

# Rural Migration News

## Blog 327

JULY 2023

### Foreign Workers and U.S. Labor Supply

Labor markets are physical or virtual places and spaces where employers find workers and workers find jobs. Employers and workers can meet physically, as with day labor markets where workers congregate to be hired by contractors for the day, or online as with internet platforms and zoom interviews. Job search is costly for workers, and hiring and training workers is expensive for employers, so employers and workers invest to ensure good and persisting worker-job matches.

The foreign-born share of US workers reached 30 million or 18 percent of the 165 million strong labor force in 2022, the highest on record. Immigrant workers include foreign-born residents with many legal statuses, including naturalized US citizens, legal immigrants, unauthorized workers, and temporary residents, workers, and students who are allowed to work. Asylum seekers can work after 150 days as can foreigners with a Temporary Protected Status in the US.

An estimated 7.5 million or 71 percent of the 10.5 million unauthorized foreign-born persons in the US in 2022 were in the labor force.

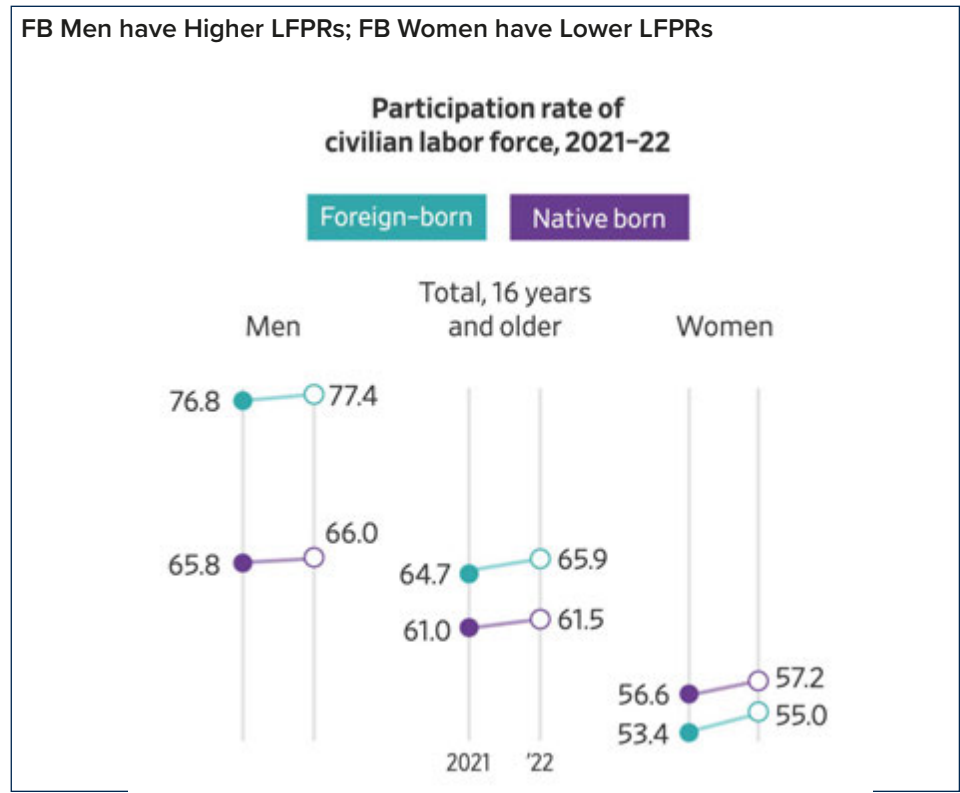
The labor force participation rate (LFPR) is the share of persons 16 and older who are employed or seeking work, so unemployed workers are considered to be in the labor force. Foreign-born men have higher LFPRs than US-born men, while foreign-born women have lower LFPRs than US-born women. There are several reasons for these gaps, including a smaller share of

65+ foreign born men and a higher share of foreign-born women with young children.

Foreign-born workers have lower unemployment rates than native-born workers in the US, the opposite of what occurs in European countries. The unemployment rate of foreign-born workers in the US was 3.4 percent in 2022, lower than the 3.7 percent of US-born workers. Unemployment rates are lowest for prime-age 45-54-year old workers and those with college degrees, and lower for Asians than for other racial and ethnic groups.

Foreign-born workers are disproportionately concentrated at the extremes of the education distribution, meaning that a higher share of foreign-born workers have very low and very high levels of schooling. As a result, foreign-born workers are concentrated in different occupations and have lower weekly earnings than US-born workers.

Foreign-born workers are less likely to be in management and



professional occupations, 36 percent versus 45 percent for the US-born in 2022, and more likely to be in agriculture, construction, and similar occupations, 14 percent versus eight percent. A third of foreign-born workers, versus a quarter of US-born workers, earn less than \$35,000 a year.

Foreign-born workers earned 87 percent as much as US-born workers in 2022, a median \$945 a week versus almost \$1,100 for US-born workers, with a larger gap for men than for women. The gap between foreign-born and US-born workers is larger for older than for younger workers, and for foreign-born and US-born workers with less than college degrees. Foreign-born workers with college degrees earn more than US-born workers with college degrees, almost \$1,600 versus \$1,500 a week.

## Supply

People decide whether to seek jobs. Economic analysis divides the time available to everyone into work and leisure and assumes that rising wages have offsetting effects on the hours that people work. Rising wages encourage people to work more hours because they earn more, but rising wages also make people richer, and richer people are assumed to desire more leisure.

This standard labor-leisure model has the competing goods of leisure and income on the X- and Y-axes. Economists assume that individuals gain utility from both leisure and earnings, and that they are indifferent between very high earnings and little leisure at A or another point on the U0 indifference curve that has lower earnings and more leisure. Maximum utility or satisfaction is at P on U\*, which generates \$500 in earnings and provides 70 hours or leisure or 40 hours of work. If earnings rise, the cost of leisure in

**Employment Status of the Foreign-Born and Native-Born Populations by Selected Characteristics, 2021–2022 Annual Averages**  
(Numbers in Thousands)

| Characteristic   | 2021                                 |                      |                    |          |            |                                      | 2022                 |                    |          |            |       |     |  |
|--|--------------------------------------|----------------------|--------------------|----------|------------|--------------------------------------|----------------------|--------------------|----------|------------|-------|-----|--|
|  | Civilian noninstitutional population | Civilian labor force |                    |          |            | Civilian noninstitutional population | Civilian labor force |                    |          |            |       |     |  |
|  |                                      | Total                | Participation rate | Employed | Unemployed |                                      | Total                | Participation rate | Employed | Unemployed |       |     |  |
| <b>TOTAL</b>   |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| Total, 16 years and over.....                            | 261,445                              | 161,204              | 61.7               | 152,581  | 8,623      | 5.3                                  | 263,973              | 164,287            | 62.2     | 158,291    | 5,996 | 3.6 |  |
| Men.....   | 126,487                              | 85,505               | 67.6               | 80,829   | 4,676      | 5.5                                  | 128,617              | 87,421             | 68.0     | 84,203     | 3,218 | 3.7 |  |
| Women.....   | 134,958                              | 75,699               | 56.1               | 71,752   | 3,948      | 5.2                                  | 135,356              | 76,866             | 56.8     | 74,089     | 2,778 | 3.6 |  |
| <b>FOREIGN BORN</b>                                      |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| Total, 16 years and over.....                            | 43,226                               | 27,987               | 64.7               | 26,431   | 1,556      | 5.6                                  | 45,150               | 29,755             | 65.9     | 28,737     | 1,017 | 3.4 |  |
| Men.....   | 20,922                               | 16,069               | 76.8               | 15,245   | 823        | 5.1                                  | 21,998               | 17,031             | 77.4     | 16,475     | 556   | 3.3 |  |
| Women.....   | 22,304                               | 11,918               | 53.4               | 11,186   | 733        | 6.1                                  | 23,152               | 12,724             | 55.0     | 12,262     | 462   | 3.6 |  |
| <b>Age</b>   |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| 16 to 24 years.....                                      | 3,174                                | 1,683                | 53.0               | 1,521    | 161        | 9.6                                  | 3,409                | 1,846              | 54.2     | 1,691      | 155   | 8.4 |  |
| 25 to 34 years.....                                      | 6,987                                | 5,397                | 77.2               | 5,099    | 298        | 5.5                                  | 7,255                | 5,671              | 78.2     | 5,484      | 187   | 3.3 |  |
| 35 to 44 years.....                                      | 9,419                                | 7,472                | 79.3               | 7,118    | 354        | 4.7                                  | 9,898                | 7,918              | 80.0     | 7,678      | 240   | 3.0 |  |
| 45 to 54 years.....                                      | 8,949                                | 7,125                | 79.6               | 6,762    | 363        | 5.1                                  | 9,353                | 7,570              | 80.9     | 7,628      | 212   | 2.8 |  |
| 55 to 64 years.....                                      | 7,020                                | 4,798                | 68.3               | 4,506    | 292        | 6.1                                  | 7,338                | 5,128              | 69.9     | 4,963      | 166   | 3.2 |  |
| 65 years and over.....                                   | 7,678                                | 1,512                | 19.7               | 1,425    | 87         | 5.8                                  | 7,897                | 1,621              | 20.5     | 1,564      | 58    | 3.6 |  |
| <b>Race and Hispanic or Latino ethnicity<sup>1</sup></b> |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| White non-Hispanic or Latino.....                        | 7,555                                | 4,545                | 60.2               | 4,310    | 234        | 5.2                                  | 7,915                | 4,768              | 60.2     | 4,608      | 160   | 3.4 |  |
| Black non-Hispanic or Latino.....                        | 4,000                                | 2,777                | 69.4               | 2,579    | 198        | 7.1                                  | 4,245                | 3,086              | 72.7     | 2,939      | 147   | 4.8 |  |
| Asian non-Hispanic or Latino.....                        | 10,915                               | 6,994                | 64.1               | 6,651    | 344        | 4.9                                  | 11,354               | 7,345              | 64.7     | 7,168      | 178   | 2.4 |  |
| Hispanic or Latino ethnicity.....                        | 20,170                               | 13,308               | 66.0               | 12,545   | 763        | 5.7                                  | 21,048               | 14,168             | 67.3     | 13,650     | 519   | 3.7 |  |
| <b>Educational attainment</b>                            |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| Total, 25 years and over.....                            | 40,052                               | 26,304               | 65.7               | 24,909   | 1,395      | 5.3                                  | 41,741               | 27,908             | 66.9     | 27,047     | 862   | 3.1 |  |
| Less than a high school diploma.....                     | 8,972                                | 5,037                | 56.1               | 4,708    | 330        | 6.5                                  | 9,076                | 5,100              | 56.2     | 4,878      | 222   | 4.4 |  |
| High school graduates, no college <sup>2</sup> .....     | 10,497                               | 6,530                | 62.2               | 6,115    | 414        | 6.3                                  | 10,990               | 7,109              | 64.7     | 6,874      | 235   | 3.3 |  |
| Some college or associate degree.....                    | 6,129                                | 4,071                | 66.4               | 3,849    | 222        | 5.4                                  | 6,391                | 4,328              | 67.7     | 4,189      | 139   | 3.2 |  |
| Bachelor's degree and higher <sup>3</sup> .....          | 14,455                               | 10,666               | 73.8               | 10,237   | 429        | 4.0                                  | 15,284               | 11,371             | 74.4     | 11,105     | 266   | 2.3 |  |
| <b>NATIVE BORN</b>                                       |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| Total, 16 years and over.....                            | 218,219                              | 133,217              | 61.0               | 126,150  | 7,067      | 5.3                                  | 218,823              | 134,533            | 61.5     | 129,554    | 4,979 | 3.7 |  |
| Men.....   | 105,565                              | 69,436               | 65.8               | 65,584   | 3,852      | 5.5                                  | 106,619              | 70,390             | 66.0     | 67,727     | 2,963 | 3.8 |  |
| Women.....   | 112,654                              | 63,781               | 56.6               | 60,566   | 3,215      | 5.0                                  | 112,204              | 64,143             | 57.2     | 61,827     | 2,316 | 3.6 |  |
| <b>Age</b>   |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| 16 to 24 years.....                                      | 34,088                               | 19,005               | 55.8               | 17,153   | 1,851      | 9.7                                  | 34,548               | 19,246             | 55.7     | 17,687     | 1,559 | 8.1 |  |
| 25 to 34 years.....                                      | 37,764                               | 31,273               | 82.8               | 29,479   | 1,794      | 5.7                                  | 38,913               | 31,054             | 84.1     | 29,816     | 1,238 | 4.0 |  |
| 35 to 44 years.....                                      | 32,423                               | 26,848               | 82.8               | 25,616   | 1,232      | 4.6                                  | 33,101               | 27,753             | 83.8     | 26,946     | 806   | 2.9 |  |
| 45 to 54 years.....                                      | 30,566                               | 24,752               | 81.0               | 23,792   | 960        | 3.9                                  | 30,641               | 24,871             | 81.2     | 24,295     | 756   | 2.3 |  |
| 55 to 64 years.....                                      | 34,865                               | 22,252               | 63.8               | 21,407   | 845        | 3.8                                  | 34,807               | 22,332             | 64.2     | 21,798     | 534   | 2.4 |  |
| 65 years and over.....                                   | 48,513                               | 9,088                | 18.7               | 8,703    | 385        | 4.2                                  | 48,813               | 9,276              | 19.0     | 9,011      | 266   | 2.9 |  |
| <b>Race and Hispanic or Latino ethnicity<sup>1</sup></b> |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| White non-Hispanic or Latino.....                        | 154,513                              | 93,561               | 60.6               | 89,674   | 3,886      | 4.2                                  | 154,438              | 94,061             | 60.9     | 91,292     | 2,769 | 2.9 |  |
| Black non-Hispanic or Latino.....                        | 27,576                               | 16,390               | 59.4               | 14,939   | 1,451      | 8.9                                  | 27,612               | 16,698             | 60.5     | 15,436     | 1,062 | 6.4 |  |
| Asian non-Hispanic or Latino.....                        | 5,047                                | 3,159                | 62.6               | 2,993    | 166        | 5.2                                  | 5,019                | 3,207              | 63.9     | 3,091      | 116   | 3.6 |  |
| Hispanic or Latino ethnicity.....                        | 24,733                               | 16,115               | 65.2               | 14,884   | 1,232      | 7.6                                  | 25,123               | 16,433             | 65.4     | 15,650     | 783   | 4.8 |  |
| <b>Educational attainment</b>                            |                                      |                      |                    |          |            |                                      |                      |                    |          |            |       |     |  |
| Total, 25 years and over.....                            | 184,131                              | 114,213              | 62.0               | 108,997  | 5,216      | 4.6                                  | 184,275              | 115,286            | 62.6     | 111,866    | 3,420 | 3.0 |  |
| Less than a high school diploma.....                     | 11,031                               | 3,970                | 36.0               | 3,556    | 414        | 10.4                                 | 10,713               | 3,888              | 36.3     | 3,620      | 268   | 6.9 |  |
| High school graduates, no college <sup>2</sup> .....     | 52,736                               | 28,465               | 54.0               | 26,706   | 1,759      | 6.2                                  | 52,717               | 28,810             | 54.6     | 27,623     | 1,186 | 4.1 |  |
| Some college or associate degree.....                    | 50,526                               | 31,617               | 62.6               | 30,006   | 1,611      | 5.1                                  | 50,149               | 31,316             | 62.4     | 30,334     | 982   | 3.1 |  |
| Bachelor's degree and higher <sup>3</sup> .....          | 69,838                               | 50,162               | 71.8               | 48,729   | 1,432      | 2.9                                  | 70,697               | 51,273             | 72.5     | 50,289     | 984   | 1.9 |  |

terms of forgone wages increases, which encourages people to work more, the substitution effect. But people want more leisure at higher incomes, the income effect. Higher wages such as a 1.5x wage premium for overtime work tend to induce more hours of work, meaning that the substitution effect is larger than the income effect.

As earnings rise over years and decades, the income effect becomes larger, which explains why average hours of work per week and per year have fallen in the US and other industrial countries over time. The result is a backward-bending supply curve, with hours of work first increasing as earnings rise and eventually decreasing as the income effect outweighs the substitution effect.

Labor-leisure choice models have several policy dimensions, including whether welfare payments reduce hours of work due to income and substitution effects and whether tax cuts “pay for themselves” as the substitution effect of higher after-tax earnings generates more work, income, and tax revenues. Cash welfare payments reduce hours of work, but the size of this negative effect on hours worked is debated, while tax cuts have so far not paid for themselves in increased tax revenues.

Welfare payments are normally provided on a sliding scale, so that someone who does not work at all receives a basic grant of say \$3,000 a month. This benefit is reduced as people work and earn.

Suppose the benefit is reduced by \$0.50 for each dollar earned, so that someone who works 150 hours at \$20 an hour has \$3,000 in earnings and receives \$1,500 a welfare payment, half of the maximum welfare grant. The worker now has a higher income of \$4,500 a month, but less incentive to work 150 hours a month because the cash payment reduced the effective wage rate to \$10 an hour.

The incentive to work less when welfare provides cash payments that are reduced as worker earnings rise is the rationale for the Earned Income Tax Credit. The EITC gives workers with earnings and children payments that are proportional to their earnings. For example, a worker with dependents could earn \$30,000 a year at \$20 an hour for 1,500 hours of work. If she gets a \$5,000 in EITC payment, the effective wage \$23 rather than \$20.

The argument that tax cuts pay for themselves is a belief that the substitution effect outweighs the income effect for high earners. The marginal tax rate on high earners is often 40 percent or more in federal

and state income taxes. Reducing income tax rates, this argument runs, can generate more tax revenue because people will work and earn more, generating more tax revenues.

### Trends

Labor supply has several dimensions, including whether to work, how many hours to work, and how much to invest in education and skills. Northern European countries have the highest LFPRs but US workers are employed more hours each year than most Europeans and have more years of schooling.

LFPRs have been trending down for men and up for women. Since the end of WWII, the overall US labor force participation rate ranged from 60 percent to a peak of 67 percent in the 1990s, and fell to 60 percent during covid before rebounding to 63 percent in 2022.

The major change over the past half century is the rise in the female labor force participation, from less than 40 percent in the 1960s to 60 percent in the early 2000s, as more married women with children worked for wages. Male labor force participation declined from over 80 percent in the 1950s to less than 70

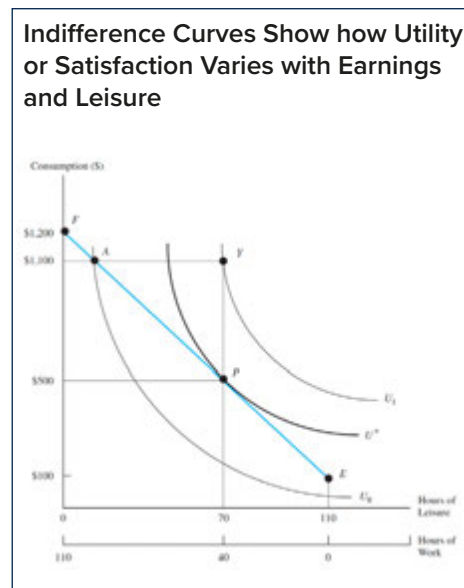
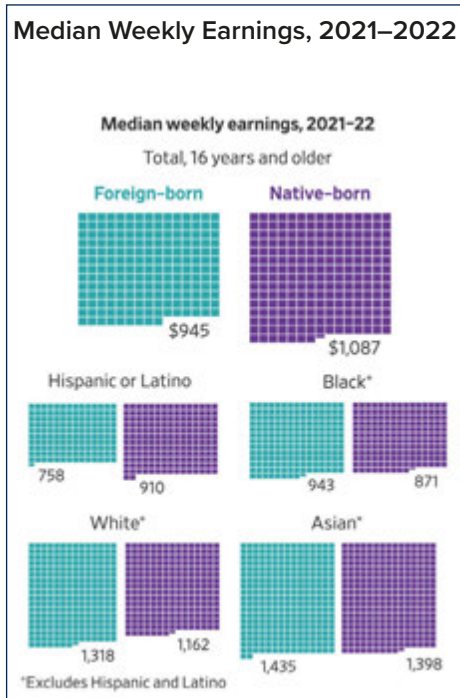
percent since the 2010s. A quarter of married women worked in 1950, versus over 60 percent in 2010.

Why is male labor force participation declining, especially for men without college degrees? One reason may be that, with more women working, more men are staying home for child and elder care. Other reasons include safety net programs for those with disabilities, the rising share of men in prison or with convictions that make it hard for them to find regular jobs, and opportunities for men to earn off-the-books or informal work such as drug dealing.

Internal mobility has declined, as when workers who are laid off in areas where they own homes elect to retire early rather than move to areas that offer jobs but also have expensive housing. Men without degrees may lose manufacturing jobs to automation or offshoring and decide that they are “too old” to start over in a lower-wage service job or acquire the education and credentials needed to find jobs in expanding sectors such as health care.

Prime-aged persons are men and women aged 25 to 54. Their labor force participation rate was the same as the overall labor force participation during the 1990s, but has been higher since the 2010s as the US population aged and baby boomers retired.

More women joined the labor force in all industrial countries, but female labor force participation among prime-aged US women stabilized at 75 percent since the 1990s while continuing to increase in other industrial countries to over 80 percent. Explanations for the lower share of US prime-aged women in the labor force include high child care costs and the need to care for elderly relatives.

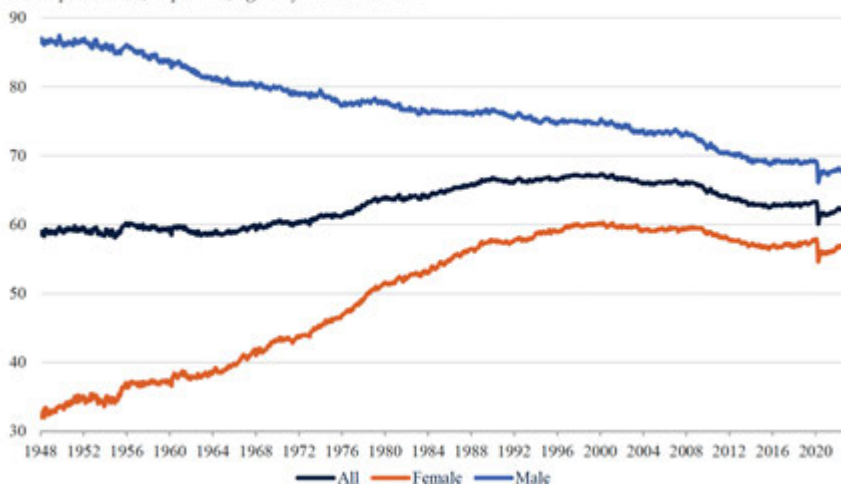




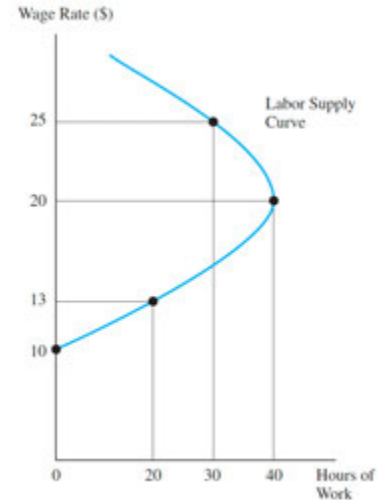
Since WWII, Women's Labor Force Participation Rose and Men's Declined

**Figure 6-1. U.S. Labor Force Participation Rate, 1948–2022**

Participation rate, in percent, age 16 years and above



The Labor Supply Curve is Backward Bending at Higher Wages

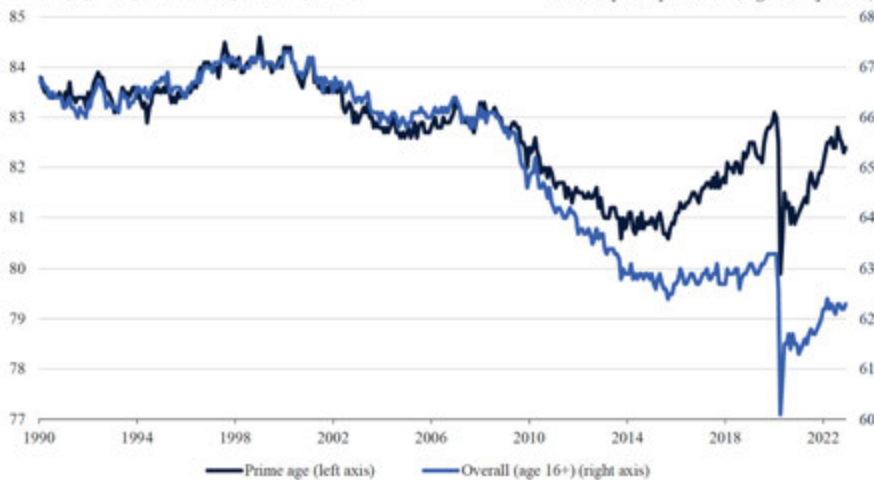


The Prime-Aged LFPR has Been Higher than the Overall LFPR as Baby Boomers Retire

**Figure 6-3. Prime-Age versus Overall Labor Force Participation, 1990–2022**

Prime-age participation rate, age 25–54 (percent)

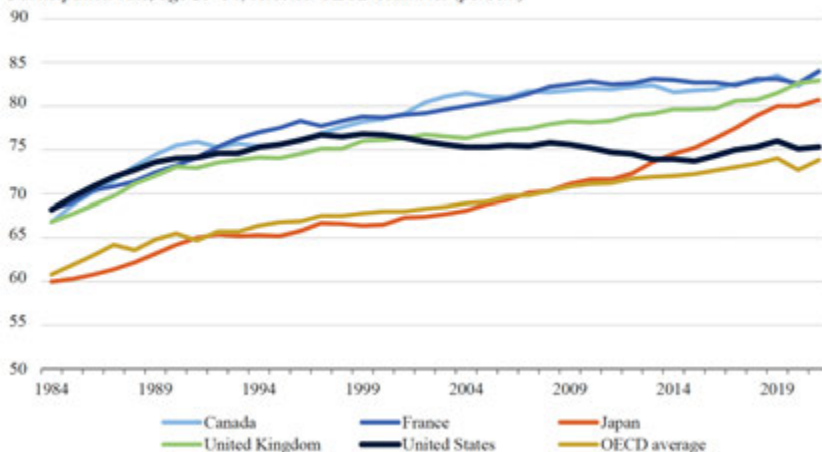
Overall participation rate, age 16+ (percent)



The Prime-Aged Female LFPR is Lower in the U.S. than in Other Rich Countries

**Figure 6-5. Prime-Age Female Labor Force Participation, 1984–2021**

Participation rate, age 25–54, selected OECD countries (percent)



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