AEI

Bringing Home the Bacon

HAVE TRENDS IN MEN'S PAY WEAKENED
THE TRADITIONAL FAMILY?

Scott Winship

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Executive Summary

The past 60 years have seen dramatic changes in the American family. Traditionally, conservatives have worried more about these changes, blaming them on cultural shifts, while progressives have viewed them as benign, positive, or problems with economic causes. However, Donald Trump's politically successful fusion of economic and cultural populism has blurred these lines. Populist right politicians and researchers not only lament the demise of traditional sole-breadwinner families and two-parent families; they blame these trends on an economy that has left men without the resources to support families.

But is it true that raising a family on one income has become harder? Are fewer men marriageable? Can changes in marriageability explain the decline in the two-parent family?

This report examines trends in young men's pay and the extent to which that pay exceeds levels typical of sole-breadwinning fathers in the nostalgia-tinged past. It finds that while young men's inflation-adjusted pay declined for an extended period between the early 1970s and early 1990s, it has largely recovered over the past 30 years. "Marriageability," as defined by the pay typical of young sole-breadwinning fathers in 1979, remains at, near, or above historic highs,

depending on the measure. This remains true when looking at trends for disadvantaged men.

To the extent that men's pay has not improved at the rates seen in the 1950s and 1960s, declensionist views may get the diagnosis backward in important regards. Rather than economic problems hurting men's ability to provide for families, trends in men's pay may reflect choices men and women have made in response to rising affluence. Some of these choices are cause for concern, such as the replacement of husbands' earnings with the expanded safety-net benefits a richer society can afford. But some choices reflect important gains, such as wider professional opportunities for women and the greater flexibility that has afforded husbands.

The impulse to find economic scapegoats for choices made by men and women in an affluent society is understandable. However, in fundamental ways, it is in conflict with the facts. We can—and often should—lament our collective decisions, but we should not be under the illusion they reflect increased economic duress in America. Policymakers who embrace the narrative of economic declensionism may effectively stoke populist outrage, but the stories they tell will not lead to improvement in Americans' lives.

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Scott Winship

The past 60 years have seen dramatic changes in the American family that have transformed social, economic, and political life in countless ways. Social conservatives have long associated trends such as delayed marriage, declining fertility, increased sexual permissiveness, rising divorce rates, and nonmarital childbearing with broad cultural shifts. Progressives have tended to celebrate the benefits of the sexual revolution and expanded opportunity for women, directing their concern, instead, to what they identify as the economic failings of "laissez-faire capitalism."

This divide between a culture-oriented right and an economics-focused left has blurred considerably since Donald Trump's successful 2016 presidential campaign. Trump's victory uncovered a dormant economic populism running through the conservative base, which he successfully fused to cultural resentment against progressive elites and the institutions they control.

Trump's fusion of economic and cultural populism has opened political space for social conservatives to link family change to economic trends. Some lament the demise of the traditional sole-breadwinner family, citing the failure of wages to keep up with the rising cost of living.[1] Others explain the erosion of the two-parent family as a consequence of economic stagnation or decline. They agree with AEI's W. Bradford Wilcox, writing for American Compass, that "with few 'marriageable' men employed in the kinds of decent-paying occupations that make them attractive as potential husbands, marriage has slipped out of reach for far too many poor and working-class Americans."[2]

Like many populist-right positions, these explanations for family change are rooted in long-standing progressive critiques of the economy. They therefore could transform economic policy through cross-party coalition building. But is it true that it has become harder to raise a family on one income? Are fewer men marriageable? Can changes in marriageability explain the decline in the two-parent family?

Answering these questions requires adopting a benchmark level of income necessary to afford the costs of raising a family—in other words, a definition of marriageability. In this report, I offer such a definition and consider whether American men have become more or less likely to satisfy it over time.[3] I focus on men in their late 20s, to assess claims that typically are about family formation among young adults. (For technical reasons, I focus on men age 25–29 rather than including younger men.)[4]

I find that however one views the transformation of the American family, the causes have little to do with changes in men's breadwinning ability, since men are as able as ever to meet economic marriageability thresholds. To the contrary, family change reflects the rising affluence of the United States, which has manifested in greater economic opportunities for women, an expanding safety net for single parents, and a variety of economic and cultural shifts that have affected family life.

Figure 1. Percentage of Men Age 25–29 Married and Living with Children, 1963–2021
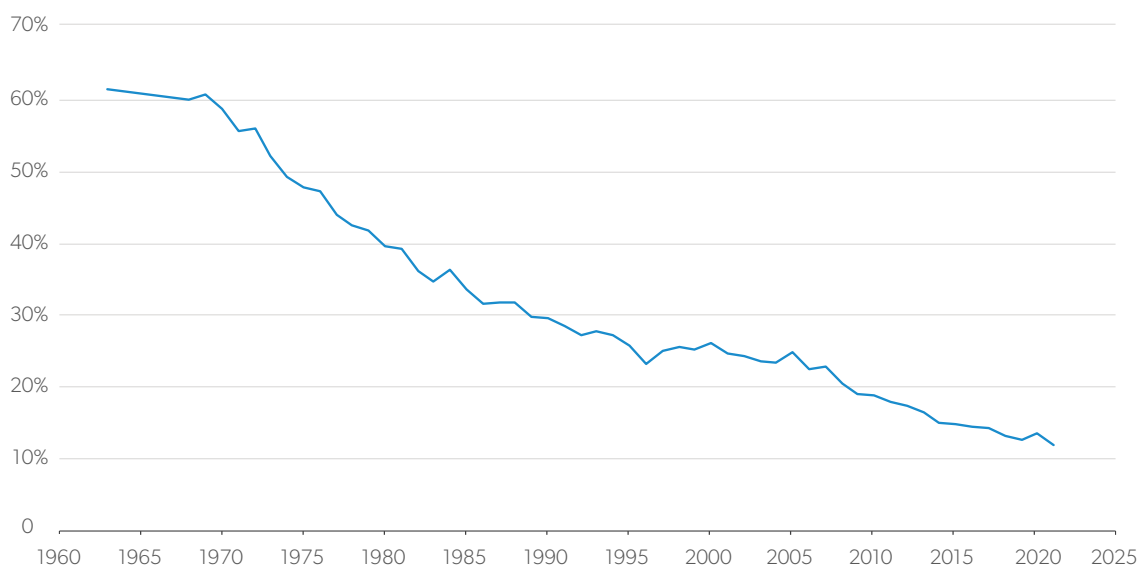
Note: Estimates are unavailable for 1964–67 and linearly interpolated between 1963 and 1968. Estimates from 2014 to 2021 have been shifted upward slightly to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

The Disappearance of the Traditional Male-Breadwinner Family and the Rise of Single Motherhood

American families have experienced profound changes since the mid-20th century. In 1963, 62 percent of American men between age 25 and 29 were married and living with children (Figure 1).[5] Of those young fathers, 55 percent were sole breadwinners the previous year (Figure 2).[6] By comparison, in 2021, just 12 percent of young men were married fathers, and only 29 percent of them were sole breadwinners. Multiply the numbers in Figures 1 and 2 and you find that the share of young men who are sole-breadwinning married fathers fell from 34 percent to 3.5 percent (Figure 3).

At the same time that male breadwinning has fallen, single motherhood has soared. Figure 4 shows that among mothers age 25–29, the share who were single rose from 6 percent to 40 percent between 1963 and 2021.[7]

Trends in Young Men's Earnings

Clearly, the populist right is correct that male breadwinning and two-parent families have become much rarer over time. Are men also less able to support a family than in the past?

Figures 1–4 are based on the Current Population Survey (CPS), which asks respondents about the earnings they received in the previous year. On first glance, it looks like there is something to the declensionist story. From 1962 to 1969, median earnings before taxes rose by 31 percent among young men (age 25–29) not in school, but by 2010, the median had fallen by 25 percent from that level, leaving pay at nearly its lowest point in 50 years. (See the dashed blue line in Figure 5. All the earnings, compensation, and income figures in this report are adjusted for the rise in the cost of living.)

That comparison is misleading because it contrasts a business cycle peak with the trough of the Great Recession. But if you compare 1969 to 2007 (another peak), the drop is still 16 percent.
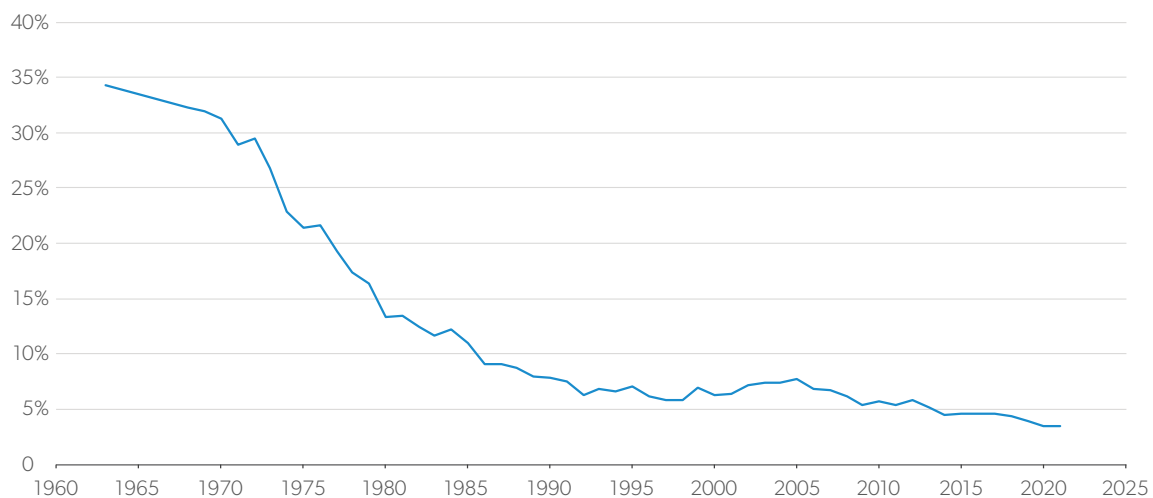
Figure 2. Percentage of Men Age 25–29 Married and Living with Children Who Are Sole Breadwinners, 1963–2021
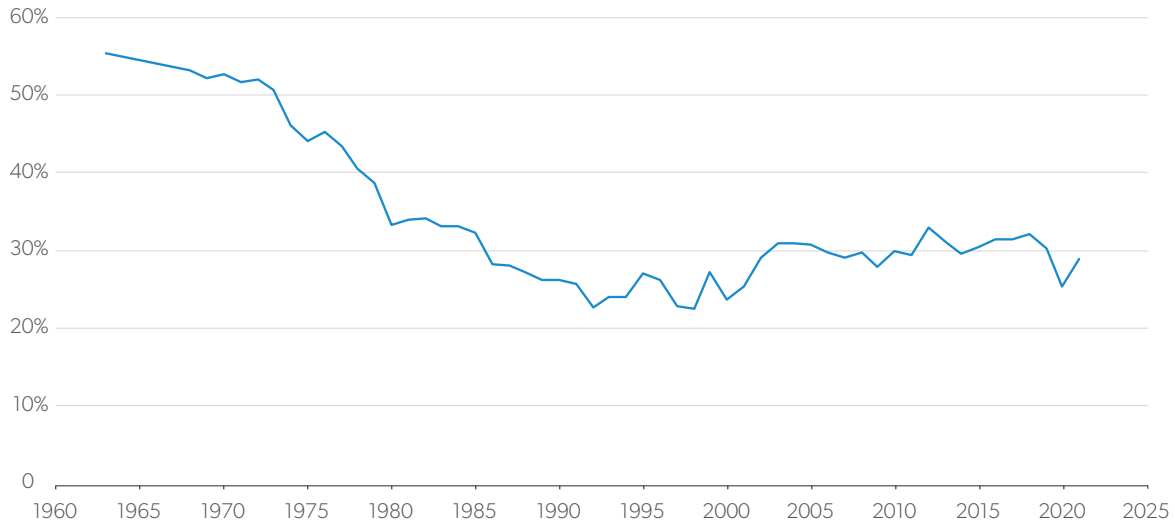
Note: Estimates are unavailable for 1964–67 and linearly interpolated between 1963 and 1968. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

Figure 3. Percentage of Men Age 25–29 Who Are Sole-Breadwinning Married Fathers, 1963–2021

Note: Estimates are unavailable for 1964–67 and linearly interpolated between 1963 and 1968. Estimates from 2014 to 2021 have been adjusted to account for a methodological break after 2013, as noted in Figures 1 and 2. (See Appendix A for details.)
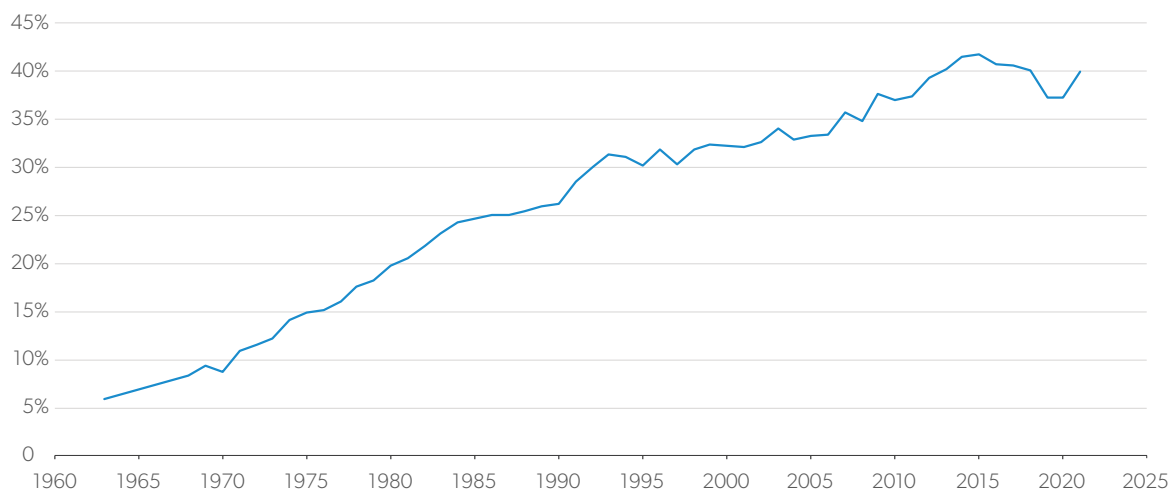Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

Figure 4. Percentage of Mothers Age 25–29 Who Are Single, 1963–2021

Note: Estimates are unavailable for 1964–67 and linearly interpolated between 1963 and 1968. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

Claims that men are no longer suitable as bread-winners or husbands are based on how much income men actually contribute to a family. That depends on overall compensation at work, since employer fringe benefits reduce families' health care expenses and need to save for retirement. It also depends on how much of worker pay the taxman takes. Nonwage compensation has risen from 8 percent of overall pay in 1969 to 14 percent in 2019, another business cycle peak.[8] At the same time, the average young man's tax rate on his earnings has fallen from 19 percent to 15 percent.[9] So while the median pretax earnings of young men fell by 9 percent from 1969 to 2019, pretax compensation declined 3 percent, posttax earnings fell 7 percent, and after-tax compensation was the same in both years.

The trend in men's *lifetime* earnings would likely show that men have done somewhat better over time.[10] Rising educational attainment has shifted the timing of earnings growth out to later in adulthood. Young men who have relatively high earnings potential have increasingly enrolled in school to raise their future earnings. If we look at older men, who are less likely to be enrolled, these issues are mitigated (though rising disability rates over time introduce new challenges). Among men in their 30s, median pretax earnings rose by 2 percent between 1969 and 2019, rather than falling by 9 percent, as occurred among men in their late 20s. For men in their 40s and 50s, the increases were 21 percent and 19 percent, respectively. Increases in posttax compensation have been correspondingly larger.[11]

There are other reasons to think that the ideal pretax earnings measures would show a somewhat better trend than in Figure 5, as discussed in Appendix A. Nevertheless, young men's take-home pay, at best, has increased only modestly over the past half century. I estimate that as of 1969, median pretax earnings among young men had more than doubled in the 22 years since 1947.[12] From the perspective of the last days of the 1960s, after multiple decades of rapid wage growth, the following 50 years would have been disappointing to anyone expecting more of the same, to say the least. (I come back to some explanations nearer the end of this report.)

But another way to describe stagnation is "no worse than in the past." Nostalgic declensionists argue that it is *more* difficult to raise a family on one

Figure 5. Median Annual Earnings and Compensation of Men Age 25–29, 1962–2020
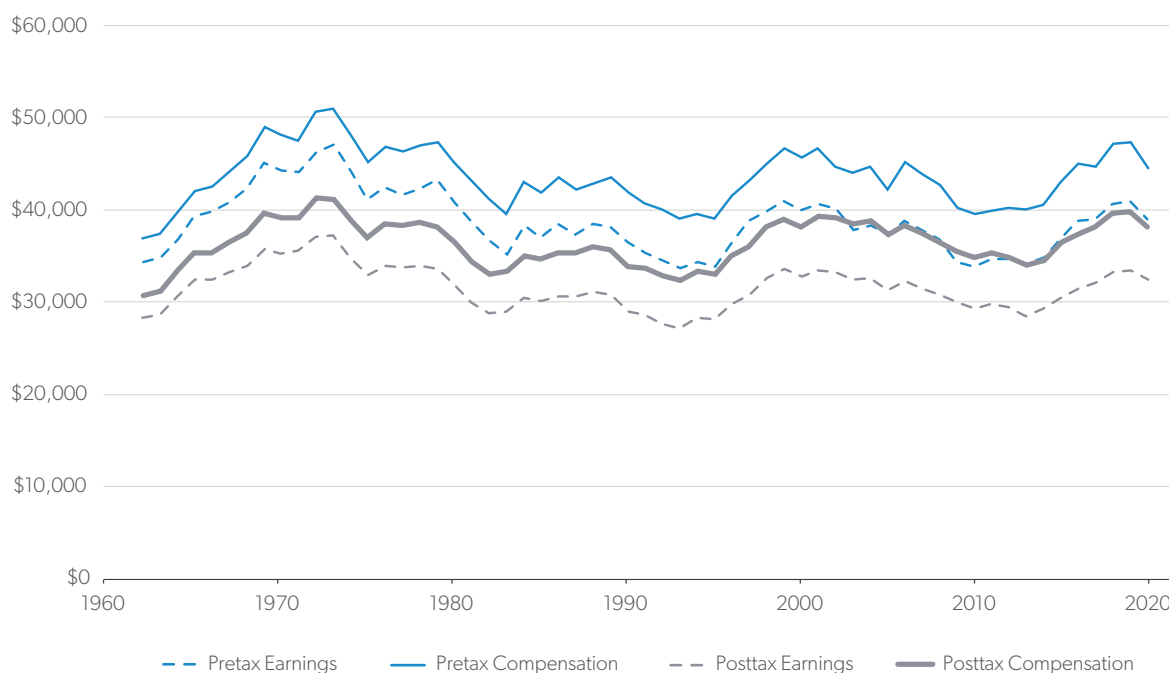
Note: Estimates are unavailable for 1964–67 and linearly interpolated between 1963 and 1968. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.) Men who worked less than year-round because they were enrolled in school are excluded.
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

income, not that it is just as hard as it ever was. They claim that the massive increase in single parenthood reflects the *declining* marriageability of men, not the same marriageability as in the 1960s.

Trends in Male Marriageability

Tracking the median earnings of young men provides one way of assessing whether it has become harder for men to raise families. Another is defining a benchmark for marriageability and then determining whether men are less likely to meet that benchmark. Since the populist right's claims are about the economic feasibility of raising a family on one income and the economic attractiveness of men to women deciding whether to marry them, this report focuses on an economic benchmark.

Any benchmark will be somewhat arbitrary; I considered a variety. It is intuitively appealing to use a benchmark tied to the earnings of men in the past who were successfully raising a family on one income. It makes little sense to set the threshold so high that earning that much was always rare, even for sole breadwinners. Setting it too low might deem so many men marriageable that trends are not meaningful. My primary analyses use as a marriageability threshold the 25th percentile of pretax earnings among married fathers age 25–29 who were sole breadwinners. This sets the bar at a level that, by definition, 75 percent of these breadwinners were above in the past. I also report trends using a higher threshold—the median (or 50th percentile). This sets a higher bar, but by definition, half of sole breadwinners manage to get by making less than the median.

The other choice involves what year to use as a reference point for "the past." The year 1969 is a

Figure 6. Marriageability of Men Age 25–29 According to Pretax Earnings, Various Thresholds, 1962–2020
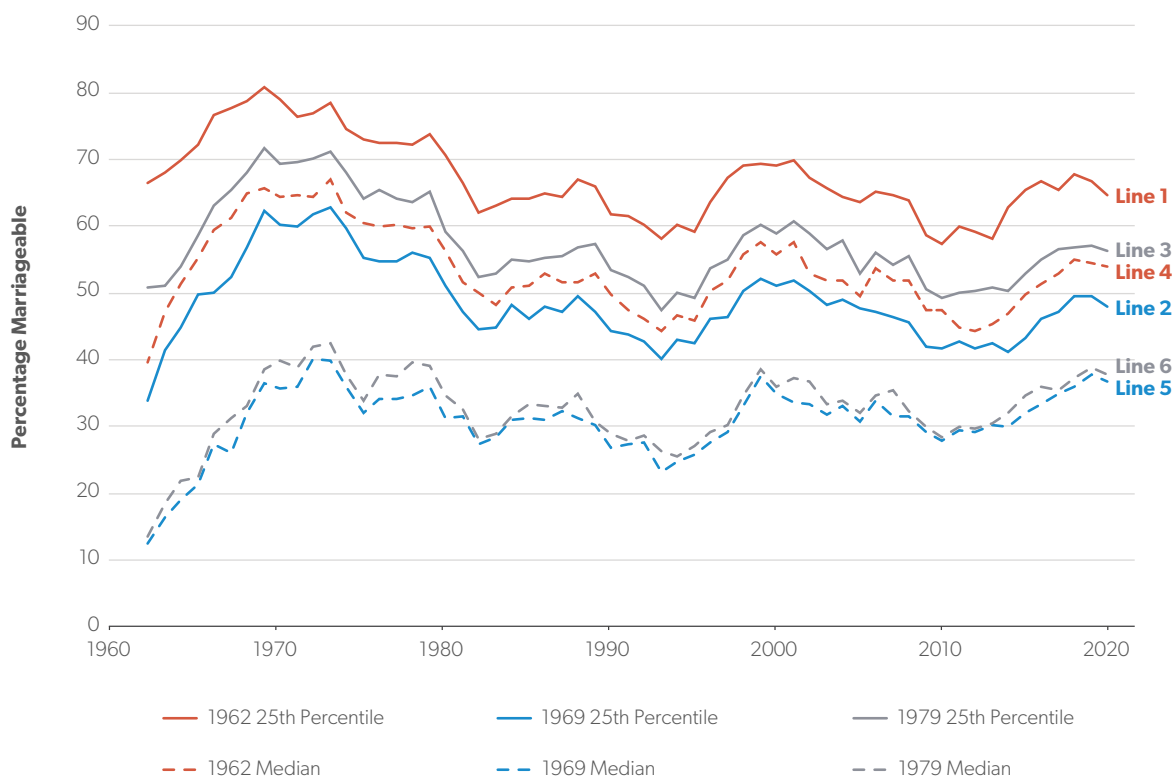
Note: The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Because Lines 1 and 4 are based on 1962 thresholds, for those trend lines, I include in every year men who were in school but worked part of the year. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.) The marriageability thresholds are as follows: Line 1: $4,000 ($27,500 in 2021 dollars); Line 2: $6,800 ($39,300); Line 3: $11,000 ($34,200); Line 4: $5,250 ($36,100); Line 5: $8,850 ($51,200); and Line 6: $16,000 ($49,720). Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

compelling option, not only being a business cycle peak but also coming at the end of the "Golden Age" of economic growth and 50 years before 2019, another peak. (The bump in 1972–73 shown in Figure 5 is, to a significant extent, an artificial effect of President Richard Nixon's price controls, which caused measured inflation to lag true inflation.)[13] However, while the tax estimates I model for the years before 1979 are reliable for young men generally, they understate the tax burdens of young male sole breadwinners.[14] Therefore, they are poorly suited for use in setting marriageability thresholds before 1979. For that reason, because 1979 was also a business cycle peak, and

because the pretax earnings distribution that year is similar to the 1969 distribution, I use 1979 as my reference point in most of the analyses that follow.

Fortunately, this report's conclusions are relatively insensitive to these decisions. Figure 6 shows six trends, using three different years as reference points and in each year using either the 25th percentile of sole-breadwinning married-father earnings or the median to set marriageability thresholds.

The earliest earnings estimates in the CPS data are for 1962. That year, 75 percent of young men not in school who were sole-breadwinning married fathers earned $4,000 or more. Line 1 shows the percentage

of all men age 25–29 (and not in school) who exceeded that inflation-adjusted threshold each year ($27,500 in terms of 2021 purchasing power). Lines 2 and 3 use the 25th percentile of young sole-breadwinner married fathers in 1969 and 1979. Lines 4 through 6 use the medians for the three years. The 1969 median was $8,850. Of the six thresholds, it is the highest— $51,200 in today's dollars. (Other threshold amounts are given in the note to Figure 6.)

Lower thresholds for marriageability correspond with higher marriageability rates in any year, but they also correspond with worse trends in marriageability. Using the 25th percentile of sole-breadwinner earnings in 1962 (Line 1), marriageability rose from 66 percent of young men in 1962 to 81 percent by 1969. It then fell to 58 percent by 1993 and reached a low of 57 percent in 2010. By 2019, it had risen to 67 percent. That was down from 1969 and 1979 but at essentially the same level as 1962 (the nearest year in the CPS data to the supposedly idyllic *Adventures of Ozzie and Harriet* era of the 1950s).

If the 1969 median is used as the threshold, the marriageability rate rises from 12 percent to 36 percent between 1962 and 1969. It falls to 23 percent by 1993 but then increases to 38 percent in 2019. That is higher than in any year except the Nixon-manipulated 1973 and 1974.

Four of the six lines in Figure 6 show a drop in marriageability since 1969, though only one is lower in 2019 than in the mid-1960s. A point to which we will return is that the downward trends of those four lines cease nearly 30 years ago, in the early 1990s. Apart from the secular fall over the 1970s and 1980s, marriageability rises and falls with the business cycle.

Marriageability Trends Accounting for Nonwage Compensation and Taxes

Line 1 in Figure 7 repeats Line 3 from Figure 6, showing the marriageability trend based on the 25th percentile of pretax earnings in 1979. Line 2 shows the trend if we set the marriageability threshold at the 25th percentile of pretax *compensation* in 1979 and compare men's compensation in each year to the

threshold. Rather than falling from 72 percent to 57 percent from 1969 to 2019, marriageability falls from 68 percent to 59 percent. Looking at posttax earnings instead (Line 3), marriageability falls from 64 to 56 percent, and considering posttax compensation (Line 4), it falls only from 63 percent to 58 percent.

Trends based on posttax compensation provide the best indication of how marriageability has changed. Some families would prefer higher wage and salary income to nonwage compensation, which would support devaluing the latter as resources relevant for marriageability. However, nonwage compensation is clearly valuable to most employees, else employers would not offer it in lieu of extra pay.

Thinking about nonwage compensation as a substitute for earnings might support preferring pretax to posttax measures. The nonwage compensation that employees receive in lieu of wages is relevant for marriageability—so, too, might be the tax-funded government benefits that employees receive in lieu of untaxed wages. Federal and state taxes fund spending on social insurance programs, a safety net, national defense, and untold other benefits.

That logic might make some sense if higher taxes corresponded with greater benefits, although even then one would want to discount these benefits versus workers just receiving the cash taxed away. But more to the point, our tax system is progressive, so those with fewer resources pay lower taxes but often receive the same or greater government benefits. Because of refundable tax credits, tax rates may even be negative. Moreover, many government benefits, broadly defined, are received by families regardless of whether the family includes a worker. And tax rates have fallen over time as government has grown. Using pretax rather than posttax earnings will add less to recent workers' earnings than it would have to past workers' earnings, even if the benefits they receive from the government have not fallen.

A final point is that if one prefers using pretax earnings or compensation rather than deducting taxes, then it is necessary to account for other earnings that are taxed away beyond the earnings to which individual income and payroll taxes are

Figure 7. Marriageability of Men Age 25–29 Using Lower Thresholds, 1962–2020
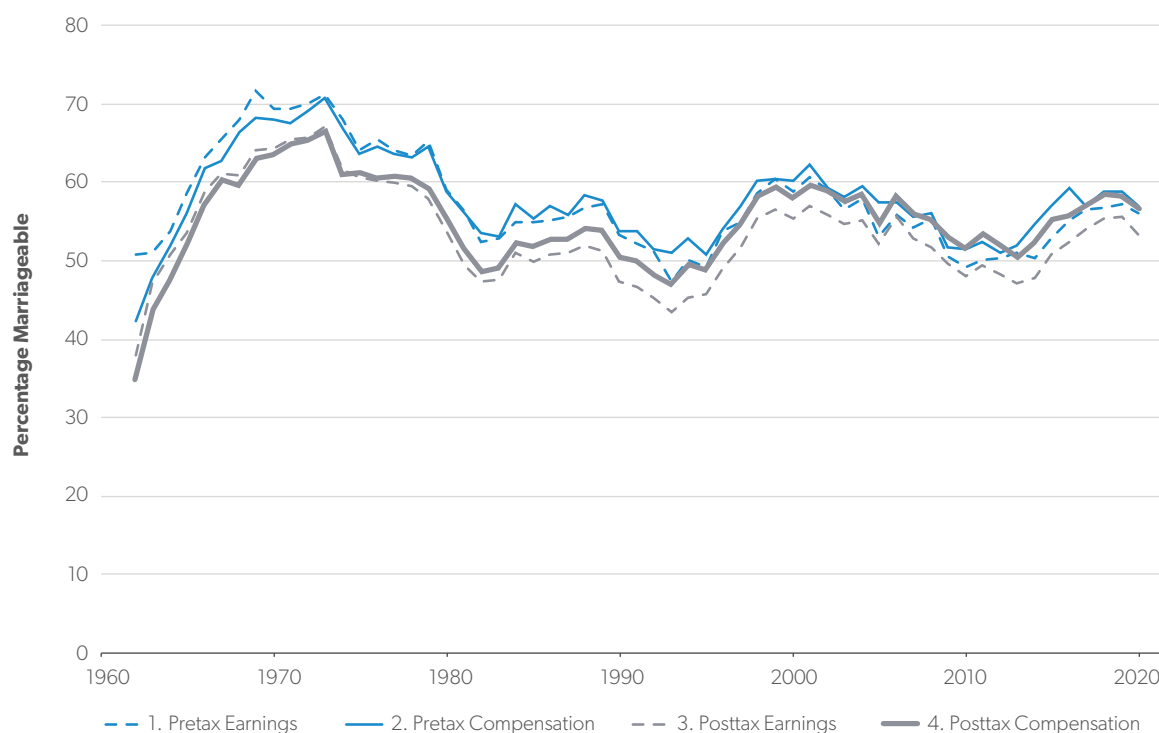
Note: The marriageability threshold is set at the 25th percentile of earnings or compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.) The marriageability thresholds are as follows: Line 1: $11,000 ($34,200 in 2021 dollars), Line 2: $12,200 ($38,000), Line 3: $9,700 ($30,150), and Line 4: $10,800 ($33,700).
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

applied. Earnings are also taxed away by the corporate income tax and the employer's share of payroll taxes, both of which employers pay partly by reducing worker pay. Corporate income tax rates have fallen modestly, but employer payroll taxes have risen,[15] and economists believe that employees bear only some of the corporate income tax cost but most of the employer payroll tax cost. That means adding back the earnings taxed away by these other levies would likely raise earnings more in recent years than in earlier years, making marriageability trends based on pretax earnings better than shown in Figures 6 and 7.

At any rate, one thing is clear from a cursory glance at the family trend figures presented earlier in the report: Any of the declines in marriageability in

Figure 7 are small in comparison to the changes in family life that marriageability is supposed to explain.

The contrast becomes even clearer using the 1979 *median* earnings and compensation for young sole-breadwinning married fathers to set marriageability thresholds. Line 1 of Figure 8, looking at pretax earnings, shows the marriageability rate one point higher in 2019 than it was in 1969 (39 percent versus 38 percent). The 2019 rates are also higher than in 1969, looking at posttax earnings or pre- or posttax compensation. The estimates based on posttax compensation show that 2019's 40 percent marriageability rate was the highest on record.

One objection to the marriageability results in Figures 7 and 8 might be that they use a single threshold for marriageability across the entire country,

Figure 8. Marriageability of Men Age 25–29 Using Higher Thresholds, 1962–2020
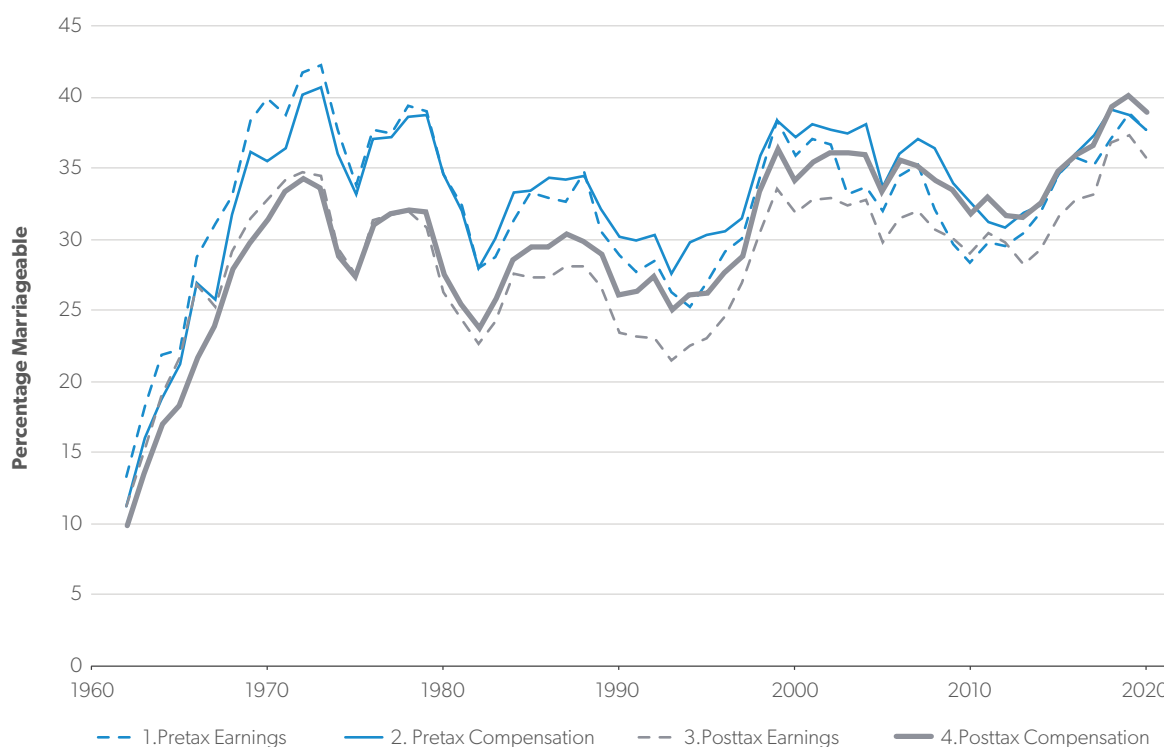
Note: The marriageability threshold is set at the median of earnings or compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.) The marriageability thresholds are as follows: Line 1: $16,000 ($49,700 in 2021 dollars), Line 2: $17,800 ($55,300), Line 3: $13,500 ($42,000), and Line 4: $15,300 ($47,500).
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.
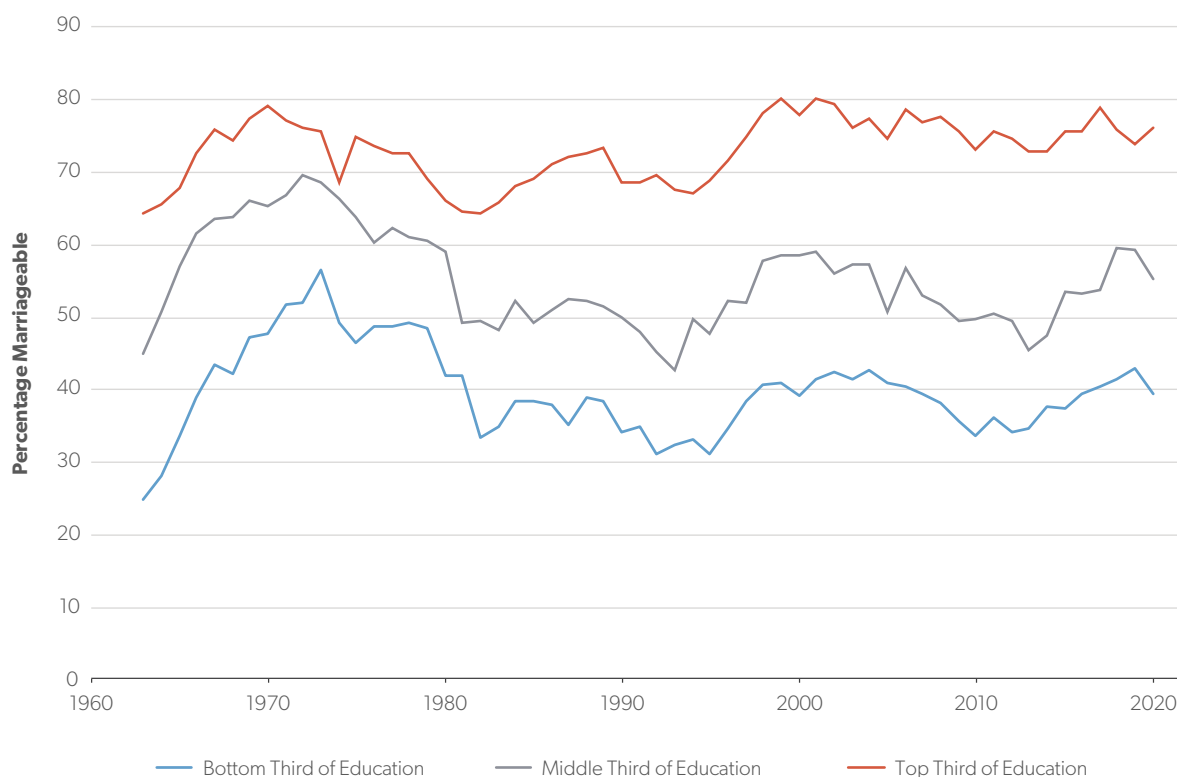
ignoring geographic cost-of-living differences and geographic variation in inflation over time. To address this question, I turned to two other data sources large enough to estimate long-term trends in marriageability rates based on pretax earnings and more local thresholds.[16] The 1969–2019 trends were practically the same whether I used a single national threshold or the local ones.

Marriageability by Education and Race

Arguments about declines in breadwinning and marriageability often focus on disadvantaged men. The relative decline of manufacturing employment, increasing global trade, and rising immigration may

have depressed the earnings growth of less-skilled workers.[17] Single parenthood is much more common among African Americans than among whites, though it has soared in both groups over the past half century, and black men have lower employment and earnings than do white men.[18] Is there evidence of declining marriageability in these populations?

Figure 9 shows the marriageability rate separately by three educational groups, using the same threshold for each (the 25th percentile of 1979 posttax compensation among young married sole-breadwinning fathers). Marriageability, unsurprisingly, increases with additional schooling. Among young men in the bottom third of education, the marriageability rate fell, but only modestly—from 47 percent in 1969 to 43 percent in 2019. The decline was only a bit larger

Figure 9. Marriageability of Men Age 25–29 by Education, Using Lower Thresholds, 1962–2020

Note: The marriageability threshold is set at the 25th percentile of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. Educational attainment percentiles were estimated by ranking the sample of men and breaking ties randomly. (See Appendix A for details.)

Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

for young men with moderate levels of schooling, falling from 66 to 59 percent. Finally, the upper third of young men also saw only a small decline, with the marriageability rate falling from 77 to 74 percent.

Figure 10 shows increases in marriageability when the 1979 median posttax compensation is used to set the threshold. The increase between 1969 and 2019 was from 17 percent to 25 percent for the bottom third, 27 to 37 percent for the middle third, and 46 to 61 percent for the top third.
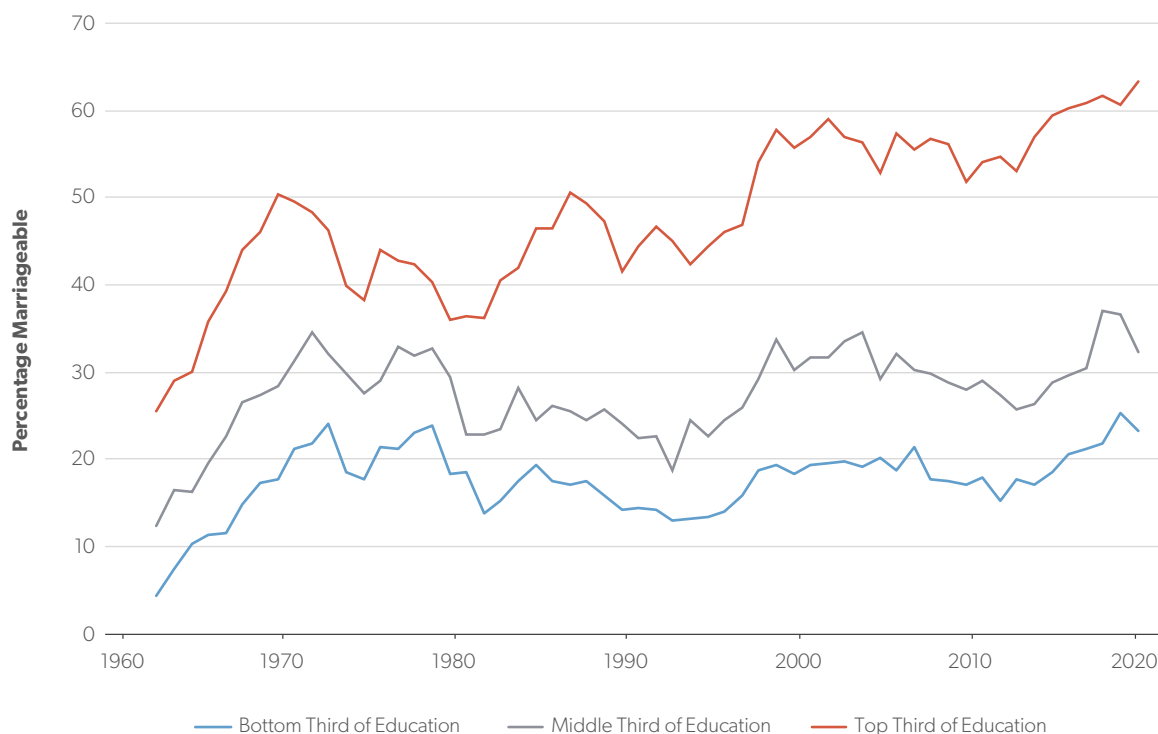
Figures 11 and 12 show marriageability trends by race, using a fixed threshold across groups (either the 25th percentile of 1979 sole breadwinners or the median, respectively). Marriageability rates are

considerably higher among white men than among black or Hispanic men, but here we are more interested in trends.

Using the lower threshold (Figure 11), the marriageability rate of young black men rose from 31 percent in 1969 to 43 percent in 2019. Marriageability was about the same in 2019 as in 1969 (for whites) and in 1970 (for Hispanics), falling slightly among whites, from 67 percent to 65 percent, and rising slightly among Hispanics (47 to 49 percent).[19]

Using the higher threshold in Figure 12, marriageability rose considerably among all three groups. The trend for African American men, however, stands out as strikingly in conflict with claims of declining

Figure 10. Marriageability of Men Age 25–29 by Education, Using Higher Thresholds, 1962–2020

Note: The marriageability threshold is set at the median of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. Educational attainment percentiles were estimated by ranking the sample of men and breaking ties randomly. (See Appendix A for details.)
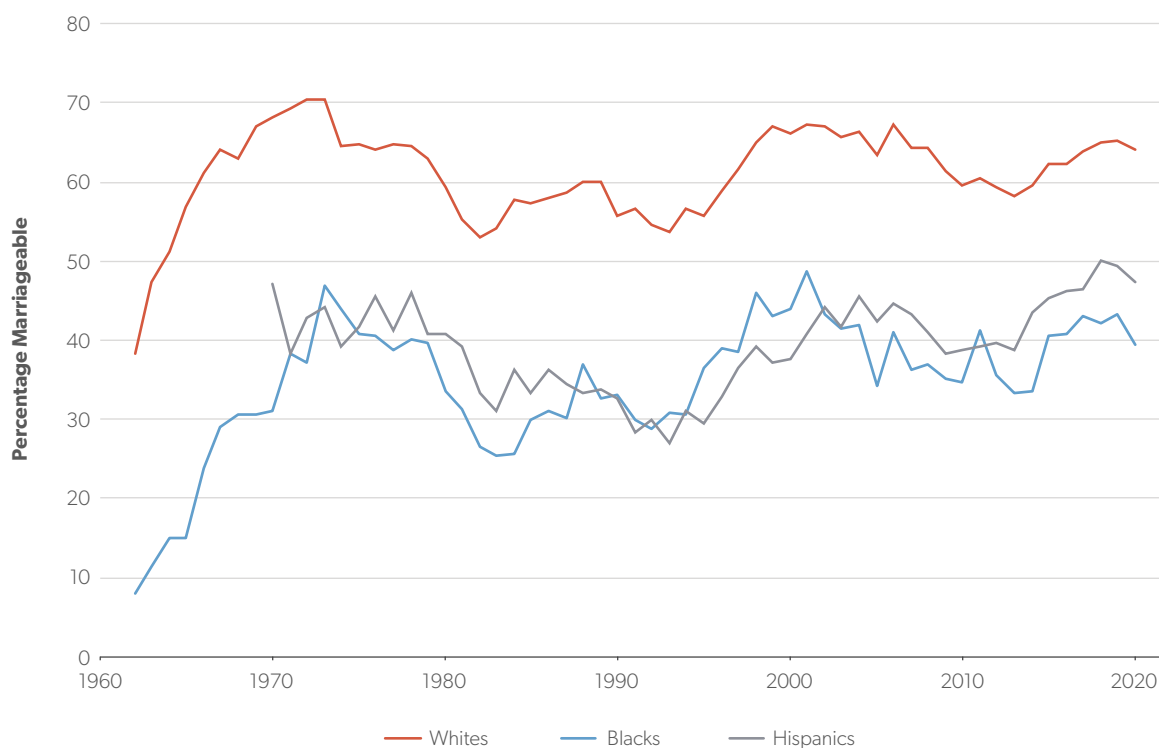Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

male marriageability. In 1962, 1 percent of young black men brought home enough after taxes to reach the 1979 median among young sole-breadwinning married fathers not in school. By 1969, that had risen to just 8 percent. In 2019, one in four young black men met that threshold. Black men have become unambiguously more economically attractive as potential husbands and fathers over the past half century.

One possible objection to these results for men with less education and black men is that perhaps thresholds based on young men generally are unrealistically high as indicators of marriageability. I reran the analyses but this time using either the median posttax compensation among young men

in the bottom third of education or among young black men, rather than the median among young men generally. Marriageability among the bottom third rose from 27 percent to 34 percent between 1969 and 2019, while marriageability among black men rose from 25 percent to 38 percent.

A second objection might be that my posttax compensation estimates, which rely on assumptions detailed in Appendix A, are less accurate for disadvantaged groups. I describe in Appendix A the numerous checks I conducted to ensure that the assumptions behind my estimates—particularly the tax estimates before 1979 and the compensation estimates in all years—produce accurate results. My

Figure 11. Marriageability of Men Age 25–29 by Race, Using Lower Thresholds, 1962–2020

Note: The marriageability threshold is set at the 25th percentile of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
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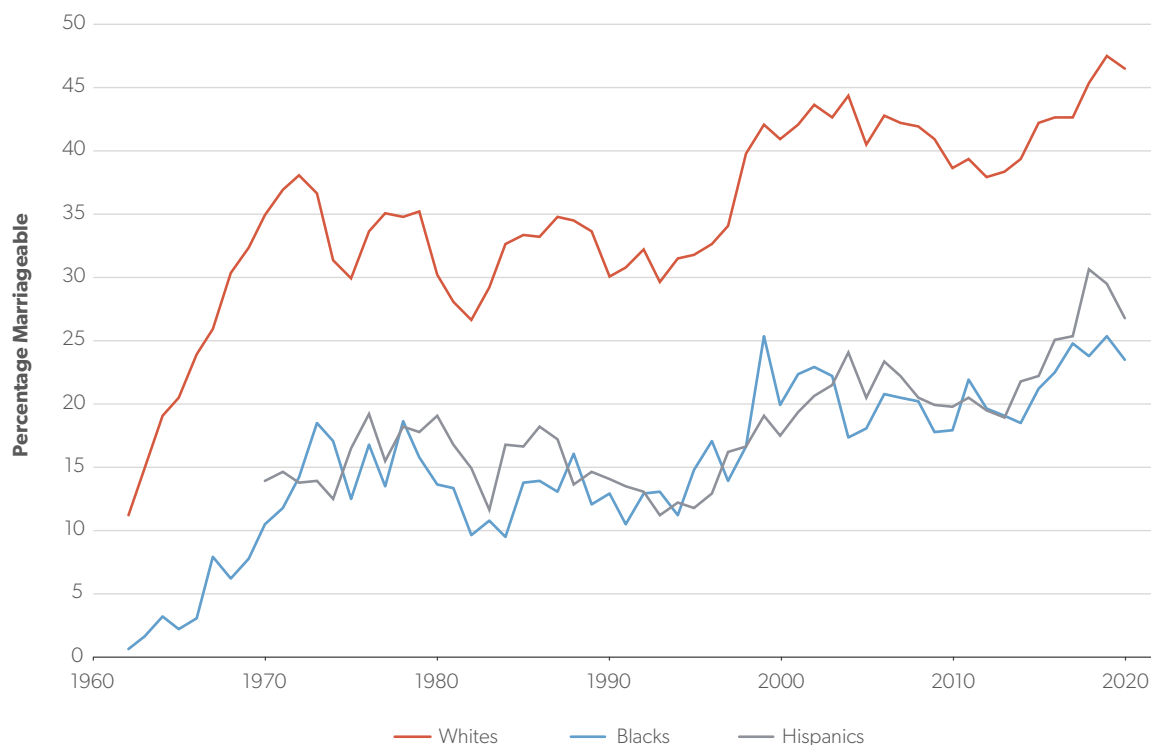
estimates rely on fewer assumptions from 1979 forward, and marriageability is at least as high in 2019 as in 1979 for all the estimates in Figures 9–12, except for the bottom and middle thirds of education, when the lower threshold for marriageability is used.

My estimates of pretax earnings are straight from the CPS data. Marriageability rates using pretax earnings generally decline over time when the lower threshold is used (except they are as high in 2019 as they were in 1969 for black men), but they either increase or (for the bottom and middle thirds of education) are unchanged when the higher threshold is used.

Finally, a third—and important—objection might be that the analyses in this report exclude the

institutionalized population, including the incarcerated. Because incarceration rates rose over this period, especially among disadvantaged young men, we should worry that the exclusion of incarcerated men from the analyses might present too rosy a picture.

To address this issue, I turned to two other data sources that include the institutionalized population and that I could use to estimate long-term trends in marriageability rates based on pretax earnings.[20] Changes between 1969 and 2019 in marriageability rates among young men in the bottom third of education and among young black men (and young Hispanic men) differed by no more than 1 percentage point, depending on whether the institutionalized

Figure 12. Marriageability of Men Age 25–29 by Race, Using Higher Thresholds, 1962–2020

Note: The marriageability threshold is set at the median of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

were included. This was true whether I used the lower or higher thresholds for marriageability.[21]

Explanations for Men's Stagnant Earnings: Beyond Economic Declensionism

The populist right's declensionism, as noted at the start of this report, is not entirely new. On issues such as trade, finance, and economic regulation, it has ended up where the political left has been for some time. Indeed, both the view that a single-breadwinner family is no longer an option for most people and that the collapse of the two-parent family is due to men's diminished ability to put food

on the table trace their origins through influential progressive ideas.

Nearly 20 years ago, Sen. Elizabeth Warren (D-MA) rose to national prominence on the popularity of 2003's *The Two-Income Trap: Why Middle-Class Mothers and Fathers Are Going Broke*.[22] Coauthored with her daughter, Amelia Warren Tyagi, the book argued that economic necessity drove more and more wives into the workforce, a development that nonetheless left families with less discretionary income than sole-earner families had in the previous generation. The book's analysis suffered from a number of serious problems.[23] Even further back, the eminent sociologist William Julius Wilson propounded the original "marriageable men hypothesis" to explain how

deindustrialization had led to high rates of father-lessness among the inner-city poor.[24]

What accounts for the pervasive view that family change has been driven by a deteriorating economy? One reason is that, as we have seen, men's earnings really did decline during an extended period from the early 1970s through the early 1990s. However, many analysts have overstated the severity of the decline through inappropriate measurement decisions.[25] Moreover, men's take-home pay has recovered over the past 30 years.[26]

But the issues run deeper than analytic choices or incomplete perspectives; there are interpretive challenges that, properly understood, weaken the narrative of economic declensionism in ironic ways. Some of the causes of male earnings stagnation reflect the choices that a freer and more affluent people have made—choices we might even celebrate with one, two, or three cheers. In other respects, it is not so much the trend in male earnings that should inspire alarm but the cultural changes behind men's stagnant paychecks.

Rather than husbands' declining earnings making it necessary for wives to work, increased work among wives may have afforded husbands opportunities to forgo higher pay. Rapid increases in labor force participation among wives predated the slowdown in male pay by decades. When women have higher earnings, their husbands have greater freedom to prioritize other considerations in their employment decisions, beyond maximizing take-home pay. They may take less highly paying jobs that are otherwise more appealing, such as because they are safer or less physically arduous. They can quit unpleasant jobs more often and more quickly and spend more time unemployed or out of the labor force. All of these choices would tend to reduce the typical earnings of husbands, even as they reflect greater opportunity for both wives and husbands.

Rather than husbands' diminished paychecks making it harder to afford kids, declining marital fertility may have diminished the pressure on men to maximize earnings. Greater work among wives has contributed to declining marital fertility. Fewer mouths to feed reduces the pressure on husbands to prioritize annual earnings.

Rather than declining male pay reducing marriage, falling marriage rates may have dampened men's earnings growth. Marriage began its long decline in the 1950s, and nonmarital childbearing rose in the 1950s and 1960s, when the economy was booming.[27] Greater economic opportunity and higher earnings among women reduce women's dependence on men, leading to less marriage. Such a decline may have affected male earnings trends because, as research suggests, marriage tends to increase men's earnings, perhaps by as much as 25 percent.[28] Presumably, it does so because husbands perceive that they are responsible for taking care of their family. Less family formation means less of this responsibility and lower male earnings.[29]

The same greater economic opportunity for women has led more women to choose to parent children alone. Researchers have speculated, with some evidence, that legal abortion and the birth control pill changed norms around a man's responsibility to his partner if she becomes pregnant.[30] Indeed, the shotgun marriage rate has plummeted over the past 60 years.[31] As expectations of single men regarding their obligations to their partners and nonresident children have withered, they, too, have faced fewer pressures to maximize their earnings.

Rather than declining men's pay making sole breadwinning less common, falling rates of sole breadwinning may have reduced men's pay. A popular explanation for men's declining earnings involves an increased-labor-supply story told by armchair economists (and many credentialed economists). As women's employment rates increased—including in occupations formerly dominated by men—a first-order effect of the greater competition could have been to lower wages, disproportionately hurting men.

However, it is inappropriate to stop at the first-order impact of increasing female labor supply. A second-order effect of more women working would be

to increase demand for consumer goods and services and investment, which would be expected to increase the employment and earnings of male and female workers alike. Just as there is a robust debate among economists about whether immigration reduces wages, it should be considered an empirical question whether increased work among married women and mothers reduced men's wages.

There is, however, another way in which the "quiet revolution"[32] of rising female labor supply might have reduced male earnings growth: by eroding "rents"—compensation in excess of a worker's productive contribution—that male breadwinners received in a more patriarchal era. That is, men's earnings growth might have slowed because now that so many wives and mothers work, earlier norms in favor of paying men a breadwinner premium have broken down.

A primary goal of organized labor for decades, often at least partly conceded by employers, was securing a "family wage" for not only married men but also young single men (who *aspired* to be breadwinners).[33] Women, who were expected to begin bearing and raising children upon getting married, were actively discriminated against by unions and employers alike. Ford's famous $5-a-day wage, for example, went to women only if they were single and supporting a family, and while it went to single men, it went to married men only if their wife did not work.[34]

While strong productivity growth explains part of why men's pay rose so rapidly in the quarter century between World War II and 1969, median earnings growth actually outpaced mean earnings growth over much of this period, and evidence suggests this was true only of men.[35] This fact suggests that increases in pay for less-skilled men outpaced increases in their productivity, which was certainly the case for workers generally during this period.[36]

Falling income concentration during these years—the period of peak labor union strength in America[37]—also suggests a funding source for breadwinner rents: top earners and investors. After plummeting during World War II, the share of income received by

the top 1 percent continued to fall during the 1950s and 1960s.[38] Male breadwinning may have been such a pervasive ideology during the mid-20th century that it tempered self-interest among the richest Americans or limited their ability to maximize their resources.

The 1950s and 1960s, then, may have served as a transitional era when the baby boom and breadwinner norms sat uneasily with gains in economic opportunity that women had experienced during the war and with the egalitarianism of the late 1960s. During the 1970s and 1980s, employment rates among married women and mothers increased rapidly. Once maternal employment became widespread, the norm of paying men extra and reserving certain jobs for them so they could raise a family on one income couldn't survive; there is no justification for paying someone extra to raise a family by himself if his wife is also likely to work. Men's median earnings declined, and income concentration bottomed out and reversed course.

In short, the slow erosion of breadwinner bonuses over decades may have dampened growth in men's pay.[39] One silver lining is that if this hypothesis accurately describes a reason for men's earnings doing poorly, it suggests that once men's pay has recalibrated in line with productivity levels, male earnings trends should improve. And indeed, since the economic recovery of the 1990s, men's and women's earnings have both trended similarly, after diverging since the 1960s.[40]

Alternative Explanations for Family Change: Rising Affluence

Two changes—both reflections of rising affluence—have played an enormous role in affecting family life over the past half century. First, while men's pay has not declined in absolute terms, it has dropped substantially relative to women's pay. Second, one of the benefits of a rich society is that it can offer a more robust safety net. But if safety nets are designed without regard for the incentives embedded in them, they can lead to concerning changes in the family.

Women's Marriageability. Women have experienced sizable earnings gains over the past half century thanks to increased employment and earnings. Declensionists, left and right, attribute increased work among women to economic necessity—a response to declining male earnings and marriageability.

There are several problems with the declensionist account, however. For starters, as we have seen, men's pay is no lower than it was at its previous high point. Second, trends around the industrialized world suggest that women have been eager to devote more time to work as a way of achieving greater fulfillment and more balance in their lives. Their educational attainment rates have risen, they have delayed marriage, and their fertility has declined.

In no small measure, this is a byproduct of affluence. The dual-earner model presumes that families can fulfill the requirements of household management—maintaining a clean and safe home and feeding family members. Adoption of the model was limited by the affordability of fulfilling basic needs such as food, clothing, and shelter via market purchases rather than home production. It was also limited by the time requirements of keeping a clean home, laundering clothes, and preparing meals. The proliferation of appliances, processed foods, and similar conveniences cut these requirements.

Sending a second parent into the workforce also presumes that families can afford childcare while they are away. In an earlier era, when Americans lived nearer to their kids' schools and extended families, when there were more stay-at-home parents to watch neighbors' kids, and when parents were more willing for children to be home alone, childcare was relatively cheap. As more mothers worked—and fathers declined to "lean out" of the workforce to assume childcare duties—paid care often became a necessity. Parents also became more attentive to childcare quality, increasingly seeking settings that would substitute for their own investment in their children's development.

Another way that affluence led to greater work among women was the development of reliable birth control technology. A barrier to widespread entry of women into many high-paying professional occupations was the difficulty of controlling their own fertility. The inability to plan confidently the timing and tempo of childbearing led to women experiencing career interruptions or opting out of many career tracks preemptively—and reticence on the part of employers to hire women.
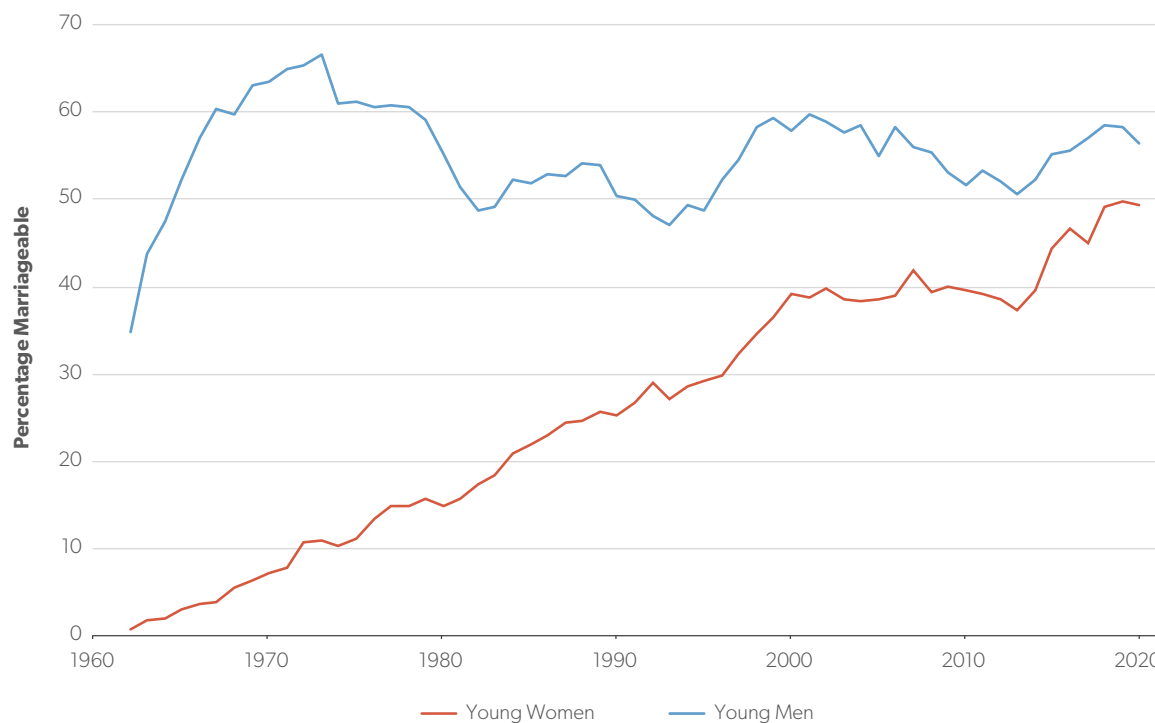
Yet another reason to reject the declensionist account of rising work among wives and mothers is that the patterns of husbands' and wives' employment trends are inconsistent with it. Work has risen most among women with the best-educated husbands, not among wives of lower-skilled men, who are likely to have more employment problems and lower wages.[41] The decisions of married women to work have become less sensitive to husbands' earnings over time, not more.[42] While the working hours of married men have declined over the long run, those of single men have not, suggesting that husbands have become more economically comfortable, not less.[43]

As women have benefited from more economic opportunity, more of them earn enough to exceed earnings thresholds allowing for self-sufficiency. Figure 13 takes the lower marriageability threshold for men from 1979 (based on the 25th percentile of posttax compensation among married sole-breadwinning fathers age 25–29) and tracks how many young women clear the bar. In 1962, while 35 percent of young men were marriageable, just 1 percent of young women had posttax compensation exceeding the threshold. By 2019, the gap had closed to just 8 percentage points (58 percent to 50 percent). Half of young women earn enough today that they do better than 25 percent of young sole-breadwinning married fathers did in 1979.

By the sort of naive economic logic that equates men's marriageability with their economic resources, women's rising pay should have unambiguously promoted marriage and family formation. Simply put, employed women bring more resources into the home, and since men are not bringing home any fewer resources, the change does not reflect rising economic necessity.

However, women's ability to support themselves (and to support children on their own) has probably

Figure 13. Marriageability of Women and Men Age 25–29 Using Male Lower Thresholds, 1962–2020

Note: The marriageability threshold is set at the 25th percentile of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men and women, and men and women who worked less than year-round because they were in school. It is not possible to exclude men and women who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

made it less appealing for them to marry men who do not measure up in other ways (or to stay married to them). Many women may also prefer marrying someone who makes more than they do or who makes a comparable amount.[44] Such men are harder to find today than in the past, but not because men are doing significantly worse. It is just that women are doing significantly better.
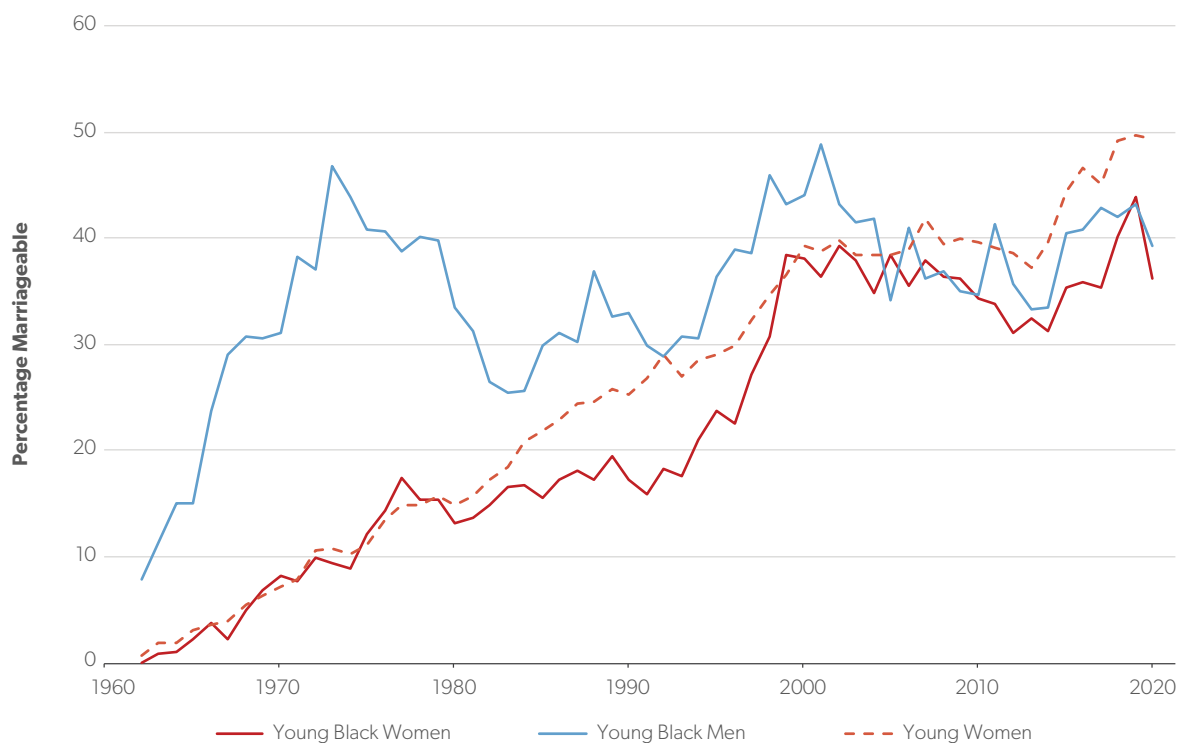
As we have seen, by an absolute economic yardstick, black men have become more marriageable over time, contrary to many accounts explaining changes in the black family. However, their progress pales in comparison to black women, as shown in Figure 14.

In 1962, while only 11 percent of black men exceeded the marriageability threshold from 1979 (based on young sole-breadwinning fathers generally,

not just black men), essentially no black women did. Those rates increased over time, initially faster for black men, but later for black women. For roughly the past 15 years, black women have had marriageability rates as high as those for black men.

Of note is the sharp increase in the economic prospects of black women during the 1990s. This decade lifted men and women generally, but comparing the solid red line in Figure 14, for black women, to the dashed red line, for all women, clarifies how much the 1990s benefited black women in particular. In 1991, only 16 percent of young black women met the threshold for male marriageability. By 1999, 39 percent did. The gap between black women and women generally, 11 percentage points in 1991, closed for the first time since the 1970s (only to reemerge later). In just three

Figure 14. Marriageability of Black Women and Men Age 25–29, Using Male Lower Thresholds, 1962–2020

Note: The marriageability threshold is set at the 25th percentile of posttax compensation of young married fathers in 1979 who were sole earners and not in school. The sample excludes non-civilians, institutionalized men and women, and men and women who worked less than year-round because they were in school. It is not possible to exclude men and women who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

years, from 1996 to 1999, the share meeting the marriageability threshold rose 16 percentage points.
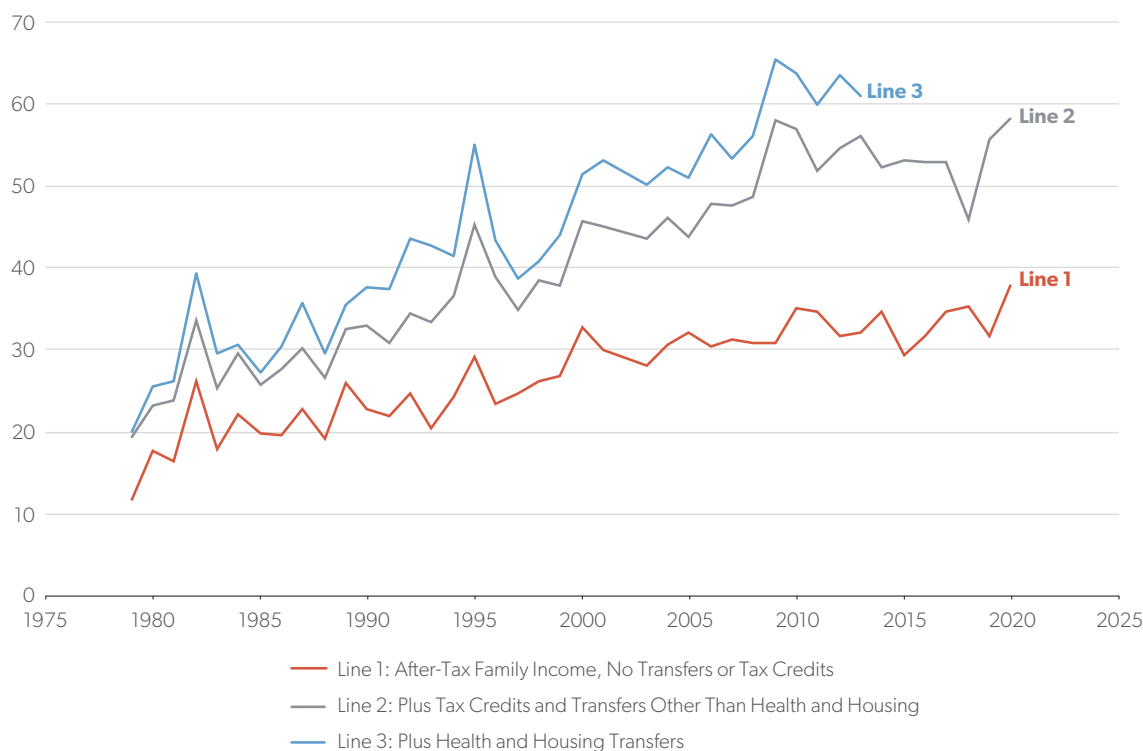
The Safety Net as a Substitute for Marriage. Another profound shift stemming from affluence has affected marriage and family formation: Richer societies are better able to afford a humane safety net for families in need. To the extent that safety nets provide temporary relief to families who have fallen on hard times, they might minimally affect family change. But because antipoverty programs are conditioned on having low incomes, they disproportionately serve single-parent families. If such programs become sufficiently generous and available over long stretches,

they may incentivize single parenthood and discourage marriage.[45]

As the US has become richer, antipoverty spending has increased dramatically, even as hardship has fallen.[46] For a cursory sense of how this might have affected trends in marriage and fertility, we can compare the family incomes of less-educated young single-mother families in a given year to a threshold pegged to the compensation of young less-educated men in the same year. Unlike the previous analyses in this report, the threshold changes from year to year and is not pegged to sole breadwinners.

Figure 15 shows three trends for young less-educated single mothers, each of them showing the share whose posttax family income exceeds the

Figure 15. Percentage of Less-Educated Single Mothers Age 25–29 with Family Income Exceeding the Median Posttax Compensation of Less-Educated Men Age 25–29, 1979–2020

Line 1: After-Tax Family Income, No Transfers or Tax Credits
Line 2: Plus Tax Credits and Transfers Other Than Health and Housing
Line 3: Plus Health and Housing Transfers

Note: The thresholds are set at the median posttax compensation of young men in each year who were in the bottom third of the young male education distribution. The estimates are for young single mothers who were in the bottom third of the young female education distribution, comparing their family income to the threshold. The sample excludes non-civilians, institutionalized men and women, and men and women who worked less than year-round because they were in school. (See Appendix A for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series.

median posttax compensation of young less-educated men in each year. Because the family income measure in the CPS is incomplete before 1979, the figure begins that year.[47]

The lowest line shows the trend when family income excludes all safety-net benefits. In 1979, just 12 percent of less-educated young single mothers had family incomes that were higher after taxes (but before including transfers and refundable tax credits) than the posttax compensation of the typical less-educated young man. By 2019, the share had nearly tripled, rising to 32 percent (and to 38 percent by 2020). (Including nonwage compensation in single mothers' incomes would shift these rates modestly higher but would likely not affect the trend.)

That less-educated single mothers' family income has risen at a faster rate than less-educated men's pay reflects, to some extent, the expanded opportunities enjoyed by women generally, discussed in the previous section. However, paradoxically, that pre-transfer incomes have risen relatively quickly also reflects the important state and federal safety-net reforms of the 1990s. In that decade, the main cash welfare program for nondisabled families was altered to include time limits and work requirements. Concurrently, refundable tax credits for working poor families were expanded, along with other work supports.

The result was a large increase in work among single mothers, especially those with the lowest educational attainment and those who had never been married, even as work among married mothers

was flat and work among single childless women declined.[48] Indeed, welfare reform was likely one cause of the dramatic increase in the share of young black women exceeding the marriageability threshold in Figure 14 between 1991 and 1999 (though the strength of the late 1990s economy was important as well).[49]

To evaluate trends in pre-transfer incomes, one must consider how a counterfactual trend would look with a different set of safety-net policies that better promote work and marriage. Whereas Figure 15 begins in 1979, the largest increases in safety-net generosity came between 1940 and the mid-1970s.[50] That suggests that the pre-transfer line in Figure 15 might not have risen as much had the safety net in 1979 resembled the post-1990s safety net, because the 1979 level would have been higher.

The middle line in Figure 15 shows the trend using the most complete measure of posttax and -transfer family income available in the CPS through 2020. It includes nearly all the major means-tested and social insurance programs, except for housing benefits and health coverage.[51] Accounting for these transfers raises the share exceeding the typical young less-educated male's earnings to 19 percent in 1979 and 56 percent in 2019. A majority of single mothers have exceeded the young male earnings threshold in every year since 2009, except for 2018.[52]

Finally, the third line in Figure 15 adds housing and health benefits to family income, available only through 2013. Doing so has no effect on the 1979 share exceeding the male earnings threshold but increases the 2013 share from 56 percent before their inclusion to 61 percent after. A majority of young less-educated single mothers have exceeded the threshold since 2000. In 2019, close to two-thirds of less-educated young single mothers likely had family incomes that were higher than the earnings of the typical less-educated young man.

While marriage would leave many of these single mothers better off in economic terms, if noneconomic considerations make many men unappealing as husbands and fathers, some women will choose not to marry them. Furthermore, many men whose partners would prefer to be married might perceive that it is unnecessary for them to tie the knot, given what single mothers can cobble together without them. Rising single-mother marriageability might mean a falling share of fathers viewing marriage as an obligation.

First World Problems

For nations as well as individuals, more money can mean more problems. The long-term increase in single parenthood is just one example of how the health of associational life—what we do together—has deteriorated over the past half century. We spend less time getting together with extended family, socializing with coworkers, and collaborating with neighbors; we join groups less often and have less trust in each other and most institutions. These trends are fundamentally related to the increased wealth of the nation, especially in the middle decades of the 20th century.[53]

In rich nations such as the United States, members of the broad middle class can satisfy a plethora of needs by purchasing services and insurance via impersonal markets. They are better able to save, insure against risks, and smooth income. In material terms, it has grown easier to be less dependent on a spouse, a co-parent, or in-laws.

Compared with previous generations, more Americans have the luxury of focusing higher up on Maslow's hierarchy of needs. As noted in an earlier report I coauthored,

> Americans can devote considerable attention to self-fulfillment, privacy, and individualist pursuits. Relationships, including marriages, became more about the satisfaction gained by the parties involved and less about broader societal obligations. As Americans have become wealthier, the opportunities for self-fulfillment have proliferated: education, career, dating, hobbies, and travel, to name a few. Marriage and childrearing must compete with these alternatives, which has proved difficult as the transition to adulthood has extended into the twentysomething years. Advances in personal

technology have made it easy to substitute pornography or no-strings dating for sexual gratification within marriage (or even within committed non-marital relationships).[54]

Women's rising workforce participation is one manifestation of a greater ability to pursue self-fulfillment.[55] While this shift has had costs—in no small measure because men did not respond to it by devoting more time to family and community—it has also had benefits, reminding us that some first world "problems" involve outsize expectations, a reluctance to grapple with trade-offs, and a failure to perceive issues in their full context.

Affluence created cultural changes, producing a market of young baby boomers eager to consume countercultural music, fashion, and ideas. These ideas, along with the scientific advances and increased security that affluence brought, undermined traditional and religious morality, damaging the two-parent family over time. Affluence also funded an expanding safety net, providing enough for a growing share of single parents to get by when cobbled together with other income sources.

Many on the populist right think that marriageability and the capacity for supporting a family on one income have declined, speaking to their discomfort with the choices that American men and women have made as the nation has become richer. Many social conservatives want to believe that Americans' preferences remain the same as those of their mid-century forebears. The narrative of economic decline can shore up the view that what people want hasn't changed, and it is only that selfish and incompetent elites (the populist-right analogue to the left's "late capitalism" bogeyman) have made it all but impossible for Americans to fulfill those timeless preferences.

That the worst years for male earnings were the 1970s and 1980s is inconsistent with stories blaming men's problems on increased trade with China or rising immigration. The timing also challenges claims that the deck has been especially stacked against millennials and Generation Z or that rising "deaths of despair" stem from economic sources. Declensionists might try to argue, against the case presented here, that the decline of male earnings in the 1970s and 1980s caused family changes, which then stubbornly and asymmetrically failed to reverse when men's earnings subsequently rose. But in that case, economic policies that increase male earnings further are unlikely to produce the family changes conservative declensionists want to see.

Americans have voted with their wallets—for more stuff, smaller families, and less time devoted to housework, raising kids, and investing in communities. It is not that a male breadwinner can no longer support a family at 1969 living standards. Rather, more women have professional aspirations, more young adults want to spend more time childless and single, and more adults of all ages prefer a more comfortable lifestyle that often requires two incomes.

It is not that single mothers increasingly question their partners' ability to provide. They are just better able to get by alone than in the past and have fewer reasons to commit to their children's fathers. To be sure, many of these men are adrift, but that, too, reflects first world cultural changes that have marginalized their roles and left them socially untethered.

We can—and often should—lament our collective decisions, but we should not be under the illusion that they reflect increased economic duress in America. Policymakers who embrace the narrative of economic declensionism may effectively stoke populist outrage, but the stories they tell will not lead to improvement in Americans' lives.

About the Author

Scott Winship is a senior fellow and the director of poverty studies at the American Enterprise Institute, where he researches social mobility and the causes and effects of poverty. He also focuses on economic insecurity and inequality, among other poverty issues.

Appendix A. Bringing Home the Bacon

In this appendix, I provide methodological details behind the analyses in this report. The nature of the decisions the analyses required are sufficiently general that the discussion may be of interest to many researchers studying income trends.

Source of Data

The Current Population Survey (CPS) is the official source of federal income, poverty, and unemployment statistics. Every month since March 1940, the CPS has asked Americans about a range of items related to their employment. Since 1944, during the early months of each year (primarily in March), the CPS has fielded a supplementary set of questions about income earned the previous calendar year. This add-on is known as the Annual Social and Economic (ASEC) Supplement.[56]

CPS ASEC microdata are available beginning in 1962, but it is not possible in that year to determine who is a parent. I therefore use data files from 1963 to 2021, which record earnings and income received from 1962 to 2020. I use 1963–2014 data files from the Unicon Research Corporation, a private company that dissolved in 2016. Unicon provided cleaned and harmonized CPS data and software to extract custom subsets of the data. In addition, I use 2014–21 CPS ASEC files downloaded from the Integrated Public Use Microdata Series (IPUMS) website. (The researchers at the Minnesota Population Center, which runs IPUMS, had been collaborating for years with Unicon researchers before it dissolved.) Unicon and IPUMS data cover overlapping years, and I have confirmed that they yield the same results in those years.[57]

There is a consequential break in the CPS time series between the 2013 and 2015 surveys (recording 2012 and 2014 earnings and income) due to a change in Census Bureau methodology capturing and processing information on incomes. Fortunately, data were collected in the 2014 survey for two subsamples—one under the old methods and another under the revised ones. The newer methods tend to produce somewhat higher earnings estimates. Without an adjustment, that would tend to make the change in male earnings look overly positive from 2012 to 2020.

I use the 2013 estimates from the subset of the 2014 ASEC that was conducted under the older methods, then I adjust downward the estimates for 2014 through 2020 (from the 2015–21 surveys) to account for the break in the series. When estimating trends in median earnings or compensation or in the marriageability rate, I shift the 2014–20 trend downward by the difference between the 2013 estimate produced by the new methodology and the 2013 estimate produced by the old methodology.[58]

I use the survey weights in the CPS data to make estimates representative of the civilian, noninstitutional population. The March 2020 survey began at nearly the same time that COVID-19 was declared a national emergency. The Census Bureau ceased in-person interviews and shifted its interviewing to phone calls. The result was lower participation in the survey, with higher-income respondents more likely to cooperate. To correct this problem, I use special survey weights developed by Census Bureau researchers for both the 2020 and 2021 data (affecting 2019 and 2020 income figures).[59]

Choosing the Sample of Young Men

I exclude from my analyses individuals living in group quarters.[60] CPS estimates are confined to the civilian noninstitutionalized population of Americans.

This means that the incarcerated are excluded from the data. In the report, I discuss sensitivity checks I conducted to assess whether this omission unduly affects the results, and I find it does not.

Students. The report is interested in the question of whether young men are less marriageable or less able to support a family than they were in the past. Initially, I included all young men in the civilian non-institutionalized population between age 20 and 29 in the year their income was measured. However, interpreting trends is complicated by rising school enrollment, which creates serious issues for analyzing men in their early 20s.

Rising school enrollment means more young men over time with either no earnings or only part-year earnings, since most students work less while attending school. Furthermore, students today are much less likely to work than in the past. The analytic question becomes what to do with these men.

To see the problem more concretely, consider a few estimates from the CPS data. In 1969, 19 percent of men age 20–24 were enrolled in school for at least part of the year and worked less than year-round. (In this section, I refer to this group as "students" or young men "in school," even though it excludes students who work year-round.) In this group, 22 percent reported no earnings in 1969. Of those who had earnings, the median was 72 percent lower than the median for young men not in school who had earnings. Among all young men, including those without earnings, median earnings among students were 81 percent lower than median earnings among nonstudents.

By 2020, 24 percent of young men were enrolled in school, and 60 percent of them reported no earnings. The median among those with earnings was 69 percent lower than the median for young men not enrolled. The median earnings among all young men not in school was $25,760, while the median among all students was 100 percent lower ($0).

One solution to this problem would be if we knew what everyone would have earned if they were not in school. Then we could assign them those earnings. However, we do not have this information, and modeling it is far from straightforward. It also would

answer a question that is somewhat abstract: How would earnings trends look among young men if no one were enrolled in college?

An alternative is to keep enrolled men in the data with their low earnings. However, doing so lowers the earnings of young men, and earnings become much less meaningful as an indicator of ability to raise a family. Put another way, most men in school full-time do not make enough in earnings to raise a family on their own, but that is because they are choosing to invest in their skills to increase their future earnings. It is a trivial statement to say that they are not marriageable in this narrow sense, and it is marginally relevant to the bigger question of whether those not in school have sufficiently high earnings to raise a family.

More importantly, because school enrollment has risen (and the share of students combining work and school has fallen), including students in the data lowers young men's earnings more in recent years than in the distant past. The resulting trend in earnings is unduly negative. From 1969 to 2020, median earnings among men age 20–24 fell 34 percent, if students are included in the data. Leave them out, and earnings fall just 11 percent. Earnings at the 25th percentile of the distribution of young men fell 53 percent from 1969 to 2020. They fell by 35 percent if students are excluded. (They fell by just 14 percent if all non-earners are excluded, though excluding them is problematic for other reasons. Suffice to say that the further down the earnings distribution one looks, the thornier the issues are around treatment of non-earners.)

So why not simply exclude men enrolled in school from the analyses? The reason is that doing so also makes earnings trends look worse than they have been. College enrollees, on average, are more likely than non-enrollees to have skills that pay off in the labor market—skills that would give them relatively high earnings if they were not enrolled in school. Compared with today, fewer of these above-median-skilled men in the past were enrolled in school in their early 20s. If we exclude students, we exclude more above-median-skilled men in 2020 than in 1969, because more of them were in school in

2020 than in 1969. But after doing so, the 1969 data still include many above-median-skilled men who, if they were observed instead as young men in the 2020 data, would be dropped (because they would be in school). The resulting trend, in an important sense, compares 1969 apples to 2020 oranges. And it does so in a way that makes 1969 earnings look too high relative to 2020 earnings for purely compositional reasons related to who is included or excluded from the data.

In principle, if we exclude 24 percent of the sample in 2021 because of school enrollment, we would want to exclude 24 percent in 1969 as well—the 24 percent who, if college enrollment rates had been as high in 1969 as in 2021, would have been in college. Doing so would then allow for a comparison of what happened over time to the 76 percent of young men who were least likely to forgo present earnings to invest in their skills.

These problems can be mitigated by looking at older men, among whom school enrollment rates are lower. However, since the questions examined in this report are about family formation, it would be inappropriate to look at trends among, say, men in their 40s. As a compromise, I focus on men age 25–29. School enrollment rates are significantly lower in this group than among younger men, and they are less different over time (3 percent in 1969 and 5 percent in 2020). Furthermore, the differences in earnings trends for this group are less pronounced than for younger men, depending on whether students are retained or dropped. The median fell 17 percent when including students and 14 percent excluding them.

I also drop students from my earnings and income analyses. Doing so distorts the underlying earnings trend less than retaining them as very low earners would. Technically, I exclude those who (1) did no work the previous year or only worked part of the year and (2) said they worked less than the full year because they were going to school. Men and women who were going to school in the previous year but who also worked all of the year are included in the analyses. In the 1963–67 surveys (recording 1962–66 earnings), it is not possible to exclude people who worked only *part* of the year due to being in school,

so in those years I exclude only men who did no work at all because of school.

The initial figures of the report, Figures 1–4, showing changes in families over time, include students.

Other Non-Earners. There are other issues related to non-earners that are less unique to young men.[61] The number of young men reporting no or negative earnings increased over time, from under 2 percent of the sample in 1969 to 9 percent on the eve of the pandemic. Exclude these men, and median pretax earnings fall only 10 percent from 1969 to 2020, rather than 14 percent. Posttax compensation increases 3 percent instead of falling 3 percent.

Some of these men simply underreported their earnings in the survey, though men can and do overstate earnings too. Others were business owners reporting economic losses whose gross earnings were considerably higher.

Still other men were not working for reasons having nothing to do with their earnings potential per se. The CPS asks able-bodied adults who are out of the labor force when interviewed whether they want a job. As a reference point, nearly three in four young men not in school and with no earnings in 2020 were asked this question when interviewed in 2021.[62] Only 18 percent of them said they wanted a job.[63] Another CPS question asks all adults without work in the previous year why they did not work. In 2021, just 24 percent of young men not in school and with no earnings said the reason they had no employment the previous year was that they could not find work.[64] In the depths of the Great Recession, the figure never exceeded 37 percent.

Assigning these nonworking men $0 in earnings pulls down median earnings in any year, because at least some of them would have above-median earnings if they worked. Because their ranks have grown, giving them earnings of $0 pulls down median earnings more in recent years than in earlier ones.[65] However, that downward tug reflects many more factors than declining marriageability.

There are good reasons for excluding at least some of these categories of non-earning men. However, the issues that would result from doing so are either

unclear or would make earnings trends appear better than shown in the report. To be conservative, I leave them in the data.

Identifying Sole-Earner Married Fathers

Identifying sole-earning married fathers requires measuring marital status, identifying sole earners, and distinguishing who is a parent.

Marital Status. I count a man as married if his marital status is married but with a spouse absent—meaning his wife is temporarily not at home due to work, military obligations, family caregiving, or the like. I count him as single if he is married but separated from his spouse.

I do not require someone to be married to an opposite-sex partner to be married. In practice, same-sex partners cannot be married in the CPS data between 2010 and 2015 because of post-interview editing practices during this period.[66] The Census Bureau phased in recognition of same-sex marriages between 2015 and 2017.

Sole Earners. To identify sole earners, I create links to spouses using a variable indicating how family members are related to each other. Once a man is linked to his spouse, he is identified as a sole earner if he has positive earnings and his spouse has no earnings. (Requiring positive earnings disqualifies a small number of men who are self-employed but have negative or no earnings due to business losses.) I believe that the Census Bureau editing process also prevents same-sex partners from being identified as spouses from 2010 through 2015–17.

Parents. As noted above, it is not possible to identify all parents in the 1962 CPS file. From 1963 to 1967, children under age 14 are not included in the CPS microdata, but there is a variable indicating the number of related children under age 18 in a family. Unfortunately, from 1964 to 1967, the number of related children is the same for parents in "related subfamilies" as for the heads of "primary families." (A related subfamily is a family unit where the head or the spouse of the head is related to the *household* head, such as when a single mother lives with her parents. The primary family includes everyone related to the household head, including any related subfamily members.)[67]

I therefore count someone as a sole-earning married father only if he is the head of the household (or the husband of a nonworking household head). Excluding sole-earning married fathers who are heads of subfamilies barely affects the trend results because there are relatively few married parents living with other married parents. Conceptually, it also makes sense to require that a man not be living in someone else's household to be deemed marriageable.

To be identified as a parent, a household head (or spouse of the head) must live in a family in which someone other than the head or their spouse is under 18 years old. That could be someone in the primary family who is not in a related subfamily or the head or spouse of a related subfamily.[68] "Living with children" does not simply mean living with one's own biological child but can refer to stepchildren or adopted or foster children. Furthermore, someone who is not identified as a parent may have a biological child who lives in another household.

Measuring Pretax Earnings

My earnings estimates include wage and salary income and self-employment income (recorded separately for farm and nonfarm self-employment in the CPS). Self-employment income may be negative if someone's business suffered losses. Each year, the CPS asks about earnings received in the previous year, so the 2021 data, for example, provide information about 2020 earnings. Respondents are instructed to report earnings before taxes or deductions from pay.

I adjust earnings to 2021 dollars using the Bureau of Economic Analysis's Personal Consumption Expenditures deflator.[69]

Measuring Pretax Compensation

Estimates of pretax compensation in the report multiply individual pretax wage and salary income from the CPS by a year-specific ratio comparing compensation (wage and salary income plus non-wage compensation) to wage and salary income before adding any self-employment income. The compensation-to-wages ratios come from National Income and Product Accounts (NIPA). For each year, I divide aggregate compensation by aggregate wage and salary income, both from NIPA Table 2.1. Compensation includes "employer contributions to employee pensions and insurance funds" (health, dental, vision, life, and disability insurance and contributions to retirement savings). I exclude "employer contributions for government social insurance"[70] (employer payroll taxes) from compensation, since this report is focused on what breadwinners contribute to a family rather than what employers spend on workers.

The NIPA ratio compares two aggregates across all employees, rather than aggregates across *young male* employees. Moreover, the ideal measure would not use a constant year-specific ratio based on aggregates to adjust wages to compensation but would capture each individual's compensation. Unfortunately, the CPS has limited information on nonwage compensation. I conducted sensitivity tests to determine whether my approach was likely to be problematic, as follows.

For reference, the thick line in Figure A1 (Line 1) shows the 25th percentile of pretax compensation for young men (age 25–29) not in school, from 1962 to 2020, with compensation measured as just described, based on NIPA ratios constant in each year. (I focus on the 25th percentile because of its role in my definition of marriageability.)

A partial measure of individual-level compensation may be estimated from the 1980–2018 CPS files (for compensation in 1979–2017). In these files, the data include estimates of the value of employer-provided health insurance (EHI) coverage for workers who have such coverage. (The value of coverage is the cost to the employer, with separate amounts depending on whether the coverage is for the worker alone or for a family.)[71]

Line 2 shows the trend for the 25th percentile of compensation after I add any EHI received by a worker to his earnings. The line lies below the levels using the NIPA data, but that is to be expected given that this CPS measure does not include forms of insurance other than health insurance and does not include employer contributions to retirement savings. What is most important for the questions that are the focus of the report, however, is the trend.

From 1979 to 2017, compensation falls by 25 percent. The NIPA-based trend in Line 1 falls just 18 percent. The estimates are closer comparing 1979 to 2016—a 24 percent decline for Line 2 versus a 20 percent fall for Line 1. (By way of comparison, the measure of pretax earnings falls by 22 percent through 2017 and by 21 percent through 2016.)

In Line 3 of Figure A1, I create year-specific ratios from the CPS data to inflate wage and salary income to compensation. I then apply those ratios to all young men's wage and salary income before adding any self-employment income. The ratio used in each year is *EHI plus wage and salary income, aggregated across all workers, regardless of age or sex* divided by *wage and salary income, aggregated across all workers*. The 25th percentile of compensation falls by 20 percent from 1979 to 2017 and 20 percent from 1979 to 2016.

Line 4 uses similar year-specific ratios, but this time I use the average of individual ratios rather than creating a ratio from aggregates in the numerator and denominator.[72] The trend is indistinguishable from Line 3, with the 25th percentile of compensation falling by 20 percent from 1979 to 2017 and by 20 percent from 1979 to 2016.

I repeat this approach for Line 5, but this time I average ratios across young male workers not in school instead of across all workers. This line, too, is essentially the same as Lines 3 and 4. It falls by 20 percent from 1979 to 2017 and by 20 percent from 1979 to 2016.

The trend barely changes if I repeat the process but give young men ratios specific to their wage and salary quintile in each year, rather than giving all

Figure A1. Pretax Annual Compensation at the 25th Percentile, 1962–2020
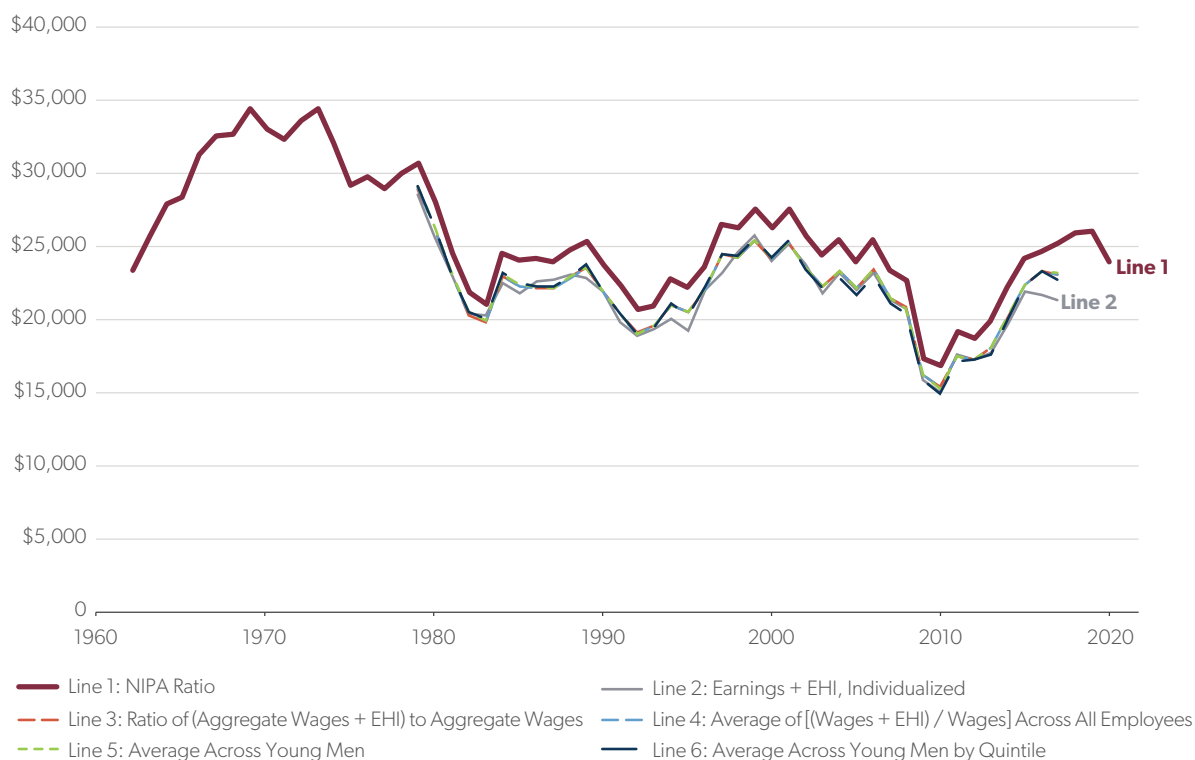
Note: The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See "Source of Data" section for details.)

Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series. Line 1 uses aggregate compensation estimates from the US Bureau of Economic Analysis National Income and Product Accounts.

young men the same year-specific ratio (Line 6).[73] The declines in this case are 22 percent and 20 percent.

As Figure A1 makes clear, using the NIPA-based trend does not distort the trend in compensation that would likely be shown by the optimal measure.[74] In addition, it covers all years before 1979 and after 2017, while the CPS includes no nonwage compensation estimates for these early and recent years. Even between 1979 and 2017, the CPS does not record nonwage compensation other than EHI.

Figure A2 displays the marriageability trends for all six measures of my compensation variants, along with the trend using earnings. As in the report, I use the 25th percentile of compensation (or earnings) in 1979 as the threshold for marriageability. It is clear

that considering compensation rather than earnings makes little difference for marriageability trends.

Measuring Posttax Earnings

To report estimates of earnings net of taxes, I begin with CPS estimates of federal and state income taxes, federal payroll taxes, and federal retirement deductions for 1979–2020 (from the 1980–2021 files). These estimates are not reported by survey respondents but are produced subsequently by the Census Bureau by running the income data it collects for each person through its own tax models.[75] These estimates are unavailable before the 1980 survey. For 1962–78,

Figure A2. Marriageability Rates Using Pretax Compensation, 1962–2020
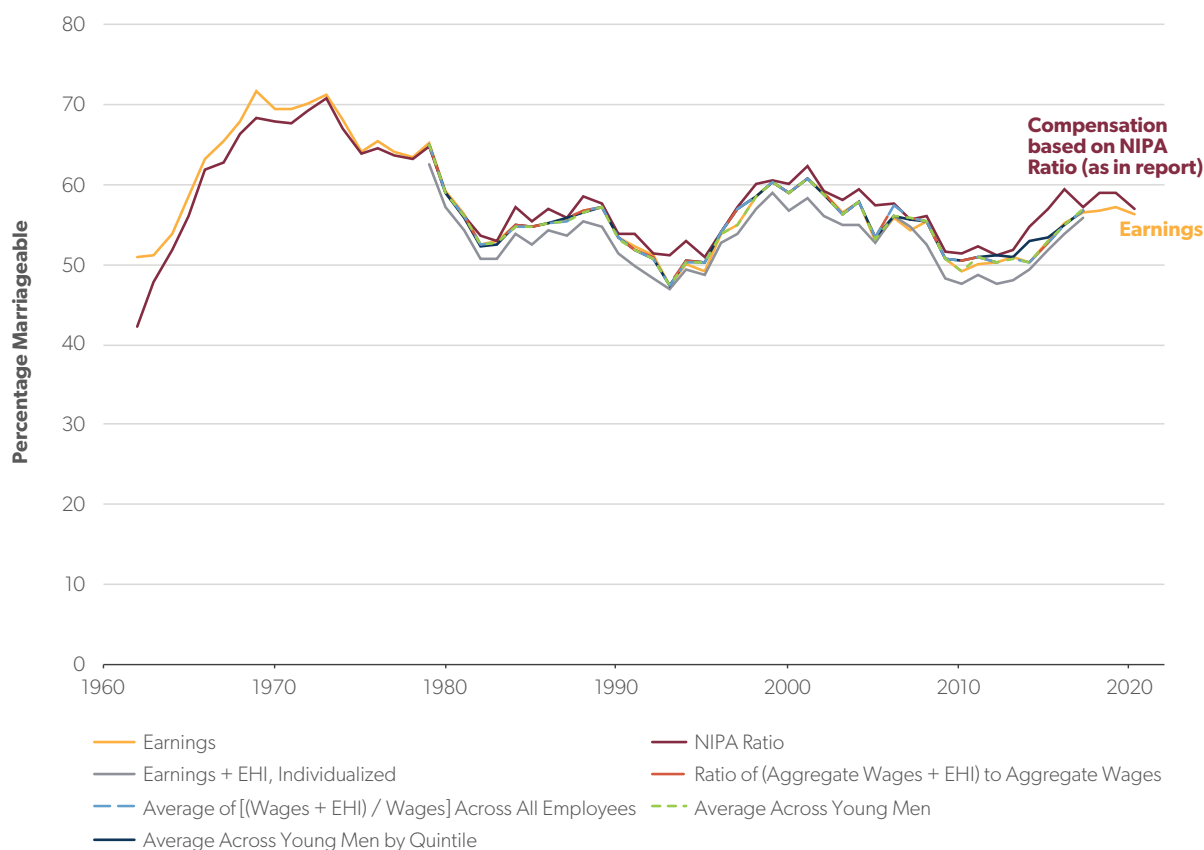
Note: The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See "Source of Data" section for details.)
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series. The "NIPA Ratio" line uses aggregate compensation estimates from the US Bureau of Economic Analysis National Income and Product Accounts.

I estimate my own tax rates as follows and apply them to earnings.

Federal and State Income Tax Rates. I use federal and state rates applying to tax unit income generally for individual earnings specifically. For 1979–2020, I use estimates from the CPS data, which are calculated by the Census Bureau at the tax unit level. "Tax units" are essentially tax returns; a married couple filing jointly is a single tax unit, as is a nondependent individual who files. I create tax units in the CPS data (as discussed below) and compute tax rates as federal and state income taxes divided by market income.[76]

As also discussed below, I compare these rates to independent figures in overlapping years to model income tax rates for earlier years, when the CPS data lack estimates.[77] Two men with the same earnings in the same state and year can have different income tax rates depending on how much other income they receive apart from earnings, on their filing status, and on how much income other members of their tax unit received.

The best potential source for earlier income tax rates that I found was from a 2007 study by Thomas Piketty and Emmanuel Saez.[78] Piketty and Saez report, by quintiles of tax unit market income,

Figure A3. Federal Income Tax Rates by Market Income Quintile, 1979–2001
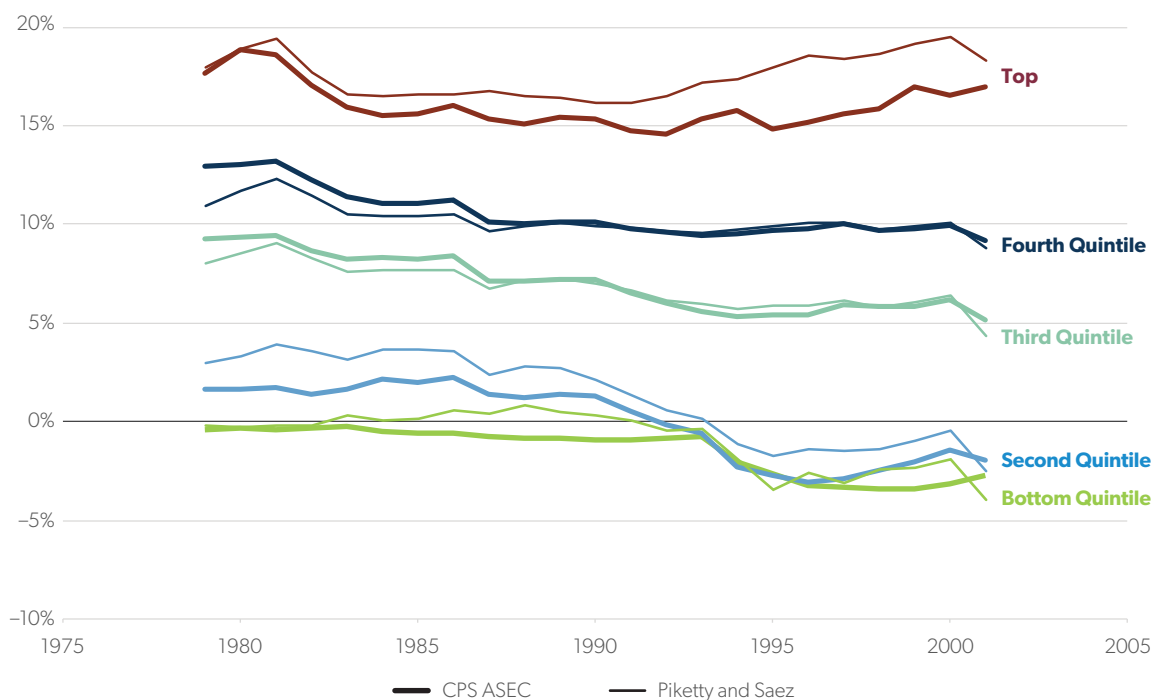
Note: Quintiles are based on the market incomes of tax units, and tax rates are based on the federal income taxes of tax units and aver-aged across tax units. Annual Social and Economic Supplement to the Current Population Survey tax unit estimates track Piketty and Saez tax unit estimates for each quintile of market income.
Source: Piketty and Saez estimates are from Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3. Annual Social and Economic Supplement to the Current Population Survey estimates are from the author's analyses of Annual Social and Economic Supplement to the Current Population Survey data.

average *federal* income tax rates for 1960, 1962, 1964, every year from 1966 through 2001, and 2004.[79]
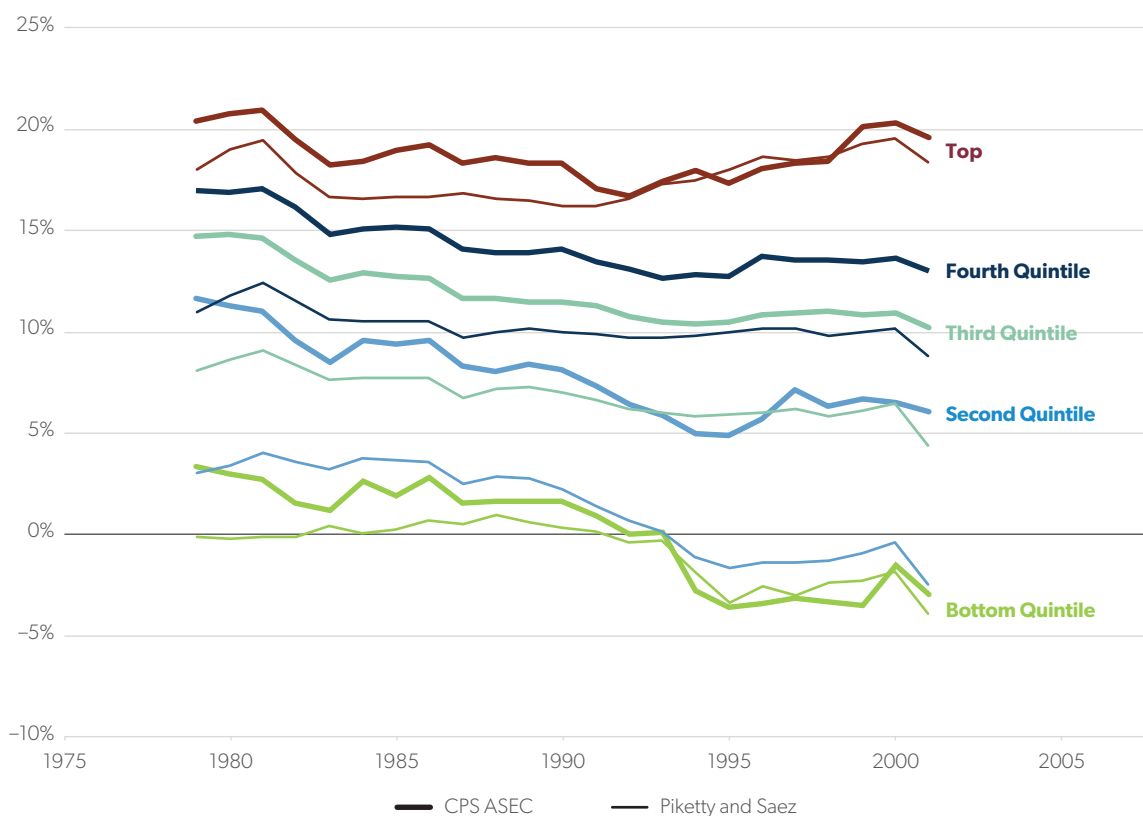
To compare the CPS federal income tax estimates against these quintile-specific averages, I created tax units in the CPS files from 1980 through 2021.[80] Within each tax unit, I aggregated market income, federal income taxes, and state income taxes.[81] I created quintiles of tax unit market income, with each quintile having an equal number of tax units. Then I estimated quintile-specific average federal income tax rates by dividing federal income tax for each tax unit by market income and bottom- and top-coding the rates at the 0.5 and 99.5 centiles.

My averages differ from the Piketty and Saez averages in three main ways. First, they are averages of tax unit rates across individuals, rather than ratios of aggregate taxes to aggregate income. Second, while the two sets of quintiles are based on similar income

concepts, when Piketty and Saez estimate tax rates within each quintile, after tax units are ranked, they add capital gains, employer payroll taxes, and corporate income taxes to income. Third, the Piketty and Saez estimates also measure the highest incomes better, as they are based on IRS data.

Figure A3 compares the two sets of tax rate estimates.[82] Despite the methodological differences, the series track one another closely.[83] With this reassurance that the Piketty and Saez and CPS estimates are sufficiently similar that the former can be used to model tax rates for earlier CPS surveys, I next estimated a new set of quintile-specific average income tax rates.

This time, I combined federal *and state* income taxes. I created quintiles so that they included an equal number of men age 25–29 and not in school, based on individual earnings, rather than an equal number of

Figure A4. Income Tax Rates, by Market Income or Individual Earnings Quintile, 1979–2001

Note: Piketty and Saez quintiles are based on the market incomes of tax units, and tax rates are based on the federal income taxes of tax units and averaged across tax units. Annual Social and Economic Supplement to the Current Population Survey quintiles are based on individual earnings of men age 25–29 and not in school, and tax rates are based on the federal and state income taxes of tax units and averaged across men age 25–29 and not in school. Annual Social and Economic Supplement to the Current Population Survey averages of combined federal and income tax rates across young men within earnings quintiles track Piketty and Saez averages of federal income tax rates across tax units within market income quintiles.

Source: Piketty and Saez estimates are from Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3. Annual Social and Economic Supplement to the Current Population Survey estimates are from the author's analyses of the Annual Social and Economic Supplement to the Current Population Survey data.

tax units based on tax unit market income. The quintile averages remain averages of tax unit income tax rates, but they are averaged across men age 25–29 not in school, rather than across tax units.[84]

As shown in Figure A4, the estimated tax rate *levels* sometimes differ between the Piketty and Saez series (based on averages of federal income taxes across tax units within quintiles of tax unit market income) and the CPS series (based on averages of combined federal and state income taxes across young men within quintiles of young male earnings). This is particularly true for the middle three quintiles, for which the CPS

rates are higher than the Piketty and Saez rates. Most likely, this difference has to do with the middle quintiles of tax unit market income including older Americans with lightly or untaxed retirement income, lowering their tax rates.

However, the *trends* in income tax rates are reasonably similar across both sources. That suggests that the Piketty and Saez estimates can be used as a guide for earlier trends in young men's income tax rates.

I therefore used the Piketty and Saez federal tax rate estimates to impute a combined federal and state income tax rate to all young men in 1962–78,

varying across men only by year and earnings quintile within years. To do so, I first estimated Piketty and Saez quintile-specific estimates for 1963 and 1965 as the averages for 1962 and 1964 and for 1964 and 1966, respectively. Then I backcasted the CPS within-earnings-quintile average rates from 1979 (shown in Figure A4) by using the year-to-year change in the Piketty and Saez within-market-income-quintile average rates.[85]

For 1962–78, I assign the backcasted earnings quintile average to all young men within a year and quintile. For 1979–2020, for each individual, I divide his tax unit's combined federal and state income tax (as estimated by the Census Bureau) by his tax unit's market income.[86] For these years, tax rates vary across individuals, even within the same quintile, state, and year.

Finally, I apply the income tax rates (which are for tax units) to individual earnings estimates from the CPS data, available in every year from 1962 through 2020. This procedure yields estimates of the earnings change due to income taxes for each worker in each year.

Figure A5 displays quintile-specific trends in (1) the Piketty and Saez average federal income tax rates (thin lines), (2) the average of individual combined federal and state income tax rates in the CPS data from 1979 to 2020 (thick line), and (3) the imputed combined federal and state income tax rates assigned to men before 1979 (dashed line).[87] I checked the sensitivity of my estimates to the assumptions made in the modeling, as discussed below.

Payroll Taxes and Federal Retirement Deductions. As with federal and state income taxes, the CPS includes in the files from 1980 forward estimates of payroll taxes for covered workers and, for federal employees, deductions for retirement benefits. In those files, it is straightforward to deduct these taxes from individual earnings. For 1962–78, these taxes must be imputed.
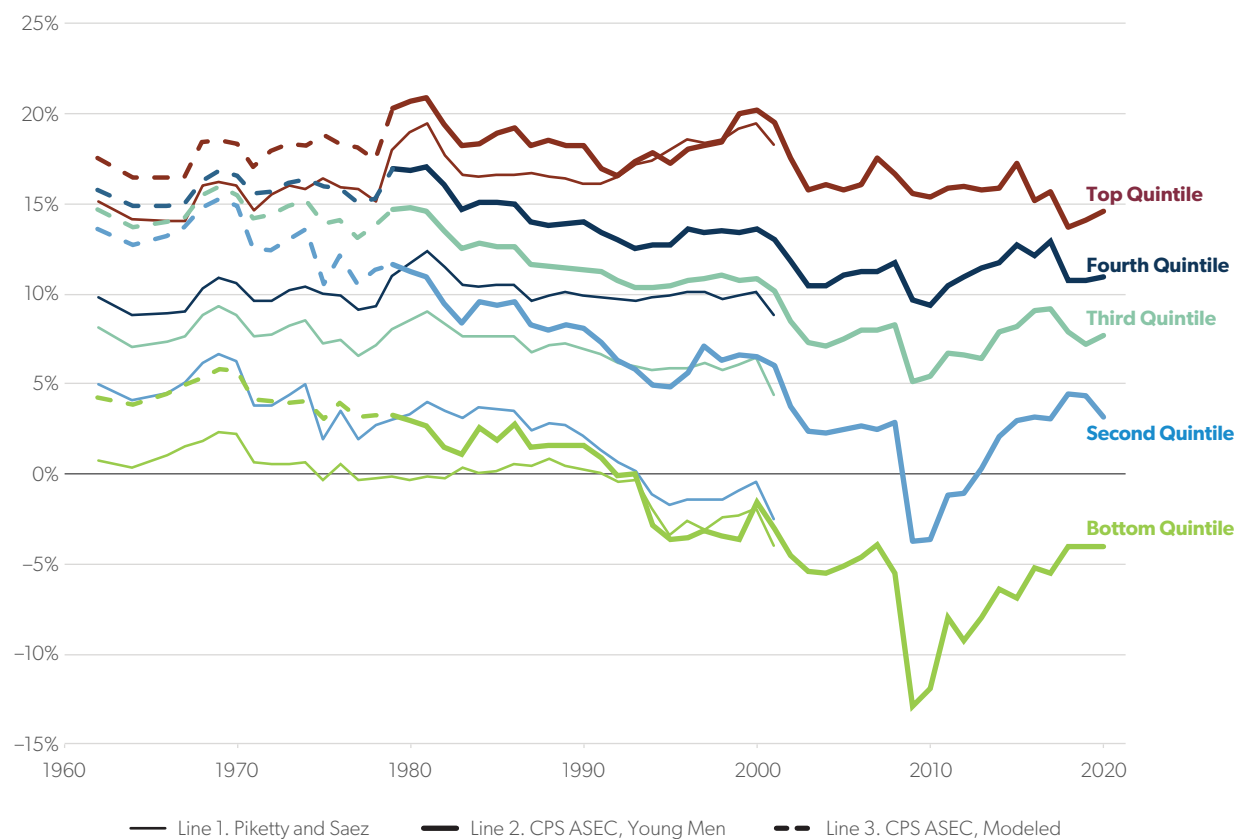
To do so, I use the statutory payroll tax rates for the Old-Age, Survivors, and Disability Insurance (OASDI) program (Social Security) and Medicare's hospital insurance (HI) program for each

year—separately by program and for employees versus self-employed workers—and the maximum earnings subject to each tax.[88] I apply these tax rates to all workers' earnings, even though not all workers were covered by the OASDI and HI programs and subject to payroll taxes. This group of non-covered workers included federal employees during the 1960s and 1970s. Ideally, I would apply statutory federal retirement deductions to these workers' earnings, but one cannot identify who was a federal employee the previous year until the 1976 CPS file. Fortunately, non-covered workers generally and federal employees specifically are small shares of the workforce, so my simplification minimally affects the trends in this report.[89]

Total Taxes. From 1979 to 2020, I use the Census Bureau federal and state income tax estimates (applying tax unit rates to individual earnings) and payroll tax and federal retirement deduction estimates. From 1962 to 1978, I use the modeled quintile averages for combined federal and state income tax rates and the statutory payroll tax rates and apply them to earnings. The resulting total tax rates are total taxes divided by earnings. Figure A6 displays average total tax rates (federal and state income tax, payroll tax, and federal retirement deductions) by quintile from 1962 through 2020.[90]

I conducted a number of sensitivity checks to assess my pre-1979 imputations. On the payroll tax side, I confirmed that my methods using statutory OASDI and HI tax rates and maximums produced virtually the same results as did the Census Bureau estimates from 1979 forward. This suggests that these imputations should work well before 1979 too.

On the income tax side, I tried a number of other ways of imputing combined federal and state income tax rates. In one version, I imputed income tax rates to men from 1979 to 2020 based on their earnings quintile average (as from 1962–78), rather than giving them individualized income tax rates. In a second version, rather than assigning men to quintiles based on individual earnings, I assigned them to quintiles based on tax unit earnings. Then I charted the average income tax rates by quintile for 1979–2020 and

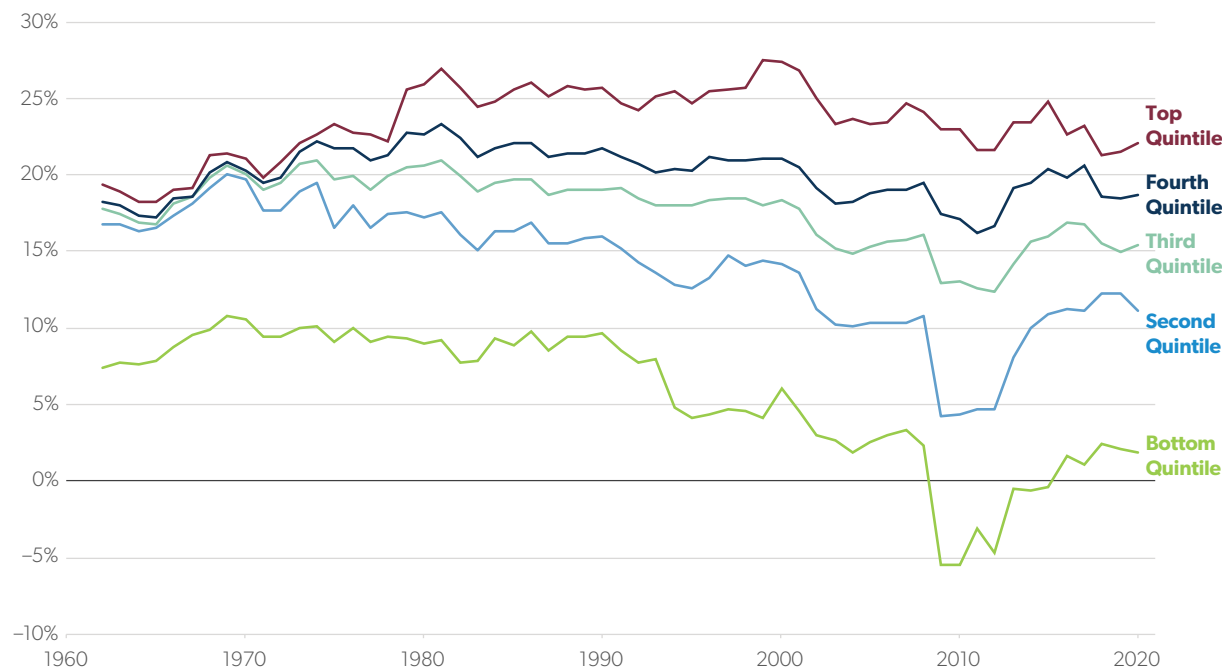**Figure A5. Income Tax Rates by Quintile, 1962–2020**

Note: Piketty and Saez quintiles are based on the market incomes of tax units, and tax rates are based on the federal income taxes of tax units and averaged across tax units. Annual Social and Economic Supplement to the Current Population Survey quintiles are based on individual earnings of men age 25–29 and not in school, and tax rates are based on the federal and state income taxes of tax units and averaged across men age 25–29 and not in school. Annual Social and Economic Supplement to the Current Population Survey averages of combined federal and income tax rates across young men within earnings quintiles track Piketty and Saez averages of federal income tax rates across tax units within market income quintiles.

Source: Piketty and Saez estimates are from Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3. Annual Social and Economic Supplement to the Current Population Survey estimates are from the author's analyses of Annual Social and Economic Supplement to the Current Population Survey data.

used the Piketty and Saez trend to backcast the CPS trend. Finally, I gave men their quintile average from 1979 to 2020. In a third version, I repeated this procedure but assigned men to quintiles based on tax unit market income. For each of these alternate versions using modeled income taxes from 1979 to 2020, I also estimate payroll taxes using the statutory rates rather than the individualized rates (and federal retirement deductions) in the CPS data.

Figure A7 shows marriageability rates using men's pretax earnings, my preferred posttax earnings measure, and alternative posttax earnings measures. The four posttax earnings trends all use the 25th percentile of 1979 posttax earnings according to my preferred posttax earnings measure, rather than setting the 25th percentile for 1979 differently each time. I do this because the versions of posttax earnings that use quintile averages for 1979 income tax rates (rather than letting income tax rates vary across individuals) are poorly suited for setting marriageability thresholds.[91] Reassuringly, the different measures indicate similar marriageability levels and trends.

Figure A6. Tax Rates by Earnings Quintile for Men Age 25–29 and Not in School, 1962–2020

Note: Quintiles are based on the individual earnings of men age 25–29 and not in school. Tax rates are based on the federal and state income tax rates of tax units and individual-level payroll taxes and (after 1978) retirement deductions for federal employees. Tax rates are applied to individual earnings and averaged across men age 25–29 and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years.

Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series. Tax rates are estimated as discussed in the sections above from Annual Social and Economic Supplement data, statutory payroll and federal retirement deduction rules and rates, and Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3.
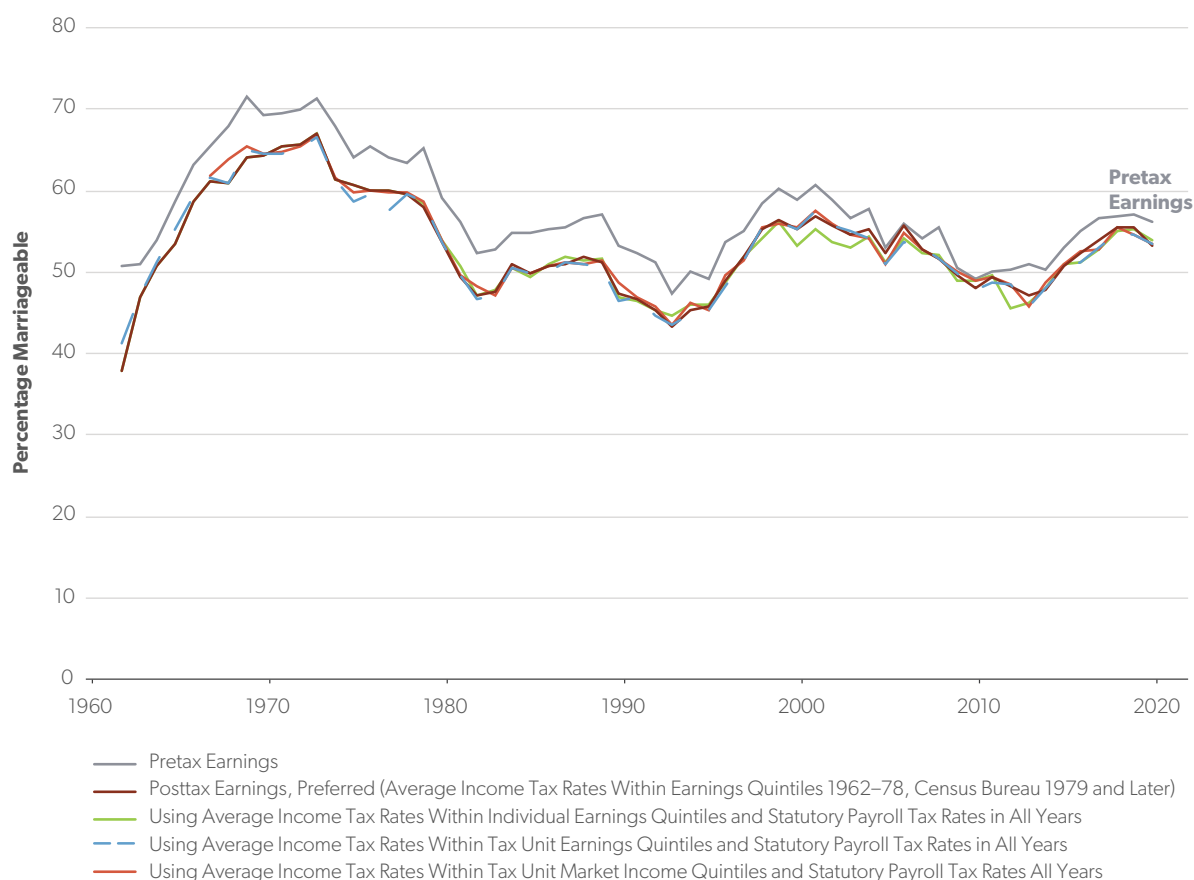
Measuring Posttax Compensation

For posttax compensation, I assume that nonwage compensation is not taxable. I apply the tax rates to earnings to get posttax earnings and then add compensation. Figure A8 shows, by earnings quintile, the trend in the mean ratio of posttax compensation to pretax earnings across men age 25–29 and not in school.[92] For each quintile, the ratio has increased over time. For the middle quintile, the combined adjustment moving from pretax earnings to posttax compensation has been a wash for much of the past 20 years, except during the Great Recession, when the adjustment raised earnings. The adjustment for

the lowest-earning quintile has been positive since 1977. In contrast, the adjustment reduces earnings for the top two quintiles. There is clearly a cyclical pattern in the trends; after recessions begin, the ratios tend to rise, subsequently falling. This pattern is also evident in Figure A6, in which tax rates tend to fall during recessions.

Measuring Race and Educational Attainment

In some analyses, I show results separately by race or by tertiles of educational attainment.

Figure A7. Marriageability Rates Using Posttax Earnings, 1962–2020

Note: Quintiles are based on the individual earnings of men age 25–29 and not in school. Tax rates are based on the federal and state income tax rates of tax units and individual-level payroll taxes and (after 1978) retirement deductions for federal employees. Tax rates are applied to individual earnings and averaged across men age 25–29 and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years. Estimates from 2014 to 2021 have been shifted downward to account for a methodological break after 2013. (See "Source of Data" section for details.)
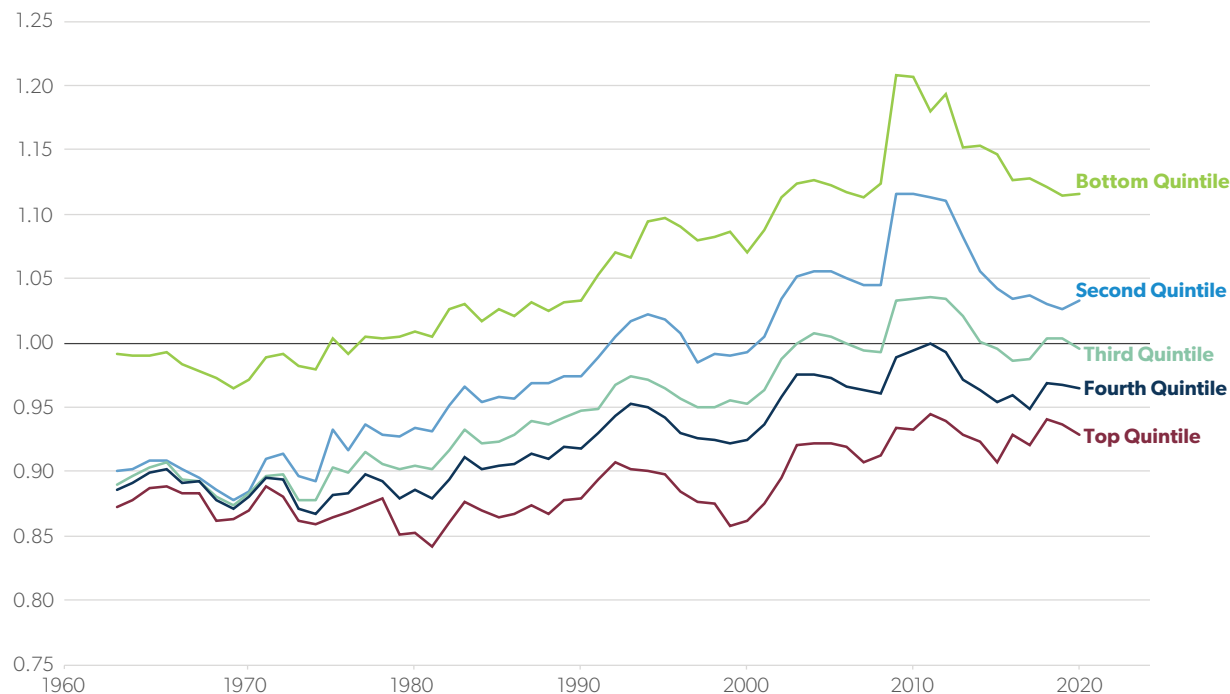
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series. Tax rates are estimated as discussed in the sections above from Annual Social and Economic Supplement data, statutory payroll and federal retirement deduction rules and rates, and Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3.

Race. I create four categories: non-Hispanic white alone, non-Hispanic black alone, Hispanic, and other. It is not possible to distinguish Hispanics before the 1971 file, so estimates from 1962 to 1970 include three categories, each of which includes Hispanics: white alone, black alone, and other.

Educational Attainment. I rank men and women between age 26 and 30 and not in school the previous

year (when they were 25–29) according to their educational attainment.[93] Before 1992, the variable measures the highest grade completed, while from 1992 forward the variable incorporates years of schooling and degree received. Comparing men and women over time within a tertile avoids compositional problems that occur when comparing adults with a fixed level of education. Comparing, for example, men without a high school diploma over time means analyzing

Figure A8. Mean Ratio of Posttax Compensation to Pretax Earnings, by Pretax Earnings Quintile, 1962–2020

Note: Quintiles are based on the individual earnings of men age 25–29 and not in school. Tax rates are based on the federal and state income tax rates of tax units and individual-level payroll taxes and (after 1978) retirement deductions for federal employees. Tax rates are applied to individual earnings and averaged across men age 25–29 and not in school. The sample excludes non-civilians, institutionalized men, and men who worked less than year-round because they were in school. It is not possible to exclude men who were in school but worked part of the year before 1967, so only those who did no work are excluded in these years.
Source: Author's analysis of the Annual Social and Economic Supplement to the Current Population Survey. Data provided by the Unicon Research Corporation and the University of Minnesota's Integrated Public Use Microdata Series. Tax rates are estimated as discussed in the sections above from Annual Social and Economic Supplement data, statutory payroll and federal retirement deduction rules and rates, and Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3.

a much larger group in the 1960s than in 2020.[94] Because the educational distribution is "lumpy," with many people concentrating at specific levels of education, I break ties randomly to ensure that the tertiles are equally sized.

Measuring the Family Income of Single Mothers

Here I describe how I identified single-mother families and how I measured family income.

"Single," "Mother," and "Family." I define single mothers as women whose marital status is separated, widowed, divorced, or never married. I require them to be heads of families that include one or more children under age 18 (excluding the head herself if she is under 18). I do not require a single-parent family to include a child born to the mother; stepchildren and adopted children are counted, as are nieces, nephews, and grandchildren whose biological parents are not present in the household.

Within primary families (families including the household head), everyone is assigned the same

family income, including members of related sub-families, and family income includes the incomes of everyone in the primary family (including members of related subfamilies).

As a concrete example, a 17-year-old single mother living with her own unmarried mother counts as a child of her mother's family, while her own son or daughter counts as a child of her family. Both are single mothers. All family-level income amounts (such as pretax and -transfer income or income from refundable tax credits) would be the same for both single mothers, reflecting the combined amount received by either of them. This is somewhat different from the way official poverty statistics would treat the family, which would combine the mothers' incomes but not consider the 17-year-old's family as a separate, female-headed family.

Note that single mothers, by my definition, may be living with an unmarried partner. The unmarried partner is never included in her family, however, nor the family of her parents, if she is living with them. Nor are the incomes of unmarried partners combined into a family income. Unmarried partners are considered either nonfamily individuals or, if they live with their own relatives, distinct families. An unmarried 17-year-old mother living with her boyfriend and his mother would still count as a single mother, but she would not be counted in her boyfriend's mother's primary family. Her boyfriend's mother and her boyfriend would have the same family income, but her own family income would be distinct. An unmarried couple, each with their own biological child, would constitute two distinct families with different incomes.

Pretax and -Transfer Income. This is the same measure of market income used in the tax analyses described above. Market income includes earnings and business income; interest; dividends; rental income; income from royalties, estates, and trusts; child support; alimony; help from family and friends; and private sources of educational, retirement, disability, and survivor benefits. It also includes any income reported in a residual "other income" category, which may include public sources of income

not directly flagged in the CPS interview. Private sources of retirement, disability, and survivor benefits include government-paid benefits to former public employees, military service members, and their families.

Transfer Income. Transfer income includes cash transfers and noncash transfers. Cash transfers include welfare benefits for nondisabled families (Aid to Families with Dependent Children, Temporary Assistance for Needy Families, and public assistance programs); Supplemental Security Income benefits; energy assistance; unemployment compensation; workers' compensation; Social Security retirement, disability, and survivor benefits; and railroad retirement and black lung benefits. Energy assistance is unavailable in 1979 and 1980, and in subsequent years, it is available only for members of primary families.

Unemployment benefits are included only if someone receives no union unemployment or strike benefits, as the three sources cannot be separated. After 1986, cash transfers also include public educational benefits (if no private educational benefits are received) and miscellaneous public retirement, disability, and survivor benefits. Finally, I allocate the two 2020 economic impact payments to transfer income in that year. Veterans' payments (other than retirement, disability, and survivor benefits—included in market income) are included in neither market income nor transfer income.

Noncash transfers are available beginning in 1979. They include food stamps (Supplemental Nutrition Assistance Program), free and reduced-price school lunches, housing subsidies (through 2013), and Medicaid and Medicare benefits (through 2013).[95]

Refundable Tax Credits. These include, starting in 1979, the earned income tax credit and (starting in 2001) the additional child tax credit (ACTC).[96] As noted above, the ACTC is available only in the Unicon data for the 2002 and 2003 survey years. While Unicon's federal income tax variable in the 2004 file accounts for the ACTC, there is no ACTC variable and no easy way to create it for the tax units that have positive federal income taxes yet received

the ACTC. I therefore exclude 2003 from the trends
that require separating out refundable tax credits.

Taxes. See the "Measuring Posttax Earnings" section
above for details.

Employer Health Insurance. See the "Measuring
Pretax Compensation" section above for details.

Notes

1. This view appeared regularly among Republican candidates in key Senate races this year. See Blake Masters (@bgmasters), "You should be able to raise a family on one single income.," Twitter, October 28, 2021, 12:03 p.m., https://twitter.com/bgmasters/status/1453754258218651648. See also statements by Ohio's J. D. Vance: JD Vance for Senate, "Issues," https://jdvance.com/issues; and Denise Grant, "Vance to Visit Findlay," *Courier*, January 31, 2022, https://thecourier.com/news/367857/vance-to-visit-findlay.

2. W. Bradford Wilcox, "Making Young Men Marriageable," American Compass, February 24, 2021, https://americancompass.org/the-commons/making-young-men-marriageable.

3. I focus on men's earnings and single mothers (rather than single parents generally) because social conservatives and cultural populists tend to idealize the traditional 1950s family, and their economic critiques often explicitly center on men's economic struggles.

4. The fact of rising educational attainment creates methodological problems analyzing the earnings of men younger than age 25, for which there are no good solutions. Rising school enrollment means there will be more young men over time with either no earnings or only part-year earnings, since most students work less while attending school. Furthermore, students today are much less likely to work than they were in the past. The analytic question becomes what to do with these men. Focusing on somewhat older men mitigates the issues involved. For an extended discussion, see the Appendix A section "Choosing the Sample of Young Men."

5. Respondents indicating they were "separated" are not counted as married. "Living with children" means being a family head or the spouse of a family head and living in a family in which someone other than the family head or their spouse is under age 18. When a household head's family includes subfamilies (such as when a married couple lives with their daughter, who has her own child), the children in the subfamily belong to the subfamily rather than the household head's family. However, any subfamily heads (or spouses of subfamily heads) who are under age 18 are counted as children in the household head's family if the subfamily includes relatives of the household head. Living with children does not simply mean living with one's own biological child but can refer to stepchildren or adopted or foster children. Finally, someone not living with children may have a biological child who lives in another household. These analyses exclude non-civilians and residents of group quarters (such as medical institutions and prisons).

6. "Sole breadwinner" means being a household head (or the husband of a household head), having positive earnings (from wages, salaries, or self-employment), and having a spouse with no earnings. Unlike in the rest of the report's analyses, I look at men who were age 25–29 at the time of the survey and define them as breadwinners depending on their earnings the previous calendar year. In the rest of the report, I look at men who were age 26–30 at the time of the survey, meaning that one year earlier they would have been age 25–29. I make an exception in this case because I want to make sure that the samples in Figures 1 and 2 comprise the same men. These analyses exclude non-civilians and residents of group quarters (such as medical institutions and prisons).

7. As in Figure 1, respondents indicating they were separated are not counted as married. "Mother" means being a family head or spouse of a family head and living in a family in which someone other than the family head or their spouse is under age 18. When a household head's family includes subfamilies (such as when a single mother lives with her daughter, who has her own child), the children in the subfamily belong to the subfamily rather than the household head's family. However, any subfamily heads (or spouses of subfamily heads) who are under age 18 are counted as children in the household head's family if the subfamily includes relatives of the household head. Being a mother does not simply mean living with one's own biological child but can refer to living with stepchildren or adopted or foster children. Finally, someone who is not a mother may have a biological child who lives in another household. These analyses exclude non-civilians and residents of group quarters (such as medical institutions and prisons).

8. This is based on aggregates from the Bureau of Economic Analysis National Income and Product Accounts. See Appendix A for details of the nonwage compensation estimates.

9. See Appendix A.

10. Fatih Guvenen, Greg Kaplan, Jae Song, and Justin Weidner examine trends in lifetime earnings among men. They find that the median man's total pretax earnings between age 25 and 55 fell by 10 percent from 1967–97 to 1983–2013. Accounting for nonwage

compensation reduces that decline to as low as 7 percent. See Fatih Guvenen et al., "Lifetime Earnings in the United States over Six Decades," *American Economic Journal: Applied Economics* 14, no. 4 (October 2022): Section II.D, Appendix Table C.6, and Appendix C.2, https://www.aeaweb.org/articles?id=10.1257/app.20190489&&from=f. (More information is at https://assets.aeaweb.org/asset-server/files/17477.pdf.) If I average the 31 median pretax earnings I estimate for young men from 1967 to 1997 and compare that to the 31-year average from 1983 to 2013, I get a decline of 8 percent (including all non-earners in these medians and including students). This is similar to the 10 percent drop in the Guvenen et al. paper, even though I am averaging 31 medians rather than taking the median of 31-year averages. Accounting for nonwage compensation reduces the decline I find to 5 percent—again similar to the up to 7 percent drop found by Guvenen and his coauthors. Their paper does not include estimates of posttax earnings or compensation. Looking at posttax compensation in my data, the decline between 1967–97 and 1983–2013 is just 3 percent. Posttax compensation over 1990–2020 was 1 percent lower than over 1967–97. Dropping young men with negative or no earnings, posttax compensation rose 3 percent between these two periods. Further, the Guvenen et al. paper likely overstates the decline in men's lifetime earnings. In supplemental analyses, the authors adjust their 31-year averages by dividing total earnings by the number of years with significant earnings (instead of by 31). Accounting in this way for years in which men have little significant work, the lifetime earnings drop for men was 7 percent rather than 10 percent. See Guvenen et al., "Lifetime Earnings in the United States over Six Decades," Section II.B and Appendix Table C.10. This detail is important because the researchers' data exclude work in self-employment and for nonprofit or public organizations. If men work in those sectors, they will appear to have no earnings while doing so. If they switch into or out of those sectors during some year, only part of their earnings that year will show up in the data. (The industries included in the paper covered only 70 percent of private-sector employment in 2004, so this is potentially a major issue.) Perhaps because of this problem, the research team's data understate earnings at age 25 and 35 when compared against the Current Population Survey (CPS), and they overstate the decline in earnings at those ages. See Guvenen et al., "Lifetime Earnings in the United States over Six Decades," Appendix Figure D.3, Appendix Figure D.4. I conclude that using lifetime earnings would not change the conclusion that men's posttax compensation is at least as high as it has ever been.

11.   In the CPS Annual Social and Economic (ASEC) data, where direct estimates are available for 1979–2019, the increase in median posttax compensation was 12 percent for men age 30–39, 22 percent for men age 40–49, and 17 percent for men age 50–59, whereas the changes for pretax earnings were –4 percent, 8 percent, and 10 percent.

12.   This estimate multiplies the 1962–69 percentage increase in median earnings of men age 25–29 and not in school calculated from the CPS ASEC data by the 1958–62 percentage increase in the median earnings of men age 14 and older from an early Census Bureau report, and then by the 1947–58 percentage increase in the median money income of men age 25–34 from the same report. The increase over the entire period is 110 percent. If one multiplies the 1962–69 trend from the CPS by the 1947–62 trend for money income of men age 25–34, the increase since 1947 is 106 percent. I put the figures from the earlier report into nominal dollars and then inflated them using the personal consumption expenditures deflator. For the earlier report, see Mary F. Henson, "Trends in the Income of Families and Persons in the United States: 1947–1964," US Department of Commerce, Census Bureau, Population Division, August 1967, https://catalog.hathitrust.org/Record/001693161.

13.   See David Henderson, "Great Stagnation or Lousy Data?," Econlog, January 28, 2011, https://www.econlib.org/archives/2011/01/great_stagnatio.html.

14.   See the discussion and evidence in Appendix A.

15.   See, for instance, the estimates in the supplementary online data for Gerald Auten and David Splinter, "Income Inequality in the United States: Using Tax Data to Measure Long-Term Trends" (working paper, Davidsplinter.com, 2022), http://davidsplinter.com/AutenSplinter-IncomeIneq.xlsx.

16.   The 1950–2000 decennial censuses provide information on earnings received the previous year for a subsample of the population, and the American Community Survey (ACS) provides estimates from 2000 forward. I first estimated the change in marriage-ability from 1969 to 2019 using a single national threshold based on the 1979 earnings of young sole-breadwinning married fathers not in school. I then repeated the analyses using a different threshold for each state and, within each state, a different threshold for metropolitan and nonmetropolitan areas. I conducted analyses using both the 25th percentile and the median. I obtained these data from Stephen Ruggles et al., Integrated Public Use Microdata Series USA: Version 12.0, 2022, https://doi.org/10.18128/D010.V12.0.

17. David Autor, David Dorn, and Gordon Hanson, "When Work Disappears: Manufacturing Decline and the Falling Marriage Market Value of Young Men," *American Economic Review: Insights* 1, no. 2 (September 2019): 161–78, https://www.aeaweb.org/articles?id=10.1257/aeri.20180010.

18. Steven Ruggles, "Race, Class, and Marriage: Components of Race Differences in Men's First Marriage Rates, United States, 1960–2019," *Demographic Research* 46 (2022): 1163–86, https://www.demographic-research.org/volumes/vol46/39/default.htm.

19. The CPS does not allow one to identify Hispanics before 1970. The Hispanic sample is relatively small, making the estimates somewhat more volatile. Comparing 2019 to 1971, the increase in marriageability is considerably larger. Because of small sample sizes, I do not include trends for Asian Americans, Native Americans, or a residual "other" group.

20. The 1950–2000 decennial censuses provide information on earnings received the previous year for a subsample of the population, and the ACS provides estimates from 2000 forward. I first estimated the change in marriageability from 1969 to 2019 using thresholds based on the 1979 earnings of young sole-breadwinning married fathers not in school. Unlike in the CPS analyses, I retained young men living in institutions in determining the marriageability threshold, and I retained institutionalized people when I looked at marriageability rates. (Men in other "group quarters" were excluded from the analyses, as were men on active military duty, as in the CPS analyses.) Then I repeated these steps after excluding institutionalized men. I obtained these data from Ruggles et al., Integrated Public Use Microdata Series USA: Version 12.0.

21. Also reassuringly, the marriageability trends in the decennial census and the CPS looked similar between 1969 and 1999, the last year the census included income data for a subsample of respondents. Marriageability trends in the ACS looked somewhat worse than in the CPS, but the comparison is complicated by the fact that ACS respondents are interviewed throughout the calendar year and report income received the past 12 months, making comparisons with the CPS difficult. I conducted a variety of other tests of the robustness of the marriageability results in this report. I looked at trends using thresholds set based on what breadwinners made in 1962, 1969, 1989, 1999, 2009, and 2019. I considered different percentiles of the distribution of young married sole-breadwinning fathers. I produced results using a threshold based on sole-breadwinning fathers with at least two children (rather than at least one child). I varied the age of my samples. Of these alternatives, none of the defensible ones produce results that are out of line with the estimates shown in this report. (An example of an indefensible choice would be looking at men age 20–24 and retaining students in the data.)

22. Elizabeth Warren and Amelia Warren Tyagi, *The Two-Income Trap: Why Middle-Class Mothers and Fathers Are Going Broke* (New York: Basic Books, 2003).

23. See Todd J. Zywicki, "An Economic Analysis of the Consumer Bankruptcy Crisis," *Northwestern University Law Review* 99, no. 4 (2005): 1463–541, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=587901; and Stephen J. Rose, *Rebound: Why America Will Emerge Stronger from the Financial Crisis* (New York: St. Martin's Press, 2010), https://www.google.com/books/edition/Rebound/JnXuGLhx2r4C?hl=en&gbpv=1&bsq=elizabeth%20warren.

24. William Julius Wilson, *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy* (Chicago: University of Chicago Press, 1987). William Julius Wilson was a member of my dissertation committee, and I hold him in the highest esteem.

25. These include using an unjustifiable inflation adjustment that overstates the rise in the cost of living; assessing trends by fixed categories of educational attainment, such as men without a high school diploma, without recognizing that these categories change in size markedly over time; failing to account for nonwage compensation and taxes; and ignoring trends such as rising school enrollment and earlier retirement that create low annual earnings for reasons having nothing to do with the strength of the economy. See, for instance, Michael Greenstone and Adam Looney, "Trends: Men in Trouble," *Milken Institute Review* 13, no. 3 (2011): 8–16, https://www.brookings.edu/wp-content/uploads/2016/06/07_milken_greenstone_looney.pdf; and David Autor and Melanie Wasserman, "Wayward Sons: The Emerging Gender Gap in Labor Markets and Education," Third Way, March 20, 2013, https://www.thirdway.org/report/wayward-sons-the-emerging-gender-gap-in-labor-markets-and-education.

26. See, too, Michael R. Strain, *The American Dream Is Not Dead: (But Populism Could Kill It)* (West Conshohocken, PA: Templeton Press, 2020).

27. Julissa Cruz, "Marriage: More Than a Century of Change," National Center for Family & Marriage Research, 2013, https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/documents/FP/FP-13-13.pdf; and Social Capital Project, *Love,*

Marriage, and the Baby Carriage: The Rise in Unwed Childbearing, December 11, 2017, https://www.jec.senate.gov/public/index.cfm/republicans/analysis?ID=E0C3BA6E-840A-4B5E-A5BF-B43FC0BB5331.

28. Kate Antonovics and Robert Town, "Are All the Good Men Married? Uncovering the Sources of the Marital Wage Premium," *American Economic Review* 94, no. 2 (May 2004): 317–21, https://faculty.wharton.upenn.edu/wp-content/uploads/2014/09/28_Are_All_the_Good_Men_Married.pdf.

29. See Ariel J. Blinder and John Bound, "The Declining Labor Market Prospects of Less-Educated Men," *Journal of Economic Perspectives* 33, no. 2 (Spring 2019): 163–90, https://www.aeaweb.org/articles?id=10.1257/jep.33.2.163. Blinder and Bound argue that "the prospect of forming and providing for a new family constitutes an important male labor supply incentive . . . [a] decline in the formation of stable families produces a situation in which fewer men are actively involved in family provision or can expect to be involved in the future. This removes a labor supply incentive." I thank Richard Reeves for directing me to this passage.

30. George A. Akerlof, Janet L. Yellen, and Michael L. Katz, "An Analysis of Out-of-Wedlock Childbearing in the United States," *Quarterly Journal of Economics* 111, no. 2 (May 1996): 277–317, https://www.jstor.org/stable/2946680#metadata_info_tab_contents.

31. Social Capital Project, *Love, Marriage, and the Baby Carriage*.

32. Claudia Goldin, "The Quiet Revolution That Transformed Women's Employment, Education, and Family," *American Economic Review* 96, no. 2 (May 2006): 1–21, https://www.aeaweb.org/articles?id=10.1257/000282806777212350.

33. Martha May, "The Historical Problem of the Family Wage: The Ford Motor Company and the Five Dollar Day," *Feminist Studies* 8, no. 2 (1982): 399–424, https://www.jstor.org/stable/3177569; Ruth Milkman, *Women, Work, and Protest: A Century of U.S. Women's Labor History* (London: Routledge and Kegan Paul, 1985); Alice Kessler-Harris, *Out to Work: The History of Wage-Earning Women in the United States* (Oxford: Oxford University Press, 1983); Julia Kirk Blackwelder, *Now Hiring: The Feminization of Work in the United States, 1900–1995* (College Station, TX: Texas A&M University Press, 1997); and Allan Carlson, *The Family in America: Searching for Social Harmony in the Industrial Age* (New Brunswick, NJ: Transaction, 2007).

34. See Todd Hopper, "The Assembly Line and the $5 Day," Michigan Historical Center, December 1, 2003, https://web.archive.org/web/20091215161407/http://www.michigan.gov/dnr/0,1607,7-153-54463_18670_18793-53441--,00.html.

35. Between 1941 and 1953, among commerce and industry workers between age 25 and 60, median earnings rose by 44 percent, while mean earnings rose 26 percent. Mean earnings then started to catch up, but it was not until the early 1980s that the two measures achieved the same cumulative growth since World War II. See Wojciech Kopczuk, Emmanuel Saez, and Jae Song, "Earnings Inequality and Mobility in the United States: Evidence from Social Security Data Since 1937," *Quarterly Journal of Economics* 125, no. 1 (February 2010): 91–128, Figure A1, web appendix, http://www.columbia.edu/~wk2110/uncovering. These figures combine men and women, but from 1947 to 1960, we can compare trends in median and mean individual income among employed civilians separately for men and women. Growth in the median between 1947 and 1953 was faster than growth in the mean among men, but not among women. From 1947 to 1960, the median for men increased by 51 percent after adjusting for inflation, while the mean rose by just 43 percent. For women, increases were smaller and similar at the median and mean (30 percent and 34 percent). See Herman Phillip Miller, "Trends in the Income of Families and Persons in the United States, 1947 to 1960," Table 14, https://www.google.com/books/edition/Trends_in_the_Income_of_Families_and_Per/nj7iEF2CdrsC?hl=en&gbpv=0&kptab=overview.

36. From 1941 to 1969, real net value added in the nonfarm business sector increased 244 percent, and real net value added in the sector per hour doubled. The sum of real compensation among employees in the nonfarm business sector and proprietor income rose 267 percent, and hourly compensation within this combined group rose by 110 percent. Pay rose faster than productivity. Net value-added estimates are from the National Income and Product Accounts, Table 1.9.5, https://www.bea.gov/itable. Compensation estimates are from National Income and Product Accounts, Table 6.2. Proprietors' income is from National Income and Product Accounts, Table 6.12. I adjust both series for inflation using the implicit price deflator for net value added in the nonfarm business sector, from National Income and Product Accounts, Table 1.9.4. Hours estimate for 1969 is from Bureau of Labor Statistics, Office of Productivity and Technology, "Quarterly Hours Worked and Employment in Total U.S. Economy and Subsectors," September 1, 2022, https://www.bls.gov/productivity/tables/total-economy-hours-employment.xlsx. Hours for 1941 are estimated by dividing real gross value added in the nonfarm business sector (from National Income and Product Accounts, Table 1.3.6, indexed to 1948) by real gross private nonfarm output per labor hour (indexed to 1948). The latter comes from the Historical Statistics of the United States,

Millennial Edition, Tables Cg265–72, https://hsus.cambridge.org/HSUSWeb/HSUSEntryServlet. The calculation assumes that the change in real gross value added in the nonfarm business sector from 1941 to 1948 was the same as the change in real gross value added in the private nonfarm sector over those seven years, and it assumes that price changes are adequately measured in the Historical Statistics source. From 1947 to 1957, the assumption can be tested by comparing the trend to the Bureau of Labor Statistics trend; the earlier series follows the Bureau of Labor Statistics estimates well.

37. Union members as a share of wage and salary workers peaked at 35 percent in 1954. See Gerald Mayer, "Union Membership Trends in the United States," Congressional Research Service, August 31, 2004, https://sgp.fas.org/crs/misc/RL32553.pdf.

38. Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," *Quarterly Journal of Economics* 133, no. 2 (May 2018): 553–609, https://gabriel-zucman.eu/files/PSZ2018QJE.pdf. For the factor income estimates for equal-split individuals, see Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Appendix II: Detailed Distributional Series," October 17, 2022, Table TA10, https://gabriel-zucman.eu/files/PSZ2022AppendixTablesII(Distrib).xlsx. Estimates for pretax national income from 1960 forward come from Auten and Splinter, "Income Inequality in the United States."

39. This erosion of male breadwinner rents would not have to have happened explicitly. As new jobs and new companies entered the labor market and old jobs and old companies left, employers would have found themselves hiring men and women, husbands and wives, increasingly for the same positions. The assumption that pay scales should partly reflect male breadwinner needs would have become rarer and rarer.

40. Author's analyses of the CPS ASEC data.

41. Ellen R. McGrattan and Richard Rogerson, "Changes in the Distribution of Family Hours Worked Since 1950," *Frontiers of Family Economics* 1 (2008): 115–38.

42. Francine D. Blau and Lawrence M. Kahn, "Changes in the Labor Supply Behavior of Married Women: 1980–2000," *Journal of Labor Economics* 25 (2007): 393–438, https://www.jstor.org/stable/10.1086/513416#metadata_info_tab_contents.

43. John A. Knowles, "Why Are Married Men Working So Much? An Aggregate Analysis of Intra-Household Bargaining and Labor Supply," *Review of Economic Studies* 80, no. 3 (2013): 1055–85, https://academic.oup.com/restud/article-abstract/80/3/1055/1569238?redirectedFrom=fulltext.

44. Alexandra Killewald, "Money, Work, and Marital Stability: Assessing Change in the Gendered Determinants of Divorce," *American Sociological Review* 81, no. 4 (August 2016): 696–719, https://journals.sagepub.com/doi/10.1177/0003122416655340; and Marianne Bertrand, Emir Kamenica, and Jessica Pan, "Gender Identity and Relative Income Within Households," *Quarterly Journal of Economics* 130, no. 2 (January 2015): 571–614, https://academic.oup.com/qje/article-abstract/130/2/571/2330321?redirectedFrom=fulltext. I thank Reeves for directing me to these papers.

45. Charles Murray, *Losing Ground: American Social Policy: 1950–1980* (New York: Basic Books, 1984).

46. Adjusted for inflation, federal spending on programs for low-income Americans was 14.5 times higher in 2019 than in 1968. Meanwhile, poverty among single-mother families fell from 70 percent to 51 percent between 1968 and 2014, *before* taking taxes and transfers into account. For the 1968 spending figure, see Vee Burke, *Cash and Noncash Benefits for Persons with Limited Income: Eligibility Rules, Recipient and Expenditure Data, FY2000–FY2002*, Congressional Research Service, November 25, 2003, https://web.archive.org/web/20220715090120/http:/stuff.mit.edu/afs/sipb/contrib/wikileaks-crs/wikileaks-crs-reports/RL32233.pdf. For the 2019 figure, see Patrick A. Landers et al., *Federal Spending on Benefits and Services for People with Low Income: FY2008–FY2020*, Congressional Research Service, December 8, 2021, https://crsreports.congress.gov/product/pdf/R/R46986. I adjusted the estimates to 2021 dollars using the personal consumption expenditures deflator. For the poverty trend figures, see Christopher Wimer et al., "Trends in the Economic Wellbeing of Unmarried-Parent Families with Children: New Estimates Using an Improved Measure of Poverty," *Population Research and Policy Review* 40 (2022): 1253–76.

47. Specifically, the CPS data lack estimates of noncash transfer benefits and taxes before 1979.

48. LaDonna Pavetti, "Why the 1996 Welfare Law Is Not a Model for Other Safety-Net Programs," Center on Budget and Policy Priorities, July 22, 2014, https://www.cbpp.org/blog/why-the-1996-welfare-law-is-not-a-model-for-other-safety-net-programs; Ron Haskins, testimony before the Subcommittee on Human Resources, Committee on Ways and Means, US House of Representatives, February 11, 2015, https://www.brookings.edu/wp-content/uploads/2016/06/2-11-15-lowincome-families-haskins-testimony.pdf;

Heather Boushey, testimony before US Equal Employment Opportunity Commission Meeting on Perspectives on Work/Family Balance and the Federal Equal Employment Opportunity Laws, April 17, 2007, https://www.eeoc.gov/meetings/meeting-april-17-2007-perspectives-workfamily-balance-and-federal-equal-employment/boushey; and Scott Winship, *The Conservative Case Against Child Allowances*, American Enterprise Institute, March 5, 2021, https://www.aei.org/research-products/report/the-conservative-case-against-child-allowances.

49. The CPS data indicate that in 1991, 25 percent of black women age 25–29 and 32 percent of *single* black women in that age range received public assistance. In 1999, those figures were 9 percent and 13 percent. For reference, in the business cycle peak of 1989, the figures were 21 percent and 30 percent, so the issue is not a matter of comparing different points in the business cycle. Young black women were more affected by welfare reform than were young white women, due to the larger share receiving public assistance benefits. (In 1991, 7 percent of non-Hispanic white women age 25–29 and 13 percent of single white women in that age range received public assistance.) The difference has a number of sources, including higher poverty rates among African Americans, lower marriage rates, higher rates of single parenthood, and greater neighborhood poverty and multigenerational poverty.

50. Social Capital Project, *The Demise of the Happy Two-Parent Home*, July 23, 2020, Figure 18, Figure 19, https://www.jec.senate.gov/public/index.cfm/republicans/2020/7/the-demise-of-the-happy-two-parent-home.

51. Housing subsidies are unavailable after 2014, and Medicaid benefits are unavailable after 2013.

52. I suspect that the 2018 data point is too low due to statistical noise or some inconsistency in survey administration.

53. Social Capital Project, *What We Do Together: The State of Associational Life in America*, May 2017, https://www.jec.senate.gov/public/_cache/files/6f670ee8-74de-497a-85f6-4cf6502d52d4/1-17-what-we-do-together.pdf.

54. Social Capital Project, *The Demise of the Happy Two-Parent Home*, 24.

55. Richard V. Reeves, *Of Boys and Men: Why the Modern Male Is Struggling, Why It Matters, and What to Do About It* (Washington, DC: Brookings Institution Press, 2022).

56. The federal government has collected employment data monthly since March 1940, and it has been the Census Bureau's responsibility since August 1942. See US Census Bureau, *Design and Methodology: Current Population Survey*, October 2006, Chapter 2, https://www2.census.gov/programs-surveys/cps/methodology/tp-66.pdf. The CPS received its current name by 1948. The source of official 1946 income statistics was the 1947 "Survey of Population, Labor Force, and Housing," while the source of 1947 statistics was attributed to the 1948 "Current Population Survey." See US Census Bureau, "Income of the Nonfarm Population: 1946," June 3, 1948, https://www.census.gov/library/publications/1948/demo/p60-003.html; and US Census Bureau, "Income of Families and Persons in the United States: 1947," February 7, 1949, https://www.census.gov/library/publications/1949/demo/p60-005.html. From 1944 through 1955, the Census Bureau collected additional information on income each April. From 1956 through 1975, the income data were collected solely in March, leading to the once-a-year subset of data that includes income information that became known as the "March Supplement" to the CPS. See US Census Bureau, "Family Income in the United States: 1954 and 1953," December 1955, https://www2.census.gov/library/publications/1955/demographics/p60-20.pdf; and US Census Bureau, "Family Income in the United States: 1955," April 1957, https://www2.census.gov/library/publications/1957/demographics/p60-24.pdf. Since 1976, the CPS has also included a smaller number of interviews collecting income data in February and (since 2004) April. See Sarah M. Flood and Jose Pacas, "Using the Annual Social and Economic Supplement as Part of a Current Population Survey Panel," *Journal of Economic and Social Measurement* 42, no. 3–4 (2018): 225–48, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6010043.

57. Sarah M. Flood et al., Integrated Public Use Microdata Series, Current Population Survey: Version 9.0, 2021, https://doi.org/10.18128/D030.V9.0. For some background on the Unicon Research Corporation, provided by the Integrated Public Use Microdata Series (IPUMS) group, see Integrated Public Use Microdata Series, Current Population Survey, "Similar Visions, Independent Work, and an Eventual Collaboration," https://cps.ipums.org/cps/collaboration.shtml. The Unicon data provide more variables and more detailed information than the IPUMS data, so I prefer using them for these overlapping years. The Unicon data, but not the IPUMS data, include variables in the 1963–67 files that allow one to identify how many children under age 14 are in a family. They also provide the value of Medicare and Medicaid benefits from 2012 through 2014, while neither the IPUMS file nor the public use file on the Census Bureau website do. Finally, they include the amount received from the additional child tax credit (ACTC) in the 2002 and 2003 files and net out the ACTC in the federal income tax variable in these years, unlike other sources of CPS data. The 2014 CPS tax data were

modified by the Census Bureau after Unicon dissolved, and the 2014 CPS ASEC was reposted entirely in 2017, correcting several tax variables. See US Census Bureau, "Current Population Survey," CPS March Supplement, Note 31, Note 36, https://web.archive.org/web/20190107132600/https://thedataweb.rm.census.gov/ftp/cps_ftp.html#cpsmarch. Further, the Unicon 2014 file includes only the 5/8 subset of the sample that was processed under the older CPS methods. While my checks against the IPUMS 2014 file indicated that the Unicon data provided essentially the same results as the IPUMS data, I use the IPUMS file. However, because the Unicon file includes estimates of the value of Medicare and Medicaid benefits, I merge the Medicare and Medicaid values from the Unicon file for 2014 into the IPUMS data. The Census Bureau changed the way it processed data in 1989 and created a "bridge" file that processed the 1988 data using the new methods. My 1988 estimates use the bridge file. The Census Bureau expanded the sample in the 2001 survey to provide estimates for allocation of State Children's Health Insurance Program funds to states. There are two files for this year, only one of which includes the expanded sample. I use the expanded file.

58. Another potential break occurs between the 2018 and 2019 data files (with information on 2017 and 2018 income). The Census Bureau changed the way it processes income data in the 2019 file. A 2017 research file and 2018 "bridge" file process the data for those years using the 2019 methods. See US Census Bureau, "2017 CPS ASEC Research File," October 28, 2021, https://www.census.gov/data/datasets/2017/demo/income-poverty/2017-cps-asec-research-file.html; and US Census Bureau, "2018 CPS ASEC Bridge Files," October 8, 2021, https://www.census.gov/data/datasets/2018/demo/income-poverty/cps-asec-bridge.html. However, the difference in median male earnings between the 2018 file and the 2018 bridge file is not statistically significant, nor is the difference in male earnings at the median and 10th percentile, comparing the 2017 file and 2017 research file. See US Census Bureau, "Table 1. Income and Earnings Summary Measures by Selected Characteristics: 2018 CPS ASEC Production File and 2018 CPS ASEC Bridge File," 2018, https://www2.census.gov/programs-surveys/demo/datasets/income-poverty/time-series/data-extracts/2018/cps-asec-bridge-file/Income-Table-1-2018-Bridge.xlsx; and Jonathan Rothbaum, "Processing Changes to Income in the CPS ASEC" (working paper, US Census Bureau, Social and Economic Housing Statistics Division, Washington, DC, September 2019), https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-18.pdf. For this reason, I chose not to adjust the post-2017 trend in my analyses. For other changes in survey methodology over the years covered in this report, see US Census Bureau, "Changes in Methodology for the Current Population Survey's (CPS) Annual Social and Economic Supplement (ASEC)," August 19, 2022, https://www.census.gov/topics/income-poverty/income/guidance/cps-methodology-changes.html. For changes in data availability and quality, see Integrated Public Use Microdata Series, Current Population Survey, "ASEC Sample Notes," https://cps.ipums.org/cps/asec_sample_notes.shtml.

59. See Jonathan Rothbaum and Adam Bee, "Coronavirus Infects Surveys, Too: Survey Nonresponse Bias and the Coronavirus Pandemic" (working paper, US Census Bureau, Washington, DC, May 3, 2021), https://www.census.gov/content/dam/Census/library/working-papers/2020/demo/sehsd-wp2020-10.pdf. The authors produced public use files containing new weights that compare CPS respondents to administrative data for the 2017–21 surveys. They report that the weights' impact on estimates is small before 2020, so I only use their weights for 2020 and 2021. For the weights, see US Census Bureau, "Public-Use Weights Adjusting for Nonresponse During the Pandemic," February 17, 2022, https://www.census.gov/data/datasets/2020/demo/cps/2020-pub-use-adj-nonresp-corono-pandemic.html.

60. "Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, prisons and worker dormitories." See US Census Bureau, "2020 Census Group Quarters," March 16, 2021, https://www.census.gov/newsroom/blogs/random-samplings/2021/03/2020-census-group-quarters.html. College students living in a dorm are counted as belonging to the households where they live when not at school.

61. Of relevance for these analyses, in earlier years coinciding with the Vietnam War, many young non-earners were enlisted in the Armed Forces the previous year despite being civilians when interviewed (43 percent of non-earners among men age 20–24 and 22 percent of non-earning men age 25–29). However, leaving them in the data does not affect my analyses, as the 25th percentile of young male earnings and the median are unchanged when they are removed.

62. Men with a disability that precludes them from working for the next six months are not asked the question, but other men reporting not working during the previous year because of illness or disability do receive the question.

63. Author's calculations using the CPS ASEC.

64. Author's calculations using the CPS ASEC. Most of the remaining men said they were ill or disabled (39 percent), 18 percent were taking care of their home or family, 4 percent claimed to be retired, and 16 percent indicated some other reason. For an assessment of the extent to which the increase in nonworking men reporting disability reflects a decline in health status or rising incentives to claim disability benefits, see Scott Winship, "Declining Prime-Age Male Labor Force Participation: Why Demand- and Health-Based Explanations Are Inadequate" (working paper, George Mason University, Mercatus Center, Arlington, VA, 2017), https://www.mercatus.org/system/files/winship-labor-force-participation-mercatus-v1.pdf; and Scott Winship, "How to Fix Disability Insurance," *National Affairs*, Spring 2015, https://www.nationalaffairs.com/publications/detail/how-to-fix-disability-insurance.

65. Scott Winship, *What's Behind Declining Male Labor Force Participation: Fewer Good Jobs or Fewer Men Seeking Them?*, George Mason University, Mercatus Center, 2017, https://www.mercatus.org/system/files/winship_malelaborparticipation_mr_v2.pdf.

66. I use the marital status indicators reported by the CPS respondent for each person in the household. However, these reports have historically been edited by the Census Bureau post-interview. This affects how same-sex marriages show up in the data. Until 2010, if someone reported they were the spouse of the household head but were the same sex as the head, the Census Bureau recoded the spouse's sex to be opposite of that of the head, under the implicit assumption that sex had been misreported. Such a couple would still show up as "married" in my analyses. However, starting in 2010, this same person's relationship to the household head would be recoded to unmarried partner, as same-sex unions were not declared legal by the Supreme Court until 2015, though several states legally recognized gay marriage. Only in 2017 were all same-sex couples able to indicate they were married and have neither their sex nor their relationship edited post-interview. See Daphne Lofquist and Renee Ellis, "Comparison of Estimates of Same-Sex Couple Households from the ACS and CPS" (PowerPoint presentation, Annual Meeting of the Population Association of America, Washington, DC, March 31–April 2, 2011), https://www.census.gov/content/dam/Census/library/working-papers/2011/demo/2011final-paa-poster.pdf; and Jennifer M. Ortman, "Changes to the Household Relationship Data in the Current Population Survey" (PowerPoint presentation, 2017 Applied Demography Conference, San Antonio, TX, January 11–13, 2017), https://www.census.gov/content/dam/Census/library/working-papers/2017/demo/SEHSD-WP2017-40.pdf.

67. To make this issue clearer, imagine young married parents both age 17, with one son, living with the wife's parents (her son's grandparents). Ideally, we would count two fathers—the household head and his son-in-law. This is possible in most CPS files, but from 1964 to 1967, all we know is the number of "related children" in the combined family, not which children belong to which couple. We observe one related child—the married daughter—in the data, but since her child is under age 14, we do not observe him. We only know there is a second "related child" under age 14. It is impossible to tell whether this unobserved child belongs to the household head and his wife (in which case there would be only one father in the household) or to the younger married couple (in which case there are two fathers).

68. In practice, primary family heads in their late 20s are highly unlikely to have someone under age 18 living with them in a related subfamily. Nevertheless, for illustration, consider a married couple living with their daughter, who has her own child. If the daughter is under age 18, the married couple are deemed parents. However, if she is older than age 17, the married couple are not identified as parents. (Nor is the daughter, as she is not the head of the household.) If the married couple lives with their granddaughter, but their daughter lives elsewhere, they are identified as "parents" of the granddaughter. If their daughter is age 19 but married, and her husband is age 17, the household heads are identified as "parents" of their son-in-law.

69. I present a detailed case for the superiority of this cost-of-living adjustment in Scott Winship, *Poverty After Welfare Reform*, Manhattan Institute, August 2016, Appendix 2, https://media4.manhattan-institute.org/sites/default/files/R-SW-0816.pdf.

70. US Bureau of Economic Analysis, "What Is the Interactive Data Application?," October 18, 2022, https://apps.bea.gov/iTable/index_nipa.cfm.

71. For full details, see US Census Bureau, *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992*, 1993, https://www2.census.gov/library/publications/1993/demographics/p60-186rd.pdf.

72. To create the ratios, I divided *employer-provided health insurance plus wages and salaries* by *wages and salaries* for each worker in the CPS and top-coded the ratio at 1.5 to reduce the influence of a small number of outliers. I then took the average ratio across workers, separately for those with no self-employment income and those with both wage and salary and self-employment income. Finally, I multiplied this ratio by individuals' wage and salary income and added any self-employment income.

73. For this version, due to sample size concerns, only men with no self-employment income are assigned quintile-specific average ratios, while men with both wage and salary income and self-employment income all receive the same ratio regardless of quintile.

74. The trends at the median also line up closely. Using the measures in Figure A1, Line 1 falls by 6 percent from 1979 to 2017, Line 2 by 7 percent, Line 3 by 9 percent, Line 4 by 8 percent, Line 5 by 9 percent, and Line 6 by 8 percent.

75. See US Census Bureau, *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992*; and Amy O'Hara, *New Methods for Simulating CPS Taxes*, US Census Bureau, December 15, 2004, https://cps.ipums.org/cps/resources/adjginc/oharataxmodel.pdf.

76. The 1980–2004 Unicon files include an estimate of federal income taxes for each tax unit that excludes the (refundable) earned income tax credit (EITC) and a separate estimate of the EITC received by the tax unit. I subtract the latter from the former. Starting in 1998, the ACTC provided families (initially a small number) with a refundable credit. See US Department of the Treasury, Internal Revenue Service, *1998 1040 Instructions*, 12, https://www.irs.gov/pub/irs-prior/i1040gi--1998.pdf. The ACTC increased in 2001, and the 2002 CPS file is the first time that the federal income tax variable is sometimes negative, reflecting the ACTC (but not the EITC). See US Department of the Treasury, Internal Revenue Service, *2001 1040 Instructions*, 14, https://www.irs.gov/pub/irs-prior/i1040--2001. pdf. For background on the refundable credits that are and are not included in the CPS federal income tax variable before 2005, see O'Hara, *New Methods for Simulating CPS Taxes*. The CPS files available on the Census Bureau website, the National Bureau of Economic Research website, and the IPUMS website do not include negative values for the federal income tax variable for 2002 or 2003, unlike the Unicon files. The 2004 Unicon values are identical to those from the other sources. The Unicon documentation indicates that they received the tax data directly from the Census Bureau. The 2003 values differ in the Unicon file solely because they are not top-coded (as in the other sources) and because they are net of the ACTC. That is to say, the tax variable in the 2003 files from other sources does not include the ACTC. The 2002 federal income tax variable in the Unicon data remains slightly different from the variable in the other sources after accounting for the ACTC and top-coding. I have chosen to use the Unicon version for two reasons. First, the 2003 Unicon file is clearly superior to the other sources. Second, the other sources clearly must exclude the ACTC in 2002, since the values are never negative. The family-level federal income tax variable in the 2002 Supplemental Poverty Measure public use file on the Census Bureau site includes negative values. From the 2005 file onward, the CPS ASEC data include separate before-credit and after-credit tax variables. I use the after-credit variable. This variable includes the value of the Making Work Pay tax credit in the 2010 and 2011 files and the value of the two 2020 COVID-19-related economic impact payments (EIP) in the 2021 file. I remove the EIPs from 2020 taxes and instead categorize them as transfers. ASEC interviewees may have given inconsistent responses to the EIP question because of the question wording (developed before the second EIP in late 2020) and the timing of the second and third (2021) EIP. (The former might have been received in 2020 or 2021, while the latter might have been received before the survey interview.) Perhaps as a result, nonresponse rates for this question were high. Rather than use the actual responses to the EIP questions, the Census Bureau imputed EIP amounts to address these issues. See Adam Bee, Charles Hoyakem, and Daniel Lin, "Imputing 2020 Economic Impact Payments in the 2021 CPS ASEC" (working paper, US Census Bureau, Social and Economic Housing Statistics Division, Washington, DC, September 2021), https://cps.ipums.org/cps/resources/spm/sehsd-wp2021-18.pdf. The Unicon data include state income tax estimates for 1979–2020 as well. From the 1980–2004 files, the estimates include state EITCs for some states, but only up to the amount of income tax liability. See O'Hara, *New Methods for Simulating CPS Taxes*. As of 2003, 15 states plus the District of Columbia had EITCs. Thirteen states subsequently enacted EITCs. See Institute of Taxation and Economic Policy, "When Did Your State Enact Its EITC?," May 29, 2019, http://itep.org/when-did-your-state-enact-its-eitc. For consistency, I recode negative state income tax amounts to zero for the 2005–21 files.

77. Another option would be to use the National Bureau of Economic Research's TAXSIM model to estimate earlier taxes. However, that model includes state income taxes only back to 1977.

78. Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective," *Journal of Economic Perspectives* 21, no. 1 (Winter 2007): 3–24, https://www.aeaweb.org/articles?id=10.1257/jep.21.1.3.

79. See Thomas Piketty and Emmanuel Saez, "How Progressive Is the U.S. Federal Tax System? A Historical and International Perspective" (working paper, National Bureau of Economic Research, Cambridge, MA, July 2006), Table A3, https://eml.berkeley.edu/~saez/piketty-saezNBER06taxprog.pdf. The estimates are also available in an Excel spreadsheet at https://eml.berkeley.edu/~saez/jep-results-standalone.xls. Piketty and Saez add an additional number of tax units to their data to represent non-filers, so that total tax

units in each year equal the number of single adults age 20 or older plus the number of married couples of any age. They assign these added units incomes equal to 20 percent of the average of filing tax units. Piketty and Saez create quintiles after adding adjustments back into adjusted gross income and subtracting transfers and capital gains included in adjusted gross income. Then, after ranking tax units on this basis, realized capital gains are added to income, along with employers' share of payroll taxes and an amount of income that would have been received by workers but that gets taxed away by the corporate income tax. Next, Piketty and Saez estimate federal income taxes for each tax unit, using the National Bureau of Economic Research's TAXSIM model. For each quintile, they sum federal income taxes across tax units and divide by total income to get an average federal income tax rate.

80. Tax units are either families or individuals not in families. I separated related subfamilies as distinct tax units from the rest of the primary family in which they reside, and I kept non-head and non-spouse family members at least 20 years old as their own tax units. I excluded tax units headed by someone under age 15 and tax units comprised of unmarried individuals under age 20.

81. Market income includes earnings and business income; interest; dividends; rental income; income from royalties, estates, and trusts; child support; alimony; help from family and friends; and private sources of educational, retirement, disability, and survivor benefits. It also includes any income reported in a residual "other income" category, which may include public sources of income not directly flagged in the CPS interview. "Private" sources of retirement, disability, and survivor benefits include government-paid benefits to former employees, military service members, and their families. Market income is unavailable before 1967, because private sources of income other than earnings cannot be separated from public sources of income. From 1968 to 1974, government and military pensions are included only if someone reports receiving no unemployment compensation, workers' compensation, or veterans' payments, as these sources of income are aggregated together. Fortunately, few men in their 20s have pension income. From 1987 forward, private educational benefits are included only if no public educational benefits were received, as the amounts are lumped together.

82. I do not include the 2004 estimate from the Piketty and Saez paper because it is based on 2000 income tax data rather than 2004 data. However, the trends align just as well when the 2004 quintile averages are included.

83. Average tax rates are understated somewhat at the top by the CPS data, an expected consequence of the top-coding in the CPS data and the unlikelihood of well representing the richest of the rich in a sample of the population. These discrepancies make no practical difference in this report, because they do not affect median earnings trends or trends in marriageability. Tax rates for the second-lowest quintile are close to those in the lowest quintile in both the Piketty and Saez data and mine. This closeness reflects the presence in the bottom quintile of nonworkers, who do not benefit from refundable tax credits, and self-employed people with negative income (whose tax rate may be positive if they receive refundable credits).

84. The averages include men who are their own tax unit or a tax unit head or spouse.

85. The quintile averages that are backcasted in this way are averages after bottom- and top-coding CPS rates at the 0.5 and 99.5 centiles (in the overall distribution—not within quintiles). This ensures that a small number of outlier individual rates do not distort any average.

86. This fraction is undefined when market income is $0, in which case I assign an income tax rate of $0. The vast majority of individuals living in tax units with no market income also have no earnings, so this assignment makes little practical difference.

87. The drop in rates in 2009 and 2010 reflect the impact of the refundable Making Work Pay tax credit, worth up to $400 for individuals and $800 for married couples and authorized for those years by the American Recovery and Reinvestment Act of 2009. The CPS quintile averages may also be compared to average federal income tax rates by quintile from the Congressional Budget Office for 1979–2018. The levels, and especially the trends, align well between the two data sources, with one exception. The Congressional Budget Office estimates indicate that tax rates for the bottom quintile fell much more from 1990 to 2018 than my estimates do. The drop shown by the Congressional Budget Office is also inconsistent with the Piketty and Saez estimates through 2004. I believe the discrepancy relates to the way the Congressional Budget Office creates its quintiles, which involves ranking *households* (rather than tax units) based on their *household-size-adjusted* income, then putting an equal number of people in each quintile, according to their *size-adjusted* household income. The Congressional Budget Office then excludes people with negative household income from the bottom quintile. See Congressional Budget Office, *The Distribution of Household Income, 2018*, August 2021, Appendix A, https://www.cbo.gov/system/files/2021-08/57061-Distribution-Household-Income.pdf. At any rate, if the Congressional Budget Office estimates were more accurate than the CPS estimates, it would indicate that my analyses have understated the improvement in men's marriageability since 1990.

88. When someone has both wage and salary income and self-employment income, I apply the employee payroll tax rate to wages first, then the self-employment payroll tax rate to self-employment income, if the taxable maximum has not been reached. Self-employment payroll taxes are set to zero if self-employment income is negative. These methods appear to correspond closely to those in the Census Bureau's tax modeling for 1979–2020. I do not apply the employer's share of payroll taxes for employees. Self-employed people face higher payroll taxes than do employees—double those of employees since 1984. Since 1990, they can deduct half the payroll taxes that would be applied absent a cap. Statutory Old-Age, Survivors, and Disability Insurance and hospital insurance rates, by year, are from Social Security Administration, "Tax Rates as a Percent of Taxable Earnings," https://www.ssa.gov/oact/progdata/taxRates. html. Maximum earnings subject to payroll taxes, by year, are from Social Security Administration, "Contribution and Benefit Base," https://www.ssa.gov/oact/COLA/cbb.html#Series. For federal retirement contribution rates, see Civil Service Retirement System and Federal Employees Retirement System, *CSRS and FERS Handbook*, April 1998, Section 30C1.1-1, https://www.opm.gov/retirement-services/publications-forms/csrsfers-handbook/c030.pdf.

89. In the 1976 CPS file, under 4 percent of employees were federal workers. The 1987 CPS file is the last year in which federal retirement deductions were combined with Federal Insurance Contributions Act (FICA) taxes, rather than the two being separate variables, and federal employees were just 3 percent of people with positive combined FICA taxes and federal retirement contributions. Also in the 1987 file, those with no FICA tax or federal retirement contribution were just 5 percent of civilians with positive wage and salary income.

90. Solely for display in Figure A6, I have bottom- and top-coded rates at the 0.5 and 99.5 centiles. This ensures that a small number of outlier individual rates do not distort any average.

91. For one, they are imprecise, giving everyone within an earnings or market income quintile the same tax rate. In addition, the imputed rates based on averages tend to assign tax rates to sole-earner married fathers in their 20s that are too low. This produces a marriageability threshold for 1979 that is lower than the 1979 marriageability threshold using individual-varying income tax rates. (The quintile averages used for the imputation are averages for all men in their 20s not enrolled in school, not just sole-earning married fathers in their 20s not in school.) Thus, when the share of young men exceeding this lower threshold is computed in other years, using imputed tax rates that *do* estimate the taxes of young men generally (as opposed to sole breadwinners), the marriageability rates are overstated. Despite these issues, the resulting levels of and trends in marriageability are similar regardless of which posttax earnings measure is used, as shown in Figure A7. In addition, if I let the 25th percentile change with each posttax earnings measure, rather than using my preferred measure to set the marriageability threshold every time, the trends in marriageability using these other measures of posttax earnings closely track the trend using my preferred measure, even though the *levels* are higher than for my preferred measure.

92. For presentation in Figure A8 only, I bottom- and top-code the ratios at the 0.5 and 99.5 centiles.

93. As discussed above, "in school" technically means they worked less than year-round the previous year because they were enrolled in school. Men who combined school with year-round work are included.

94. See Social Capital Project, *Reconnecting Americans to the Benefits of Work*, October 27, 2021, https://www.jec.senate.gov/public/ index.cfm/republicans/analysis?id=50C6EBFB-B2C7-4AB2-BF64-DCDBC0C1E869.

95. The CPS asks about receipt of noncash benefits, but the values of health, housing, and school lunch benefits are imputed by the Census Bureau, rather than reported by survey respondents. For full details of the imputation methods, see US Census Bureau, *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992*. Food stamp amounts are reported by respondents. Medicaid and Medicare values are not available on the public use files on the Census Bureau website after the 2011 survey, nor are they available on IPUMS. However, they are in the Unicon data through the 2014 file. (The Census Bureau had posted them but took them down in October 2016. See US Census Bureau, "Annual Social and Economic Supplements Footnotes," October 8, 2021, Note 11, https://www. census.gov/programs-surveys/cps/data/datasets/cps-asec-footnotes.html.) Personal communication with Census Bureau staff revealed that there were errors in the values for Medicaid in the 2012, 2013, and 2014 files, which I corrected per the instructions provided. The 2014 Unicon file includes only the subsample that was surveyed under the older methods. To value Medicaid and Medicare benefits, I reduce the "market value" the Census Bureau imputed to them by 75 percent, to account for the fact that many low-income benefi-ciaries would rather have the equivalent amount in cash instead of in the form of health benefits. This decision also makes my trend in post-transfer income conservative, because health benefits have grown more valuable over time—and more widespread. For a full

justification of my discounting of these benefits, see Winship, *Poverty After Welfare Reform*, Appendix 1. Housing subsidies are available in the IPUMS and public use files through 2014, but because of the limited availability of Medicaid and Medicare benefits, I only include them through 2013. The variable in the data is a monthly amount, which I multiply by 12 to get an annual benefit.

96. These values are imputed from the Census Bureau's tax modeling, as discussed above. For details, see US Census Bureau, *Measuring the Effect of Benefits and Taxes on Income and Poverty: 1992*. A small number of families received a refundable child tax credit from 1998 to 2000, but the ACTC variable begins only in the 2002 file (for 2001 taxes), and the federal income tax variable is never negative in the files before 2002.