Why Marriage Matters for Child Wellbeing

David C. Ribar

Summary

Marriage between two parents, compared with other family living arrangements, appears, on average, to enhance children's wellbeing and development. Some of the positive association between marriage and children's wellbeing comes from positive associations between marriage and other things that also contribute to children's wellbeing. David Ribar first sets up a standard economic rational-choice model to show that, all else equal, marriage should produce advantages that can improve children's wellbeing, such as better coordination between parents and economies of scale that make limited resources go further.

Digging more deeply, he then examines specific mechanisms through which marriage may operate to improve children's lives. Some of these have been well studied, including income, fathers' involvement, parents' physical and mental health, parenting quality, social supports, health insurance, home ownership, parents' relationships, bargaining power, and family stability. Others have received less attention, including net wealth, borrowing constraints, and informal insurance through social networks. Many of these mechanisms could be bolstered by public policy; that is, when they are lacking in children's lives, public policy could potentially provide substitutes—greater cash assistance, more generous health insurance, better housing, more help for caregivers, etc.

Yet studies of child wellbeing that control for the indirect effects of these mechanisms typically find that direct positive associations remain between children's wellbeing and marriage, strongly suggesting that marriage is more than the sum of these particular parts. Thus, Ribar argues, the advantages of marriage for children's wellbeing are likely to be hard to replicate through policy interventions other than those that bolster marriage itself.

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eams of social science and medical research convincingly show that children who are raised by their married, biological parents enjoy better physical, cognitive, and emotional outcomes, on average, than children who are raised in other circumstances.1 Because nearly all of this research (necessarily and rightly!) uses data from surveys and interviews rather than experiments in which children are randomly assigned to one group or the other, social scientists have vigorously debated whether the results reflect mere associations between marriage and wellbeing or causal effects of marriage on wellbeing. Increasingly, however, using statistical methods that mimic key aspects of experimental designs, researchers have been able to make a strong case that marriage has causal impacts on outcomes such as children's schooling, their social and emotional adjustment, and their employment, marriage, and mental health as adults.² Thus the intriguing research and policy questions are focusing less on whether than on why marriage between biological parents improves children's wellbeing.

Social scientists have identified numerous household characteristics that contribute to child wellbeing, including economic circumstances, parental skills and ability, stability, social supports, and neighborhoods, among others.³ Just as empirical research has linked family structure to many child outcomes, it has also linked family structure to many of these other characteristics.⁴ These relationships immediately suggest pathways—or more formally, mediating mechanisms—through which marriage may affect child wellbeing.

Empirical researchers recognize the importance of these mediating mechanisms,

and many researchers have adjusted their analyses to account for them—especially household economic resources or socioeconomic status. However, studies have seldom examined more than a few at a time. This article takes a more comprehensive view and catalogs a wider range of mechanisms, working from a general theoretical model of how families produce child wellbeing and using that model to trace how marriage might work through those pathways.

Conceptual Framework

To frame my analysis, I begin with a relatively straightforward theoretical economic model of how different types of families produce child wellbeing. Models are abstractions that necessarily simplify processes, but they let us focus on potential mechanisms for the impacts of family structure and, most importantly, explain relationships that we observe in the data. The first simplification involves the main outcome we're interested in, child wellbeing, which we will consider as a single developmental outcome, rather than as separate domains such as physical, emotional, social, or intellectual wellbeing. This simplification makes analysis easier but risks glossing over processes that are specific to these narrower domains. Another simplification is the economic approach itself, which starts from an assumption that parents make rational choices to maximize the outcomes they value, subject to the constraints that they face. Despite these simplifications, the model is able to point to many reasons why marriage would affect child wellbeing.

Following a theoretical approach developed by economist Robert Willis, let's first consider how wellbeing is produced for children whose mother never married and whose father is not involved their upbringing; then we'll consider different forms of fathers' involvement.⁵ Initially focusing on lone motherhood lets me introduce many of the general mechanisms for producing child wellbeing and provides a critical point of comparison to married-couple parenthood. From a policy perspective, this strategy also identifies mechanisms that are relevant to lone motherhood and could possibly be affected by policy. As I introduce family structures with other forms of paternal involvement, I will discuss their implications through the mechanisms identified for lone mothers and also discuss how the conceptual model needs to be altered.

A Lone Mother

Consider a mother raising a child whose father is wholly uninvolved with the child's upbringing. Let's put aside any behavior or decision-making by the child and instead focus on the mother's behavior. Assume that the mother values both her child's wellbeing and her own consumption of other goods in the present, and also assume that she considers and values these outcomes in the future. Combining elements from economists' frameworks for household production and health production, let's assume that the level of child wellbeing in each period depends on the level of wellbeing from the previous period and is augmented or maintained through inputs of the mother's time and of goods and services she can purchase.⁶ Further assume that present wellbeing depends on the history and stability of wellbeing over the child's lifespan and is subject to shocks such as illness, injury, or other crises. The mother has only so much time available, and the time that she can devote to investing in her child's wellbeing is reduced by the time that she spends at work, earning an income. In a given period, she can also spend only so much on goods or services for the child and herself; in particular, she cannot spend more than the total of her earnings, the returns on her net savings (or carrying cost on her net debt), any other unearned or transferred income, and the amount of her borrowing or savings. In each period, the mother presumably chooses to allocate her time (for example, for child care and work) and goods (for example, for the child and for her own consumption) to maximize her lifetime valuation of the child's wellbeing and her own consumption, subject to the constraints on the production of child wellbeing, on her time, and on her budget.

This model suggests a number of ways that a mother's characteristics and circumstances might contribute to better outcomes for her child:

- More economic resources or greater economic flexibility in the form of a higher income; more assets or wealth; larger private or social assistance payments; better access to health insurance and child care; availability of employment; access to goods and services; and opportunities to save and borrow, which allow her to purchase more goods that can benefit the child.
- More nonmarket resources, including more time to spend with the child and deeper social networks.
- Greater efficiency in the form of higher market productivity from better work skills and better health, leading to higher wages, as well as greater productivity at home, which allows the mother to produce better child outcomes with fewer resources.
- Increased family and residential stability and reduced susceptibility to shocks that can directly affect the production of child wellbeing.

The model's dynamic structure has further implications. In particular, children's developmental outcomes in a given period depend not only on conditions and behaviors in that period but also on the conditions and behaviors in previous periods. In addition, the mother's decisions and behaviors depend on her expectations of future conditions.

A Father Living Apart

Now consider a father who doesn't live with the mother and child but acknowledges paternity. We look at the father individually because he and the mother are both decision-makers. Let's assume that, like the mother, the father values his child's wellbeing and his own consumption now and in the future. We can modify the process for producing child wellbeing so that it depends on inputs of both parents' time and purchased goods, instead of just the mother's. We also assume that the father faces constraints on his time and on his budget in each period. Although the father has distinct preferences and constraints, we still assume that he chooses to allocate his own time and goods to advance his preferences, subject to the constraints he faces.

Under the assumptions we've made so far, this father's availability should never reduce the child's wellbeing and would more likely improve it. The reason is simple: any goods or time the father contributes add to the economic and time resources that would have been available in his absence. Thus, his availability, or more precisely involvement, produces more opportunities. Along the same lines, the availability and involvement of a second parent also increase the chances that at least one of the parents will have access to resources such as health insurance, other types of insurance, and a social network. A wrinkle in this framework is that the child's wellbeing is what economists call a "public good" in the sense that the mother cannot exclude the father from benefiting from good outcomes for the child, nor can the father exclude the mother. Assuming that the father remains involved and can observe the mother's inputs and the child's wellbeing, this fact has some positive implications for the stability of investments in the child, because the father's contributions of goods and time should move inversely to the mother's. Thus, if the mother suffers an economic shock, such as losing a job, getting a pay cut, or losing government benefits, the father would contribute more, partially mitigating the shock and providing a form of insurance. Similarly, mothers would be expected to partially compensate for shocks that affect the father. However, there are also negative implications. For one thing, positive changes to either parent's contributions to the child's wellbeing would cause the other parent to reduce his or her support, so the child wouldn't benefit fully from one parent's good fortune. More generally, because of the public goods problem, uncoordinated contributions from the parents would lead to less investment in the child's wellbeing than we would see if the contributions were coordinated. On the whole, however, in the framework we've considered so far, an involved father who lives apart from the mother and child adds to, rather than subtracts from, the child's wellbeing. Note, though, that these beneficial outcomes stem from assuming that the parents have benevolent or altruistic preferences (that is, we assume that each parent positively values the child's wellbeing) and that the parents' contributions are helpful (that is, we assume that each parent's inputs of goods and time add to the production of wellbeing).

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The involvement of a father who doesn't live with the mother and child becomes more ambiguous once we modify the model to allow for conflict or harmony between the parents, which can affect the child's development. Conflict and negative interactions between the parents could offset or swamp the resources and other potential contributions from the father. The implications of the model also become more ambiguous if the father is not able to observe the mother's contributions to child wellbeing.⁷

A Coresident Father

Based on the model, having a father who lives with the mother and child will confer several additional advantages for child wellbeing relative to having a father who lives apart. Many of these advantages can be considered "efficiencies" in the context of our earlier list of mechanisms. The first efficiency is that it costs less for family members to live together than apart, assuming the same standard of living in each home. We can view these economies of scale in living costs as increases in nonmarket productivity—the mother and father can each enjoy more consumption and better child wellbeing for a given set of time and goods inputs. Second, living together reduces the access costs associated with the father's inputs of time and goods. It also reduces the cost of access to the father's private insurance and social networks, enhancing the value of those mechanisms. Third, when parents live together, it should be easier to coordinate household decision-making.8 Moreover, each parent could have greater say in how the other parents' resources are allocated. In particular, mothers might play a bigger role in allocating fathers' resources and expenditures toward children. Fifth, living together makes it easier for the couple to support and reinforce each other's parenting.

Having a long-term coresident father, as is likely to be the case if the parents are married, could help in other ways. First, a long-term cooperative arrangement between the parents could encourage each one to specialize in different types of productive activities-for example, one parent could specialize in caring for the child at home and the other in working outside the home—leading to higher overall household productivity and better child outcomes.9 Second, a long-term arrangement would also encourage each parent to invest more in "marriage-specific capital," that is, in goods that have near-term costs but pay off in the long term within their marriage. Third, of course, a long-term coresidential relationship implies a stable family. More generally, however, married relationships tend to be more stable than other relationships. A stable relationship contributes to stability not only in the child's family arrangements but also in the family's economic and housing circumstances. Fourth, long-term relationships, and marriage specifically, could have other

benefits for the parents, such as better physical or psychological health and greater happiness, that could help them produce better outcomes for children.¹⁰

As we've seen in the case of fathers who live apart from their children, several of these benefits from coresidential relationships depend on positive interactions and the absence of conflict between the parents. Conflict between coresidential parents might harm a child more than conflict between parents who don't live together; the child's proximity to the conflict makes it difficult to shield the child from it. Similarly, when one of the parent's actions might be harmful to the child, coresidence puts the child closer to that harm and may make it harder to protect the child.

This conceptual discussion has highlighted many ways that marriage might improve children's development. We've identified mechanisms that are usual suspects in this sort of investigation, such as economic resources, specialization, coordination, father involvement, relationship quality, and stability, and that have been considered before. However, we've also turned up some new leads, such as borrowing ability and market access, that might be worth pursuing.

Some Empirical Challenges

Before running down our leads, we need to consider some formidable challenges in developing the empirical evidence. A central methodological challenge in analyzing mechanisms empirically, as in the analysis of the total impacts of marriage, is known as selection. Our theoretical discussion provides many reasons that marriage might improve children's wellbeing. However, we have to remember that marriage itself is a behavioral outcome and that many of the

favorable characteristics and mechanisms that we discussed as consequences of marriage might themselves cause people to marry or to remain married. In discussing the net impacts of marriage, the selection question comes down to whether marriage leads to good or successful parenting or whether people with the traits of good parents are more likely to marry. Similarly, when we consider particular mechanisms, such as efficiency or stability, we have to ask whether marriage enhances these attributes, the attributes enhance marriage, or some combination of the two. Because the mechanisms have been studied less extensively than the net impact of marriage, much of the empirical evidence is indirect and associational. In particular, the evidence typically tells us that there are associations, first, between marriage and the attributes and, second, between the attributes and child wellbeing. But associational evidence can't prove that marriage directly causes the attributes or that the attributes directly affect child wellbeing.

Another methodological challenge is the possibility of reverse causality—namely, that problems in children's development or other characteristics of children might cause stresses on parents that either keep them from marrying or lead them to divorce. Indeed, this argument has been used to suggest that the gender of a couple's first-born child can affect the likelihood of divorce and predict other parental behaviors.¹¹

The dynamic nature of child development and wellbeing presents another challenge to research. If a child's current developmental attainments depend on previous attainments and on the child's developmental history, then the child's entire history of family status also becomes relevant. Far too frequently, empirical research simply examines the association between family structure at one point in time and child outcomes at either that point or some later point. Such analyses can miss long periods during which the child might have been exposed to different family structures. Starting with a pioneering 1993 study by sociologists Lawrence Wu and Brian Martinson, several studies have tried to account for the dynamic nature of child development and wellbeing; however, such studies have tended to be exceptions.¹²

Indirect Evidence on Mediating Mechanisms

With these methodological caveats in mind, we can now discuss evidence regarding the hypothesized pathways through which marriage might affect children's wellbeing. The evidence in this section is indirect and mostly takes the form of empirical associations between family structure and the hypothesized mediating mechanisms, but does not go on to consider whether these associations actually lead to mediating effects.

Economic Resources

Income. Income differences between married-couple families and other families have been studied extensively.¹³ These differences appear whether or not income is adjusted for family size. For example, Adam Thomas, an economist, and Isabel Sawhill, a senior editor of Future of Children, reported that the average annual incomes of lone-mother households in 2003 were only 37 percent of the incomes of marriedparent households, and that the annual incomes of cohabiting parent households were only 61 percent of the incomes of married-parent households. Even when they adjusted for taxes, social assistance benefits, work expenses, and family size,

Thomas and Sawhill found that lone-mother and cohabiting families had 55 and 64 percent, respectively, of the incomes of married-couple households.¹⁴ More recent analyses indicate that these disparities likely widened during and after the Great Recession.¹⁵ Disparities in income between married couples and other family structures appear in other countries besides the United States.¹⁶

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Although much of the evidence regarding income differences is associational, several studies have examined incomes and marital status for the same families over time. These longitudinal analyses compare changes in each family's incomes with changes in that same family's marital status, which helps to control statistically for characteristics, such as skills and attitudes, that are specific to the family and might otherwise contribute to the observed association between income and marriage. Most notably, economists Marianne Page and Ann Huff Stevens have compared family incomes for children for several years before and after family status changes. They found that U.S. children who were born into two-parent, married families

suffered a 41 percent decline in family incomes in the year following divorce, and that children born into single-parent families enjoyed a 68 percent increase in their family incomes in the year following a marriage. These income differences were largely sustained in later years following the family structure changes.¹⁷

Assets and wealth. Incomes are an important economic resource for households, but they are not the only one. Researchers have found that married-parent households have more financial assets and are wealthier than other types of households, and that lone mothers and cohabiting parents have substantially fewer assets than other households.¹⁸ There is also evidence that divorce is associated with a greater risk of personal bankruptcy.¹⁹

Researchers have paid particular attention to one type of asset—home ownership. Studies inside and outside the United States indicate that married parents transition sooner from renting to home ownership than do other types of parents.²⁰ Although home ownership typically costs more than renting on a month-to-month basis, it has generally been a means for households to build wealth through equity and appreciation, with homeowners being able to tap into that equity through lines of credit and other financial mechanisms.

Borrowing and savings constraints. Borrowing and saving allow households to move money from one period to another. These tools help households deal with emergencies and unexpected expenditures. More generally, they let households smooth and stabilize consumption across time. Although there are informal ways to borrow and save, banks and other financial institutions are especially reliable and effective. Research has found that married adults are much more likely to be "banked," in the sense of having access to a checking or savings account, than are their unmarried counterparts.²¹ Access to financial accounts provides indirect evidence that people have the ability to borrow or save.

One set of studies has asked people directly whether and from whom they could raise money in an emergency, but the results have been equivocal. For example, an Australian study reported that married adults were more likely than others to report being able not only to raise money but also to do so from various sources; however, a similar analysis for U.S. households did not find significant differences between married-couple and other households.²²

Health insurance. Insurance, particularly health insurance, also helps protect families against unexpected expenditures and acts to stabilize consumption. Unlike countries with universal health coverage, the United States has substantial numbers of people who lack health insurance, and studies frequently find that marital status is a predictor for this condition. In particular, nonelderly divorced and never-married women are much more likely to be uninsured than married women are. However, because poor mothers can enroll in Medicaid, these differences are concentrated among women with moderate and high household incomes.²³ Other studies have similarly found that U.S. women's risk of losing health insurance rises following a divorce, especially for women who were initially included as dependents on their husbands' policies.²⁴ These coverage differences extend to children-those in married-couple families are more likely to have insurance, and especially private insurance, than are those living in other types of households.25

Nonmarket Resources

Time availability. In principle, coresidence should increase parents' total time availability and let them spend more time caring for children. There is evidence of this benefit for both younger and older children. A comparison of the total time that U.S. children aged 0-14 spent with household caregivers revealed that those who lived with two coresident biological parents spent more time with caregivers than those who lived in single-parent or married or unmarried stepparent families.²⁶ Similarly, studies have found that teenagers in singleparent households, and especially teenage boys, spent more time in unsupervised activities than did teenagers in two-parent households, and, more generally, that in single-parent households, teenagers' time was less structured.²⁷

Social networks. Besides increasing the time available for children within a household, the presence and involvement of a second parent may also increase access to time and other resources that are available through that parent's social network of friends and relatives. Research that has investigated individual mothers' access to financial, child-care, and residential support over time has found that mothers' transitions into coresidential relationships strengthened these social supports and that exits from such relationships weakened them.²⁸

Efficiencies

Economies of scale. Economists have long investigated how households' consumption needs vary with household size, and their analyses of consumption data regularly find that coresidence offers sizeable economies of scale.²⁹ Indeed, the evidence is so firm that the government takes economies of scale into account when it sets measures of families' needs, such as the U.S. poverty

thresholds and the Thrifty Food Plan (a minimum-cost budget developed by the U.S. Department of Agriculture for purchasing nutritionally adequate meals). For example, the annual poverty threshold in 2014 for two adults living with a child was \$19,055, while the threshold for a single, nonelderly adult and child was \$16,317 and the threshold for a single, nonelderly adult was \$12,316. That is, the threshold for two adults living apart plus one child was \$28,633 altogether, or 50 percent higher than the threshold for a coresiding family of three, thanks to economies of scale that the coresiding family can take advantage of.³⁰ Effectively, every study that adjusts income by the poverty threshold implicitly takes some account of economies of scale.

Specialization. In addition to reducing the costs of living, coresidence should create incentives for couples to alter how they spend their time to maximize the household's total output. In particular, parents who live together can specialize in the activities in which each is relatively more productive. Specialization brings rewards in the form of increased productivity in the chosen activity, but it can also bring risks in the form of forgone productivity or growth of skills in other activities. Because of these trade-offs, we would expect the incentives for specialization to be stronger the longer the coresidential relationship is expected to last. However, empirical studies of elements of specialization have reached mixed conclusions. One research approach has compared household behaviors for new married couples across U.S. states that relaxed their divorce laws in the 1970s. Consistent with the specialization hypothesis, this approach indicates that wives in states with unilateral divorce laws, and thus presumably greater risks to marriage, were more likely to

work than wives in other states; couples in unilateral divorce states were also less likely to engage in other couple-specific investments.³¹ Although marriage might change how couples allocate market labor, such changes might not necessarily benefit children. Evidence across several decades indicates that the amount of time U.S. mothers spend with their children hasn't changed much, despite the fact that mothers today are much less likely to be married and much more likely to be in the work force than mothers in earlier years.³² Also, a study that used rigorous statistical techniques to account for selection's effect on family structure (see the discussion of empirical challenges) found that married U.S. mothers devoted less daily time to either market labor or child care than did single mothers.³³

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Parental stress. An alternative measure of household efficiency, albeit indirect and inversely proportional, is the amount of parental stress reported by the mother. Research has compared mothers' reports of parenting-related stress at different points in their lives. These studies have found that mothers reported more such stress when they transitioned into single parenthood and into new relationships with men who weren't their children's biological fathers. Some results also indicated that mothers reported less stress when they transitioned into coresidential arrangements with their children's biological fathers.³⁴

Stability and Better Processes

Family instability. Some exceptional circumstances aside, a child who is living with both of his or her biological parents has grown up with a stable family structure. Conversely, a child whose parents have divorced or remarried has likely experienced instability. So some family structures involve less stability than others. Beyond these crude differences, children could experience very different numbers of transitions from one family structure to another or have different degrees of risk for instability. An analysis of the Fragile Families and Child Wellbeing Study, which has followed children over time since 1998, found that children who were born to unmarried mothers experienced many more transitions than did children born to married mothers. Children born to mothers in noncoresidential romantic (for example, dating) relationships and to mothers who were not in relationships with the fathers had a high number of transitions, but so did children of mothers in cohabiting relationships.³⁵ Another analysis found that by age 10 children born to cohabiters were twice as likely to have had their parents separate as children born to married parents.36

Complex arrangements. Living in a family structure other than with married biological parents also increases the risk that a child will be raised in a complex arrangement involving other biologically related or

unrelated adults and partly related or unrelated children. About a quarter of children living apart from one of their biological parents in 2009 were estimated to be living with a stepparent, and nearly a third of children living apart from one of their biological parents were estimated to be in a family arrangement involving sibling complexity.³⁷ Children's wellbeing tends to be worse in more complex family arrangements, although the evidence is mixed when it comes to a few particular arrangements, such as three-generation families.³⁸

Changes in bargaining power. Marriage may alter the parents' relationship by giving the mother more bargaining power over the distribution of the couple's resources. Mothers tend to direct more resources to children than do fathers; thus a change in bargaining power could mean that children get a larger share of resources. For example, analyses of household spending have found that single-father families spend a greater share of their money than do marriedparent families on food away from home, alcohol, and tobacco, and a smaller share on fruits, vegetables, and children's toys and education.³⁹

Evidence about changes in bargaining power is indirect. It comes primarily from analyses of young adults who grew up in states or countries with different divorce laws. Economists have hypothesized that unilateral divorce laws weaken marriages by making it easier for husbands and wives to dissolve them. They have also hypothesized that these laws may weaken mothers' bargaining position within marriages because mothers' traditional specialization in childrearing and marriage-specific activities leaves them more economically vulnerable than fathers in the event of a divorce. When researchers compared young adults' education, health, and other outcomes in the United States and Europe, they found that these outcomes were worse for children who were exposed to unilateral divorce laws than for those who grew up with more restrictive divorce laws. Although some of the differences in outcomes could be attributed to an increase in the divorce rate, the changes in divorce were too small to explain all of them, suggesting that changes in bargaining power were also responsible.⁴⁰ The interpretation that changes in bargaining power caused some of the differences in these studies is controversial. It hinges on the assumption that unilateral divorce reduces women's bargaining power, an assumption that is undercut by evidence that most divorce filings are initiated by women rather than men and that unilateral divorce laws are associated with reductions in domestic violence, female suicide, and murders of wives by their husbands.⁴¹

Dysfunction and conflict. The subject of domestic violence reminds us that not all marital processes are positive or beneficial. Some marriages are characterized by problems, such as dysfunctional family processes and high levels of conflict, that can harm children's wellbeing. Pathbreaking research in 1991 by sociologist Andrew Cherlin and several colleagues compared children's school achievement and behavioral problems before and after some of them were exposed to their parents' divorce.42 A novel feature of the study was that the researchers could measure the levels of dysfunction and conflict in the families before divorce. They found that these preexisting conditions explained a substantial portion of the harm to children's wellbeing from divorce. More recent studies have continued to find that conflict harms

children's wellbeing and that the benefits of marriage occur mainly in families with low levels of conflict.⁴³

Direct Evidence

Empirical researchers who investigate the effects of marriage on child wellbeing frequently discuss certain mechanisms as explanations for why marriage might affect child wellbeing, and sometimes researchers try to account for these mechanisms directly in their analyses. Typically, the researchers' statistical models include measures of family structure along with one or two mediating mechanisms. The researchers usually find that the mechanisms they've chosen to study explain some but not all of the relationship between family structure and the selected measure of wellbeing.

For example, a recent study hypothesized that household income and access to health insurance might explain the associations between various family structures and children's general health, activity-limiting health conditions, and mental health. The authors confirmed that family structure was associated with income and insurance, and that income and insurance were in turn associated with children's health: however. the inclusion of measures of income and insurance in the statistical analysis did little to reduce the remaining associations between family structure and children's health.⁴⁴ Thus, they found support for their hypothesis that differences in income and insurance produced differences in children's health, but they also found that family structure had other associations with health beyond these mechanisms. This pattern of partial explanation is repeated across many, many studies.

The principal exception to this pattern involves studies that have focused on family

stability. Starting with Wu and Martinson's pioneering article (discussed above in the section on empirical challenges), researchers with access to children's entire histories of family living arrangements have found that instability, as measured by the simple number of transitions in family arrangements, often accounts for most if not all of the associations between family structure and children's outcomes. Wu and Martinson found that the number of family transitions that young women experienced increased the chances that they would give birth before marriage. Other researchers have uncovered similar findings in analyses of young children's problem and social behaviors and young women's early transitions to either marriage or cohabitation.⁴⁵ Such findings aren't universal; some studies report that children's wellbeing is associated with both the number of family structure transitions and their exposure to a nonmarital family structure at a given point in time.⁴⁶ Also, these results are subject to an important qualification. Because the studies measure stability by counting the number of family structure changes, the results could indicate that this particular measure of family structure explains children's wellbeing outcomes better than other measures of family structure. That is, it could be that the studies haven't really explained why family structure matters, they've just found the best way to measure it.

Conclusions

Researchers have offered numerous causal explanations for the observed empirical association between marriage among biological parents and children's wellbeing. Their theoretical analyses almost always consider several of these explanations but frequently discuss only enough of them to justify a general empirical analysis of the relationship between family structure and child wellbeing or to justify analyses of the available measures of potential mechanisms. I have attempted to enumerate a more comprehensive set of outcomes, at least as predicted by a standard rationalchoice model of household investments in children's wellbeing. My analysis includes many mechanisms that have been investigated in previous studies, including economic resources, specialization, father involvement, parents' physical and mental health, parenting quality and skills, social supports, health insurance, home ownership, parental relationships, bargaining power, and family stability. However, it also points to many others that have received less attention, including net wealth, borrowing constraints, informal insurance through social networks, and inefficiencies associated with parents living apart.

Also, even though studies often mention many explanations for the relationship between family structure and child wellbeing, the studies rarely include measures corresponding to the full set of offered explanations and even more rarely test these explanations rigorously enough to distinguish among them. The exceptions to this rule, such as Wu and Martinson's careful analysis of how family histories can affect child wellbeing, remain notable because of their rarity. Clearly, we need more comprehensive empirical tests of specific mechanisms. The fact that many studies have directly examined and found evidence of selected mechanisms yet have also found remaining associations from family structure suggest that much remains to be explained.

The other implication from the long list of nonexclusive candidate mechanisms, the indirect evidence indicating the association of these mechanisms with marriage and children's outcomes, and the associations between marriage and children's outcomes that remain in studies that also directly examine mechanisms, is that the likely advantages of marriage for children's wellbeing are hard to replicate through policy interventions other than those that bolster marriages themselves. While interventions that raise incomes, increase parental time availability, provide alternative services, or provide other in-kind resources would surely benefit children, these are likely to be, at best, only partial substitutes for marriage itself. The advantages of marriage for children appear to be the sum of many, many parts.

ENDNOTES

- For recent comprehensive reviews of this research, see Paul Amato, "The Impact of Family Formation Change on the Cognitive, Social, and Emotional Well-Being of the Next Generation," *Future of Children* 15, no. 2 (2005): 75–96; Susan Brown, "Marriage and Child Well-Being: Research and Policy Perspectives," *Journal of Marriage and Family* 72 (2010): 1059–77, doi: 10.1111/j.1741-3737.2010.00750.x; Sara McLanahan, Laura Tach and Daniel Schneider, "The Causal Effects of Father Absence," *Annual Review of Sociology* 39 (2013): 399–427, doi: 10.1146/annurev-soc-071312-145704; David Ribar, "What Do Social Scientists Know about the Benefits of Marriage? A Review of Quantitative Methodologies" (George Washington University, 2003); Linda Waite and Maggie Gallagher, *The Case for Marriage: Why People Are Happier, Healthier, and Better Off Financially* (New York: Broadway Books, 2000); Bradford Wilcox et al., *Why Marriage Matters, Third Edition: Thirty Conclusions from the Social Sciences* (New York: Institute for American Values, 2011).
- 2. McLanahan, Tach, and Schneider, "Causal Effects"; Ribar, "What Do Social Scientists Know?"
- 3. Robert Haveman and Barbara Wolfe, *Succeeding Generations: On the Effects of Investments in Children* (New York: Russell Sage Foundation, 1994).
- 4. Adam Thomas and Isabel Sawhill, "For Love and Money? The Impact of Family Structure on Family Income," *Future of Children* 15, no. 2 (2005): 57–74; Waite and Gallagher, *Case for Marriage*; Wilcox et al., *Why Marriage Matters*.
- 5. Robert Willis, "A Theory of Out-of-Wedlock Childbearing," *Journal of Political Economy* 56 (1999): S33–64, doi: 10.1086/250103.
- 6. Christopher Barrett, "Food Security and Food Assistance Programs," in *Handbook of Agricultural Economics*, vol. 2B, ed. Bruce L. Gardner and Gordon C. Rausser (Amsterdam: Elsevier Science B.V., 2002), 2103–90; Gary Becker, "A Theory of the Allocation of Time," *Economic Journal* 75 (1965): 493–517; Reuben Gronau, "Leisure, Home Production, and Work—The Theory of the Allocation of Time Revisited," *Journal of Political Economy* 29 (1977): 1099–123; Michael Grossman, "On the Concept of Health Capital and the Demand for Health," *Journal of Political Economy* 80 (1972): 223–55.
- 7. Yoram Weiss and Robert Willis, "Children as Collective Goods and Divorce Settlements," *Journal of Labor Economics* 3 (1985): 268–92.
- 8. Pierre-Andre Chiappori, "Collective Labor Supply and Welfare," *Journal of Political Economy* 100 (1992): 437–67; Weiss and Willis, "Children as Collective Goods."
- 9. Gary Becker, A Treatise on the Family (Cambridge, MA: Harvard University Press, 1981).
- 10. Waite and Gallagher, The Case for Marriage; Wilcox et al., Why Marriage Matters.
- Elizabeth Ananat and Guy Michaels, "The Effect of Marital Breakup on the Income Distribution of Women with Children," *Journal of Human Resources* 43 (2008): 611–29, doi: 10.1353/jhr.2008.0025; Kelly Bedard and Olivier Deschenes, "Sex Preferences, Marital Dissolution, and the Economic Status of Women," *Journal of Human Resources* 40 (2005): 411–34, doi: 10.3368/jhr.XL.2.411; Shelly Lundberg, "Sons, Daughters, and Parental Behaviour," *Oxford Review of Economic Policy* 21 (2005): 340–56, doi: 10.1093/oxrep/gri020.

- 12. Sarah Meadows, Sara McLanahan, and Jean Knab, "Economic Trajectories in Non-Traditional Families with Children" (Working Paper no. WR-701, Rand Corporation, Santa Monica, CA, 2009); Cynthia Osborne, Lawrence Berger, and Katherine Magnuson, "Family Structure Transitions and Changes in Maternal Resources and Well-Being," *Demography* 49 (2012): 23–47, doi: 10.1007/s13524-011-0080-x; Cynthia Osborne and Sara McLanahan, "Partnership Instability and Child Well-Being," *Journal of Marriage and Family* 69 (2007): 1065–83, doi: 10.1111/j.1741-3737.2007.00431.x; Jane Waldfogel, Terry-Ann Craigie, and Jeanne Brooks-Gunn, "Fragile Families and Child Wellbeing," *Future of Children* 20, no. 2 (2010): 87–112; Lawrence Wu and Brian Martinson, "Family Structure and the Risk of a Premarital Birth," *American Sociological Review* 58 (1993): 210–32.
- 13. Ariel Kalil and Rebecca Ryan, "Mothers' Economic Conditions and Sources of Support in Fragile Families," *Future of Children* 20, no. 2 (2010): 39–61; Thomas and Sawhill, "For Love and Money?"
- 14. Thomas and Sawhill, "For Love and Money?"
- 15. Mary Keegan Eamon and Chi-Fang Wu, "Employment, Economic Hardship, and Sources of Assistance in Low-Income, Single-Mother Families before versus during and after the Great Recession," *Journal* of Poverty 17 (2013): 135–56, doi: 10.1080/10875549.2013.775995; Jiyoung Yoo and Younghee Lim, "The Trend in the Income Status of Children in Female-Headed Families: A Replication and Update," *Children and Youth Services Review* 31 (2009): 482–8.
- Hans-Jürgen Andress and Dina Hummelsheim, eds., When Marriage Ends: Economic and Social Consequences of Partnership Dissolution (Cheltenham, UK: Edward Elgar, 2009).
- Marianne Page and Ann Huff Stevens, "The Economic Consequences of Absent Parents," Journal of Human Resources 39 (2004): 80–107.
- Michal Grinstein-Weiss et al., "Asset Holding and Net Worth among Households with Children: Differences by Household Type," *Children and Youth Services Review* 30 (2008): 62–78, doi: 10.1016/j. childyouth.2007.06.005.
- 19. Jonathan Fisher and Angela Lyons, "Till Debt Do Us Part: A Model of Divorce and Personal Bankruptcy," *Review of Economics of the Household* 4 (2006): 35–52, doi: 10.1007/s11150-005-6696-0.
- Michal Grinstein-Weiss et al., "The Effect of Marital Status on Home Ownership among Low-Income Households," *Social Service Review* 85 (2011): 475–503, doi: 10.1086/662166; Annika Smits and Clara Mulder, "Family Dynamics and First-Time Homeownership," *Housing Studies* 23 (2008): 917–33, doi: 10.1080/02673030802416601.
- Sherrie Rhine and William Greene, "Factors that Contribute to Becoming Unbanked," Journal of Consumer Affairs 47 (2013): 27–45, doi: 10.1111/j.1745-6606.2012.01244.x.
- Annamaria Lusardi, Daniel Schneider, and Peter Tufano, "Financially Fragile Households: Evidence and Implications" (Working Paper no. 17072, National Bureau of Economic Research, Cambridge, MA, 2011); Andrew Worthington, "A Note on Households' Choice of Emergency Finance," *Economics Bulletin* 4 (2005): 1–7.
- 23. Amy Bernstein et al., "Marital Status Is Associated with Health Insurance Coverage for Workingage Women at all Income Levels" (NCHS Data Brief no. 11, National Center for Health Statistics, Hyattsville, MD, 2008).
- Bridget Lavelle and Pamela Smock, "Divorce and Women's Risk of Health Insurance Loss in the U.S." (Working Paper no. 11-04, National Poverty Center, Ann Arbor, MI, 2011); David Zimmer, "Asymmetric Effects of Marital Separation on Health Insurance among Men and Women," *Contemporary Economic Policy* 25 (2007): 92–106, doi: 10.1111/j.1465-7287.2006.00032.x.

- Kathleen Ziol-Guest and Rachel Dunifon, "Complex Living Arrangements and Child Health: Examining Family Structure Linkages with Children's Health Outcomes," *Family Relations* 63 (2014): 424–37, doi: 10.1111/fare.12071.
- Ariel Kalil, Rebecca Ryan, and Elise Chor, "Time Investments in Children across Family Structures," Annals of the American Academy of Political and Social Science 654 (2014): 150–68, doi: 10.1177/0002716214528276.
- Charlene Kalenkoski, David Ribar, and Leslie Stratton, "How Do Adolescents Spell Time Use? An Alternative Methodological Approach for Analyzing Time-Diary Data," *Research in Labor Economics* 33 (2011): 1–44; Vanessa Wight et al., "The Time Use of Teenagers," *Social Science Research* 38 (2009): 792–809, doi: 10.1016/j.ssresearch.2009.05.009.
- 28. Osborne, Berger, and Magnuson, "Family Structure Transitions."
- Martin Browning, Pierre-Andre Chiappori, and Arthur Lewbel, "Estimating Consumption Economies of Scale, Adult Equivalence Scales, and Household Bargaining Power," *Review of Economic Studies* 80 (2013): 1267–1303, doi: 10.1093/restud/rdt019; Julie Nelson, "Household Economies of Scale in Consumption: Theory and Evidence," *Econometrica* 56 (1988): 1301–14.
- 30. "Poverty Thresholds," U.S. Census Bureau, accessed January 31, 2015, https://www.census.gov/hhes/ www/poverty/data/threshld/.
- Betsey Stevenson, "The Impact of Divorce Laws on Marriage-Specific Capital," *Journal of Labor Economics* 25 (2007): 75–94, doi: 10.1086/508732.
- 32. Suzanne Bianchi, "Maternal Employment and Time with Children: Dramatic Change or Surprising Continuity?" *Demography* 37 (2000): 401–14, doi: 10.1353/dem.2000.0001.
- 33. Charlene Kalenkoski, David Ribar, and Leslie Stratton, "The Effect of Family Structure on Parents' Child Care Time in the United States and the United Kingdom," *Review of Economics of the Household* 5 (2007): 353–84, doi: 10.1007/s11150-007-9017-y.
- Carey Cooper et al., "Family Structure Transitions and Maternal Parenting Stress," *Journal of Marriage and Family* 71 (2009): 558–74, doi: 10.1111/j.1741-3737.2009.00619.x; Osborne, Berger, and Magnuson, "Family Structure Transitions."
- 35. Osborne and McLanahan, "Partnership Instability."
- 36. Wendy Manning, Pamela Smock, and Debarun Majumdar, "The Relative Stability of Cohabiting and Marital Unions for Children," *Population Research and Policy Review* 23 (2004): 135–59, doi: 10.1023/B:POPU.0000019916.29156.a7.
- Wendy Manning, Susan Brown, and J. Bart Stykes, "Family Complexity among Children in the United States," Annals of the American Academy of Political and Social Science 654 (2014): 48–65, doi: 10.1177/0002716214524515.
- Rachel Dunifon, Kathleen Ziol-Guest, and Kimberly Kopko, "Grandparent Coresidence and Family Well-Being: Implications for Research and Policy," *Annals of the American Academy of Political and Social Science* 654 (2014): 110–26, doi: 10.1177/0002716214526530.
- Kathleen Ziol-Guest, "A Single Fathers' Shopping Bag," *Journal of Family Issues* 30 (2009): 605–22, doi: 10.1177/0192513X08331022; Kathleen Ziol-Guest, Thomas DeLeire, and Ariel Kalil, "The Allocation of Food Expenditure in Married- and Single-Parent Families," *Journal of Consumer Affairs* 40 (2006): 347–71, doi: 10.1111/j.1745-6606.2006.00061.x.

- 40. Jonathan Gruber, "Is Making Divorce Easier Bad for Children? The Long-Run Implications of Unilateral Divorce," *Journal of Labor Economics* 22 (2004): 799–833, doi: 10.1086/423155; Steffen Reinhold, Thorsten Kneip, and Gerritt Bauer, "The Long Run Consequences of Unilateral Divorce Laws—Evidence from SHARELIFE," *Journal of Population Economics* 26 (2013): 1035–56, doi: 10.1007/s00148-012-0435-7.
- 41. Margaret F. Brinig and Douglas W. Allen, "These Boots Are Made for Walking': Why Most Divorce Filers Are Women," *American Law and Economics Review* 2 (2000): 126–69, doi: 10.1093/aler/2.1.126; Betsey Stevenson and Justin Wolfers, "Bargaining in the Shadow of the Law: Divorce Laws and Family Distress," *Quarterly Journal of Economics* 121 (2006): 267–88, doi: 10.1093/qje/121.1.267.
- 42. Andrew Cherlin et al. "Longitudinal Studies of Effects of Divorce on Children in Great Britain and the United States," *Science* 252 (1991): 1386–9, doi: 10.1126/science.204785.
- Donna Ruane Morrison and Mary Jo Coiro, "Parental Conflict and Marital Disruption: Do Children Benefit When High-Conflict Marriages Are Dissolved?" *Journal of Marriage and the Family* 57 (1999): 800–12; Kelly Musick and Ann Meier, "Are Both Parents Always Better than One? Parental Conflict and Young Adult Well-Being," *Social Science Research* 39 (2010): 814–30.
- 44. Ziol-Guest and Dunifon, "Complex Living Arrangements."
- 45. Shannon Cavanagh and Aletha Huston, "Family I, Instability and Children's Early Problem Behavior," Social Forces 85 (2006): 551–81, doi: 10.1353/sof.2006.0120; Osborne and McLanahan, "Partnership Instability;" Jay Teachman, "Childhood Living Arrangements and the Formation of Coresidential Unions," Journal of Marriage and Family 65 (2003): 507–24, doi: 10.1111/j.1741-3737.2003.00507.x.
- Paula Fomby and Andrew Cherlin, "Family Instability and Child Well-Being," American Sociological Review 72 (2007): 181–204, doi: 10.1177/000312240707200203.