In December, the Washington, D.C., City Council took a historic vote to require paid family leave for employees working in the District, joining California, New Jersey, Rhode Island, and New York as part of a movement to expand such benefits. The debate was fierce — some business owners objected to a new payroll tax the measure would impose — but the Council voted in the end to enact a compromise bill granting leave up to eight weeks. Lauren Kunis, a D.C. resident and mother of a toddler, summed up the sentiment of the bill’s supporters as she told the Washington Post the legislation would have helped her in the “scary and vulnerable” time right after childbirth, noting that her husband had to return to work immediately so they could make ends meet. “It forced us into gender roles we never believed in,” she said. “He went to work and I stayed home.”

The District and those four states are outliers in the United States, which has no federally mandated paid leave. To its supporters, the push for paid leave is primarily about securing better work-life balance. But it has implications for a surprising trend affecting the entire U.S. economy: the declining share of women in the labor force. This drop is prompting economists to ask just how much paid leave and other family support policies can help women stay in the job market over the long run.

The puzzle: American women have long been near the top of global rankings in educational achievement, work-force participation, and career advancement. But since 2000, women who are between their student years and retirement are increasingly dropping out of the labor force, even as more and more complete college. Just as notable is that the opposite is happening with working-age women around the world, whether they’re in prosperous economies with generous family support programs, nations hard-hit by recession, or countries with more traditional notions of gender roles. In terms of rank, American women now have a middling labor participation rate among developed nations despite their gains in education — and that rate is slipping while other nations’ rates are rising. To economists, this is a surprise because rising education is strongly correlated with labor force participation. Moreover, researchers are increasingly focused on the broader trend of stagnant or declining participation by both men and women in the United States despite the economic recovery since 2009.

The American Exception
Just how different is the United States from the rest of the world? The Organization for Economic Co-operation and Development (OECD), a 35-nation club of industrialized economies, estimates that the average labor force participation rate for prime-age women (defined as aged 25-64) among its members jumped from 62 percent to 68 percent between 2000 and 2015. But in the United States, it fell from 73 percent to 70 percent. This may seem like a blip, but it happened while the percent of prime-age American women with a college degree spiked from 36 percent to 47 percent — a jump so large that it’s now about 5 percentage points higher than that for men. (See charts.) The labor force participation rate for American women is also striking in that it lags the OECD leaders in female labor force participation by 10 percentage points or more.

“In many other nations, we see a rise in women’s employment that is driven by working mothers, while in the United States, that’s been static,” says OECD economist Olivier Thévenon. “And American women who are highly educated aren’t participating in the labor force to the same degree that women elsewhere are.”

To be sure, the OECD average rate masks the fact that some countries have made a big leap from a low baseline (Spain went from 55 percent to 75 percent), while others with an already high rate posted a smaller gain, such as Norway (79 percent to 81 percent). Still, taken together, these changes cap a global historic shift of women moving...
out of the home and into the formal labor market. As recently as 1980, for example, the OECD average rate for prime-age women was only 54 percent.

What's particularly interesting to economists about the U.S. decline is that it's concentrated among women in their 30s and 40s. In fact, the participation rate for U.S. women aged 55-64 has jumped since 2000, from 52 percent to 59 percent, a trend also seen among older women in many other countries. But it's dropped by more than offsetting amount for those aged 25-54, whereas it's risen for that age group globally. The fact that this drop is affecting U.S. women in their childbearing and child-raising years has led many observers to conclude that the explanation lies in policy: The lack of paid family leave and subsidized day care for very young children (from newborn to age 3) may be a factor in inducing more American women to drop out of the labor force — while the expansion of those very benefits abroad may have helped their international counterparts stay in. Indeed, in a 2014 report, the Pew Research Center found an increase in the share of American mothers who stay at home, from 23 percent in 1999 to 29 percent in 2012.

Who's In, Who's Out?
To economists, labor force participation has a very specific meaning. It includes both full-time and part-time workers, as well as those who are not working but are looking for jobs. Full-time students and retirees, as well as stay-at-home parents and disabled people who aren't actively looking for work, are considered out of the labor force, as are people who are so discouraged that they stopped job hunting. In terms of women’s participation, a mother on leave is still considered in the labor force if a return to her job is protected (whether leave is paid or not). But if she formally quits her job to take care of her child, she's considered out of the labor force.

Sometimes the labor force participation rate can fall for demographic reasons, like a rising share of retirees or of young people who continue studies before starting work. But if it affects people, whether men or women, in their prime working years especially, it could have important macroeconomic consequences. Among other things, lower labor force participation often means slower GDP growth (unless productivity jumps), reduced consumption, and less Social Security and tax revenue. Long breaks from the labor force also make it more likely that skills erode. Economists are now focusing more research on why U.S. prime-age labor force participation rates for both men and women have not recovered along with the economy since 2009.

Does Paid Leave Matter?
Paid family leave is one of the major policy differences between the United States and the rest of the OECD. The United States is the only OECD member that hasn’t mandated this benefit at a national level, whereas almost every other member has expanded it in the past two decades, usually to one to three years. Even the Family and Medical Leave Act of 1993 (FMLA), which established the requirement of three months of unpaid leave, excludes a large share of workers — about 40 percent — because it exempts firms smaller than 50 employees, among other restrictions.

Economists who study the relationship between paid leave and labor force participation have generally found a modest, but positive, correlation. On the one hand, employers may view paid leave as a net liability because it may make more workers want to take a longer absence rather than return to work soon and because it may be financed (as in Washington, D.C.) by a tax on firms. But international studies suggest that paid leave induces workers to stay at their jobs rather than switching employers or moving in and out of the work force. This, in turn, builds labor force attachment.

How has this played out in the United States? California’s paid-leave policy, now going on 13 years, provides a break of up to six weeks at a 55 percent wage-replacement rate, although not all workers take it or are aware of it. But its track record has been getting more attention from researchers. For
example, a report co-authored by the Center for Economic and Policy Research and three university institutes found that the policy has had the largest impact on workers in low-paying jobs, who tend to have little or no benefits; for these parents, job retention rates rose to 83 percent compared to 74 percent for those who took unpaid or no leave. Meanwhile, Tanya Byker, an economist at Middlebury College, has published a study on both the California and New Jersey laws that finds paid family leave lifts female labor force participation by 5 to 8 percentage points in the months following birth — with a stronger effect on women without college degrees.

In a study with a broader national sample, Claudia Goldin of Harvard University and Joshua Mitchell of the U.S. Census Bureau compared how long mothers in the 1990s stayed in the labor force following the birth of their first child. Over the course of 10 years, the highest participation rate was found among those who had taken paid leave offered by their employer, followed by those who took unpaid leave, and last, those who quit their jobs after their child's birth. But Goldin and Mitchell also noted these findings aren't clear-cut because a woman could fall into more than one category over those 10 years.

For the time being, however, there is relatively little U.S. data on paid leave to go on, outside of the few states mentioned above. Only one in nine U.S. employers offer paid family leave, so parents tend to use up savings and vacation days to cover costs if they take time off. Many mothers who don't have the finances to cover an unpaid leave return to work quickly, sometimes within days. And women who return to work soon tend to be concentrated in lower-paying, lower-skilled work, and they are more likely to be single. For this reason, many advocates of paid leave argue for it primarily on grounds of reducing inequality.

Minding the Kids
Another major policy divergence is the provision of subsidized day care for infants and toddlers. As with paid leave, this policy has become widespread throughout the developed world except in the United States. Proponents argue it's especially effective at keeping women in the labor force — especially when paired with paid leave — because it substantially reduces the cost of working outside the home. It also provides continuity for a woman's career development and thereby can make her a more valuable worker in the eyes of employers.

On average, an OECD country spends about 0.9 percent of its gross domestic product on subsidized day care for infants and toddlers, although in some cases, such as the Nordic nations and France, this share rises to 2 percent. In the United States, whether at the federal or state level, there is almost no public money at all for day care except some targeted programs for low-income parents, which vary from state to state. In terms of per capita public spending on early child care, the United States ranks near the bottom in the OECD. (This comparison doesn't include cash subsidies or tax credits to offset child care costs, policies that also vary from country to country. In the United States, parents who pay income tax are eligible for a refundable federal tax credit for child care expenses, but only up to $1,000.)

Despite this low ranking on spending, about 30 percent of American infants and toddlers are in day care. But this is a market that is almost entirely private. Research by doctoral student So Kubota of Princeton University has estimated that inflation-adjusted hourly costs of day care have risen by 32 percent since the mid-1990s, while the hours of market-based day care used have fallen by 27 percent (often with informal care provided by family members making up the difference). The effect of this cost increase, he estimated, was a drop of 5 full percentage points in the employment rate for all women, and a 13 percent drop for mothers with children under 5.

As for its effect, subsidized day care and early childhood education tends to have a positive impact on women's labor force participation — even though it alone is not a "sufficient driver," in Thévenon's words. In a study of 18 OECD countries, Thévenon has estimated that about 2.8 percent of the total increase in prime-age women's labor force participation from 1980 to 2007 (that is, a quarter of the total) resulted from the expansion of those policies. Another new paper by Claudia Olivetti of Boston College and Barbara Petrongolo of the London School of Economics has also found that public spending on day care and early childhood education lifted labor force participation rates in the countries that enacted them — and generally, these measures have had a stronger effect than paid leave policies.

The Secular Shifts
Policy debates aside, economists generally agree that even more fundamental economic changes account for a large part of the long-term trend of rising female labor force participation across the globe. In poor and developing countries, women's labor force participation is actually quite low because so many work in agriculture or in small family businesses. Then, as economies industrialize, women drop out as men take a lion's share of manufacturing jobs. Later, as nations become wealthier, education tends to become more widespread for both boys and girls. Educated women, in turn, are much more likely to join the labor force. They also tend to have fewer children, and they have them later, because the opportunity cost of each child rises as well. Another driver that brings women back to work is the shift from manufacturing to services in advanced economies, as these jobs tend to be female dominated. For many countries that used to have very few women working — Southern Europe, Ireland, and Japan, for example — these long-term changes in labor demand, rather than modernizing cultural attitudes per se, can help explain their rising share in the workforce.

In the case of the United States, this boost in women working since the 1970s may also help to explain the modest decrease of married men in the labor force over that time, from 97 percent to 93 percent, according to economists Limor Golan and Usa Kerdunvong of the St. Louis Fed. They found that as more married women join the labor force, this can allow their spouses to either work part
time or take time off, whether to take over more domestic work, spend more time looking for a better-matching job, or go back to school.

The Part-Time Difference

The growth of the service sector also dovetails with another trend: the rise of part-time work. Part-time jobs are much more common in the services sector throughout the world, and these, too, tend to be female dominated. In some nations with high female labor force participation, a large percentage of prime-age women also work part time. But the OECD average — which came to 22 percent of women aged 25-54 who work 30 hours a week or less in 2015 — masks a wide range of part-time rates. In the Nordic countries, they are only in the teens, whereas they reach almost 55 percent in the Netherlands. As for the United States, a direct comparison is not quite exact, because the Bureau of Labor Statistics definition of part time encompasses a broader pool — all women working 35 hours a week or less. In 2015, that share was around 26 percent.

Cornell University economists Francine Blau and Lawrence Kahn, who have studied the impact of policy differences and the rate of part-time work on labor force participation, believe these cross-national comparisons are telling. In a 2013 paper, they compared an estimate of part time incidence in the United States, harmonized for the OECD’s definition (30 hours a week or less), with that in 16 other OECD countries. By this measure, they found that about 13 percent of prime-age American women worked part time in 2010, compared to 26 percent of their international sample, suggesting that higher labor force participation rates outside the United States may be inflated in part by a higher incidence of women working part time. The paper did conclude that policy differences — including parental leave and part-time policies, as well as public spending on child care — could account for some of the gap between the rate for American women and women elsewhere, by about 29 percent. But they also noted more than half of the employment gains for women outside the United States came through part-time work.

Why does this matter? To be sure, some women chose part-time work as the more suitable balance at certain stages of their lives. But this issue is important to labor economists because part-time jobs are less likely to lead to career advancement and better pay.

“Part-time work is important and positive in that it builds greater labor-force attachment” says Blau. “But it’s not necessarily a good channel for moving up. It can keep women trapped in secondary positions.”

Goldin and Mitchell also cite the incidence of part-time work as a factor to consider. In a recent paper, they estimated what the drop in the international ranking of U.S. female labor force participation would look like if it were just confined to women aged 25-54 working in full-time jobs. According to the OECD, the U.S. ranking fell from sixth place to 17th from 1990 to 2014. But Goldin found that if the rankings were adjusted to account for only full-time jobs, the U.S. drop would be far less — from fourth to eighth.

Meanwhile, Blau and Kahn have also found that American women are not just more likely to hold full-time work but are twice as likely to hold managerial positions than were women in the 16 other OECD countries compared in their sample; American women are also more likely to work in traditionally male professions. One possible reason, they suggest, is that employers are less likely to discriminate against female employees if they think the risk of that employee taking a long leave or switching to part-time work is low.

Lessons Learned Abroad

In a recent paper, the OECD’s Thévenon noted that the question of quantifying policy impacts is a complicated one given the great variation of approaches across countries. Equally challenging is that many of these policies’ effects tend to interact with each other. For example, a government can offer a long or generous provision of paid leave and a robust job protection, but if the day care provision is modest or if the hours of day care offered per day are limited, a mother may still be inclined to stay at home. The comprehensiveness of day care may also affect whether a woman chooses full-time or part-time work. In general, though, the countries that tend to post the highest labor force participation rates for women — the Nordic countries and France — also tend to provide workers with the most generous leave and day care policies, and the effects of these two policies tend to magnify each other in their impact on labor force participation. They also have a higher full-time female workforce than other countries. In the United Kingdom and other English-speaking countries, by contrast, less public money is spent on child care, but leave policies are still generous. There tends to be more labor market flexibility and more part-time work. But mothers tend not to return to full-time work until children are older. This leads to more stratification between high-paying male-dominated jobs and lower-paying female-dominated ones.

The Disappearing “Hump”

Goldin and Mitchell have been looking at this debate from a different angle: What if the drop-off of U.S. women in the labor force is a temporary phenomenon? Their paper concluded that the rise of older women working has fundamentally changed the traditional life cycle model of employment for women. The pattern used to be a “hump” — more and more women would work as they entered their 30s and 40s, then they would gradually leave the labor force as they approached retirement age. But increasingly, that “hump” is flattening out: Among younger generations, more women are working in their 50s and 60s than earlier generations did once they reached their later years, even if they dropped out of the labor force in their 30s and 40s.

continued on page 30
The merger agreement called for J.P. Morgan and Co. to manage International Harvester for 10 years, but when the McCormick family wrested control of the company away from the other partners in 1912, Cyrus Jr. reasserted the legend to help fend off federal antitrust charges. The company never got Cyrus Sr.’s image printed on currency, but a depiction of a mid-19th century reaper graced the back of the Federal Reserve’s first $10 note in 1914.

**Entrepreneurial Power**

Separating fact from fiction in the Cyrus McCormick legend is difficult — if not impossible — because there are no contemporary accounts of what happened at Walnut Grove during the harvest of 1831. Most of that early history is based on the recollections of Cyrus himself and other highly partisan participants and observers — many of them taking sides (sometimes switching sides) in patent disputes and the McCormick family feud.

But based on overlapping information from sources cited by both sides of the family, it seems likely that Cyrus and Robert both contributed to the McCormick reaper of 1831. And so did their slave, Jo Anderson, and so did a local blacksmith, John McCown. It also seems possible that Cyrus and Robert obtained knowledge of previous attempts to develop a practical reaper.

“One thing we know about the evolution of technology in general is that almost never does an important technology come out of the blue,” Hounshell says. “There are always precedents. There are always theories that lead up to a breakthrough invention.”

The more important question, according to Hounshell, is who supplied the entrepreneurial power that brought the reaper into common use? And the answer is clearly Cyrus McCormick.

---

**Readings**


---

**WHY AREN’T MORE WOMEN WORKING? continued from page 14**

One reason for this, they wrote, is that the most robust predictor of whether a woman will return to work late in life is whether she had work experience early in her career. So the fact that labor force participation is high for young women — and that more and more of these women are college educated — suggests that, over time, they will return to the workforce when they are older.

Whether — or how much — diminished female labor force participation is a drag on U.S. growth is something economists will continue to debate. In a 2015 report, the OECD estimated that if American women caught up to men in this respect by 2025, this could increase GDP growth by 0.5 percentage point a year. But many scholars caution that, on the other side of the ledger, it’s hard to quantify the economic contribution of unpaid work such as care-taking and household chores that is done by people not in the labor force. Accordingly, such estimates may not be clear-cut. Blau is among those, and she cautions that the question of economic impact isn’t a “strictly mechanical” one.

“The broader question is whether people with skills and education are contributing to the economy as much as they can or want,” Blau adds. “You need to factor in the reasons for nonparticipation. And here, the data suggest the United States is not offering the fullest opportunity for women to contribute.”

**Readings**


