Report on the Economic Well-Being of U.S. Households in 2017

May 2018

Board of Governors of the Federal Reserve System

Report on the Economic Well-Being of U.S. Households in 2017

May 2018

Board of Governors of the Federal Reserve System

This and other Federal Reserve Board reports and publications are available online at
www.federalreserve.gov/publications/default.htm.

To order copies of Federal Reserve Board publications offered in print,
see the Board's Publication Order Form (www.federalreserve.gov/files/orderform.pdf)
or contact:

Printing and Fulfillment
Mail Stop K1-120
Board of Governors of the Federal Reserve System
Washington, DC 20551
(ph) 202-452-3245
(fax) 202-728-5886
(email) Publications-BOG@frb.gov

Preface

This survey and report were prepared by the Consumer and Community Development Research Section of the Federal Reserve Board's Division of Consumer and Community Affairs (DCCA).

DCCA directs consumer- and community-related functions performed by the Board, including conducting research on financial services policies and practices and their implications for consumer financial stability, community development, and neighborhood stabilization.

DCCA staff members Jeff Larrimore, Alex Durante, Kimberly Kreiss, Christina Park, and Claudia Sahm prepared this report. Federal Reserve staff members Eric Belsky, Anna Alvarez Boyd, Andrea Brachtesende, Alexandra Brown, David Buchholz, Allen Fishbein, Heidi Kaplan, Madelyn Marchessault, Ellen Merry, Barbara Robles, Jenny Schuetz, Susan Stawick, and Jennifer Williams provided valuable comments on the survey and report. The authors would also like to thank Shannon Nelson and Lisa Lee for their feedback on the survey questions as well as Bob Torongo, Lisa Jackson, and Sergei Rodkin for their assistance fielding the survey. If you have questions about the survey or this report, please email SHED@frb.gov.

Contents

Executive Summary 1
- Economic Well-Being 1
- Income 2
- Employment 2
- Dealing with Unexpected Expenses 2
- Banking and Credit 2
- Housing and Neighborhoods 2
- Higher Education 3
- Student Loans 3
- Retirement 3

Economic Well-Being 5
- Current Financial Situation 5
- Changes in Financial Situation over Time 7
- Local and National Economic Conditions 8

Income 11
- Level and Source 11
- Financial Support 12
- Income Volatility 12

Employment 15
- Overview 15
- Scheduling and Benefits 16
- Gig Economy 18

Dealing with Unexpected Expenses 21
- Small, Unexpected Expenses 21
- Health Care Expenses 23

Banking and Credit 25
- Unbanked and Underbanked 25
- Credit Outcomes 25
- Credit Perceptions 27
- Credit Cards 28
- Financial Management 29

Housing and Neighborhoods 31
- Living Arrangements 31
- Housing 31

Neighborhoods 32

Higher Education 37
Value of Higher Education 37
Look Back on Education Decisions 38
College Attendance 40
No College Degree 41

Student Loans 43
Overview 43
Student Loan Payment Status 43

Retirement 47
Retirement Savings 47
Financial Literacy and Comfort Investing 48
Retirement 50

Description of the Survey 53
Survey Sample 53
Survey Mode 54
Weighting 54

Executive Summary

This report describes the responses to the fifth annual Survey of Household Economics and Decisionmaking (SHED). The survey is designed to enhance our understanding of how adults in the United States are faring financially.[1] The findings show many signs of growth and improvement along with remaining pockets of distress and fragility. They also reveal new insights into how households approach their financial lives and decisions.

In many ways, the latest findings underscore the overall economic recovery and expansion over the five years of the survey. Not surprisingly, the improvement in individuals' own assessment of their finances largely parallels other measures, such as the falling national unemployment rate. And in 2017, more people say they are managing okay financially and would be able to handle a small, unexpected expense than in previous years since at least 2013.

The survey also highlights some aspects of subjective well-being and emerging issues that can be missed in long-standing measures of objective outcomes. Our understanding of full employment and how to measure it is a key example. Many workers in the survey have a full-time job with regular hours, pay raises, and good benefits. Others who are also employed describe a very different experience: fewer hours than they want to work, only a few days' notice on work schedules, and little in benefits or pay increases. Still others supplement their income through odd jobs and gig work.

Additionally, alongside the improvements in the years following the Great Recession, several areas of concern remain. Disparities in economic well-being and outcomes are common among minorities, those with less education, and those living in lower-income neighborhoods. Small emergency expenses would still challenge a troubling number of households, and the opioid crisis appears to have touched many families. Individuals also point to financial struggles across a lifetime—from repaying college loans to managing retirement savings.

Altogether, the survey findings provide a snapshot of people's financial lives in late 2017. It is a story of overall improvement consistent with the national economic expansion. It is also a complex story of variation among different groups in the country and remaining areas of economic vulnerability.

Economic Well-Being

A large majority of individuals report that financially they are doing okay or living comfortably, and overall economic well-being has improved over the past five years. Even so, notable differences remain across various subpopulations, including those of race, ethnicity, and educational attainment.

- When asked about their finances, 74 percent of adults said they were either doing okay or living comfortably in 2017—over 10 percentage points more than in the first survey in 2013.
- Individuals of all education levels have shared in the improvement over the past five years, though the more educated still report greater well-being than those less educated.
- Over three-fourths of whites were at least doing okay financially in 2017 versus less than two-thirds of blacks and Hispanics.
- Three in five urban residents describe the economy in their local community as good or excellent versus two in five rural residents who offer this positive of an assessment of local conditions.

[1] The latest SHED interviewed a sample of over 12,000 individuals—roughly twice the number in prior years—with an online survey in November and December 2017. The anonymized data, as well as a supplement containing the complete SHED questionnaire and responses to responses to all questions in the order asked, are also available at www.federalreserve.gov/consumerscommunities/shed.htm.

- In an effort to understand how the opioid crisis may relate to economic well-being, the survey asked questions related to opioids for the first time. About one-fifth of adults (and one-quarter of white adults) personally know someone who has been addicted to opioids. Exposure to opioid addiction was much more common among whites—at all education levels—than minorities. Those who have been exposed to addiction have somewhat less favorable assessments of economic conditions than those who have not been exposed.

Income

Changes in family income from month to month remain a source of financial strain for some individuals. Financial support from family or friends is also common, particularly among young adults.

- Three in 10 adults have family income that varies from month to month, and 1 in 10 adults experienced hardship because of monthly changes in income.
- Nearly 25 percent of young adults under age 30, and 10 percent of all adults, receive some form of financial support from someone living outside their home.

Employment

Most workers are satisfied with the wages and benefits from their current job and are optimistic about their future job opportunities. Even so, challenges, such as irregular job scheduling, remain for some. Three in 10 adults work in the "gig economy," though generally as a supplemental source of income.

- Less than one-fifth of non-retired adults are pessimistic about their future employment opportunities, although pessimism is greater among those looking for work or working part time for economic reasons.
- One-sixth of workers have irregular work schedules imposed by their employer, and one-tenth of workers receive their work schedule less than a week in advance.
- For many, stability of income is valued highly. Three-fifths of workers would prefer a hypothetical job with stable pay over one with varying but somewhat higher pay. Those who work an irregular schedule in their actual job are somewhat more likely to prefer varying pay in the hypothetical choice than those who work a set schedule.
- Three in 10 adults participated in the gig economy in 2017. This is up slightly from 2016 due to an increase in gig activities that are not computer- or internet-based, such as child care or house cleaning.

Dealing with Unexpected Expenses

While self-reported financial preparedness has improved substantially over the past five years, a sizeable share of adults nonetheless say that they would struggle with a modest unexpected expense.

- Four in 10 adults, if faced with an unexpected expense of $400, would either not be able to cover it or would cover it by selling something or borrowing money. This is an improvement from half of adults in 2013 being ill-prepared for such an expense.
- Over one-fifth of adults are not able to pay all of their current month's bills in full.
- Over one-fourth of adults skipped necessary medical care in 2017 due to being unable to afford the cost.

Banking and Credit

Access to bank accounts expanded further in 2017. However, substantial gaps in banking and credit services exist among minorities and those with low incomes.

- Nearly 95 percent of all adults have a bank or credit union account. However, this varies by race and ethnicity. One in 10 blacks and Hispanics lack a bank account, and an additional 3 in 10 have an account but also utilize alternative financial services, such as money orders and check cashing services.
- One-fourth of blacks are not confident that a new credit card application for them would be approved—twice the rate among whites.

Housing and Neighborhoods

Satisfaction with one's housing and neighborhood is generally high, although notably less so in lower-income communities. Renters face varying degrees of housing strain, including some who report difficulty *getting repairs done or being forced to move due to a threat of eviction.*

- While 8 in 10 adults living in middle- and upper-income neighborhoods are satisfied with the overall quality of their community, only 6 in 10 living in low- and moderate-income neighborhoods are satisfied.
- Nearly half of adults age 22 and older currently live within 10 miles of where they lived in high school, but those who have moved farther from home are more likely to be satisfied with the overall quality of their neighborhood.
- Three percent of renters were evicted or moved because of the threat of eviction in the past two years.

Higher Education

Economic well-being rises with education, and most of those holding a postsecondary degree think that attending college paid off. The net benefits of education are less evident among those who started college but did not complete their degree; the same is true among those who attended for-profit institutions.

- Two-thirds of graduates from bachelor's degree programs feel that their educational investment paid off, but less than one-third of those who started but did not complete a degree share this view.
- Just over half of those who attended a for-profit institution say that they would attend a different school if they had a chance to go back and make their college choices again. By comparison, less than one-quarter of those who attended not-for-profit institutions would want to attend a different school.

Student Loans

Over half of college attendees under age 30 took on some debt to pay for their education. Most borrowers are current on their payments or have successfully paid off their loans, although those who failed to complete a degree and those who attended for-profit institutions are more likely to have fallen behind on their payments.

- Among those making payments on their student loans, the typical monthly payment is between $200 and $300 per month.
- Nearly one-fourth of borrowers who went to for-profit schools are behind on their loan payments, versus less than one-tenth of borrowers who went to public or private not-for-profit institutions.

Retirement

Many adults feel behind in their savings for retirement. Even among those who have some savings, people commonly lack financial knowledge and are uncomfortable making investment decisions.

- Less than two-fifths of non-retired adults think that their retirement savings are on track, and one-fourth have no retirement savings or pension whatsoever.
- Three-fifths of non-retirees with self-directed retirement savings accounts, such as a 401(k) or IRA, have little or no comfort in managing their investments.
- On average, people answer fewer than three out of five basic financial literacy questions correctly, with lower scores among those who are less comfortable managing their retirement savings.

Economic Well-Being

In 2017, more people gave a positive assessment of their own economic well-being than in the prior year, a trend that has continued annually over the five years of this survey. This improvement in self-reported well-being is consistent with the broader economic expansion over that same period. The national unemployment rate was 4.1 percent at the time of the most recent survey in 2017, down from 6.9 percent at the first survey in 2013.[2] Despite these gains, stark differences in economic well-being remain, in particular, by education and race.

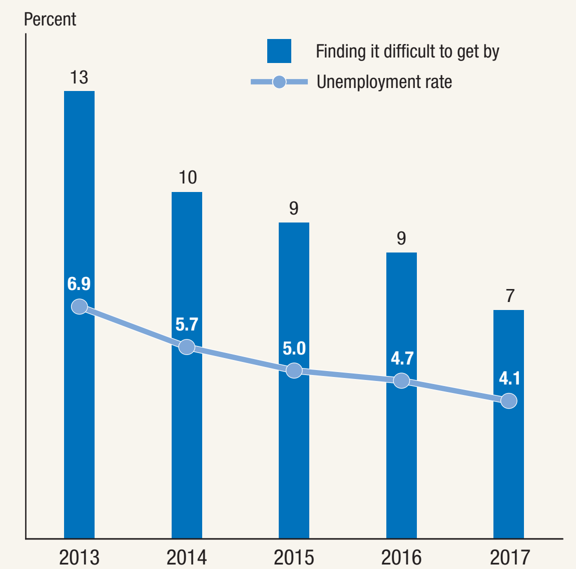
Current Financial Situation

Nearly three-quarters of adults say they are either living comfortably (33 percent) or doing okay (40 percent), when asked to describe how they are managing financially. The share who are at least managing okay has risen consistently over the past five years and is over 10 percentage points higher than in 2013 when this survey began.

Similarly, fewer people are finding it difficult to get by, or just getting by, than was the case five years ago. The 7 percent of adults in 2017 who find it difficult to get by financially is about half of what was seen in 2013. This decline in financial hardship is consistent with the decline in the national unemployment rate over this period (figure 1).

The overall positive trend in self-reported well-being masks some notable differences across groups. Adults with a bachelor's degree or higher are far more likely (85 percent) to be at least doing okay financially than those with a high school degree or less (66 percent). Despite this persistent gap, economic well-being improved in 2017, and over the past five years, at every education level (figure 2).

Figure 1. Self-report struggling financially and the national unemployment rate (by survey year)



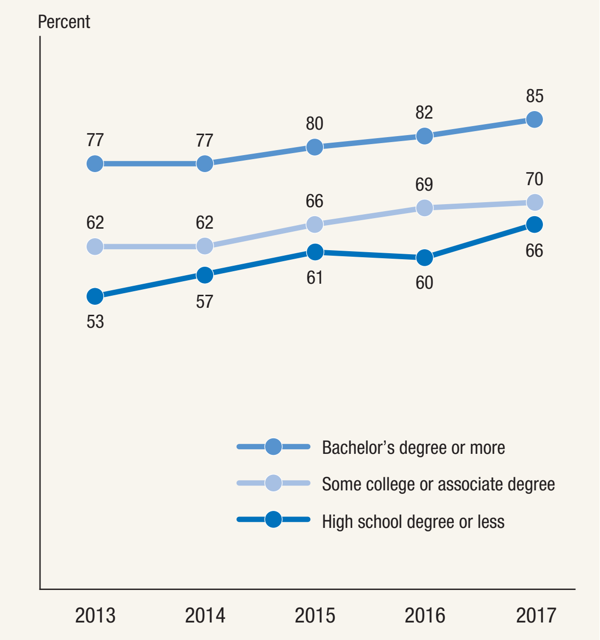
Note: Unemployment rate is from the Current Population Survey as reported by the Bureau of Labor Statistics. Here and in subsequent figures, percents may not sum to 100 due to rounding and question non-response.

More education is associated with greater economic well-being; however, at each education level, blacks and Hispanics are worse off than whites.[3] In fact, whites with only a high school degree are more likely to report doing okay financially than blacks or Hispanics with some college education or an associate degree (figure 3). This pattern, combined with the fact that blacks and Hispanics typically have completed less education, results in substantially lower

[2] The 2017 SHED was fielded in November and December 2017. Since 2013, the SHED has been fielded in the fourth quarter of the year, though the exact survey period has varied somewhat. Any comparison to statistics from other sources, such as the national unemployment rate from the Census Bureau's Current Population Survey, is made relative to the fourth quarter of the year.

[3] These differences persist across different age groups. With the exception of those over age 60, who report higher levels of economic well-being, relatively little variation exists by age. As a result, the gaps in self-reported well-being by race and ethnicity within education levels generally remain even after taking age into account.

Figure 2. At least doing okay financially (by survey year and education)



overall economic well-being for black and Hispanic adults.[4]

Differences in well-being extend beyond education and race and ethnicity—and are also apparent by income level, marital and parental status, and community characteristics (table 1).[5] Urban residents, for example, are slightly more positive about their financial situation than those living in rural areas. Although differences across these groups remain, economic well-being has generally improved over the past year, and since 2013, for individuals with a wide range of backgrounds.

The financial well-being question discussed so far has the advantage of being broadly defined and easy for respondents to understand. However, it may miss some aspects of well-being. As a check, respondents also complete a series of five questions on specific components of their financial lives.[6] The responses to these questions are then converted to a single

---

[4] For details on educational attainment by race and ethnicity, see Camille L. Ryan and Kurt Bauman, *Educational Attainment in the United States: 2015* (Washington: United States Census Bureau, March 2016).

[5] Income is measured as the income of the respondent and his or her spouse or partner. Urban communities are those in a metropolitan statistical area and rural ones are those outside of a metropolitan statistical area.

[6] The Consumer Financial Protection Bureau (CFPB) developed the five questions and the mapping of responses to a 100-point scale. The questions focus on how well certain statements describe the respondent's situation. Examples include "because of my money situation, I feel like I will never have the things I want in life" and "my finances control my life." The CFPB's financial well-being scale was added to the SHED in 2017 to support further study of the scale.

Figure 3. At least doing okay financially (by education and race/ethnicity)

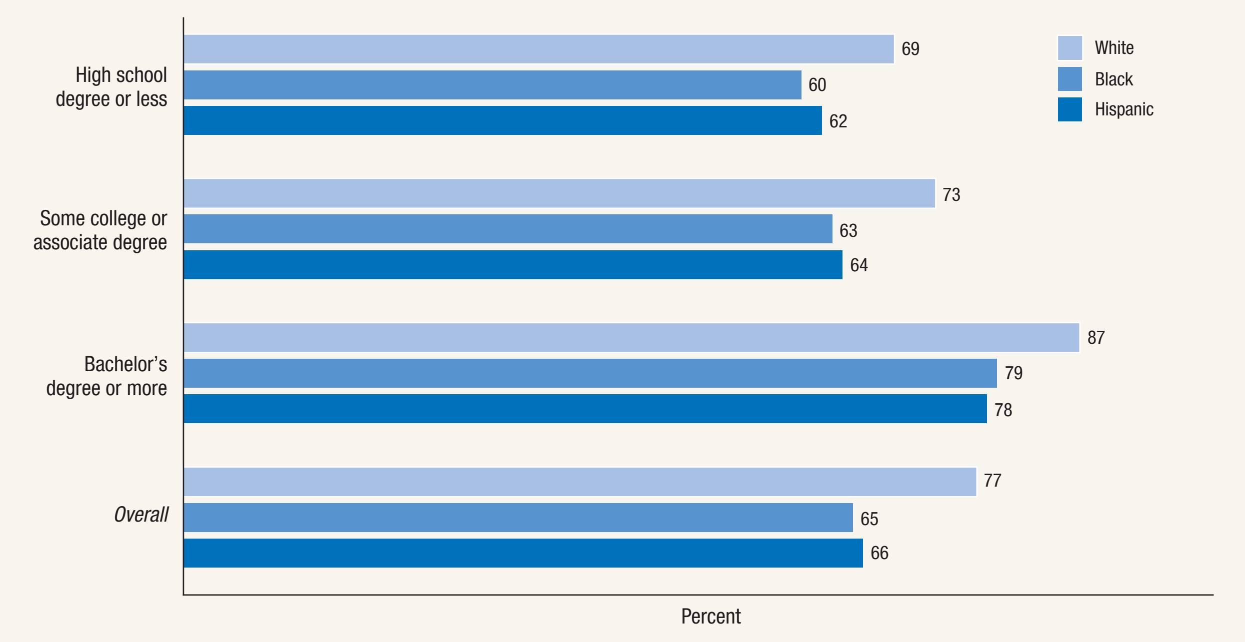


Table 1. Share of adults at least doing okay financially (by demographic characteristics)
Percent

Characteristic	2017	Change from 2016	Change from 2013
Family income			
Less than $40,000	56	+5	+14
$40,000–$100,000	78	+2	+13
Greater than $100,000	94	+2	+11
Race/ethnicity			
White	77	+5	+12
Black	65	+1	+12
Hispanic	66	+2	+10
Urban/rural residence			
Urban	74	+4	+11
Rural	71	+4	+12
Neighborhood income			
Low or moderate income[1]	63	+3	n/a
Middle or upper income	77	+4	n/a
Marital/parent status			
Unmarried, no children under 18	66	+3	+8
Married, no children under 18	84	+4	+9
Unmarried, children under 18	57	+2	+14
Married, children under 18	76	+3	+14
Overall	**74**	**+4**	**+11**

Note: Census tracts were not included in the 2013 SHED so changes since 2013 are not available. Here and in subsequent tables, percents may not sum to 100 due to rounding and question non-response.

1 Low- and moderate-income neighborhoods are defined here as those census tracts with a median family income less than 80 percent of the national median income.

n/a Not applicable.

score on a 100-point scale of financial well-being. Earlier research found that a score of 50 or below on this scale is associated with a high probability of material hardship, such as the inability to afford food, medical treatment, housing, or utilities. A score over 60 is associated with low rates of material hardship.[7]

This alternative multiple-question measure of well-being shows somewhat higher rates of financial challenges than the single-question measure. About 2 in 5 adults have scores that suggest a high likelihood of material hardship, which is above the share who said

Table 2. Financial well-being score (by demographic characteristics)
Percent

Characteristic	High likelihood of material hardship[1]	Low likelihood of material hardship[1]
Education		
High school degree or less	50	24
Some college or associate degree	46	27
Bachelor's degree or more	29	39
Race/ethnicity		
White	38	34
Black	46	26
Hispanic	52	22
Urban/rural residence		
Urban	41	31
Rural	45	28
Neighborhood income		
Low or moderate income	51	22
Middle or upper income	38	33
Overall	**42**	**30**

Note: See table 1 for definitions of low- and moderate-income neighborhoods.

1 Individuals with a high likelihood of material hardship are those with a financial well-being score of 50 or below. Individuals with a low likelihood of material hardship are those with a financial well-being score of above 60.

that they are "just getting by" or "finding it difficult to get by." However, by either measure, those with more education, white adults, and people living in middle- and upper-income neighborhoods areas exhibit higher levels of financial well-being (table 2).

Changes in Financial Situation over Time

More individuals say that their financial situation improved in the year prior to the survey (33 percent) than indicate it worsened (15 percent). Additionally, the share with improving finances is higher than in the 2016 survey.

Those with less education report less improvement financially than those with more education, consistent with the pattern in the past two surveys. Even so, at all education levels, reports of improving finances are more common than worsening finances (table 3). In 2017, at each education level, blacks and Hispanics experienced similar rates of improvement as whites. This contrasts with the previous two years when racial and ethnic minorities had larger

See *Financial Well-Being in America* (September 2017), www.consumerfinance.gov/documents/5606/201709_cfpb_financial-well-being-in-America.pdf, for details on the development of these questions and their relation to material hardships. Mapping to the well-being scale uses Austin Nichols's PFWB package in Stata: Austin Nichols, "PFWB: Stata Module to Predict Financial-Well-Being Scale Scores from CFPB Survey Instrument," Statistical Software Components S458353 (2017), Boston College Department of Economics.

7 Ibid.

Table 3. Change in financial situation compared to 12 months ago (by education and race/ethnicity)
Percent

Characteristic	Better off	Same	Worse off
High school degree or less			
White	25	59	15
Black	29	53	19
Hispanic	31	49	19
Overall	27	56	17
Some college			
White	30	53	16
Black	36	44	19
Hispanic	31	49	19
Overall	31	51	17
Bachelor's or more			
White	38	50	12
Black	43	42	15
Hispanic	50	37	13
Overall	39	49	12
Overall	**33**	**52**	**15**

improvements than whites, thereby narrowing the gap in well-being.

Local and National Economic Conditions

In addition to their own family's finances, individuals are asked to assess the economic conditions in their local community and in the nation as a whole. Generally, people have a more positive attitude about their local economy than the nation's. Individuals are substantially more likely to view their local economy as "good" or "excellent" (57 percent) than the national economy (41 percent).

Table 4. Self-assessment of the local and national economy as good or excellent (by select characteristics)
Percent

Characteristic	Local economy	National economy
Race/ethnicity		
White	61	44
Black	45	29
Hispanic	51	39
Urban/rural residence		
Urban	60	42
Rural	38	35
Neighborhood income		
Low or moderate income	38	34
Middle or upper income	64	43
Overall	**57**	**41**

Note: See table 1 for definitions of low- and moderate-income neighborhoods.

This more positive assessment of local than national conditions varies across the country. In particular, individuals in urban areas are 22 percentage points more likely to report that their local economy is faring well than individuals in rural areas. This urban-rural gap also holds for opinions about the national economy, though less starkly so (table 4).

Residents of low- and moderate-income neighborhoods have less favorable views of economic conditions than those living in higher-income areas. Blacks and Hispanics are less likely than whites to have a positive impression of either the local or national economic situation. Other individual and neighborhood attributes, such as exposure to the opioid epidemic, may also relate to differing perceptions of economic conditions (see box 1).

Box 1. Local Economic Conditions and the Opioid Epidemic

The sharp rise in opioid addiction and overdoses is a subject of national concern, so the 2017 SHED added a question on opioids to explore links to economic well-being.[1] One hypothesis, advanced by Anne Case and Angus Deaton, is that a long-standing decline in economic opportunities was an important driver of the current opioid epidemic (2017).[2] They refer to these as "deaths of despair." Yet, the existing evidence on the role of economic conditions is mixed. For example, Christopher Ruhm (2018) has argued against this hypothesis, using geographic variation in economic outcomes.[3] This year's survey sheds light on the debate by linking individual-level exposure to opioid addiction with subjective assessments of economic conditions. There are large differences in exposure to the opioid epidemic by race and ethnicity and smaller differences by economic conditions.

To measure exposure to the opioid epidemic, individuals report whether they "personally know someone who has been addicted to opioids or prescription painkillers."[4] By this measure, about one-fifth of adults have been personally exposed to the opioid epidemic. White adults, regardless of education, are about twice as likely to be personally exposed to opioid addiction as black or Hispanic adults (figure A).[5]

To investigate the "deaths of despair" hypothesis, figure B compares individuals' assessments of local and national economic conditions by their exposure to the opioid epidemic. Adults who have been personally exposed to the opioid epidemic have somewhat less favorable assessments of economic conditions than those who have not been exposed. Among whites, the gap in perceptions of economic conditions by opioid exposure is larger. However, local unemployment rates are similar in the neighborhoods where those exposed to opioids live and where those not exposed live.[6] Subjective assessments of economic conditions do show more support for the "deaths of despair" hypothesis than objective outcomes, like local unemployment. Still, over half of adults exposed to opioid addiction say that their local economy is good or excellent. Altogether, this analysis suggests the need to look beyond economic conditions to understand the roots of the current opioid epidemic.

Figure A. Personally exposed to the opioid epidemic (by race/ethnicity and education)

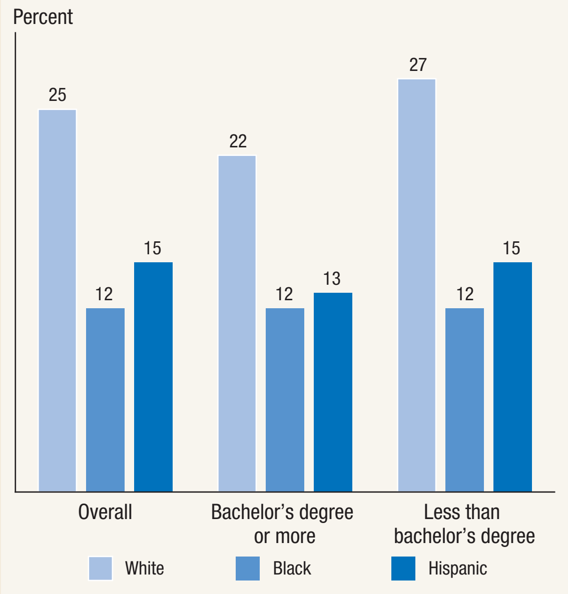
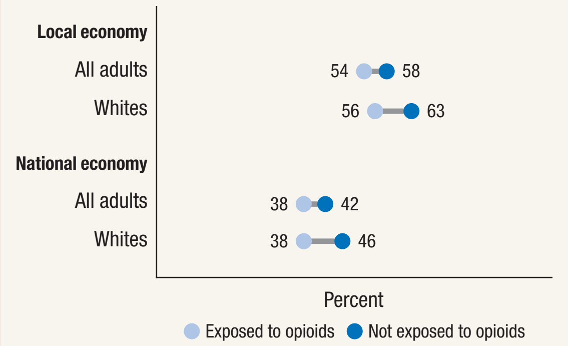


Figure B. Self-assessment of the local and national economy as good or excellent (by exposure to opioid epidemic)



1 See, for example, analysis from the Centers for Disease Control and Prevention on opioid-related deaths, "Understanding the Epidemic," www.cdc.gov/drugoverdose/epidemic/index.html.

2 Anne Case and Angus Deaton, "Mortality and Morbidity in the 21st Century," *Brookings Papers on Economic Activity* (Spring 2017): 397–476.

3 Christopher J. Ruhm, "Deaths of Despair or Drug Problem?" NBER Working Paper 24188 (2018).

4 This question is modeled after an April 2017 survey that found 27 percent of adults personally knew someone addicted to opioids (American Psychiatric Association, APA Public Opinion Poll – Annual Meeting 2017, www.psychiatry.org/newsroom/apa-public-opinion-poll-annual-meeting-2017). Two other recent surveys found even higher rates of exposure (Robert J. Blendon and John M. Benson, "The Public and the Opioid-Abuse Epidemic," *New England Journal of Medicine* 378 (2018): 407–11.

5 The survey does not include potentially more-sensitive questions about illicit drug use or an individual's own use of opioids. Since the measure does not ask about the respondent's own addiction, it may not reflect the ethnicities, education, or geographies of people personally struggling with addiction.

6 The local unemployment rates, measured with the five-year average from the 2012–16 American Community Survey at the census tract of the respondent, are 7.4 percent for those exposed and 7.3 percent for those who are not. The gap, while still modest, is somewhat larger for the local employment-population ratios for working-age adults (ages 25 to 64), 72.7 percent versus 73.2 percent.

Income

Income is central to economic well-being. The ability to meet current expenses and also save for the future depends on that income being sufficient and reliable. Frequent changes in the level of family income, referred to here as "income volatility," can also be a source of economic hardship.

Level and Source

Family income in this survey is the income from all sources that the individual respondent and his or her spouse or partner received during the previous year. Income is collected in dollar ranges as opposed to exact amounts. Over one-quarter of adults had less than $25,000 of family income during 2017, and nearly two-fifths had less than $40,000 (figure 4).[8]

Wages and salaries are the most common source of family income; nearly 70 percent of adults and their spouse or partner received wage income during 2017 (table 5).[9] Yet, many families also rely on non-wage income sources. Over 3 in 10 received some income from self-employment or gig work.[10]

Sources of non-wage income vary with age. Among young adults (ages 18 to 29), gig work was the most common source of non-wage income. Among older people, income from gig work is less prevalent, while interest, dividend, and rental income is more common. Additionally, over three-quarters of adults age 60 and older received Social Security or pension income. (The sources of income among retirees are discussed further in the "Retirement" section of this

[8] The income distribution in the SHED is largely similar to the 2017 March Current Population Survey, although a higher fraction of adults in the SHED have family incomes between $40,000 and $200,000 and a lower fraction have incomes between $5,000 and $39,999. The higher income may partly reflect the fact that unmarried partners are treated as one family in the SHED, while the Current Population Survey treats them as two separate families.

[9] Since the survey was fielded in November and December of 2017, references to activities in 2017 consider the 12-month period before the survey (typically from November 2016 through November 2017) rather than the precise calendar year.

[10] Gig work in the 2017 survey is asked about as "occasional work activities or side jobs" to be consistent with the phrasing in the employment section of the survey. In the 2015 and 2016 surveys, this was phrased as "freelance work or hobby income." This change may have resulted in the increase in people reporting gig work as an income source in 2017.

Figure 4. Family income distribution

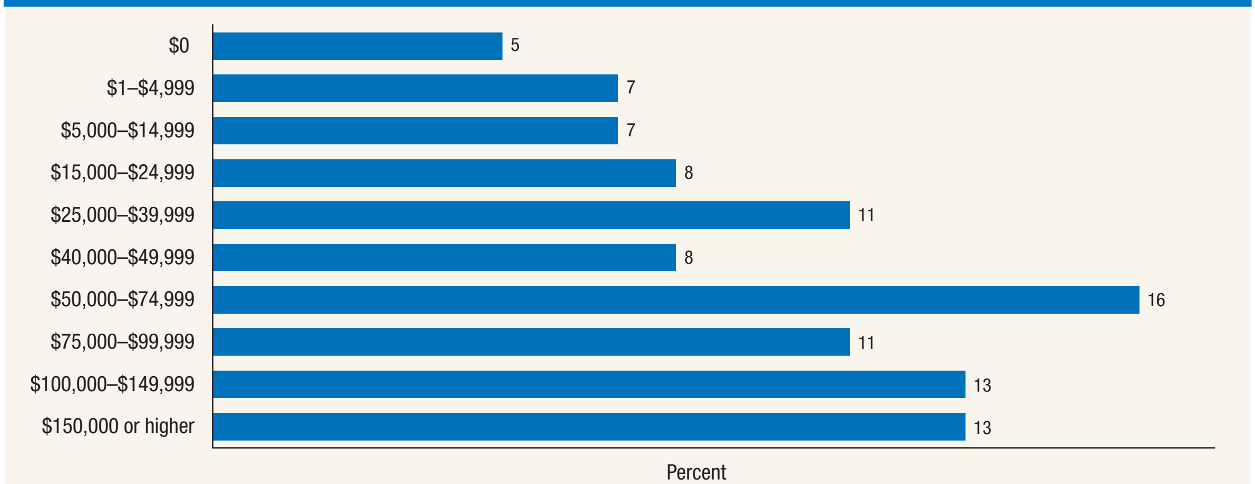


Table 5. Family income sources (by age)
Percent

Income source	18–29	30–39	40–49	50–59	60+	Overall
Wages or salaries	77	81	84	80	38	68
Interest, dividends, or rental income	16	19	26	30	44	29
Social Security	1	4	7	13	77	27
Gig work (occasional work activities or side jobs)	35	27	24	22	15	24
Pension income	1	1	3	12	52	18
Self-employment	13	17	18	18	15	16
Supplemental Security (SSI)	4	3	5	6	5	5
Unemployment income	3	3	4	3	2	3
Any other income	7	5	6	7	17	9

Note: Respondents can select multiple answers.

report.) Both the common sources of income and the distribution of income are largely similar to previous surveys.

Financial Support

Some families also depend on financial support from, or provide such support to, their family or friends. This support can be sharing a home to save money (as discussed in the "Housing and Neighborhoods" section of this report), as well as assistance from individuals living elsewhere.

Approximately 1 in 10 adults receive some form of financial support from someone living outside of their home. Nearly one-quarter of young adults received such support during 2017 (table 6). Among young adults with incomes under $40,000, over one-third receive some support from outside their home. Conversely, older adults are more likely to *provide* financial support to individuals outside their home—peaking at 23 percent of adults in their 50s.

This support is mainly between parents and adult children. Parents were among the providers for just over 6 in 10 support recipients, including 8 in 10 of those under age 30. Additionally, adult children are support providers for over half of people over age 60 who are receiving some assistance.

Financial support from family and friends takes many forms. Over half of those receiving financial support received money for general expenses, and about one-third received help with their rent or mortgage (figure 5). In addition, almost one-quarter of all recipients, and over one-third of recipients under age 30, received help with educational expenses or student loan payments.

Table 6. Receiving and providing financial support outside of the home (by age)
Percent

Age	Receive support	Provide support
18–29	24	10
30–39	12	12
40–49	8	20
50–59	4	23
60+	4	16
Overall	**10**	**16**

Income Volatility

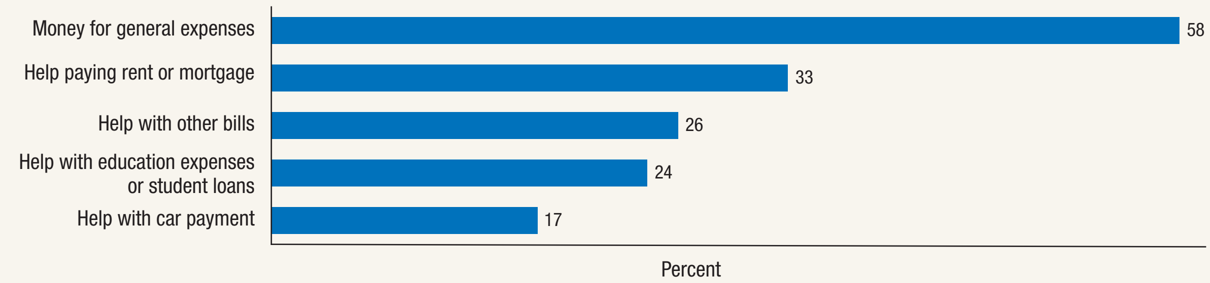
The level of income during the year as a whole may mask substantial changes in income from month to month. The survey considers how mismatches between the timing of income and expenses lead to financial challenges.

Income in 2017 was roughly the same from month to month for 7 in 10 adults, varied occasionally for 2 in 10, and varied quite often for slightly less than 1 in 10.

Some families can manage frequent changes in income easily, but for others this may cause financial hardship. In fact, one-third of those with varying income, or 10 percent of all adults, say they struggled to pay their bills at least once in the past year due to varying income.

Those with less access to credit are much more likely to report financial hardship due to income volatility.

Figure 5. Forms of financial support received from someone outside of the home



Note: Among adults receiving any support from outside the home.

For example, one-fourth of adults who are not confident in their ability to get approved for a credit card have experienced hardship from income volatility in the past year, versus only 6 percent of those who are confident in their credit availability (table 7). (Access to credit is discussed further in the "Banking and Credit" section of this report.)

Individuals may be willing to accept more-volatile income if their income is higher on average as a result. Tolerance for income variability may also differ across individuals. In a hypothetical scenario, the survey asks workers to choose between two new jobs: the first pays their current annual income in stable monthly amounts, and the second pays more for the year but the monthly income varies.[11] The increase in the second job's annual income is randomized across "a little" more, "somewhat" more, or "a lot" more.

Overall, many prefer stable income. Six in 10 workers choose the first job with stable income over the second job with varying income that pays a little or somewhat more annually. Only when the second job pays a lot more does the preference for the stable job fall to 4 in 10 workers. Men and younger workers have a greater tolerance for income volatility and are more willing to accept the variability in exchange for additional income (figure 6 and figure 7).

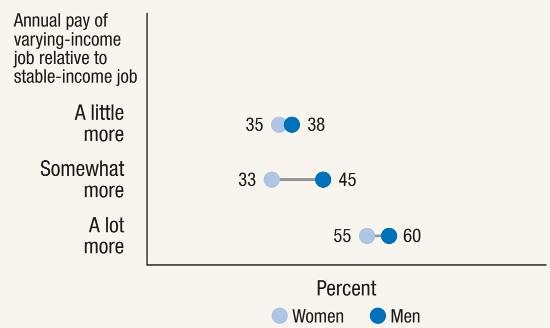
[11] Self-employed workers are excluded from this analysis.

Table 7. Income volatility and related hardship (by credit confidence)
Percent

Expect credit card application would be approved	Stable income	Varying income	
		No hardship	Causes hardship
Confident	73	20	6
Not confident	65	10	24
Overall	**71**	**19**	**10**

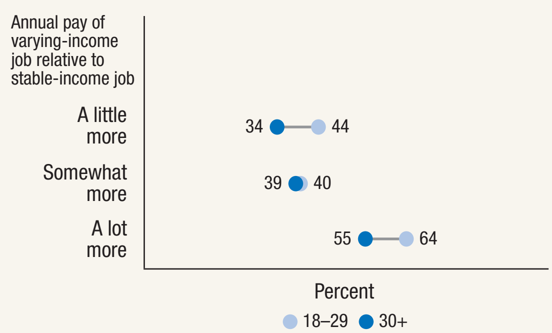
Note: "Overall" includes those who don't know if they are confident about credit availability.

Figure 6. Choose varying, but higher-pay job, over stable-pay job (by gender and relative income from varying-pay job)



Note: Among adults employed for someone else or who work as a contractor in their main job.

Figure 7. Choose varying, but higher-pay job, over stable-pay job (by age and amount of higher income in variable-pay job)



Note: Among adults employed for someone else or who work as a contractor in their main job.

Employment

Wages and many other aspects of employment affect the economic well-being of workers and their families, including hours worked, employee benefits, and work scheduling. In 2017, most adults were optimistic about their future labor market opportunities. Three in 10 adults work in the "gig economy," though generally as a supplemental source of income.

Overview

In 2017, 61 percent of adults were employed at some point in the month prior to the survey.[12] In their main job, 41 percent of adults were working full time for someone else; 10 percent were working part time for someone else; and 10 percent were self-employed, in a partnership, or a contractor (table 8). Those not working do so for a variety of reasons, including those who are full-time students or retired.

Table 8. Form of employment in main job
Percent

Form of employment	Among adult population	Among workers
Full time for someone else	41	67
Part time for someone else	10	16
For non-economic reasons	7	12
For economic reasons	2	4
Self-employed or partnership	8	14
Contractor	2	3

Although most people work consistent hours with one employer, some have more complicated work lives that involve multiple jobs or transitions in and out of employment. This is especially true for the self-employed, among whom one-third were also employed for someone else and one in seven were also not working at least some time in the prior month. Eight percent of the adult population (13 percent of workers) use multiple activities (including working for someone else, self-employed, on layoff, or not employed) to describe their past month.

Among those working part time, economic conditions are often cited as a barrier to full-time employment. One-fourth of part-time workers (2 percent of all adults) indicate that they are working part time for economic reasons.[13]

Among the two-fifths of adults who were not working at some point in the prior month, 6 in 10 are retired and 1 in 10 have a disability but are not retired.[14] Including retirees and those with a disability who were looking for work, nearly 2 in 10 of those who spent time not working had also looked for work.

Other than retirement, child care and other family obligations are the dominant reasons for why people are not working or are working part time. One-eighth of those not working, and one-fourth of those working part time, cite these reasons (table 9).

Those who have been unable to find full-time work due to economic conditions are also more pessimistic about their future job prospects. Overall, 16 percent

[12] The rate of employment in the SHED is comparable to the Current Population Survey. In the 2017 SHED, 61 percent of individuals over age 20 report having a job of any kind in the month prior to the survey, similar to 62 percent in the Current Population Survey in 2017:Q4 based on four reference weeks (see www.bls.gov/web/empsit/cpseea08a.htm). Unlike the Current Population Survey, the SHED allows the employed to select multiple employment statuses to describe the past month.

[13] This compares to 19 percent of part-time workers in the November Current Population Survey who were working part time for economic reasons. The somewhat higher share observed in the SHED may be due to the SHED allowing workers to select all the reasons that they work part time, whereas the Current Population Survey focuses on the main reason.

[14] The survey asks respondents about their employment status—and includes subsequent questions on the reasons for not working among those who explicitly report that they were not employed during a period in the past month. Approximately 9 percent of adults replied "no" to all three questions of whether they were employed, self-employed, or not employed in the past month. These respondents are excluded from the discussion of reasons for not working.

Table 9. Reasons for not working or working part time
Percent

Reason	Among non-workers	Among part-time workers
Retired	59	16
Have a disability but not retired	9	n/a
Business conditions or lack of work	11	36
Child care or family obligations	13	22
Medical limitations	4	12
School	6	22
Reason not specified	7	19
Selected multiple reasons	7	22

Note: Among adults who are either not working or working part time for someone else. For the retired and those with disabilities, other reasons are not considered. With the exception of the retired and those with disabilities, respondents can select multiple answers.

n/a Not applicable.

Table 10. Employment activities in the past year
Percent

Action taken	2016	2017
Asked for a raise at work (among currently employed)	16	18
Received a raise at work (among currently employed)	46	52
Applied for a new job	24	29
Started a new job	14	17
Voluntarily left a job	10	10
Got laid off or fired from a job	4	5

Note: Among all adults, except for questions about asking for a raise at work and receiving a raise at work, which are asked only of adults who are currently employed. Respondents can select multiple answers.

of non-retired adults in 2017 are pessimistic about their future job opportunities. By comparison, among those working part time for economic reasons, that share rises to 30 percent. Among those who were not working and looking for work, it is 27 percent.

Another way to assess labor market conditions is the frequency at which workers receive raises, voluntarily change jobs, or are laid off. Additional workers asking for raises, receiving raises, or voluntarily changing jobs are indications of a strong labor market where workers have more bargaining power. In 2017, 18 percent of employed workers asked for a raise (table 10)—up slightly from 16 percent in the 2016 survey. Overall, 52 percent of employed workers received a raise in 2017, up from 46 percent in 2016. Consistent with a strengthening labor market, a rising share of adults applied for and started a new job. However, the share that were laid off or fired in 2017 also increased modestly.

Additionally, the increased likelihood of receiving a raise relative to 2016 is observed for each education level. For workers with a high school degree or less, the increase was particularly large. Forty-nine percent of these workers received a raise in 2017, versus 38 percent who received a raise in 2016.

Scheduling and Benefits

Job schedules and notice of shifts can also affect the economic well-being derived from employment. Predictable part-time schedules may even support greater labor force engagement, since the predictability would allow workers to seek additional employment and supplement their income. Three-fourths of workers normally work the same hours each day, 9 percent work schedules that vary at their own request, and 16 percent have schedules that vary by their employers' needs. Many of these workers with irregular schedules would prefer a job with stable pay, even if it paid them less overall (see box 2).

The prevalence of irregular schedules set by employers differs across industries and education levels of the workers. One in 5 workers with a high school degree or less has this variability, compared to 1 in 10 workers with a bachelor's degree or more. Similarly, within the retail, wholesale, food services, and entertainment industries, about one-third of workers have employer-set irregular schedules—approximately twice the rate observed for workers as a whole.[15]

Among workers whose employer varies their schedule, just over half say that they usually are told the hours that they will work three or fewer days in advance, with 36 percent reporting that their employer usually tells them their hours one day or less in advance, including on-call scheduling. This compares to 15 percent who are given at least three weeks of advance notice (figure 8).

Less-educated workers with irregular schedules also receive less advance notice about their work sched-

[15] Joan Williams and coauthors (2018) discuss some of the reasons for variable work schedules in retail, as well as the results of an experiment to increase schedule stability at a large national retailer (*Stable Scheduling Increases Productivity and Sales: The Stable Scheduling Study*, www.worklifelaw.org/publications/Stable-Scheduling-Study-Report.pdf).

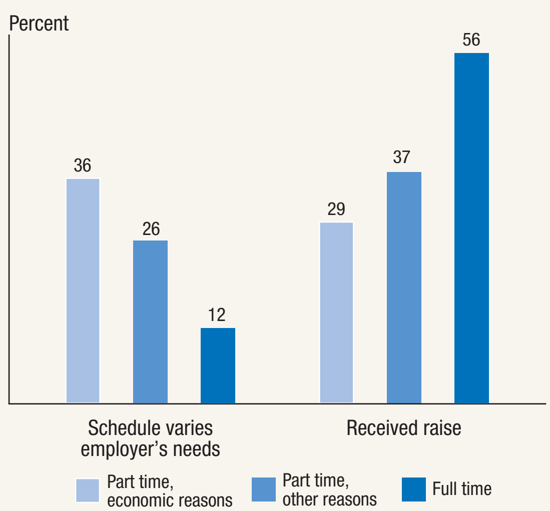
Box 2. Irregular Work Schedules, Part Time for Economic Reasons, and Preferences for Stable Pay

Variable work schedules give employers the ability to match their workforce to shifts in customer demand and other changes in business conditions. Yet work hours set by employers on short notice may cause financial strain, particularly for low-income workers. In the U.S. Financial Diaries, an ethnographic study of over 200 low- and moderate-income families by Jonathan Morduch and Rachel Schneider, monthly swings in income, even by modest amounts, and unpredictable work hours frequently led to an inability to pay expenses.[1] In addition, unpredictable hours may make it difficult for part-time workers to take on additional jobs and increase their family income.

In the survey, more than one-third of non-retirees working part time for economic reasons in 2017 have a variable work schedule set by their employer (figure A). One-quarter of non-retired individuals working part time for non-economic reasons, and 12 percent of full-time workers, have such an irregular schedule. This means that many of the part-time workers who would potentially work more hours (and thus are not currently at their full employment) also face the challenge of unpredictable hours. As another sign of differences in employees' status, 3 in 10 of those working part time for economic reasons received a raise in the past year versus more than half of full-time workers who received a raise.

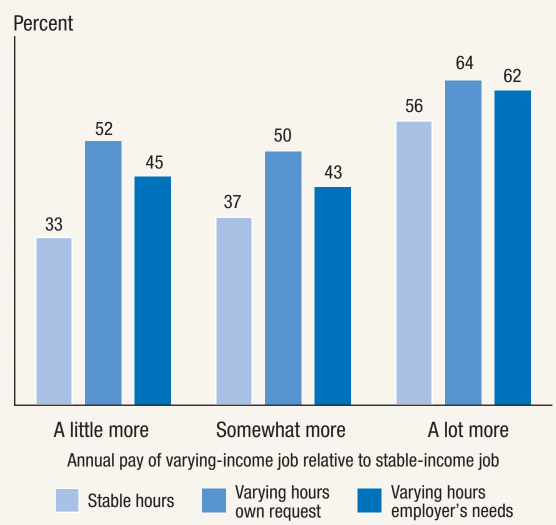
Some individuals may be more willing to take on unpredictable hours than others. For example, those with a cushion of savings, fewer fixed expenses, or a greater flexibility, in general, may be willing to exchange stable hours for higher pay or other job characteristics. A hypothetical job choice in the survey suggests that those who actually work irregular schedules—particularly those who request the flexibility—are somewhat more tolerant of varying income than those who work a fixed schedule (figure B). Even with this relationship between actual and hypothetical job choices, it is striking how many individuals always prefer the stable job in the hypothetical scenario. Even when the varying job pays a lot more, two-fifths of non-retirees would still choose the stable-pay job. In an experimental setting, Alexandre Mas and Amanda Pallais (2016) found that workers were willing to give up one-fifth of their weekly wages to avoid a work schedule set by their employer with a week's advance notice.[2]

Figure A. Irregular work schedule and pay raises (by employment status)



Note: Among non-retired adults employed for someone else in their main job.

Figure B. Choose hypothetical varying-pay job over stable-pay job (by current actual work schedule and relative income from hypothetical varying job)

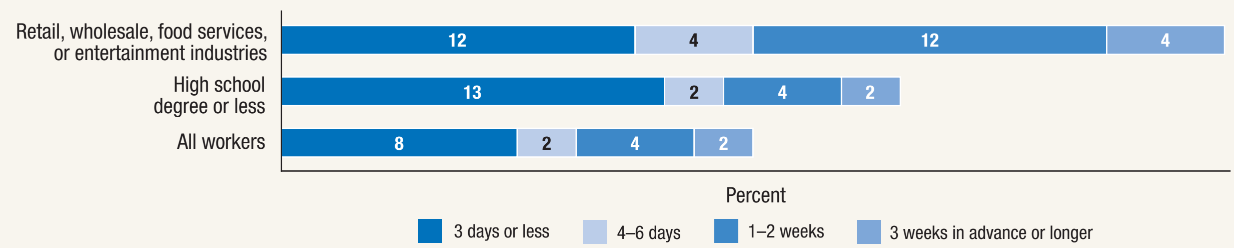


Note: Among non-retired adults employed for someone else or working as a contractor in their main job.

1 Jonathan Morduch and Rachel Schneider, *The Financial Diaries: How American Families Cope in a World of Uncertainty* (Princeton, NJ: Princeton University Press, 2016); see also the U.S. Financial Diaries website, www.usfinancialdiaries.org/.

2 Alexandre Mas and Amanda Pallais, "Valuing Alternative Work Arrangements," *American Economic Review* 107, no. 12 (2017): 3722–59.

Figure 8. Advance notice for workers with irregular schedules based on their employer's needs (by select characteristics)



Note: Among adults employed for someone else or who work as a contractor in their main job. Workers whose schedule does not vary or varies at their own request are not shown.

ules. Sixty-one percent of irregular-schedule workers with no education beyond high school receive their schedule three days in advance or less. This compares to 44 percent of those with a bachelor's degree who are given only this level of advance notice.

Employee benefits are an additional component of employment conditions. Over three-fourths of workers indicate that their employer offers paid vacation time and health insurance, making those two benefits the most commonly offered (table 11).[16] Retirement benefits and paid sick leave are each offered to just over two-thirds of employees while maternity or paternity leave is offered to over half of workers.[17]

The offering of these benefits is closely tied to employment status, with full-time workers much more likely to be offered nearly all forms of benefits than part-time workers or contractors. For example, 77 percent of full-time workers are offered paid sick leave, compared to 32 percent of part-time workers and 15 percent of contract workers.

Part-time and contract workers are also less satisfied with their benefits packages than full-time workers. While 70 percent of full-time workers are somewhat or very satisfied with their employee benefits overall, one-third of part-time workers and 3 in 10 contract workers are satisfied with their benefits. Among those who are working part time for economic reasons, an even lower one-fourth of workers are satisfied with their benefits. The difference in satisfaction with benefits is much larger than for wages: 67 percent of full-time workers versus 55 percent of contractors and 52 percent of part-time workers are satisfied with their wages or salary.

Gig Economy

The gig economy, with independent workers and short-term contracts, can also be a source of employment and income. Here, gig work covers three types of non-traditional activities: offline service activities, such as child care or house cleaning; offline sales, such as selling items at flea markets or thrift stores; and online services or sales, such as driving using a ride-sharing app or selling items online.[18] This definition of gig work, encompassing

Table 11. Employment benefits offered to workers (by employment status)
Percent

Benefit	Full time	Part time	Contractor	All workers
Paid vacation or personal leave	90	36	17	78
Health insurance	89	35	20	77
Retirement benefits	78	31	16	67
Paid sick leave	77	32	15	67
Life insurance	75	22	11	63
Maternity or paternity leave	63	22	11	54
Tuition assistance	44	17	6	38
Ability to work from home	28	16	50	26

Note: Among adults employed for someone else or who work as a contractor in their main job. Respondents can select multiple answers.

16 The survey asks respondents whether their employer offers each of these benefits, irrespective of whether they personally use the benefit.

17 The fraction of workers in the SHED being offered each benefit is broadly consistent with that reported by the Bureau of Labor Statistics in the National Compensation Survey (see www.bls.gov/ncs/ebs/benefits/2017/home.htm).

18 The findings in this section are from different survey questions than in the "Income" section of this report. For question wording, see appendix A of the supplemental appendixes to this report (www.federalreserve.gov/consumerscommunities/shed_publications.htm). The measurement of an evolving issue, like the gig economy, can be particularly challenging, since the terms and practices are not widely understood. This survey explores various ways to ask about gig work, providing rich, but sometimes conflicting information on this form of employment and source of income.

Table 12. Gig work (by education)
Percent

Activity	High school degree or less	Some college	Bachelor's or more	Overall
Offline services	17	15	10	14
Offline sales	9	8	9	9
Online activities	13	16	19	16
Unspecified activities	3	4	5	4
Overall	**30**	**31**	**31**	**31**

Note: Respondents can select multiple answers.

both online and offline activities, takes a broad view of the gig economy and underscores the fact that such supplemental work predates the internet. Gig work is largely done in addition to a main job, so this is often distinct from those who work as contractors in their main job.[19]

Overall in 2017, 31 percent of all adults engaged in gig work in the month before the survey, up slightly from 28 percent in 2016. This increase was predominantly due to an increase in participation in offline activities—which rose to 20 percent in 2017 from 17 percent in 2016. Younger individuals are more likely to perform gig work: 43 percent of those ages 25 to 34 versus 18 percent of those age 65 or older.[20] The typical person working in the gig economy spends five hours per month on these activities.[21]

Online activities are the most common form of gig work, performed by 16 percent of adults (table 12). In addition, 14 percent earned money through offline service activities and 9 percent through offline sales activities. The mix of online and offline activities varies by education, but the overall differences in gig work across education groups is narrower than in 2016.

To earn extra money is, by far, the most common reason that individuals engage in gig work (figure 9). Two-fifths of gig workers (12 percent of all adults) are doing these side jobs to supplement income from main jobs, and for an additional 16 percent of gig workers, this is their primary source of income.

Gig work is typically a modest share of family income. For over three-fourths of gig workers, these activities account for 10 percent or less of their family income.[22] This work comprises over half

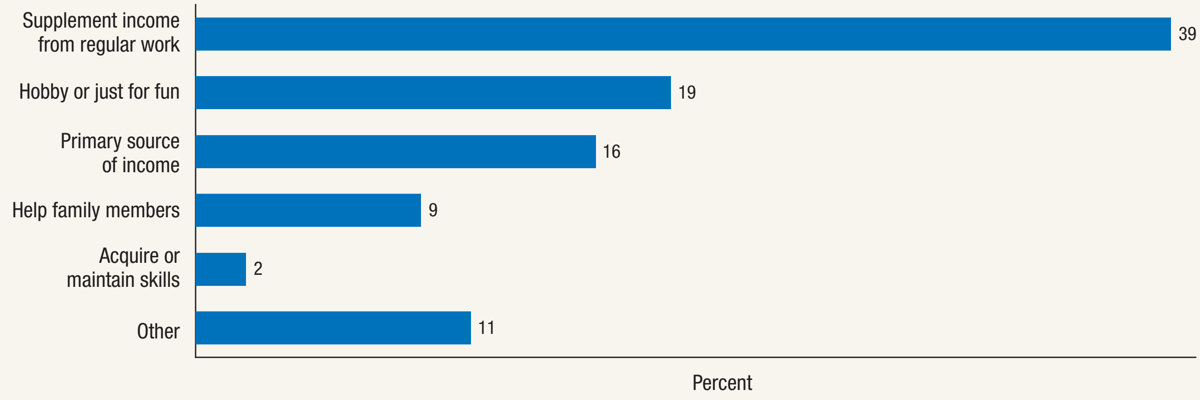
[19] See Barbara Robles and Marysol McGee, "Exploring Online and Offline Informal Work: Findings from the Enterprising and Informal Work Activities (EIWA) Survey" Finance and Economics Discussion series 2016-089 (Washington: Board of Governors of the Federal Reserve System, October, 2016); and Government Accountability Office, *Contingent Workforce: Size, Characteristics, Earnings, and Benefits* (Washington: Government Accountability Office, April 2015), for additional discussion on measuring gig work.

[20] The 2017 survey offers different response options to the gig work questions than in 2016. In particular, "driving using a ride-sharing app" is now listed as a separate task. Such changes in the question wording may affect the year-to-year comparisons.

[21] Throughout this report, references to the typical person reflect the median response.

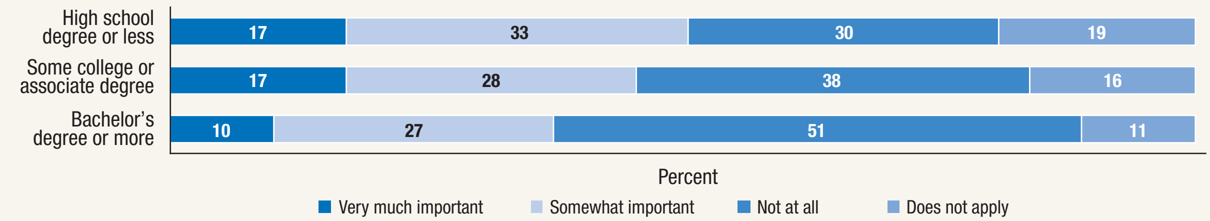
[22] The small fraction of income earned from gig work may help explain why some gig workers do not report these activities as sources of family income, as described in the previous "Income" section. In addition, the richer descriptions of the gig work, including specific online and offline activities, may have captured more gig work than the brief response option in the income question.

Figure 9. Main reasons for gig work



Note: Among gig workers in the past month.

Figure 10. Importance of money earned through gig work to family incomes (by education)



Note: Among gig workers in the past month.

of family income for only 5 percent of gig workers. Despite the modest share of family income, many gig workers (45 percent) say that this income is at least somewhat important, including 15 percent who say it is very important. The greater subjective value placed on this income may be related to its ability to smooth out unexpected changes in earnings from main jobs even if the actual amount of money earned is relatively small.

Half of gig workers with a high school degree or less say that the work is an important source of income for their families (figure 10). The financial importance of gig work declines with education, but even 37 percent of gig workers with a bachelor's degree or higher say it is important.

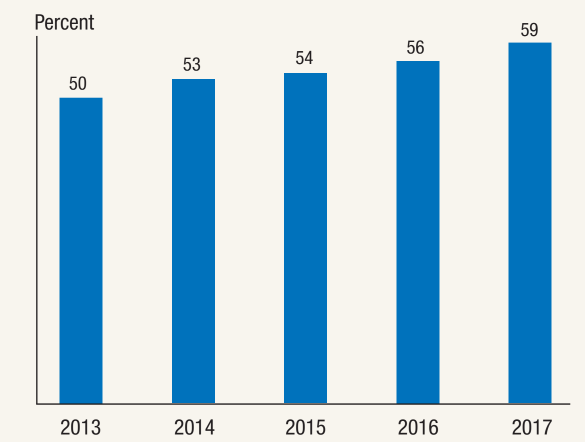
Dealing with Unexpected Expenses

Four in 10 adults in 2017 would either borrow, sell something, or not be able pay if faced with a $400 emergency expense. While still disconcertingly large, the share of families who would struggle with such an expense has decreased over the past five years. In 2013, half of adults could not easily cover such an expense. Even with the improvement, financial challenges remain for many families. One in five adults cannot cover their current month's bills, and one in four skipped a medical treatment in the past year due to an inability to pay.

Small, Unexpected Expenses

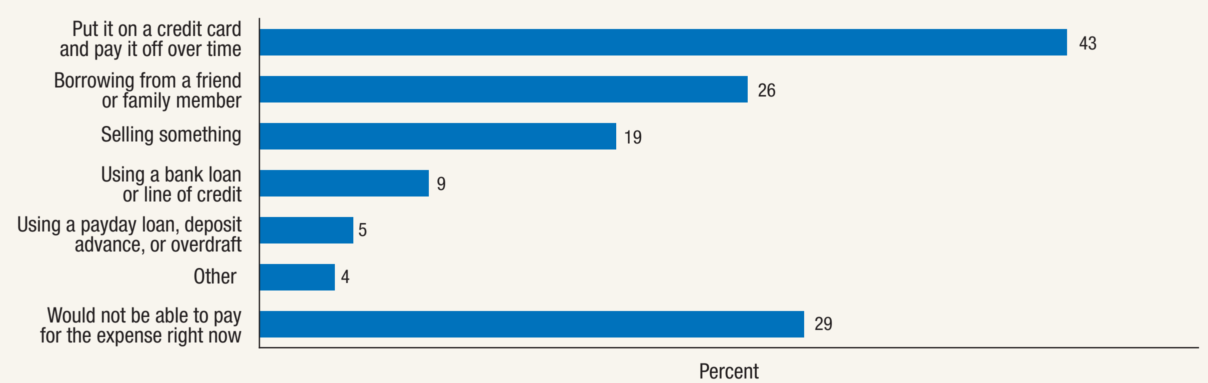
Relatively small, unexpected expenses, such as a car repair or replacing a broken appliance, can be a hardship for many families without savings. When faced with a hypothetical expense of only $400, 59 percent of adults in 2017 say they could easily cover it, using entirely cash, savings, or a credit card paid off at the next statement (referred to, altogether, as "cash or its equivalent"). Over the past five years, as the economy has recovered, the fraction of families able to easily cover this emergency expense has increased by about 9 percentage points (figure 11).

Figure 11. Would cover a $400 emergency expense using cash or its equivalent (by survey year)



Among the remaining 4 in 10 adults who would have more difficulty covering such an expense, the most common approaches include carrying a balance on credit cards and borrowing from friends or family (figure 12). Far fewer people would turn to high-cost options, such as a payday loan, deposit advance, or a bank overdraft in these situations.

Figure 12. Other ways that individuals would cover a $400 emergency expense



Note: Among those who would not pay the expense in full using cash or its equivalent. Respondents can select multiple answers.

Table 13. Bills to leave unpaid or only partially paid in the month of the survey
Percent

Bill	Among adult population	Among those who expect to defer at least one bill
Housing-related bills		
Rent or mortgage	4	17
Water, gas, or electric bill	6	26
Overall	7	32
Non-housing-related bills		
Credit card	11	49
Phone or bill	6	27
Student loan	2	10
Car payment	3	14
Other	1	5
Overall	15	71
Unspecified bills	5	23
Overall	**22**	**100**

Note: Respondents can select multiple answers.

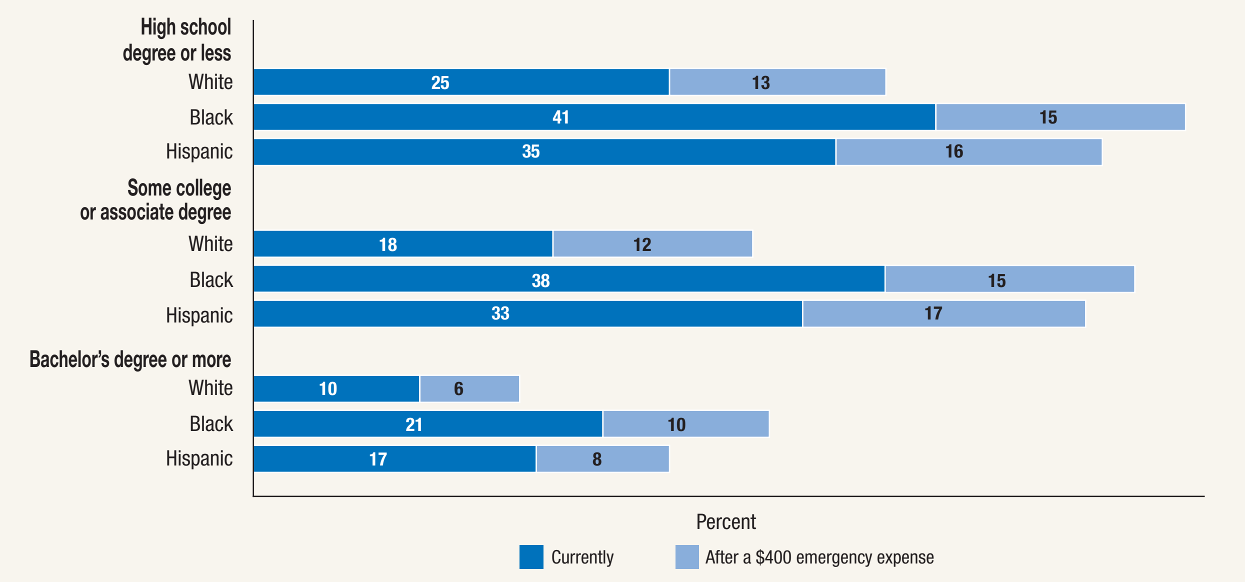
Inability to pay one's actual bills is another sign of economic vulnerability. Even without an unexpected expense, 22 percent of adults expected to forgo payment on some of their bills in the month of the survey. Most frequently, this involves not paying, or making a partial payment on, a credit card bill (table 13). One-third of those who are not able to pay all their bills say that their rent, mortgage, or utility bills will be left at least partially unpaid.

Another 11 percent of adults would be unable to pay their current month's bills if they also had an unexpected $400 expense that they had to pay. Altogether, one-third of adults are either unable to pay their bills or are one modest financial setback away from financial hardship, slightly less than in 2016 (35 percent).

Those with less education are also less able to handle unexpected expenses. Of those adults with at least a bachelor's degree, over 80 percent could handle an unexpected $400 expense on top of their regular bills. By comparison, the same was true for 54 percent of those with a high school degree or less. Racial and ethnic minorities of each education level are even less able to handle a financial setback (figure 13).

Some financial challenges require a greater level of preparation and advanced planning than a relatively small, unexpected expense. One common measure of financial preparation is whether people have savings sufficient to cover three months of expenses if they lost their job. Half of people have set aside dedicated emergency savings of this level. Another one-fifth say that they could cover three months of expenses by borrowing or selling assets. In total, 7 in 10 adults

Figure 13. Not able to fully pay current month's bills (by education and race/ethnicity)



could tap savings or borrow in a financial setback of this magnitude.

Health Care Expenses

Out-of-pocket spending for health care is a common unexpected expense that can be a substantial hardship for those without a financial cushion. As with the small financial setbacks discussed above, many adults are not financially prepared for health-related costs. During 2017, over one-fifth of adults had major, unexpected medical bills to pay, with a median expense of $1,200. Among those with medical expenses, 37 percent have unpaid debt from those bills. In addition to the financial strain of additional debt, over one-quarter of adults went without some form of medical care due to an inability to pay. This was up slightly from 2016 but still lower than the one-third who skipped medical care due to cost five years ago in 2013 (figure 14).

Dental care was the most frequently skipped treatment (19 percent), followed by visiting a doctor (13 percent) and taking prescription medicines (11 percent). Most of the decline in skipped coverage in the past five years resulted from fewer people skipping dentists' and doctors' visits—although skipping other forms of medical care also declined (table 14).

Those with less income are more likely than others to forgo medical care due to cost. Among those with family income less than $40,000, 39 percent went without some medical treatment in 2017. This share falls to 25 percent of those with incomes between $40,000 and $100,000 and 9 percent of those making over $100,000.

Health insurance is one way to help families handle the financial burden of large, unexpected medical expenses. In 2017, 91 percent of adults had health insurance. This includes nearly three-fifths of adults who have health insurance through an employer or labor union and just under one-fourth who have insurance through Medicare. Four percent of people purchased health insurance through one of the health insurance exchanges. Those with health insurance are less likely to forgo medical treatment due to an inability to pay. Among the uninsured, 42 percent went without medical treatment due to an inability to pay, versus 25 percent among the insured.[23]

Figure 14. Skipped medical treatment due to cost (by survey year)

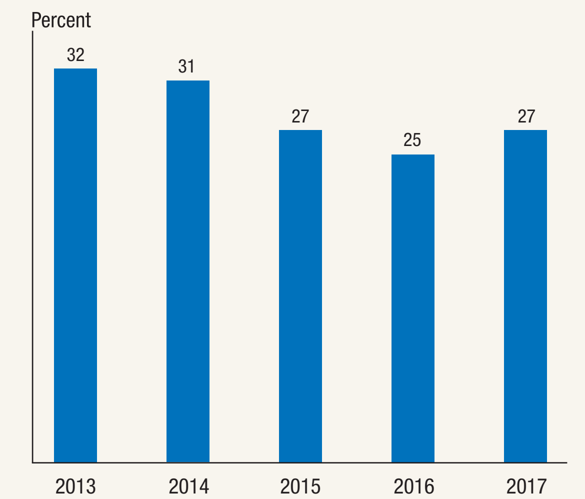


Table 14. Forms of skipped medical treatment due to cost (by survey year)
Percent

Treatment skipped	2013	2015	2017
Prescription medicine	14	11	11
To see a doctor	16	12	13
Mental health care or counseling	6	5	6
Dental care	24	20	19
To see a specialist	11	9	8
Follow-up care	10	7	6

Note: Respondents can select multiple answers.

[23] Since the survey asks respondents about their current health insurance status, but also asks about whether they missed medical treatments in the previous year, it is possible that some respondents who currently have insurance were uninsured at the point at which they were unable to afford treatment.

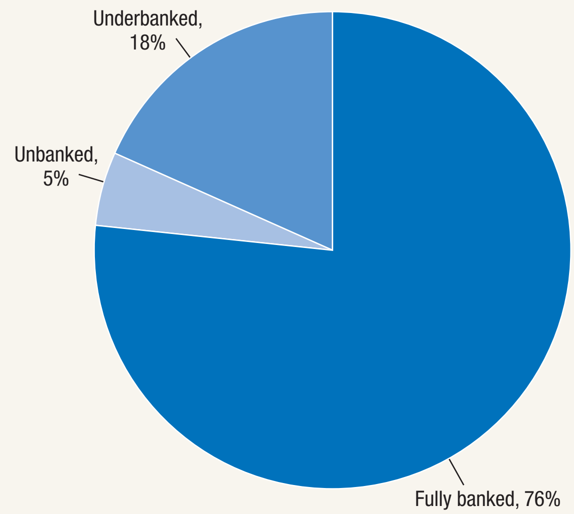
Banking and Credit

Access to bank accounts edged up in 2017 to include almost 95 percent of adults, continuing the upward trend in previous years. The rate of self-reported credit denial has also declined substantially over the past five years, although, increasingly, applicants who are approved for credit report receiving a smaller amount than requested. Notable gaps in access to these basic financial services still exist among minorities and those with low income.

Unbanked and Underbanked

About 5 percent of adults in 2017—or 13 million people—do not have a checking, savings, or money market account (often referred to as the "unbanked"). The fraction who are unbanked is down from 7 percent in 2016 and 8 percent in 2015.[24] Half of the unbanked used some form of alternative financial service during 2017—such as a check cashing service, money order, pawn shop loan, auto title loan, paycheck advance, or payday loan. In addition, 18 percent of adults are "underbanked": they have a bank account but also used an alternative financial service product (figure 15). The fraction who are underbanked is down from 19 percent in 2016 and 21 percent in 2015. The remaining three-quarters of adults are fully banked, with a bank account and no use of alternative financial products.

Figure 15. Banking status



Note: Fully banked individuals have a bank or credit union account and have not used an alternative financial service in the past year.

The unbanked and underbanked are more likely to have low income, less education, or be in a racial or ethnic minority group. Just 1 percent of those with incomes over $40,000 are unbanked, versus one in eight with incomes under that threshold. Similarly, 11 percent of blacks and Hispanics are unbanked, versus 3 percent of whites (table 15).

Use of alternative financial services reflects a decision, by choice or necessity, to conduct certain financial transactions through providers other than traditional banks and credit unions. The vast majority (74 percent) of people using alternative financial services sent or received a money order (table 16). One-third used a check cashing service, and 26 percent borrowed money with an alternative financial service product, including pawn shop loans, payday loans, auto title loans, paycheck advances, and tax refund anticipation loans.

Credit Outcomes

During 2017, 4 in 10 adults applied for some type of credit, which is similar to the share who did so during 2016 and up from the 3 in 10 who applied for

---

24 The most recent FDIC National Survey of Unbanked and Underbanked Households in 2015 observed that a similar 7 percent of households were unbanked and 20 percent of households were underbanked. However, the FDIC uses a broader underbanked definition, which includes international remittances and rent-to-own services as alternative financial services. See Federal Deposit Insurance Corporation, *2015 FDIC National Survey of Unbanked and Underbanked Households* (Washington: Federal Deposit Insurance Corporation, October 2016), www.economicinclusion.gov/surveys/2015household/.

Table 15. Banking status (by family income, education, and race/ethnicity)
Percent

Characteristic	Unbanked	Underbanked	Fully banked
Income			
Less than $40,000	12	26	62
$40,000–$100,000	1	17	81
Greater than $100,000	*	9	90
Education			
High school degree or less	10	23	66
Some college or associate degree	4	21	75
Bachelor's degree or more	1	11	87
Race/ethnicity			
White	3	13	84
Black	11	36	52
Hispanic	11	26	63
Overall	**5**	**18**	**76**

* Less than 1 percent.

Table 16. Forms of alternative financial services used
Percent

Alternative financial service	Among adult population	Among those using any alternative financial services
Money order	16	74
Check cashing services	7	34
Borrowing services		
Tax refund anticipation loan	2	7
Pawn shop, payday, or auto title loan	5	22
Overall	**6**	**26**

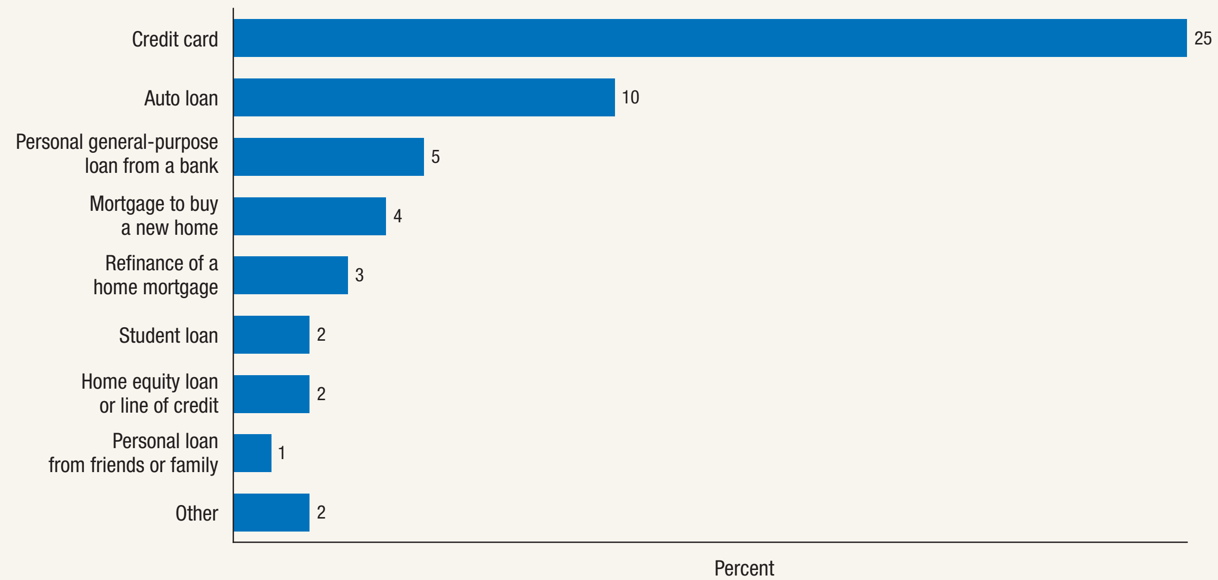
credit during 2013 when the survey began. The most common credit applications were for credit cards and auto loans (figure 16).

One-quarter of those who applied for credit were denied at least once in the past year, and 32 percent were either denied or offered less credit than they requested. The rate of denials has declined relative to five years ago, although this has been counterbalanced by an increase in the share offered less credit than requested (table 17).

The rate at which individuals are denied or offered less credit than requested differs by the type of credit application. Thirty-four percent of credit card applicants experienced at least one of these adverse events versus 16 percent of auto loan applicants (figure 17).

The rate of denial also differs by the family income of the applicant and by their race and ethnicity. Lower-income individuals are substantially more likely to experience adverse outcomes with their credit applications than those with higher incomes. Among applicants with incomes under $40,000, 39 percent were denied credit versus 10 percent of

Figure 16. Types of credit applied for in the past 12 months



Note: Respondents can select multiple answers.

Table 17. Experiences of adults who applied for credit (by survey year)
Percent

Credit outcome	2013	2014	2015	2016	2017
Denied credit	28	24	26	23	24
Offered less credit than applied for	14	16	17	16	18
Either adverse outcome	**32**	**32**	**33**	**31**	**32**

Note: Among adults who applied for some form of credit in the past 12 months. Respondents can select multiple answers.

Table 18. Credit applicants with adverse credit outcomes (by family income and race/ethnicity)
Percent

Characteristic	Denied	Denied or approved for less credit than requested (combined)
Less than $40,000		
White	33	40
Black	53	70
Hispanic	43	52
Overall	39	49
$40,000–$100,000		
White	17	24
Black	30	43
Hispanic	27	42
Overall	21	30
Greater than $100,000		
White	9	12
Black	14	21
Hispanic	23	33
Overall	10	16
All incomes		
White	18	24
Black	38	53
Hispanic	34	45
Overall	24	32

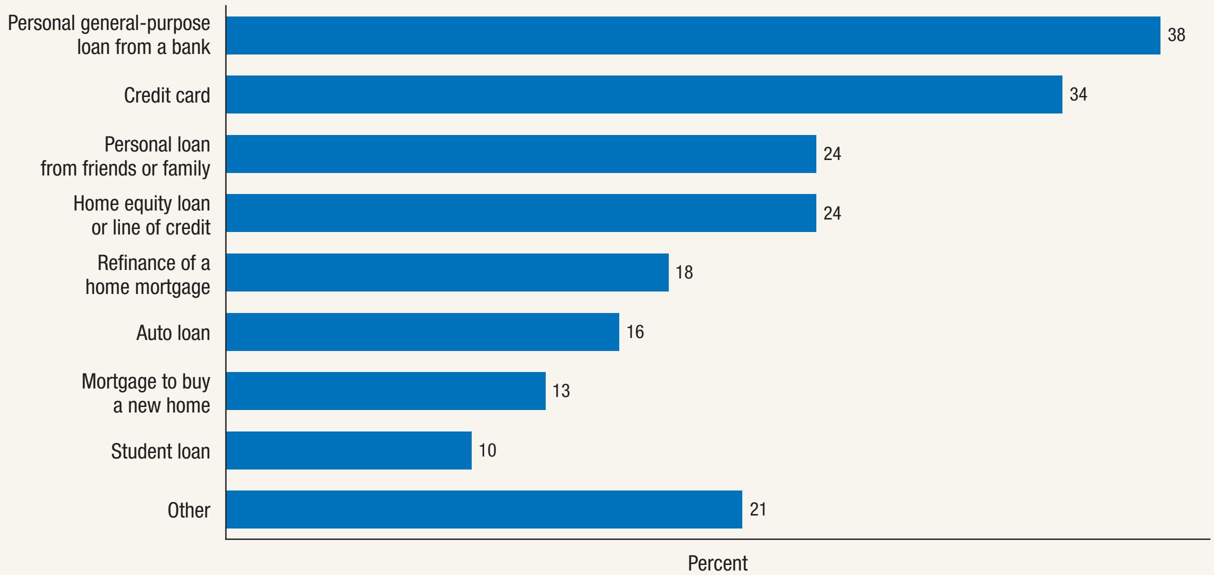
Note: Among adults who applied for some form of credit in the past 12 months.

applicants with incomes over $100,000. Within each income bracket, black and Hispanic individuals are more likely to report an adverse credit outcome (table 18).

Credit Perceptions

One in nine adults put off at least one credit application because they thought that their credit application would be denied. This includes 7 percent who applied for some credit, but opted against submitting other applications because they expected to be denied, and 4 percent who desired credit but did not apply at all for fear of denial. Thus, negative perceptions may be an additional barrier to credit.

Figure 17. Adverse credit outcomes (by form of credit applied for)



Note: Among adults who applied for each type of credit. Respondents who applied for multiple forms of credit report their outcomes for each type of credit separately.

Table 19. Confidence that a credit card application would be approved (by family income and race/ethnicity)
Percent

Characteristic	Confident	Not confident	Don't know
Less than $40,000			
White	65	25	10
Black	47	38	15
Hispanic	57	30	12
Overall	60	28	12
$40,000–$100,000			
White	89	9	2
Black	80	16	4
Hispanic	78	16	6
Overall	86	11	3
Greater than $100,000			
White	96	2	1
Black	86	9	4
Hispanic	95	4	0
Overall	95	3	2
All incomes			
White	83	12	5
Black	64	26	10
Hispanic	70	21	8
Overall	78	15	6

Note: "Confident" includes people reporting that they are either very confident or somewhat confident.

Although some people are forgoing credit applications because they expect a denial, most adults (78 percent) are confident that they could obtain a credit card if they were to apply for one. Those with low incomes are substantially less confident about being approved than those with high incomes (table 19). Additionally, credit perceptions differ by race and ethnicity, although these gaps may be at least partially attributable to other socioeconomic factors that also vary by race.[25] The patterns in 2017 are consistent with those seen in recent years.

Credit Cards

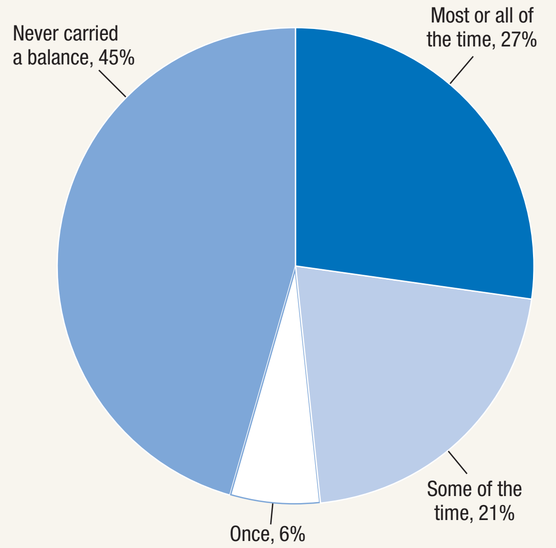
Overall, 83 percent of adults have at least one credit card, and the share with a credit card is higher among those with higher incomes, more education, or who are white (table 20). These credit cards can be used as a convenient way to pay for purchases or as a way to borrow money by carrying balances from one month to the next.

Table 20. Has at least one credit card (by family income, education, and race/ethnicity)

Characteristic	Percent
Income	
Less than $40,000	65
$40,000–$100,000	91
Greater than $100,000	97
Education	
High school degree or less	73
Some college or associate degree	81
Bachelor's degree or more	95
Race/ethnicity	
White	87
Black	70
Hispanic	76
Overall	**83**

Among those with a credit card, about half always or almost always paid their bill in full each month, while 2 in 10 did so some of the time and slightly over one-fourth carried a balance most of the time (figure 18). Twenty-eight percent of those with a credit card paid only the minimum on their bill at least some of the time. The frequency of regular borrowing with credit cards during 2017 is similar to 2016.

Figure 18. Frequency of carrying a balance on one or more credit cards in the past 12 months



Note: Among adults with at least one credit card.

[25] In a regression controlling for marital status, age, education, income, employment status, region, and urban/rural residence, the difference in confidence between black and white adults and between Hispanic and white adults remains significant.

Financial Management

Individuals use a wide range of approaches to manage their finances. Slightly over 7 in 10 adults keep track of their spending and over half follow a budget or spending plan. Also common is the use of technology to track or automate financial management. For example, 62 percent of adults use auto-pay for some bills; 52 percent get electronic account alerts; and 46 percent use automatic saving (table 21). While the frequency of budgeting is similar by income, lower-income individuals are less likely to use automatic bill payments or automatic savings withdrawals.

Younger adults are more likely to use newer technology in their financial management than older adults. Among those who track their spending or follow a budget, two-thirds of adults ages 18 to 29 use an electronic tool, such as a spreadsheet or mobile app, while 61 percent over age 60 use a paper-based tool, such as checkbook (table 22).[26]

[26] New technologies are also used for interactions with banks and credit unions. For example, young adults are more likely than older individuals to use mobile banking and are less likely to have spoken with a bank teller in the past year. For additional discussion of mobile banking see Ellen Merry, "Mobile Banking: A Closer Look at Survey Measures," Finance and Economics Discussion Series Notes (Washington: Board of Governors of the Federal Reserve System, March 27, 2018).

Table 21. Financial management techniques

Technique	Percent
Follow a budget	53
Track spending	73
Review paper statements or bills	70
Automatic bill payment	62
Save for periodic expenses	55
Get account alerts	52
Automatic savings transfers	46
Use cash or a prepaid card to avoid overdrafts	26
Pay bills with a budget payment plan	18

Note: Respondents can select multiple answers.

Table 22. Method of budgeting or tracking spending (by age)
Percent

Budgeting method	18–29	30–39	40–49	50–59	60+	Overall
Electronic methods						
Electronic program through a bank	41	39	38	35	39	38
Nonbank program (e.g., online service, software, or mobile app)	18	20	19	14	11	16
Spreadsheet	29	27	28	21	18	24
Overall	64	63	63	55	55	59
Paper-based system	32	33	42	51	61	46
Other	3	2	2	2	3	2

Note: Among adults who follow a budget or spending plan or track their spending. Respondents can select multiple answers.

Housing and Neighborhoods

Three-quarters of adults were satisfied with their neighborhood in 2017, and a similar share were satisfied with their house or apartment. However, satisfaction was notably lower in low-income communities. As one example of strain, nearly half of renters requested a repair from their landlord, and 18 percent of renters had moderate or substantial difficulty getting their landlord to complete a repair. Three percent of renters experienced an eviction during the previous two years.

Living Arrangements

Living arrangements are important for family finances and well-being. Sixteen percent of adults were living alone in 2017, and over half were living in a household solely with their spouse or partner and/or children under age 18 (referred to as a nuclear family). The remaining one-third of adults have living arrangements with other people that extend beyond the traditional concept of a nuclear family. Twelve percent of adults live with their parents, 10 percent live with an adult child not in school, 10 percent live with extended family members, and 5 percent live with roommates (table 23).

Over a quarter of young adults ages 25 to 29, and slightly more than 1 in 10 in their 30s, live with their parents (table 24). Hispanics in their late 20s are more likely to live with their parents (45 percent) than similarly aged blacks (27 percent) or whites (21 percent). A substantial majority of people living with their parents say that saving money is a reason for the living arrangement. As people age, however, the financial relationship flips for some families. Over two-fifths of young adults in their late 20s provide financial assistance to their parents; twice that seen among those in their early 20s. Moreover, nearly one-third choose this living arrangement at least in part to care for sick or elderly relatives.

Table 23. People living in household

Category	Percent
Live alone	16
Spouse or partner	66
Children under age 18	28
Adult children (all in school full time)	5
Adult children (at least one not a full-time student or unknown)	10
Parents	12
Extended family	10
Roommates	5
Other	1

Note: With the exception of living alone, respondents can select multiple answers.

Housing

For housing, 66 percent of adults own a home, 25 percent rent, and 8 percent have some other arrangement. Renters, on average, are younger and have lower incomes than homeowners. Among those with family incomes under $40,000, less than half of people own their home (table 25).

The median monthly rent is between $750 and $1,000, and among low-income renters whose income is below $40,000 per year, the median monthly rent is between $500 and $750. Seven in 10

Table 24. Reasons for living with parents among young adults (by age)
Percent

Category	18–21	22–24	25–29	30–39
Percent living with parents	**68**	**52**	**28**	**11**
Reason for living with parents				
To save money	69	87	84	71
To provide financial assistance	23	17	42	52
To care for sick or elderly relatives	10	9	30	42
To receive assistance with child care	4	1	13	12
For companionship/prefer living with others	43	35	42	35

Note: Among adults who live with their parents. Respondents can select multiple reasons for living with others.

Table 25. Housing tenure (by age and family income)
Percent

Characteristic	Own	Rent	Neither own nor rent
Age			
18–24	18	36	46
25–29	36	47	17
30–39	60	34	6
40–49	71	25	4
50–59	79	17	3
60+	83	15	2
Family income			
Less than $40,000	43	39	17
$40,000–$100,000	74	22	4
Greater than $100,000	89	10	1
Overall	**66**	**25**	**8**

Note: "Other" includes people who live in a house that neither they nor their spouse own without paying rent.

low-income renters spend more than 30 percent of their monthly income on rent, which is the standard for housing affordability used by the Department of Housing and Urban Development.[27]

One way to assess rental quality is whether the landlord makes repairs promptly.[28] Nearly half of renters requested at least one repair, such as a leak or a broken appliance, during the year prior to the survey, and one-fourth experienced at least some difficulty working with their landlord to get the repair done. Just under one-fifth of all renters (or 39 percent of those who requested a repair) experienced moderate or substantial difficulty. The share reporting any difficulty with repairs is basically unchanged from 2016, although more now report moderate or substantial challenges.

Among renters requesting a repair from their landlord, white renters are more likely to say that those repairs were completed without difficulty. Slightly over half of whites requesting a repair had no problems getting it completed, compared to 35 percent of black renters and 43 percent of Hispanic renters who requested a repair. This gap largely reflects more black and Hispanic renters having a little difficulty, rather than more serious difficulties (figure 19).

Eviction is a less common, but more acute, sign of strain among renters and among those who previously rented but now rely on others for housing. Three percent of all non-homeowners were evicted or moved because of the threat of eviction in the past two years—which represents 9 percent of all non-homeowners who moved from another rental unit over this time. This frequency of eviction is unchanged from the 2015 to 2016 period. These evictions are somewhat more common in urban than rural areas, contributing to 9 percent of recent moves in urban areas versus 6 percent in rural areas.

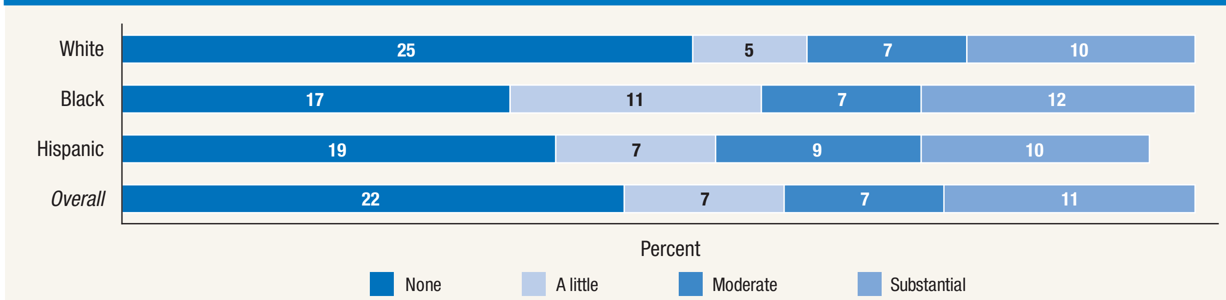
Neighborhoods

Where to live and whether to buy a home are influenced by several factors, including where someone grew up, neighborhood amenities, and housing costs.

[27] Rent-to-income ratios are calculated based on the midpoints of the ranged income and rent responses. Renters who report no income are excluded. Alternatively, when including those reporting no income, 73 percent of low-income renters have rent burdens over this threshold. See Jeff Larrimore and Jenny Schuetz, "Assessing the Severity of Rent Burden on Low-Income Families," Finance and Economics Discussion Series Notes (Washington: Board of Governors of the Federal Reserve System, December 22, 2017) for a discussion of rent burdens among low-income families.

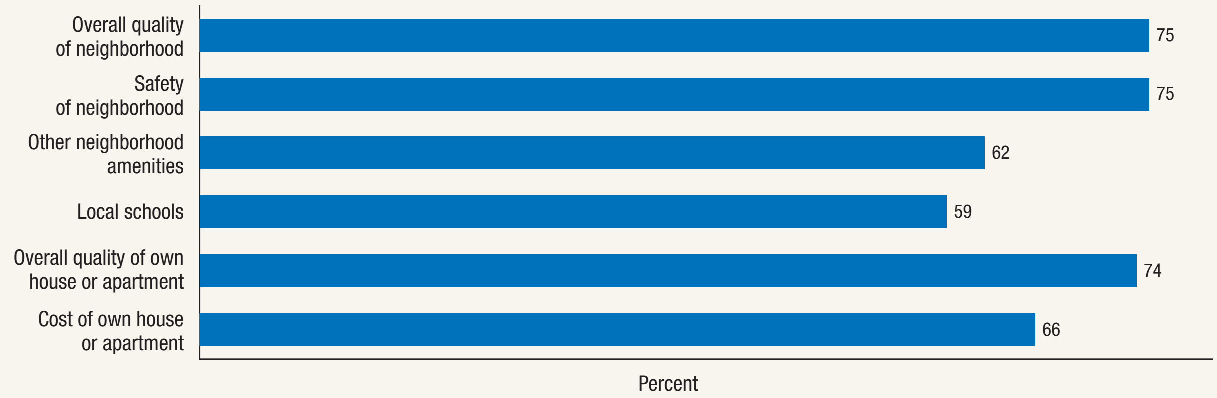
[28] Matthew Desmond, *Evicted: Poverty and Profit in the American City* (New York: Crown, 2016) highlights the challenges of rental housing repairs among low-income renters.

Figure 19. Difficulty getting landlord to fix problems with rental unit (by race/ethnicity)



Note: Among all renters. Renters who did not contact their landlord about a repair are not shown.

Figure 20. Satisfied with local neighborhood and housing characteristics



Note: Satisfaction with the cost of own house or apartment excludes those who do not own and are not paying rent.

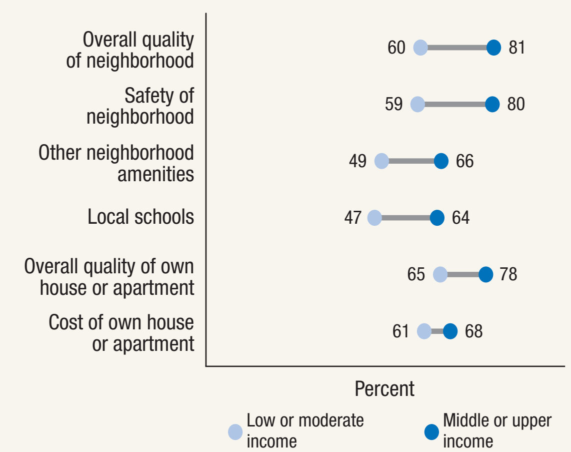
Reflecting low rates of geographic mobility, nearly half of adults live within 10 miles of where they went to high school (see box 3 for a discussion of geographic mobility). But most people are generally happy with where they live. Overall, three-fourths of people are satisfied (either somewhat or very) with the quality of their neighborhood, and a similarly high share are satisfied with the quality of their home or apartment. Most are also satisfied with specific aspects of their neighborhood—including local schools, safety, and other amenities (figure 20).

The rate of overall neighborhood satisfaction is slightly higher among urban residents (76 percent) than rural residents (72 percent). Additionally, adults living in low- and moderate-income neighborhoods are much less likely to be satisfied with their neighborhood (60 percent) than those in middle- and upper-income communities (81 percent).[29] Satisfaction with specific amenities, such as the quality of local schools, also varies with neighborhood income (figure 21).

Neighborhood satisfaction is also lower among blacks and Hispanics than among whites, due in part to differences in their own incomes and those of their neighborhoods. Eight in 10 whites are satisfied with their neighborhood, compared to two-thirds of blacks and Hispanics who are satisfied. The racial/ethnic gaps in neighborhood satisfaction extend to specific amenities, including local schools and safety (table 26).

In evaluating the desirability of neighborhoods, people focus on different amenities that are most important to their lifestyle. The importance of some specific amenities varies by age. People of all ages think that it is at least moderately important to have

Figure 21. Satisfied with local neighborhood and housing characteristics (by neighborhood income)



Note: Satisfaction with the cost of own house or apartment excludes those who do not own and are not paying rent. See table 1 for definitions of low- and moderate-income neighborhoods.

[29] Low- and moderate-income neighborhoods are census tracts with median family income less than 80 percent of the national median income. Middle- and upper-income neighborhoods are those with family median income above the threshold. Neighborhood designations are calculated with the five-year averages from the 2012–16 American Community Survey. An alternate definition of low- and moderate-income neighborhoods based on average incomes relative to the surrounding area, rather than relative to national averages, produces similar results.

a grocery store in their neighborhood and to have shops or restaurants nearby. However, while a local bank or credit union is important to those of all ages, it is less important to younger age cohorts than it is to those over age 60. Similarly, older age groups consider it more important to have a church or place of worship nearby. Conversely, younger adults—and especially those ages 30 to 39—place a higher premium on local parks and playgrounds than do older individuals (table 27).

The importance of neighborhood amenities also differs across urban and rural environments. Rural residents place a greater importance on a local church or place of worship than urban residents, but are less likely than urban residents to cite each of the other amenities considered as important to their location decision (figure 22).

Figure 22. Neighborhood amenities that are moderately or very important (by urban/rural residence)

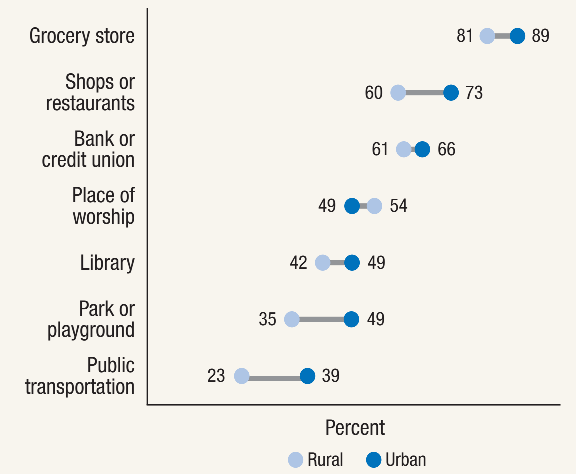


Table 26. Satisfied with local neighborhood and housing characteristics (by race/ethnicity)
Percent

Characteristic	White	Black	Hispanic	Overall
Overall quality of neighborhood	80	66	66	75
Safety of neighborhood	80	64	65	75
Other neighborhood amenities	64	56	56	62
Local schools	62	54	55	59
Overall quality of own house or apartment	78	68	66	74
Cost of own house or apartment	70	61	60	66

Note: Satisfaction with the cost of own house or apartment excludes those who do not own and are not paying rent.

Table 27. Neighborhood amenities that are moderately or very important (by age)
Percent

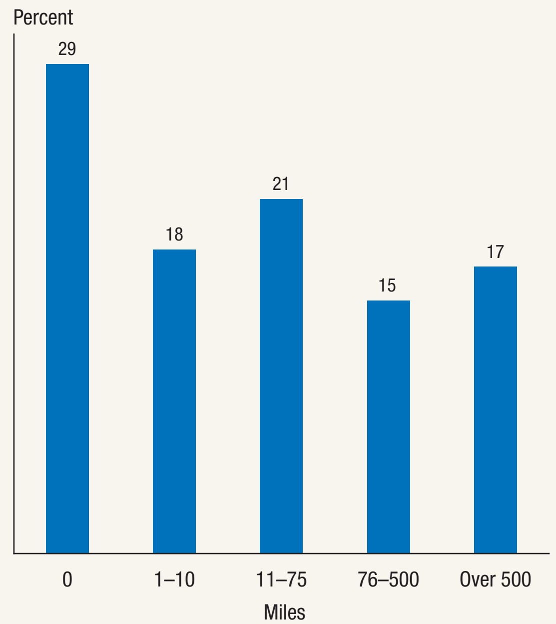
Category	18–29	30–39	40–49	50–59	60+	Overall
Grocery store	88	83	87	88	90	88
Shops or restaurants	72	67	69	72	72	71
Bank or credit union	63	55	60	68	74	65
Place of worship	43	44	46	53	58	50
Library	48	52	48	44	48	48
Park or playground	51	60	51	44	37	47
Public transportation	40	39	36	35	34	36

Box 3. Geographic Mobility, Neighborhood Characteristics, and Family Support

Over the past several decades, the rate at which Americans move—both short distances within states and longer distances across the country—has steadily fallen. This reduction in geographic mobility also fits within a pattern of less job switching, more generally, or reduced labor market fluidity, as documented by Molloy and coauthors (2016).[1] While the reasons for reduced geographic mobility remain an open question among researchers, evidence is mounting on the importance of local communities on individuals' economic outcomes. As one recent example, Chetty and coauthors (2014) have shown that upward income mobility from one generation to the next varies widely across the country and even within a single metro area.[2] This year's survey can also be used to study geographic mobility and to pair it with subjective assessments.

In order to gain insight into geographic mobility, respondents are asked to provide their location when they started high school, which can then be mapped against their current place of residence.[3] The distance in miles between the ZIP code where individuals currently live and the ZIP code where they were living in high school is calculated for each survey respondent.[4] As figure A shows, almost 3 in 10 adults (age 22 and older) still live in the same ZIP code as where they started high school, and nearly half live within 10 miles. Those who have moved farther away from home are split fairly evenly between distances of 11 to 75 miles, 76 to 500 miles, and more than 500 miles.

Figure A. Distance of current residence from ZIP code in high school



Note: Among adults age 22 and older.

A major predictor of whether individuals move away from their hometown is their level of education. Three-fifths of adults with a bachelor's degree live more than 10 miles away from where they grew up, versus two-fifths of those who have a high school degree or less. Those who move also have greater levels of income, which is consistent both with their

1 Raven Molloy, Christopher L. Smith, Riccardo Trezzi, and Abigail Wozniak, "Understanding Declining Fluidity in the U.S. Labor Market," Brookings Papers on Economic Activity (Spring 2016), pp. 183–237.

2 Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez, "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States," *Quarterly Journal of Economics* 129 (December 2014): 1553–1624.

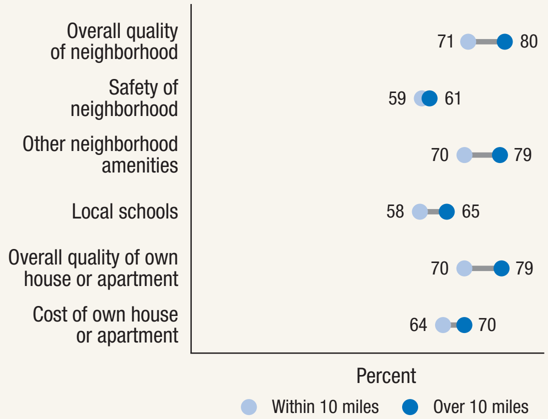
3 The ZIP code of the current residence is available for all respondents, while the ZIP code of high school residence is available for roughly three-quarters of respondents. The analysis in this box is limited to individuals with both a current and high school ZIP code. Perhaps reflecting that ZIP codes were not introduced until 1963, older respondents are less likely to provide the ZIP code of their high school and will therefore be underrepresented in this analysis. Information on geographic location for individuals is not included in the public-access data set to maintain the privacy of the respondents.

4 Distance is calculated by matching each ZIP code to latitude and longitude coordinates and then imputing distance using Austin Nichols's Vincenty package in Stata: Austin Nichols "VINCENTY: Stata Module to Calculate Distances on the Earth's Surface," Statistical Software Components S456815 (2003), Boston College Department of Economics, revised February 16, 2007.

(continued on next page)

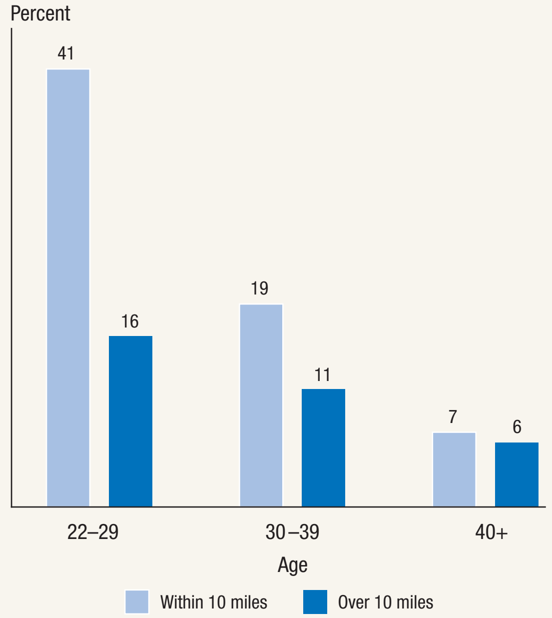
Box 3. Geographic Mobility, Neighborhood Characteristics, and Family Support—*continued*

Figure B. Satisfied with local neighborhood and housing characteristics (by distance currently living from where lived in high school)



Note: Among adults age 22 and older. Satisfaction with the cost of own house or apartment excludes those who do not own and are not paying rent.

Figure C. Receiving financial support from outside the home or living with others without paying rent (by age and distance currently living from where lived in high school)



Note: Among adults age 22 and older.

higher education levels and with moving to seek out better economic opportunities.

An additional reason to move away from home would be to live in a community that better fits an individual's preferences and needs than the community that his or her parents had chosen for themselves. While the majority of adults are satisfied with the overall quality of their current neighborhood, those who have moved away from where they grew up are more satisfied with their neighborhood and their housing than those who stayed close to home (figure B).

According to a study by the Pew Research Center (2008), family ties are one of the main reasons that people are reluctant to move away from their hometown.[5] Likewise, this year's survey shows a similar pattern. Among young adults, in particular, these family ties often come with important financial support. Forty-one percent of young adults (ages 22 to 29) living within 10 miles of where they went to high school either receive financial support from outside their home or are living with others without paying rent (figure C). Young adults who have moved farther away are less likely to receive such support. Financial support from others also declines with age, particularly for those living close to home. These data highlight how family ties and financial support are linked with mobility decisions as individuals enter adulthood.

[5] D'Vera Cohn and Rich Morin, *Who Moves? Who Stays Put? Where's Home?* (Washington: Pew Research Center, December 17, 2008), www.pewsocialtrends.org/files/2010/10/Movers-and-Stayers.pdf.

Higher Education

A college education is widely recognized as a path to higher income and greater financial well-being. In fact, two-thirds of graduates from private not-for-profit and public institutions view the benefits of their own education as larger than the costs. To those who started college but did not complete their degree, and to those who attended private for-profit institutions, the net benefits of their additional education are less clear cut.

Value of Higher Education

Among all adults, 7 in 10 have ever enrolled in some educational degree program beyond high school and one-third have received a bachelor's degree. Economic well-being rises with education. Associate degree holders are somewhat more likely to be at least doing okay financially than those with some college or less, although a larger increase is associated with a completion of a bachelor's degree (figure 23).

Among those who have attended college, just over half say that the lifetime financial benefits of their higher education exceed the financial costs, versus one in five who say the costs are higher. The rest see the benefits as about the same as the costs. These self-assessments of education have changed little since the question was first asked in 2014.

The self-assessed value of higher education, while generally positive, depends on several aspects of a person's educational experience. Most importantly, those who complete their program and receive a degree are more likely to see net benefits than non-completers. For example, among those who attended college but are not enrolled and did not complete at least an associate degree (referred to in this section as having no degree), only one in three say their education was worth the cost. This fraction jumps to 46 percent for those with just an associate degree and 67 percent among those with at least a bachelor's degree (table 28).

The value of higher education also differs by type of institution attended.[30] Over 60 percent of graduates

[30] Individuals do not self-report the type of institution in the survey. Instead, the institution type is assigned by matching the name and location of the college reported by the individual with data from the Center on Postsecondary Research at the Indiana University School of Education.

Figure 23. At least doing okay financially (by education)

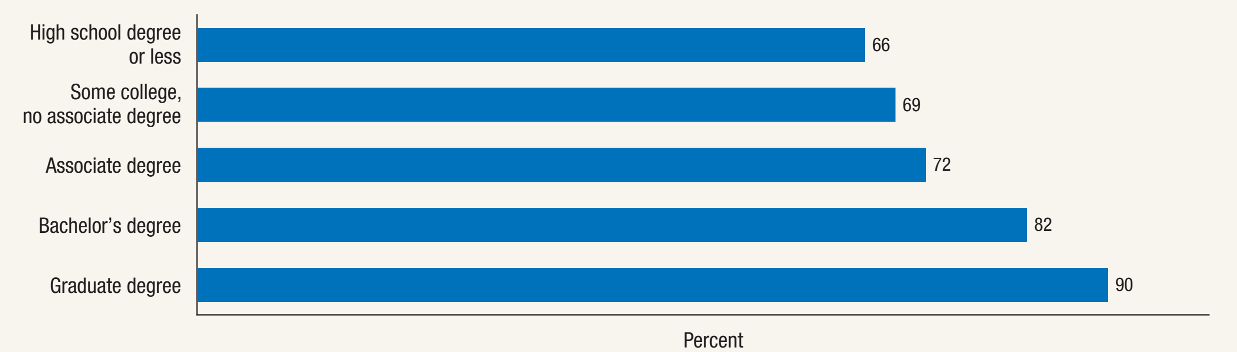


Table 28. Self-assessed value of higher education (by education level)
Percent

Education	Benefits larger	About the same	Costs larger
Some college, no degree	32	38	26
Associate degree	46	34	19
Bachelor's degree or more	67	18	14

Note: Among adults who attended college.

of bachelor's degree programs from public and not-for-profit institutions see benefits greater than the costs, versus less than 40 percent of graduates from for-profit institutions (figure 24). Because the survey collects information about specific schools, they can also be placed on a selectivity spectrum, based on standardized test scores, established by the Carnegie Classification.[31] Using this measure, public and not-for-profit institutions that are classified as less selective also outperform for-profit institutions as a whole on perceived value. After excluding selective and more selective institutions, 54 percent of graduates from public or not-for-profit schools still say the benefits of their education outweigh the costs, well above the share of graduates from for-profit institutions with this view.

[31] Selective institutions, as defined by the Carnegie Classification, are those whose first-year students' test scores are in the middle two-fifths of baccalaureate institutions; more selective institutions are in the top fifth of baccalaureate institutions. See also "Carnegie Classification of Institutes of Higher Education," web page, http://carnegieclassifications.iu.edu/.

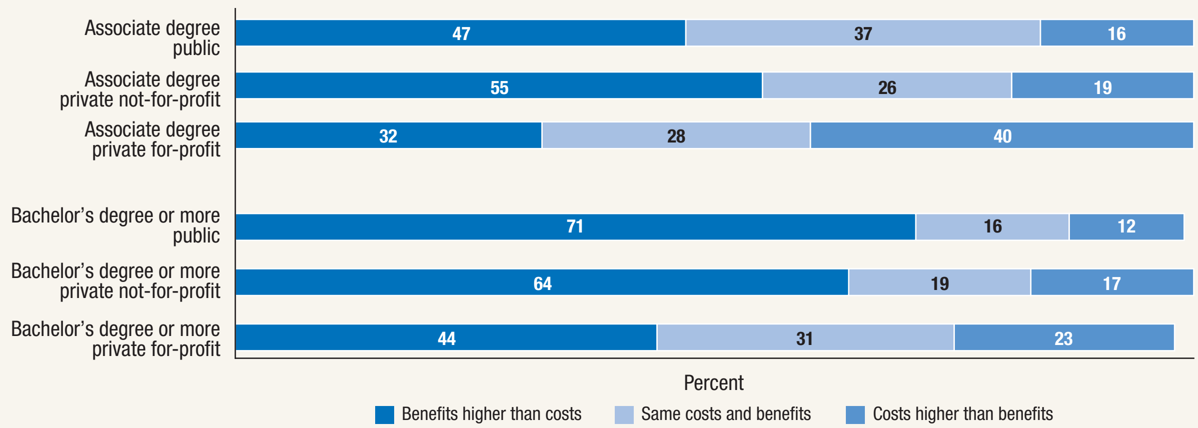
The self-assessed value of higher education also varies by field of study (figure 25). Among those who completed a bachelor's degree, the share reporting benefits larger than costs range from 86 percent for engineering to 46 percent for vocational or technical fields.

Older adults are more likely to report net benefits from their education than are younger individuals. Nearly 8 in 10 people age 50 or older with a bachelor's degree say that the lifetime benefits of their degree are larger than the costs, versus about half of those under age 30. The age profile of self-assessment is similar to that from when the question was first asked in 2014 (figure 26). However, the age differences could either reflect smaller net benefits from education among younger graduates or the fact that younger graduates have not had enough time to fully experience the financial benefits of their education.

Look Back on Education Decisions

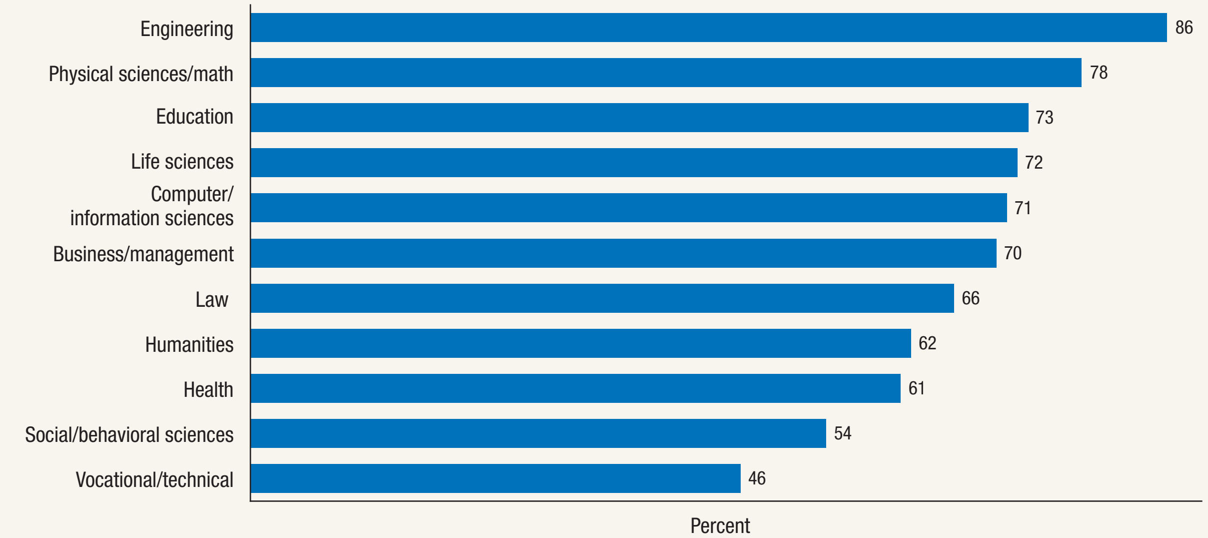
Most people value the education they have, yet with the benefit of hindsight and life experience, it is also common to think that different educational decisions would have been better. Among those without a college degree, almost three-quarters would like to have completed more education, and 13 percent would rather have completed less education in general or not have attended college (table 29). This strong desire for additional education is similarly true among those who feel that the education they received did not pay off.

Figure 24. Self-assessed value of higher education (by degree and institution type)



Note: Among adults who completed at least an associate or bachelor's degree. Degree holders are asked specifically about the value of their associate or bachelor's degree, rather than their higher education as a whole.

Figure 25. Benefits of education outweigh costs (by field of study)

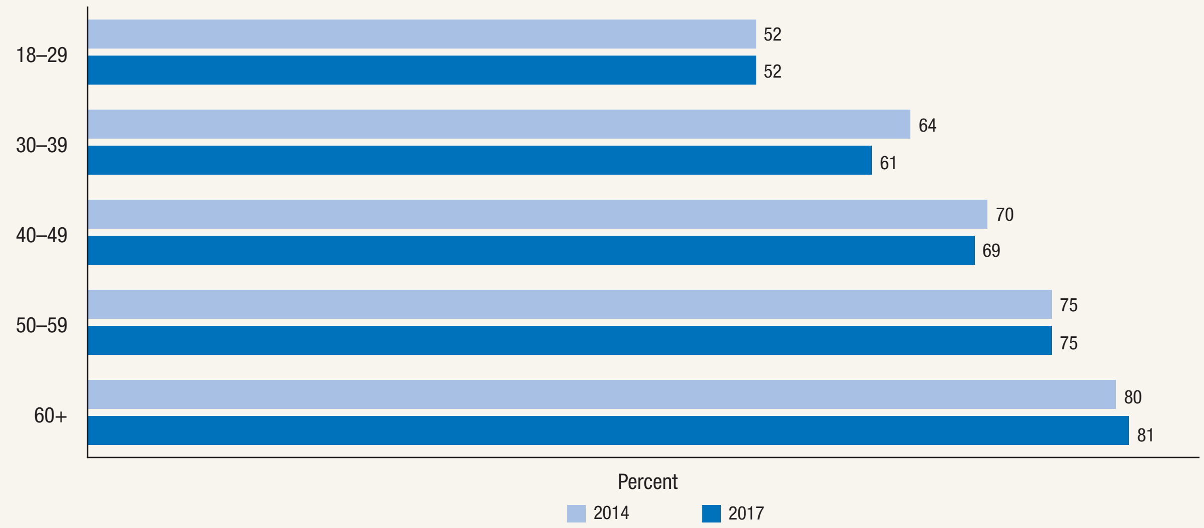


Note: Among adults who completed at least a bachelor's degree.

Likewise, among those who completed at least an associate degree, the most common desired change (44 percent) is to have completed more education. Seven percent of those with an associate degree and 5 percent of those with at least a bachelor's degree would like to have had less education.

The reassessment of education decisions also varies by the type of institution attended. Just over half of those who attended a for-profit institution say they would like to have attended a different school, versus one-fourth of those attending a private not-for-profit institution and less than one-fourth of those attend-

Figure 26. Lifetime financial benefits of bachelor's degree exceed the costs (by age and survey year)



Note: Among adults who completed at least a bachelor's degree. 2014 is the earliest year for which data are available.

Table 29. Changes would make now to earlier education decisions (by education)
Percent

Change	No degree	Associate degree	At least a bachelor's degree
Completed more education	74	67	37
Not attended college or less education	13	7	5
Chosen a different field of study	39	34	37
Attended a different school	34	25	21

Note: Among adults who completed at least some college. Degree denotes at least an associate degree or a bachelor's degree. Respondents can select multiple answers.

ing a public institution (figure 27). This difference remains even after accounting for the selectiveness of the institution, level of education completed, and demographic characteristics of the student.

College Attendance

Having parents with additional education noticeably increases one's own likelihood of obtaining a college degree. Among young adults (ages 22 to 29) who have a parent with a bachelor's degree, 71 percent received a bachelor's degree themselves, whereas 7 percent have a high school degree or less (figure 28).[32] In contrast, over half of young adults whose parents' education ended with high school also received a high school degree or less, and 19 percent obtained a bachelor's degree.

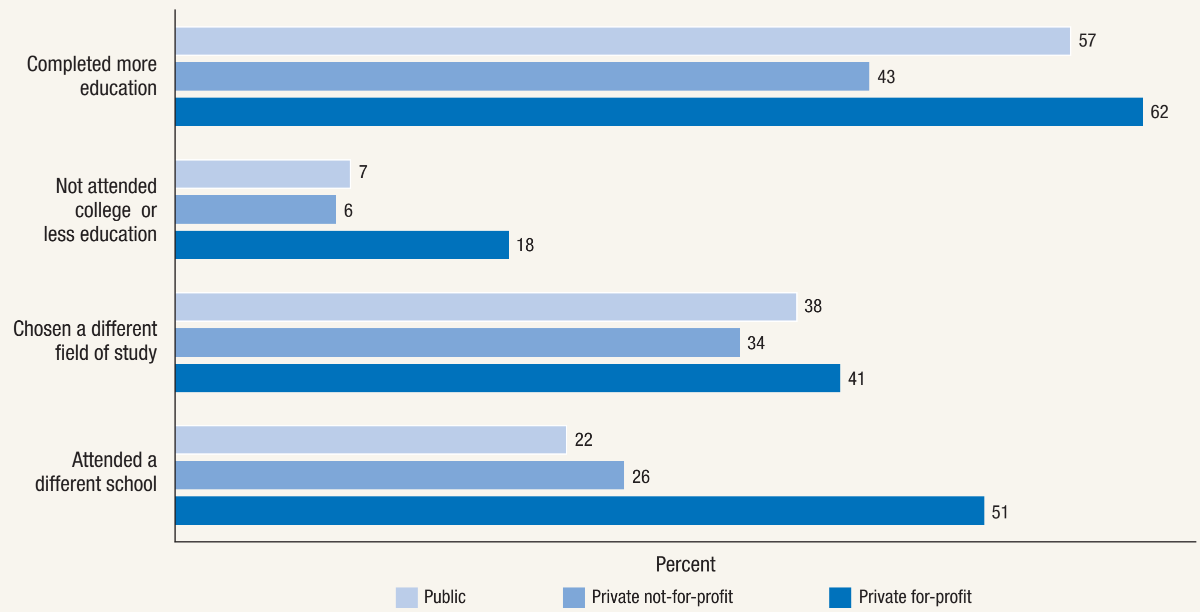
The type of institution attended also varies with parental education. Young adults whose parents did not attend college are much more likely to attend a private for-profit institution than those who have a parent with a bachelor's degree—12 percent versus 4 percent, respectively (figure 29).[33]

Notable differences in types of institution attended also exist by the race and ethnicity of the student. Five percent of white young adults who attended college went to a for-profit institution, whereas among black and Hispanic college-goers the rate is nearly three times higher (figure 30). Differences in the quality of institutions attended likely contribute to disparities in financial well-being by race and

[32] Individuals ages 18 to 21 are excluded here from the category "young adults" to reflect that many individuals in that age cohort have not yet completed their education. Results are also similar with a larger age exclusion to account for those continuing their education up through age 24.

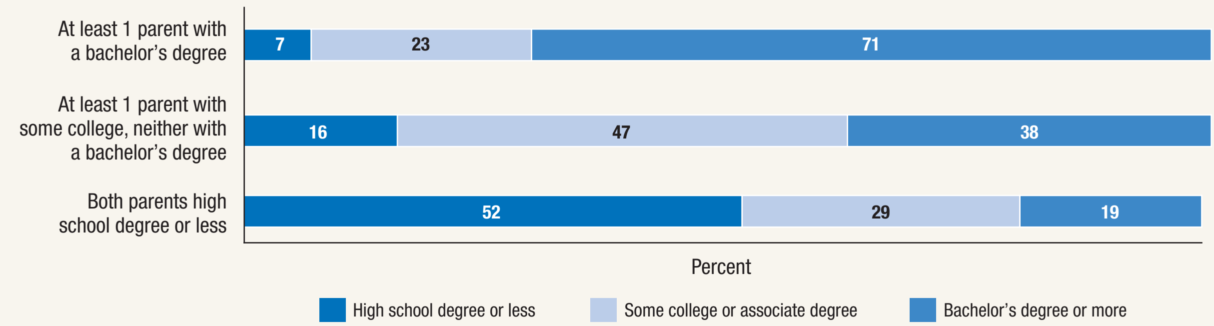
[33] This gap is wider among people currently in their 30s, among whom nearly one-fourth of those with parents who did not go to college attended a for-profit, versus 5 percent of those with a parent who has a bachelor's degree.

Figure 27. Changes would make now to earlier education decisions (by institution type)



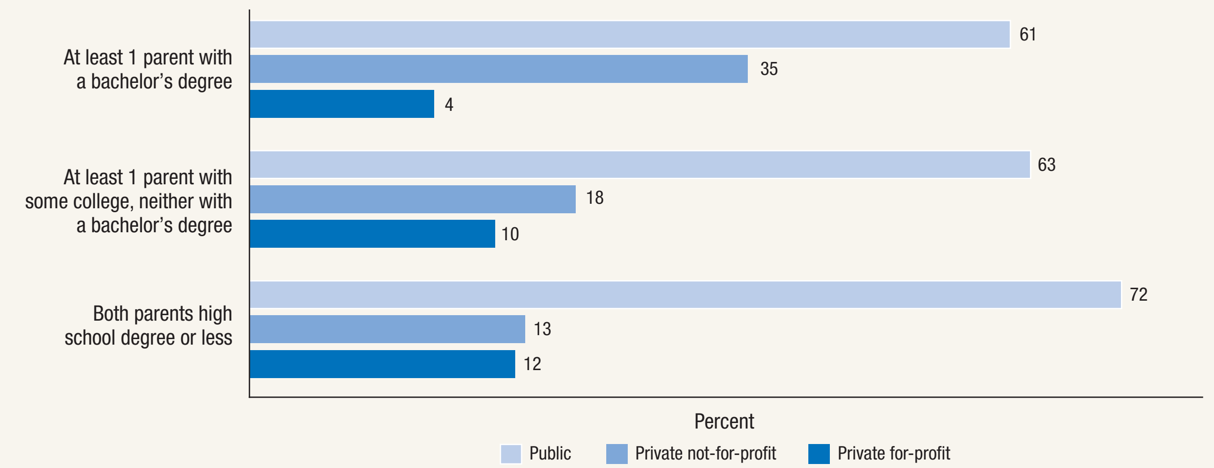
Note: Among adults who completed at least some college. Respondents can select multiple answers.

Figure 28. Educational attainment of young adults ages 22–29 (by parents' education)



Note: Among adults ages 22 to 29.

Figure 29. Institutions attended by young adults ages 22–29 (by parents' education)



Note: Among adults who completed at least some college.

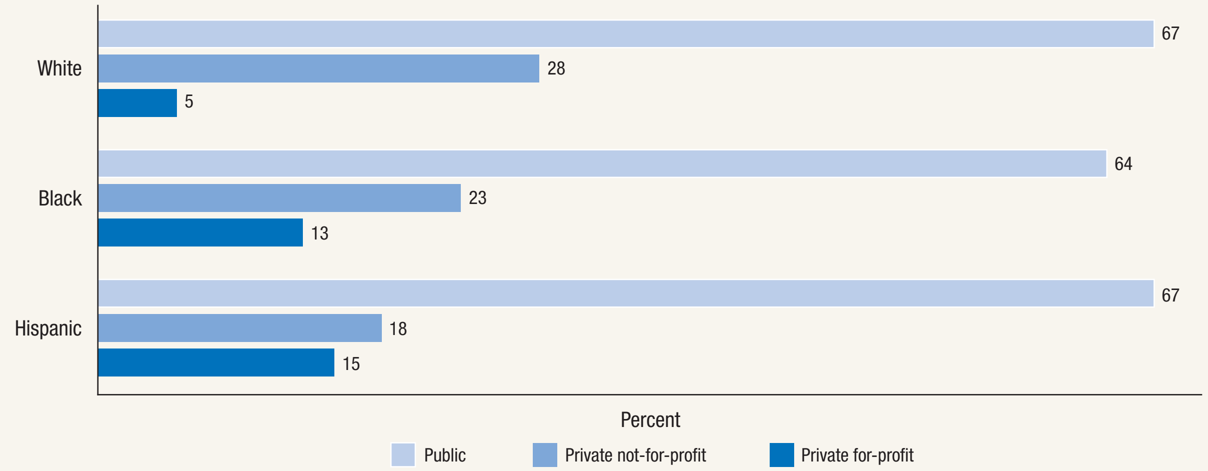
ethnicity, even within educational groups, as discussed elsewhere in this report.

No College Degree

A wide range of reasons including financial costs, life events, or a lack of interest can explain why some people do not attend college or complete a degree. Financial considerations, including tuition being too expensive or a need to earn money, are the most common reasons, collectively affecting two-thirds of those who did not attend college and nearly three-fifths who did not complete their degree (table 30). A lack of interest in college, a desire to work, or family responsibilities such as child care were also important factors for some.

In some cases, women and men have different reasons for not completing a college degree. For example, women are much more likely than men to cite family responsibilities as a factor. In contrast, men are more likely than women to indicate a lack of interest in college or a desire to work instead of pursuing more education (table 31).

Figure 30. Institutions attended by young adults ages 22–29 (by race/ethnicity)



Note: Among adults who completed at least some college.

Table 30. Reasons for not attending college or not completing college degree
Percent

Reason	Did not attend college	Did not complete degree	Overall
Financial considerations			
Too expensive	37	32	34
Needed to earn money	29	41	36
Did not think benefits outweighed costs	22	14	17
Family responsibilities			
Child care responsibilities	14	19	17
Supported or cared for parents or siblings	6	5	6
Lack of interest in college, desire to work			
Simply was not interested in college	31	17	22
Wanted to work	36	22	27
Educational ability			
Was not admitted	1	n/a	1
Low grades	n/a	11	11

Note: Among adults who did not attend college and are under age 30 or who went to college in the past decade but did not complete their degree and are not currently enrolled in school. Respondents can select multiple answers.

n/a Not applicable.

Table 31. Reasons for not attending college or not completing college degree (by gender)
Percent

Reason	Men	Women
Financial considerations		
Too expensive	33	34
Needed to earn money	36	36
Did not think benefits outweighed costs	19	15
Family responsibilities		
Child care responsibilities	9	25
Supported or cared for parents or siblings	6	5
Lack of interest in college, desire to work		
Simply was not interested in college	25	19
Wanted to work	34	20
Educational ability		
Was not admitted	*	2
Low grades	14	9

Note: Among adults who did not attend college or who went to college but did not complete their degree and are not currently enrolled in school. Respondents can select multiple answers.

* Less than 1 percent.

Student Loans

Over half of young adults who went to college took on some debt, including student loans, for their education. Repayment of this debt can be challenging.

In 2017, one-fifth of those with education debt were behind on their payments. Individuals who did not complete their degree or who attended a for-profit institution are more likely to struggle with repayment than those who took on large amounts of debt but completed a degree from a public or not-for-profit institution.

Overview

Forty-two percent of those who attended college, representing 30 percent of all adults, have incurred at least some debt from their education. This includes 22 percent who still owe money and 20 percent who have already repaid their debt. Adults under the age of 30 who attended college are more likely to have taken out loans than older adults, consistent with the upward trend in educational borrowing over the past several decades (figure 31).[34]

Many forms of debt are used to finance education. Student loans are by far the most common form, held by 94 percent of those with their own education debt outstanding. In addition, 30 percent have some other form of debt for their education, including 25 percent who have borrowed with credit cards, 6 percent with a home equity line of credit, and 7 percent with some other form.[35] The typical amount of education debt in 2017 among those with any outstanding was between $20,000 and $25,000.[36]

Almost 3 in 10 adults with outstanding education debt are not currently required to make payments on their loans. Such deferments are common for those still in college. Of those who are making payments, the typical monthly payment is between $200 and $300 per month.

Education debt is also taken out to assist family members with their education (either through a co-signed loan with the student or a loan taken out independently). Although this is less frequent than borrowing for one's own education, 4 percent of adults owe money for a spouse's or partner's education and 5 percent have debt that paid for a child's or grandchild's education. Similar to debt outstanding for the borrower's education, debt for a child's or grandchild's education can be in forms other than a student loan (table 32).

Student Loan Payment Status

Among those with outstanding student loans from their own education, 20 percent were behind on their payments in 2017. This rate is up slightly from 19 percent in 2016 and 18 percent in 2015.

Those who did not complete their degree are the most likely to be behind on payments. Over one-third with student loans outstanding and less than an associate degree are behind versus one-quarter of borrowers with an associate degree.[37] The delin-

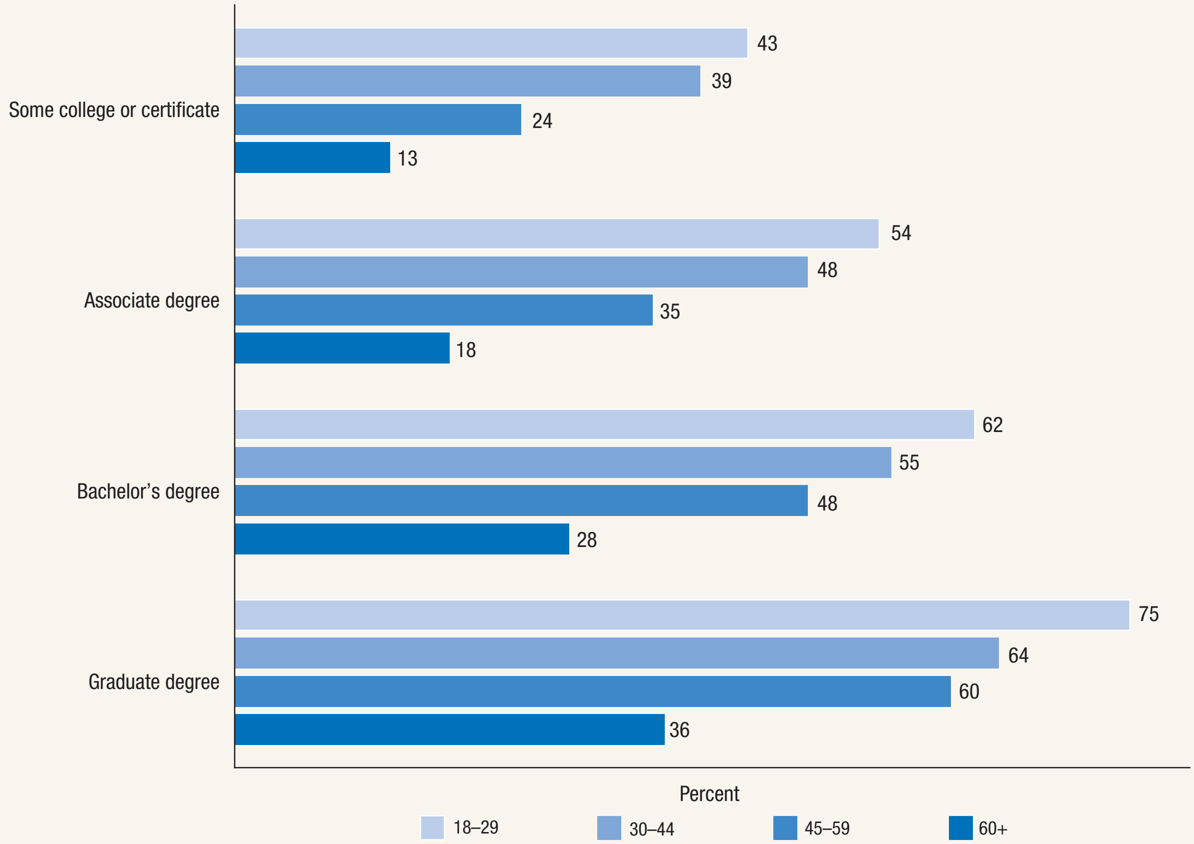
[34] Student loan borrowing has declined since its peak in 2010–11 but remains substantially above the levels from the mid-1990s (Sandy Baum, Jennifer Ma, Matea Pender, and Meredith Welch, *Trends in Student Aid 2017* (New York: The College Board, 2017), www.trends.collegeboard.org/sites/default/files/2017-trends-student-aid.pdf).

[35] Respondents who indicate that they have other debt for their education are asked to specify its form. Among those who provide additional specificity to this follow-up question, the most common responses are auto loans, personal loans, or borrowing from relatives.

[36] Education debt levels and monthly payments are asked in ranges rather than exact dollar amounts.

[37] The rate of being behind on payments for those with some college, a certificate, or a technical degree who are behind on their payments includes respondents who report that their highest degree is a high school degree or less who report that they are behind. These respondents likely incurred debt for higher education, but given their lack of completion of a higher degree, still consider their highest level of education to be their high school education.

Figure 31. Acquired debt for own education, including repaid (by age and highest degree completed)



Note: Among adults who attended college.

quency rate is even lower among borrowers with a bachelor's degree (11 percent) or graduate degree (5 percent).

Table 32. Type of education debt (by whose education funded)
Percent

Form of debt	Own education	Child's/ grandchild's education
Student loan	94	82
Credit card	25	22
Home equity loan	6	14
Other loan	7	7

Note: Among adults who have at least some debt outstanding for their own education or a child's or grandchild's education. Some people have more than one type of debt.

Since the level of education rises with debt levels, those with more debt often have less difficulty with repayments. Twenty-seven percent of borrowers with less than $10,000 of outstanding debt, and 20 percent of those with between $10,000 and $25,000 of debt, are behind on their payments. Among those with $100,000 of debt or more, the fraction who are behind is 13 percent.

Excluding those who have already repaid their student loans could overstate difficulties with repayment. The remainder of this section therefore considers the repayment status of all borrowers, including those who have completely repaid their loan. Among those who ever incurred debt from their education, 11 percent are currently behind on their payments, 42 percent have outstanding debt and are current on their payments, and 47 percent have completely paid off their loans.

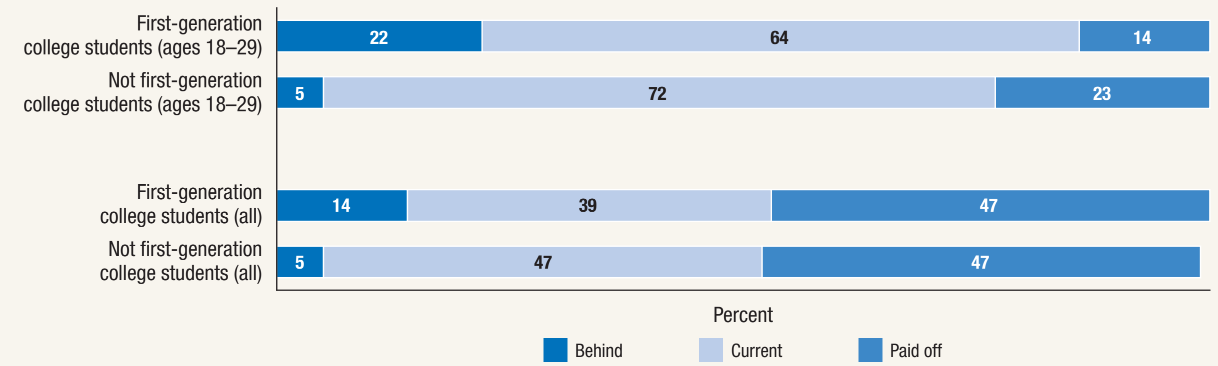
Borrowers who were first-generation college students are more likely to be behind on their payments than those with a parent who completed college.[38] Among borrowers under age 30, first-generation college students are four times as likely to be behind on their payments as those with a parent who completed a bachelor's degree (figure 32).

Difficulties with repayment also vary across race and ethnicity. Black and Hispanic education borrowers are much more likely than white borrowers to be behind on their loan repayment and are less likely to have repaid their loans (figure 33). These patterns partly reflect differences in rates of degree completion and subsequent wages.

Repayment status also differs by the type of institution attended. Nearly one-fourth of borrowers who attended for-profit institutions are behind on student loan payments, versus 9 percent who attended public institutions and 6 percent who attended nonprofit institutions (table 33).

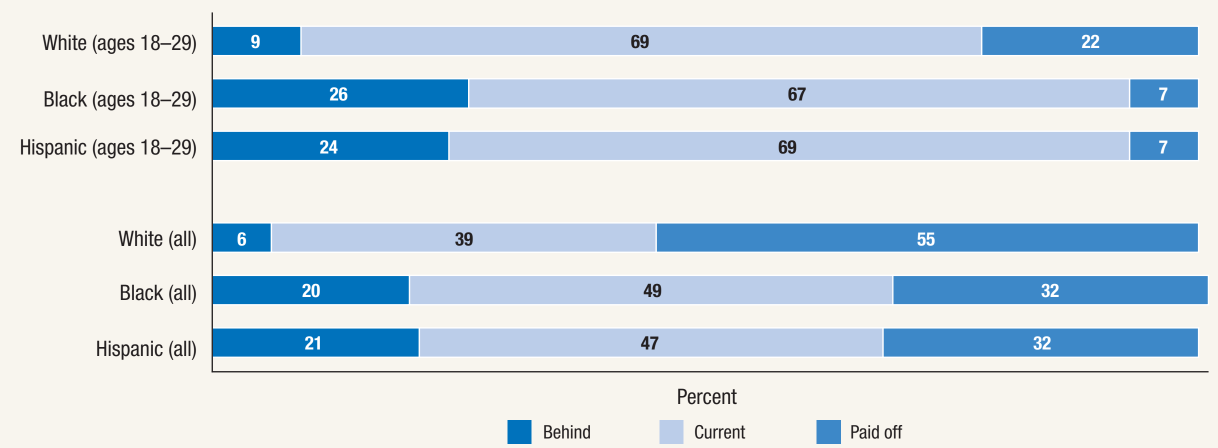
[38] First-generation college students are defined here as those who do not have at least one parent who completed a bachelor's degree.

Figure 32. Payment status of loans for own education (by parents' education and current age)



Note: Among adults who borrowed for their own education.

Figure 33. Payment status of loans for own education (by current age and race/ethnicity)



Note: Among adults who borrowed for their own education.

Table 33. Payment status of loans for own education (by institution type)

Percent

Institution type	Behind	Current	Paid off
Public	9	43	49
Private not-for-profit	6	42	53
Private for-profit	23	46	31
Overall	**10**	**43**	**48**

Note: Among adults who borrowed to pay for their own education.

Greater difficulties with loan repayment among attendees of for-profit institutions may partly reflect the lower returns on these degrees.[39] It could also relate to differences in the educational backgrounds of students. Test scores of first-year students, a measure of admissions selectivity (also used in the "Higher Education" section), tend to be lower at for-profit institutions than at public or nonprofit institutions. However, even when selective schools are excluded, a gap in repayment remains.

[39] See David J. Deming, Claudia Goldin, and Lawrence F. Katz, "The For-Profit Postsecondary School Sector: Nimble Critters or Agile Predators?" *Journal of Economic Perspectives* 26, no. 1 (Winter 2012): 139–64, for a discussion of the rates of return by education sector.

Retirement

Many adults are struggling to save for retirement, and less than two-fifths feel that they are on track with their savings. While preparedness for retirement increases with age, concerns about inadequate savings are still common for those near retirement age. Additionally, many with self-directed retirement savings are not comfortable managing the investments.

Retirement Savings

Less than two-fifths of non-retired adults think their retirement savings plan is on track, whereas over two-fifths think it is not on track and about one-fifth are not sure. In fact, one-quarter of the non-retired indicate that they have no retirement savings or pension whatsoever.

Among those who do have retirement savings, a defined contribution plan, such as a 401(k) or 403(b) plan, is most common. Over half of non-retirees have money in this form (figure 34). These accounts are more than twice as frequent as traditional defined benefit pension plans, which are held by 26 percent of non-retirees.

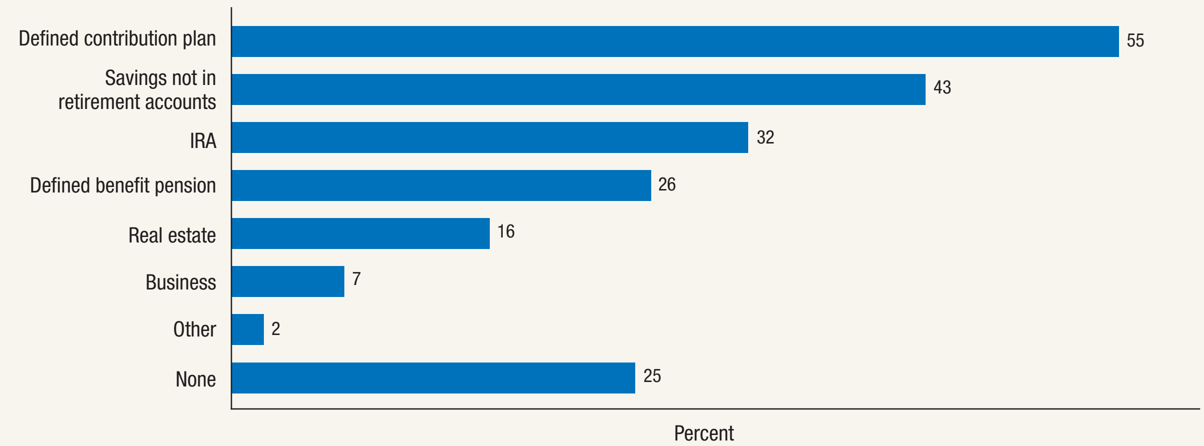
Older adults are more likely to have retirement savings and to view their savings as on track than younger adults. Nevertheless, even among non-retirees in their 50s and 60s, one in eight lacks any retirement savings and less than half think their retirement savings are on track (figure 35).

Additionally, retirement savings vary substantially by race and ethnicity. White non-retirees are 14 percentage points more likely than black non-retirees to have any retirement savings, and they are 18 percentage points more likely to view their retirement savings as on track (figure 36).[40]

Self-assessments of retirement preparedness vary with the amount of current savings and time remaining until retirement. Among young adults under age 30, people typically believe that their savings are on track if they have at least $10,000 set aside for retirement (figure 37). The amount of savings needed for a majority to think they are on track increases as

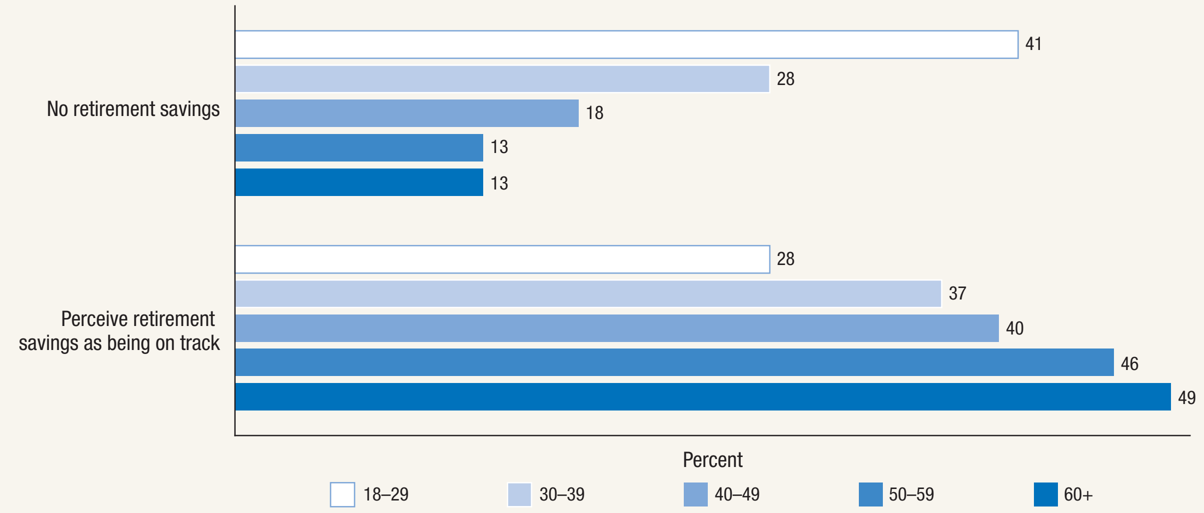
[40] Blacks and Hispanics are younger than whites, on average, which contributes to these racial and ethnic gaps. However, even within age cohorts, substantial differences remain in retirement savings.

Figure 34. Forms of retirement savings among non-retirees



Note: Among non-retirees. Respondents can select multiple answers.

Figure 35. Lack of retirement savings and perception of preparedness (by age)



Note: Among non-retirees.

people near retirement, rising to at least $100,000 of retirement savings among those age 40 and older. Approximately 9 in 10 people with at least $500,000 of retirement savings think that they are on track, regardless of their age.

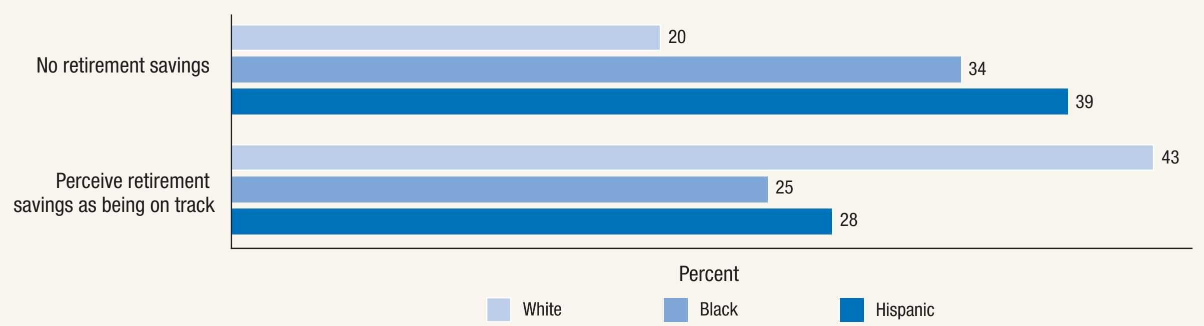
Some people withdraw money from their retirement accounts early for purposes other than retirement, despite the fact that they may incur a substantial tax penalty. Overall, 5 percent of non-retirees have borrowed money from their retirement accounts in the past year, 4 percent have permanently withdrawn funds, and 1 percent have done both. Those who have withdrawn early are less likely to view their retirement savings as on track than those who have not—27 percent versus 39 percent (figure 38).

Financial Literacy and Comfort Investing

Among those with self-directed retirement savings, including 401(k)s, IRAs, and savings outside of formal retirement accounts, comfort in managing these investments is mixed. Three-fifths of non-retirees with these accounts have little or no comfort managing their investments.

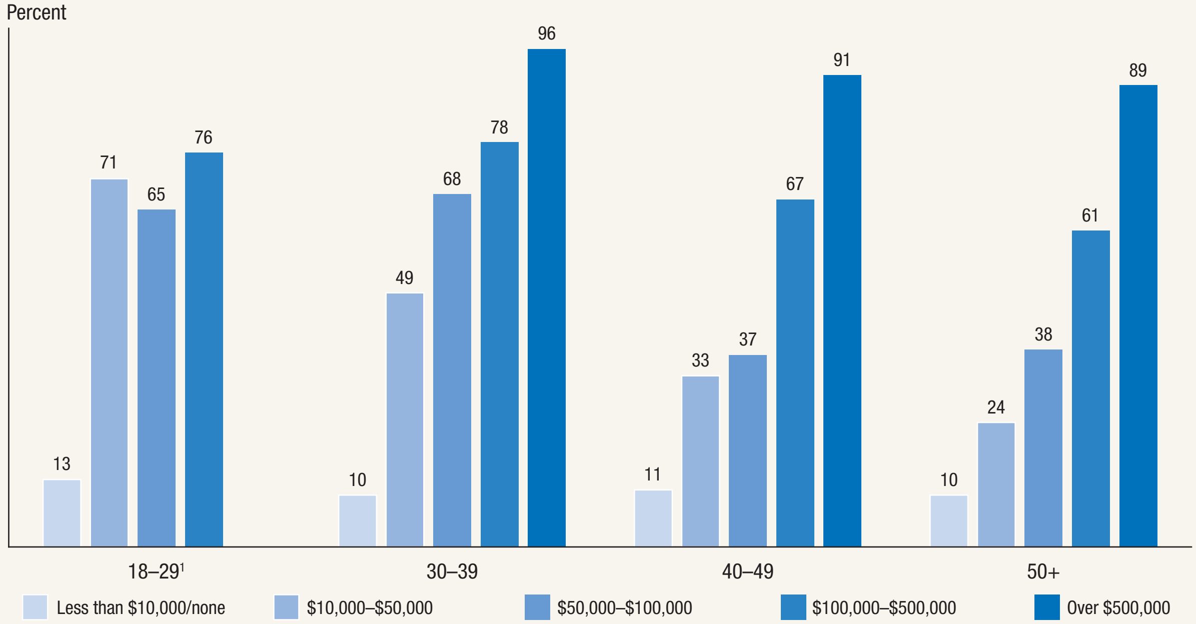
On average, women of all education levels and less-educated men are less comfortable managing their retirement investments (figure 39). While 60 percent of men with at least a bachelor's degree are largely comfortable making these investment decisions,

Figure 36. Lack of retirement savings and self-assessed preparedness (by race/ethnicity)



Note: Among non-retirees.

Figure 37. Retirement savings are on track (by age and amount of savings for retirement)



Note: Among non-retirees.

[1] Respondents ages 18 to 29 with over $500,000 saved for retirement are excluded due to the small sample size.

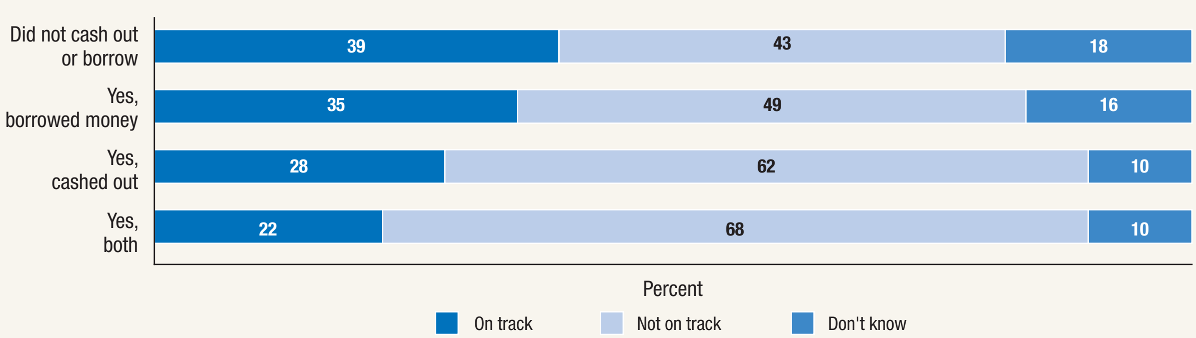
41 percent of men with a high school degree or less are comfortable. Among women with any level of education, investment comfort is lower than among similarly educated men. Thirty-five percent of women with a bachelor's degree are comfortable managing their investments. Women's comfort with their investments also rises less with education than men's.

Expressed comfort in financial decisionmaking may or may not correlate with actual knowledge about how to do so. To assess actual financial literacy, respondents are asked five basic questions about finances (table 34).[41] The average number of correct answers is 2.8 with one-fifth of adults getting all five correct.

The average number of correct financial literacy questions is higher for those who are generally com-

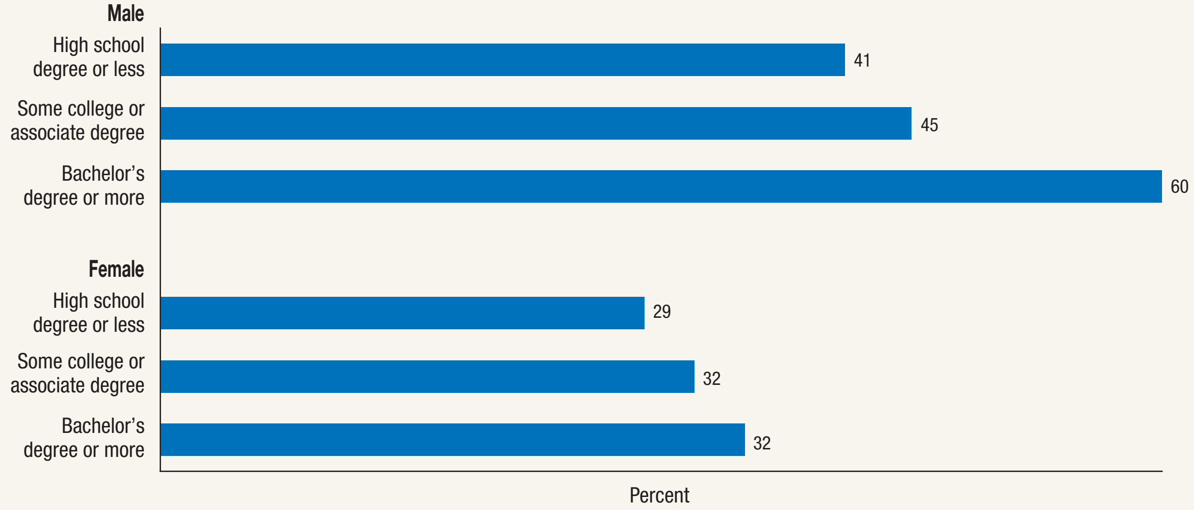
[41] Three of these questions are the "big 3" financial literacy questions developed by Annamaria Lusardi and Olivia Mitchell (see "Financial Literacy around the World: An Overview," *Journal of Pension Economics and Finance* 10, no. 4 (2011): 497–508, https://doi.org/10.1017/S1474747211000448). Of just those three questions, people answered 60 percent of questions correctly, on average.

Figure 38. Perception that retirement savings are on track (by borrowing and withdrawing from retirement savings accounts)



Note: Among non-retirees.

Figure 39. Mostly or very comfortable investing self-directed retirement savings (by gender and education)



Note: Among non-retirees.

fortable with managing their retirement accounts (3.5 questions) than those who have savings but limited comfort (2.9 questions) (table 35). Notably, the number of incorrect answers does not vary with investment comfort. Instead, the number of "don't know" responses falls as investment comfort rises.

Retirement

Half of retirees in 2017 retired before age 62, and an additional one-fourth retired between the ages of 62 and 64.[42] Average retirement ages differ by race and ethnicity, with black and Hispanic retirees more likely to have retired before age 62 (58 percent and 55 percent, respectively) than white retirees (48 percent).

[42] This discussion of current retirees considers everyone who reports that they are currently retired, even if they also indicate that they still are working in some capacity. Sixteen percent of retirees indicate that they are still working—either for themselves or for someone else. Analysis of the ages retired excludes those who don't know.

Table 34. Financial literacy questions
Percent

Question	Correct	Incorrect	Don't know or no answer
Housing prices in the United States can never go down? [True or **False**]	60	19	22
Buying a single company's stock usually provides a safer return than a stock mutual fund? [True or **False**]	46	4	50
Considering a long time period (for example, 10 or 20 years), which asset described below normally gives the highest returns? [**Stocks**, Bonds, Savings accounts, Precious metals]	42	20	37
Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account? [More than today, Exactly the same, **Less than today**]	62	12	25
Suppose you had $100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow? [**More than $102**, Exactly $102, Less than $102]	71	12	16
Average score	**56**	**13**	**31**

Note: Correct answers provided in bold. "Don't know" includes individuals who did not provide an answer. For each question, less than 2 percent of respondents did not reply.

Table 35. Financial literacy (by retirement savings and comfort investing)
Number of answers out of five

Investment comfort and presence of retirement savings	Correct	Incorrect	Don't know
Has self-directed retirement savings	3.2	0.6	1.2
Mostly or very comfortable investing	3.5	0.6	0.8
Not or slightly comfortable investing	2.9	0.6	1.5
No self-directed retirement savings	2.4	0.7	1.8
Retired	3.0	0.6	1.4
Overall	**2.8**	**0.7**	**1.5**

In choosing when to retire, a desire to do other things than work or to spend time with family were the most common factors. In addition, two-fifths of retirements before age 62—and one-third between ages 62 and 64—involved poor health as a contributing factor. About one-fourth of those who retired before age 65 said the lack of available work contributed to their decision (table 36).

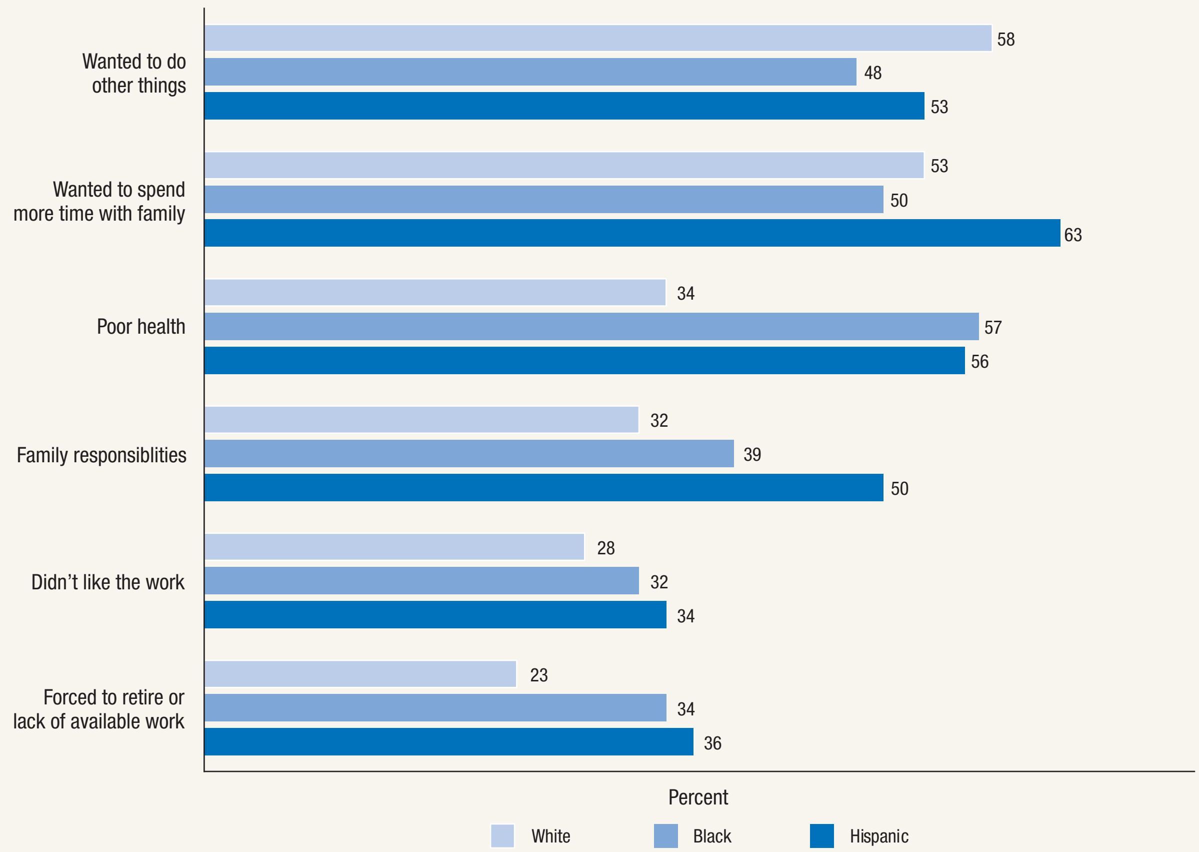
Table 36. Reasons for when to retire (by age retired)
Percent

Reason	Don't know	61 or earlier	62–65	65+
Wanted to do other things	48	56	62	61
Wanted to spend more time with family	54	52	57	57
Poor health	63	39	31	27
Family responsibilities	52	33	33	30
Didn't like the work	32	30	28	26
Forced to retire or lack of available work	38	23	26	25

Note: Among retirees. Resondents can select multiple answers.

Among blacks and Hispanics who retired early, health concerns are a more common factor than among white early retirees (figure 40). Conversely, whites who retired early are more likely to have retired, at least in part, because they wanted to do other things than work.

Figure 40. Reasons for early retirement (by race/ethnicity)



Note: Among retirees who retired before age 65.

For income in retirement, 86 percent of retirees in 2017 receive Social Security benefits (table 37). Fifty-six percent draw on a defined benefit pension, and 58 percent use savings from an IRA, 401(k), or other defined contribution plan. The types of retirement savings for current retirees differs substantially from non-retirees, for whom defined contribution plans are much more common than defined benefit pensions.

The sources of retirement income also differ by race and ethnicity. Black and Hispanic retirees are less likely than whites to have self-directed savings. In aggregate, 71 percent of black retirees and 66 percent of Hispanic retirees are drawing from at least some private retirement savings (other than employment during retirement and relying on family), compared to 86 percent of white retirees.

Table 37. Sources of funds in retirement (by race/ethnicity)
Percent

Source of funds	White	Black	Hispanic	Overall
Social Security	89	83	73	86
Defined benefit pension	58	57	48	56
Savings outside a retirement account	59	33	33	53
IRA or 401(k)	65	38	41	58
Income from real estate	15	11	13	14
My spouse/partner has a job	32	35	33	32
I have a job	9	14	12	10
Income from a business	5	2	7	5
Relying on children or other family	3	4	8	4
Other retirement savings	22	9	18	20

Note: Among retirees. Resondents can select multiple answers.

Description of the Survey

The Survey of Household Economics and Decisionmaking (SHED) was fielded in November and December of 2017.[43] This is the fifth year of the survey, conducted annually in the fall of each year since 2013.[44]

On average, the survey takes respondents 24 minutes (median time) to complete. The questions in the survey were written by staff of the Federal Reserve Board in consultation with other Federal Reserve System staff, outside academics, and professional survey experts.[45] In selecting questions, a priority is to provide new information on the financial experiences and challenges among low- and moderate-income populations. These questions are intended to complement and augment the base of knowledge from other data sources, including the Board's own Survey of Consumer Finances (SCF). In addition, some questions from other surveys are included to allow direct comparisons across datasets.[46] Most new survey questions were reviewed by survey design experts at NORC to improve comprehension and minimize potential confusion among respondents. The full survey questionnaire can be found in appendix A of the supplemental appendixes to this report (see www.federalreserve.gov/consumerscommunities/shed_publications.htm).

GfK, a private consumer research firm, administers the survey using its KnowledgePanel, a nationally representative probability-based sample. GfK selects respondents into KnowledgePanel based on address-based sampling (ABS).[47] SHED respondents are then selected from this panel based on the criteria described below.

Survey Sample

The SHED sample is designed to be representative of adults ages 18 and older living in the United States. It includes a subset of respondents from the 2016 SHED ("re-interviewed respondents"), adults who did not participate in the previous year ("fresh respondents"), and an oversample of individuals with a household income less than $40,000 per year ("lower-income oversample").

The respondents in the 2017 SHED had to agree to several separate decisions to participate. First, they agreed to participate in GfK's KnowledgePanel and complete an initial demographic profile survey. Second, they agreed to complete the 2017 SHED. Only 12 percent of individuals contacted to join KnowledgePanel agreed to join (recruitment rate), and 63.6 percent of these recruited participants completed the initial profile survey necessary to become a panel member (profile rate). Then, of the 22,355 panel members contacted to take the 2017 SHED, 12,246 participated, yielding a final-stage completion rate of 54.8 percent (table 38).[48] Taken together, the cumulative response rate is 4.2 percent.

GfK uses email reminders and small monetary incentives to encourage participation in the SHED. GfK sent two reminders to non-responders on the third and eleventh days in the field. GfK also maintains a

43 The exact field dates were November 3 through November 18 and December 15 through December 24. The additional field dates in December were targeted at low-income and hard-to-reach populations in order to increase their participation.

44 Data and reports of survey findings from all past years are available at www.federalreserve.gov/consumerscommunities/shed.htm.

45 The survey instrument was also available for public comment through the Federal Reserve Board's website.

46 For a comparison of results to select overlapping questions from the SHED and Census Bureau surveys, see Jeff Larrimore, Maximilian Schmeiser, and Sebastian Devlin-Foltz, "Should You Trust Things You Hear Online? Comparing SHED and Census Bureau Survey Results," Finance and Economics Discussion Series Notes (Washington: Board of Governors of the Federal Reserve System, October 15, 2015).

47 Prior to 2009 respondents were also recruited using random-digit dialing.

48 Of the 12,246 respondents who completed the survey, 59 were excluded from the analysis in this report due to either leaving responses to a large number of questions missing, completing the survey suspiciously quickly, or both. Hence, 12,187 respondents are included in the analysis in this report.

Table 38. Survey response statistics

Sample type	Number sampled	Completed responses	Completion rate (percent)
2016 re-interviews	2,913	2,305	79.1
Fresh cases	14,617	7,552	51.7
Lower-income oversample	4,825	2,389	49.5
Overall	**22,355**	**12,246**	**54.8**

modest incentive program with raffles and lotteries to encourage KnowledgePanel members to participate in surveys. Respondents receive a $5 incentive for completing the SHED, in addition to the standard incentives offered by GfK.

Although the sample is designed to be nationally representative, some hard-to-reach populations will likely be excluded. Homeless populations are likely missed by address-based sampling, and non-English speakers may not participate in the survey conducted in English.[49] To better understand the effect of the language restriction, a portion of this year's survey was translated to Spanish and asked to a small sample of Spanish speakers. Box 4 discusses the results across the English and Spanish samples.

Survey Mode

While the sample is drawn using probability-based sample methods, the SHED is administered to respondents entirely online. Probability-based online interviews are less costly than telephone or in-person interviewing, and can still be an effective way to interview a representative population.[50] GfK's online panel offers some additional benefits. Their panel also allows the same respondents to be re-interviewed in subsequent surveys with relative ease, as they can be easily contacted for several years. Furthermore, internet panel surveys have numerous existing data points on respondents from previously administered surveys, including detailed demographic and economic information. This allows for the inclusion of additional information on respondents without increasing respondent burden. The respondent burdens are further reduced by automatically skipping irrelevant questions based on responses to previous answers.

The "digital divide" could bias participation in online surveys, so recruited panel members who do not have a computer or internet access are provided with a laptop and access to the internet to complete the surveys. Consequently, the raw distribution of KnowledgePanel mirrors that of U.S. adults fairly closely. Occasional disparities may occur in certain subgroups due to differential attrition rates among recruited panel members. Nonetheless, individuals who complete an online survey may have greater comfort or familiarity with the internet and technology than the overall adult population. For the 2017 SHED sample, 96 percent report that they or someone else in their household uses the internet at home. This is higher than the estimated three-quarters of adults reporting use of the internet at home in the July 2015 Computer and Internet Use Supplement to the Current Population Survey. This difference exists among both urban and rural respondents to the surveys. SHED respondents are also more likely than Current Population Survey respondents to use the internet at other locations, such as at work, suggesting that differences in internet usage across the surveys are due to different interests or comfort levels rather than availability.

Weighting

The selection methodology for the general population sample from KnowledgePanel ensures that the resulting samples behave as an equal probability of selection method (EPSEM) samples. This methodology starts by weighting the entire KnowledgePanel to the benchmarks in the latest March supplement of the Current Population Survey along several dimensions. This way, the weighted distribution of the KnowledgePanel matches that of U.S. adults. The geo-demographic dimensions used for weighting the entire KnowledgePanel include gender, age, race, ethnicity, education, census region, household income, home ownership status, and metropolitan area status.

Using the above weights as the measure of size (MOS) for each panel member, in the next step a

49 For example, while the survey does weight to match the race and ethnicity of the entire U.S. adult population, there is evidence that the Hispanic population in the survey is somewhat more likely to speak English at home than the overall Hispanic population in the United States. Sixty-three percent of Hispanics who responded to the SHED speak Spanish at home, versus 73 percent of the overall Hispanic population who do so based on the American Community Survey. See table B16006 at factfinder.census.gov.

50 David S. Yeager, Jon A. Krosnick, LinChiat Chang, Harold S. Javitz, Matthew S. Levendusky, Alberto Simpser, and Rui Wang, "Comparing the Accuracy of RDD Telephone Surveys and Internet Surveys Conducted with Probability and Non-Probability Samples," *Public Opinion Quarterly* 75, no. 4 (2011): 709–47.

Box 4. Spanish-Language Sample

In the main SHED, the interview questions are all asked in English. People who are less fluent in English may, therefore, be less represented in the survey. To understand financial well-being among non-English speakers, in 2017 a subset of SHED questions were asked in Spanish to 260 additional respondents from GfK's Spanish-language panel ("Spanish-language sample").[1]

[1] A separate set of survey weights is used to combine this Spanish-language sample of Hispanics with the English-language SHED sample of Hispanics in the main survey report. With the weights, the combined responses are representative of the U.S. population.

Table A indicates some differences in the demographic characteristics of the two groups of Hispanic respondents. Hispanics interviewed in Spanish, on average, have lower incomes, less education, and are older than those interviewed in English. As discussed in the main report, ethnicity, income, education, and age are all used in weighting the survey data to be representative of the U.S. population. Therefore, by design, the combined sample of Hispanic respondents and the main SHED sample provide very similar estimates of the share of Hispanic adults with each of these demographic characteristics.

Table A. Demographic characteristics of Hispanic respondents to SHED (by survey language)
Percent

Characteristic	Experimental survey of Hispanics (English and Spanish interviews)			Main survey sample of Hispanics (English interviews only)
	English-interview Hispanics	Spanish-interview Hispanics	Combined Hispanics	
Family income				
Less than $40,000	48	56	51	51
$40,000–$100,000	33	36	34	33
Over $100,000	18	7	14	16
Education				
High school degree or less	45	69	53	50
Some college or associate degree	36	19	30	33
Bachelor's degree or more	19	12	17	17
Age				
18–29	33	11	25	26
30+	67	89	75	74

Note: The English-language Hispanics weighted to match the Hispanic population represents the sample and weights used throughout this report.

(continued on next page)

probability proportional to size (PPS) procedure is used to select study specific samples. Since this survey includes a lower-income oversample, the departures caused by this oversample from an EPSEM design are corrected by adjusting the corresponding design weights accordingly with the Current Population Survey benchmarks serving as reference points.

Once the sample has been selected and fielded, and all the study data are collected and made final, a post-stratification process is used to adjust for any survey non-response as well as any non-coverage or under- and over-sampling resulting from the study specific sample design. The following variables were used for the adjustment of weights for this study: age, gender, race, ethnicity, census region, residence in a metropolitan area, education, and household income. Demographic and geographic distributions for the noninstitutionalized, civilian population age 18 and over from the March Current Population Survey are used as benchmarks in this adjustment.

Although weights allow the sample population to match the U.S. population based on observable characteristics, similar to all survey methods, it remains possible that non-coverage or non-response results in differences between the sample population and the U.S. population that are not corrected using weights.

Box 4. Spanish-Language Sample—*continued*

The Hispanic respondents in the Spanish-language sample and the SHED sample also differ in their responses to survey questions (table B). Hispanics in the Spanish-language sample report lower levels of economic well-being and more financial distress than Hispanics who took the main survey in English. For example, 61 percent of Hispanics in the Spanish-language sample say they are at least doing okay financially, compared to 69 percent of those interviewed in English. Similarly, 47 percent of Spanish-language Hispanics would be able to pay all of their current month's bills if faced with an emergency $400 expense, versus 55 percent of Hispanics interviewed in English. However, despite these differences, after weighting based on observable characteristics, the Hispanic sample who took the survey in English appears to reflect the Hispanic population as a whole across these measures.

Some differences between the English-language and combined samples remain when using survey weights. The share engaging in online gig work is somewhat lower for the combined sample of Hispanic respondents than is seen among just the SHED sample of Hispanic respondents who took the survey in English, whereas the share having problems with landlords and the share lacking a bank account are somewhat higher. As a result, readers of this report should keep in mind the potential for additional differences between the largely English-speaking population completing this survey and those with other language preferences that are less likely to be represented.

Table B. Selected survey measures among Hispanic respondents to SHED (by survey language)
Percent

Characteristic	Experimental survey of Hispanics (English and Spanish interviews)			Main survey sample of Hispanics (English interviews only)
	English-interview Hispanics	Spanish-interview Hispanics	Combined Hispanics	
At least doing okay financially	69	61	66	66
Dealing with emergencies				
Pay $400 emergency using cash or equivalent	47	45	46	45
Could pay current month's bills in-full after $400 expense	55	47	52	52
Gig economy employment				
Online gig activities	18	12	16	19
Offline gig activities	25	27	26	25
Any gig work	36	35	36	36
Rental experience				
Any challenge getting landlord to fix problems in rental unit (among renters)	24	33	28	25
Bank status				
Unbanked	11	23	15	11
Underbanked	25	26	25	26

Note: The English-language Hispanics weighted to match the Hispanic population represents the sample and weights used throughout this report.

www.federalreserve.gov
0518