist Jonathan Gruber has found that adults who were exposed to higher divorce rates in their state as children have lower levels of educational attainment (Gruber 2004). In general, then, research indicates not only that children are more likely to acquire human capital in the United States when they are raised in stable, two-parent homes, but that there are benefits to all children when higher proportions of school children are from stable two-parent homes.

Outside the United States, children in developed countries are less likely to be held back in school and more likely to do well on standardized tests if they come from two-parent families. Children from single-parent households in countries as diverse as Sweden, Singapore, and Indonesia, for instance, are at least 70 percent more likely to be held back in school, compared to their peers from two-parent families (Scott et al. 2013). In Europe, research also indicates that children from single-parent families are more likely to skip school, compared to children in two-parent families, as Garriga and Berta point out in Chapter 6.

In general, then, in much of the developed world, children may benefit educationally from the higher levels of time, money, and stability found in two-parent families, compared to single-parent families. Given that marriage is a more stable context for the rearing of children, children are more likely to live in two-parent homes in nations where marriage is the dominant pattern when it comes to childbearing (DeRose et al. 2017). We suspect that higher rates of marriage and two-parent families, then, foster greater educational attainment. This, in turn, is probably one mechanism by which countries that have strong and stable families are likely to experience the highest rates of economic growth.

MARRIAGE AND COUNTRY-LEVEL ECONOMIC GROWTH

To test our theories about the relationships between family structure and economic growth in countries across the globe, we compile data from a number of sources. We obtain historical data on marriage rates from the United Nations Statistics Division as well as the World Values Survey (WVS), which is a survey started in 1981 designed to gather national representative samples of individuals from almost 100 countries, which collectively constitute 90 percent of the world's population, and the sample we use includes 340,000 total respondents providing on average about 4,000 respondents per country. Additionally, we merge in marriage statistics from census data from 81 countries obtained from the Integrated Public Use Microdata Series-International (IPUMS-I) database. Using the latest wave of data from all three data sets, we have marriage statistics for 129 countries scattered over a 46-year time period between 1968 and 2014, with a total of 401 unique country-year observations. Within these observations, the marriage rate is calculated as the fraction of adults who are legally married out of all adults.

We obtain historical data on the fraction of children who are living with two parents from the Organisation for Economic Co-operation and Development (OECD) and the Demographic and Health Surveys (DHS), which is a survey compilation beginning in 1984 including over 300 nationally representative surveys in over ninety countries. Combining the most recent OECD and DHS

data sets, we have statistics on the fraction of children living in two-parent families for eighty-seven countries between 2001 and 2014, with a total of 416 unique country-year observations.

The other key measure of interest in our analyses is the gross domestic product (GDP) growth experienced by each country. We use data from the World Bank's World Development Indicators to obtain data on per capita GDP, adjusted for inflation. As additional controls, we also merge in information about each country's population, the fraction of the population that lives in cities, the proportion of the population under 15, the proportion of the population over 65, the education index (which taps the expected years of schooling as well as the historical average of years of schooling within each country), and the average life expectancy. Some of these measures (such as education) are likely to be influenced by family structure and so our estimates are likely to slightly understate the actual correlation between family structure and economic growth.

We start by using a fixed effects regression to model the relationship between the economic growth and the fraction of adults who are married. The results are found in Table 8.1, indicating a positive relationship between marriage and economic growth. The coefficient indicates that a standard deviation increase (or 13 percentage point increase) in the fraction of adults who are married in a country is associated with a per capita GDP that is 8 percent higher.

The subsequent columns in Table 8.1 indicate how the size and statistical precision of this relationship between marriage and economic growth differs based on the controls that we include. Since each regression already includes country fixed effects, those fixed characteristics about each country (history, geography, natural resources) are controlled for in all of the analysis that we do. We find that the relationship is robust to the inclusion of additional time-varying controls such as population, urbanization, age distribution, education, and life expectancy. In each model, a standard deviation increase in the fraction of adults who are married is associated with about a 10 percent higher per capita GDP.

We then use a similar fixed effects model to explore the relationship between the fraction of children who are being raised by two parents in a country and its economic growth. Again, the results indicate a positive relationship (Table 8.2). The coefficient in this model is even higher and indicates that a standard deviation increase (also about 13 percentage points) in the fraction of children living with both parents is associated with a per capita GDP that is 13 percent higher. This relationship gets even larger when we include additional time-varying controls for each country. In the model with full controls, a standard deviation increase in the fraction of children

TABLE 8.1 GDP growth by proportion of adults who are married, country-level regression

	(1)	(2)	(3)	(4)
Proportion of Adults Married	0.0819*** (0.0297)	0.103*** (0.0288)	0.102*** (0.0287)	0.106*** (0.0286)
Population (log)		-1.626*** (0.377)	-1.702*** (0.379)	-1.764*** (0.377)
Percentage of Population in Cities		0.0830 (0.138)	0.106 (0.138)	0.0640 (0.138)
Proportion of Population under 15		-0.507*** (0.119)	-0.526*** (0.119)	-0.528*** (0.118)
Proportion of Population over 65		-0.306* (0.168)	-0.304* (0.167)	-0.295* (0.166)
Average Years of Education			-0.192 (0.117)	-0.206* (0.116)
Life Expectancy				0.200*** (0.0897)
N	401	401	401	401

Note: The outcome variable is the log of per capita GDP. Each regression includes country fixed effects. All of the control variables are measured in standard deviation units. ***, **, and * indicate statistical significance at the 1, 5, and 10 levels, respectively. This includes 129 different countries. The regions represented by these countries are Africa (37), the Americas (24), Asia (32), Europe (32), and Oceania (4).

who are living with two parents is associated with about a 16 percent higher per capita GDP. Overall, then, our results indicate that marriage and family structure are both strongly linked to patterns of growth using a sample of more than eighty countries across the globe.

Our analysis has some important limitations. One of the limitations of this analysis is that we have a limited number of observations per country and can only exploit a limited amount of the full variation of data over time. In addition, the results we present are descriptive and may not represent a causal relationship for a variety of reasons, including unobserved heterogeneity and reverse causality. What we show here is that changes in the proportion of adults who are married and changes in the proportion of children who are living in two-parent homes are both strongly associated with more economic growth. We assume that shifts in family structure

TABLE 8.2 GDP growth by proportion of children in two-parent homes, country-level regression

	(1)	(2)	(3)	(4)
Proportion of Children with Two Parents	0.126** (0.0516)	0.185*** (0.0505)	0.192*** (0.0513)	0.157*** (0.0517)
Population (log)		-0.189 (0.470)	-0.239 (0.475)	-0.242 (0.468)
Percentage of Population in Cities		-0.0774 (0.186)	-0.0940 (0.187)	-0.134 (0.185)
Proportion of Population under 15		-1.054*** (0.166)	-1.038*** (0.168)	-1.055*** (0.165)
Proportion of Population over 65		-0.510*** (0.112)	-0.522*** (0.113)	-0.435*** (0.115)
Average Years of Education			0.106 (0.143)	0.0232 (0.143)
Life Expectancy				0.399*** (0.121)
N	416	416	416	416

Note: The outcome variable is the log of per capita GDP. Each regression includes country fixed effects. All of the control variables are measured in standard deviation units. *** and ** indicate statistical significance at the 1 and 5 percent levels, respectively. This includes 87 different countries. The regions represented by these countries are Africa (30), the Americas (10), Asia (16), Europe (29), and Oceania (2).

predict shifts in growth, but changing economic conditions could also affect family structure. For instance, the work of economist Autor and his colleagues (2017) indicates that regional declines in employment in the United States fueled declines in marriage and increases in single parenthood in the regions most-affected by trade-related losses in employment (Autor, Dorn, and Hanson 2018).

Efforts in the future may be able to identify factors unrelated to economic growth that had an independent effect on marriage and two-parent family rates that could be used as an instrumental variable. The downside of such an approach is that it is likely that identifying factors that influence the marriage rates of a sufficiently large sample of countries may be difficult to find. We present these results as a set of interesting descriptive findings of a largely overlooked factor, family structure, which may contribute to economic

growth. Future research on economic growth should seek additional ways to explore the family structure–growth connection around the world.

CONCLUSION

Research on economic growth around the globe has tended to overlook the role that family structure may play in fostering growth. This is surprising, given a large body of evidence connecting marriage and family life to factors – from education to household savings to crime – that have potential implications for economic growth. In this chapter, we hypothesize that strong and stable families are associated with higher levels of economic growth in countries across the globe.

Indeed, we find that a significant association between family structure and economic growth. Every 13 percentage point increase in the proportion of adults who are married is associated with an 8 percent increase in per capita GDP, net of controls for a range of sociodemographic factors. Likewise, every 13 percentage point increase in the proportion of children living in two-parent families is associated with a 16 percent increase in per capita GDP, controlling for education, urbanization, age, population size, and other factors. There is clearly a link between family structure and economic growth.

However, this association does not prove causation. For instance, better economic growth may encourage increases in marriage and two-parent families even as poor economic performance may discourage marriage and family stability (e.g., Autor, Dorn, and Hanson 2018). Our results cannot definitively prove that family structure has a causal impact on economic growth.

Nevertheless, we also note that the cross-national relationship between family structure, household savings, and crime are generally consistent with our expectations about how marriage and two-parent families foster a social environment more conducive to economic growth in countries around the world. It is striking that more two-parent families are linked to less crime and more savings. If nothing else, the patterns documented in this paper suggest that stronger families, higher household savings rates, less crime, and higher economic growth may cluster together in mutually reinforcing ways.

On the other hand, when it comes to labor force participation, we do not find consistent evidence that two-parent families are more or less conducive to work on the part of men or women. Not surprisingly, women in countries with a greater proportion of two-parent families are less likely to work, and surprisingly, men in countries with a greater proportion of two-parent families are less likely to be in the labor force, contrary to our expectations. On the other hand,

after controlling for a number of demographic factors, our ancillary analyses indicate a positive association between male labor force participation and the proportion of children in two-parent families. Additional research ought to explore the links between family structure, men's labor force participation, and economic growth, if any.

In conclusion, this chapter indicates that strong and stable families are linked to higher levels of economic growth in nations across the globe, despite the fact that marriage and two-parent families are in decline across much of the globe. Given the potential economic importance of marriage and family stability to a nation's economic life, policymakers, business leaders, and civic leaders should pursue a range of public and private policies to encourage and strengthen marriage and stable families. That is because what happens in the family may not affect only the welfare of private families but also the wealth of nations.

