A Policymaker’s Guide to Labor Force Participation

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ABSTRACT

Labor force participation among prime-age workers has been declining for many decades. This memo aims to provide policy makers with a useful framework for thinking about the question: “Why are so many people deciding that seeking work isn’t worth it?” After reviewing relevant facts and trends about labor force participation in the United States, we consider plausible explanations for the causes of decline. We identify 20 potential explanations for low and declining labor force participation and ultimately conclude that there is still too much uncertainty about the causes of the decline, and thus it is difficult to quantify the expected benefits of any particular policy change. We conclude with five policy approaches to increase prime-age labor force participation.

1. What is Labor Force Participation?

Every adult falls into one of three categories:

1. Employed
2. Unemployed and looking for work
3. Unemployed and not looking for work

Policymakers are undoubtedly familiar with the unemployment rate, which is simply the number of people in group two, divided by the sum of the people in groups one and two. That is:

\[
\text{unemployment rate} = \frac{\text{(# unemployed and looking)}}{\text{(# employed)} + \text{(# unemployed and looking)}}
\]

We also care how many people are in the labor force, which is the sum of groups one and two. We typically measure this as a rate, as a share of all adults (groups one, two, and three combined), so:

\[
\text{labor force participation rate} = \frac{\text{(# employed)} + \text{(# unemployed and looking)}}{\text{(# all adults)}}
\]

We will discuss it less, but you may also hear discussion of a different rate, the employment-to-population ratio, which is group one, divided by all adults:

\[
\text{employment - to-population ratio} = \frac{\text{(# employed)}}{\text{(# all adults)}}
\]

* Technically, all non-institutionalized civilian adults. This excludes those in nursing homes, the incarcerated, and those serving in the armed forces.
This means that if you are unemployed and looking for work, you are participating and included in labor force participation (LFP), but you are excluded from the employment-to-population ratio.

When labor force participation is declining, more people are out of work and not looking for work—more people are falling into group three above.

Choosing which ages to measure gets a bit tricky. “Adults” are defined as ages 16 and older. Many analysts begin their analysis by looking at prime-age adults: those between 25 and 54 years old. Doing so allows us to partially set aside two age-related dynamics:

- teens and young adults (ages 16 to 24) may choose school over work (and we should want them to do so); and
- adults 55 and older may choose to retire. These retirements may have an indirect effect of increasing demand and wages for prime-age workers, drawing more of them into the labor force.

Policymakers should care about LFP for these two groups, but we begin by trying to understand the simpler problem of what is happening to prime-age adults. By focusing on prime-age workers, we can also worry less about demographic trends, and specifically about the bulge of Baby Boomers in their retirement and near-retirement years. In this paper, we focus on prime-age labor force participation and use LFP as shorthand for that concept.

As women are more likely to take time off from paid work to raise children, some analysts begin by studying trends for prime-age men, then expand their analysis to include prime-age women, and then add back in younger and older workers of both genders.

We offer a caution. Many who participate in public debates about economics gravitate to a discussion of jobs. When thinking about LFP, we recommend you instead start by thinking about people and wages. All three are, of course, related.

2. Important Facts About Labor Force Participation

Four important facts merit the attention of U.S. policymakers.

1. Labor force participation in the United States is low. One in nine prime-age men (11%) are not participating in the labor force. That is a lot of people neither working nor looking for work.
2. **Labor force participation has been falling over a long period of time.**
LFP among men has been falling for 70 years, since the end of World War II. Female LFP grew rapidly from the early 1970s until around 2000. Technological changes raised wages for jobs often held by women, attracting more into the paid workforce. At the same time, societal norms were changing and women were having fewer children. Since about 2000, female LFP has been falling, roughly matching the gradual decline of male LFP.

3. **Labor force participation is now lower in the United States than in other developed economies.** The United States has a lower prime-age labor force participation rate than France, Germany, Spain, Canada, the UK, Japan, Australia, and the EU and G7 averages. At the same time, the United States has a lower structural (long-term) unemployment rate than most other developed economies, and Americans who are employed work more hours than do their developed-economy counterparts.

4. **The declines are unequally distributed.** Of particular importance, LFP is both lower and dropping more for those with fewer skills and less education. As is true for other labor statistics, there are also differences by race and by geography.

3. **Cyclical vs. Structural**

It is important to distinguish between *cyclical* and *structural* changes in LFP. When the overall economy is weak, some unemployed workers may get discouraged and stop seeking work. Measured LFP will then decline. When the labor market picks back up, more and better job opportunities and higher wages will lure some of these **discouraged workers** back into the labor force. Some of the decline in LFP during a recession or slow recovery is therefore temporary or *cyclical* and less of a long-term policy problem.

We concern ourselves here with low and declining **structural** LFP: those not in the labor force even when the overall U.S. economy and labor market are strong, as is true in late 2018.

4. **Is Low Labor Force Participation Bad?**

Leisure time is valuable. Most people prefer leisure to work, and most work to pay the bills. If someone makes a free choice to choose leisure over work, they will not be participating in the labor force, and who are we to second guess them?

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On the other hand, if policy barriers, market failures, or cultural forces are preventing or discouraging a person from seeking work, that’s a problem. Those contributions to low LFP are bad.

In addition,

- LFP is both low and declining more for those with fewer skills and less education. This seems inconsistent with the idea that most of those not participating in the workforce are doing so because they have enough resources to enjoy their leisure time;

- The per-worker tax burdens of financing government expenditures and debt are higher when fewer people are working and paying taxes; and

- We make a value judgment that work is good for people, and that more people working is good for society. More people working strengthens behavioral norms and social cohesion.

While recognizing that not all causes of lower participation are bad, we therefore start with a policy goal of increasing aggregate structural LFP, with a particular emphasis on those with fewer skills or less education.

5. The Core Decision

A person who is physically and mentally capable of working, and who does not participate in the paid workforce, has decided (explicitly or implicitly) that seeking work is not likely to be “worth it,” that he or she is better off not working. When making such a decision, one is comparing the alternatives of working and not. (If they look for work but don’t find it, we would classify them as unemployed and count them as participating, as part of the labor force.)

When we think about this in the aggregate, we want to know “Why are so many people deciding that seeking work isn’t worth it?” Adults don’t participate for a range of different reasons. We will return to those after looking at some aggregate numbers.

6. The Numbers

SNAPSHOT

As of 2016, 81% of all prime-age workers were participating—working or seeking work. We can decompose that into 89% of prime-age men and 74% of prime-age women. That means one in five prime-age workers (one in 11 prime-age men and one in four prime-age women) was neither working nor seeking paid work.
After gender, we think the most interesting and important subgroups are by education level. The chart below illustrates how labor force participation increases as education increases.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>MEN</th>
<th>WOMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree and higher</td>
<td>94%</td>
<td>82%</td>
</tr>
<tr>
<td>Associates degree</td>
<td>92%</td>
<td>80%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>87%</td>
<td>73%</td>
</tr>
<tr>
<td>High school graduate, no college</td>
<td>85%</td>
<td>67%</td>
</tr>
<tr>
<td>Less than a high school diploma</td>
<td>80%</td>
<td>49%</td>
</tr>
</tbody>
</table>

There is a 14-percentage point participation difference between the highest and lowest education subgroups for men, and a staggering 33 percentage point difference for women. One in five male and one in two female high school dropouts is not in the workforce.

### DECLINES OVER TIME

**LFP for prime-age men has declined 8.6 percentage points since its peak in 1956.** About three percentage points of this decline have happened since 2000, although some of that may be a cyclical effect.

We can separate the trends in prime-age female LFP into three time periods.

- It grew from about one-third (35%) in 1948, to one-half (50%) in 1970. That’s about +0.3 percentage points per year.

- From 1970 to 2000, we saw much faster growth, about +1 percentage point per year, to a high of three in four prime-age women (77%) in 2000.

- Since 2000, we have seen a slow decline, similar to that affecting prime-age men, such that female LFP is down two percentage points since 2000.

If male prime-age LFP today matched its 1956 peak rate, 5.4 million more men would be in the workforce. If prime-age female LFP matched its 2000 peak rate, 1.3 million more women would be in the workforce. **Historically low LFP means up to 6.7 million more prime-age Americans could be in the workforce.** That
foregone labor is a loss both for those people and for America as a whole. This is a tremendous ongoing missed opportunity.

There is a startling difference in the declines for different levels of education. The following table shows the declines by education level. Since female LFP increased up until 2000, we look at their decline since that peak.

<table>
<thead>
<tr>
<th>PERCENTAGE POINT DECLINE IN LFP</th>
<th>MEN SINCE 1965</th>
<th>WOMEN SINCE 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced degree</td>
<td>-3</td>
<td>0</td>
</tr>
<tr>
<td>Bachelor's degree and higher</td>
<td>-4</td>
<td>-1</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>-9</td>
<td>-3</td>
</tr>
<tr>
<td>High school graduate or less</td>
<td>-14</td>
<td>-6</td>
</tr>
</tbody>
</table>

The gap between low- and high-education-level LFPs is much wider today than it was 50 years ago.

**INTERNATIONAL COMPARISONS**

Prime-age LFP in the United States is lower than in other developed economies. In recent years, U.S. prime-age LFP fell from 19th to 32nd among the OECD nations. At the same time, those Americans who do work tend to work more hours than their counterparts in other developed economies.

We have yet to see a convincing explanation for this disturbing comparison.

**7. An Uncertain Problem Diagnosis**

Diagnosing the causes of the low level and large decline of LFP is hard for three reasons.

1. Many potential factors can influence an individual's decision not to seek work.
2. Different people make the same decision for different reasons.
3. It appears the relative importance of these factors has changed over time.
We have found a wide range of views from economists and labor market experts attempting to explain why LFP is low, and why it has declined so much. The economists we spoke to agreed that globalization and technological innovation are related to the decline in LFP since the 2000s. However, they disagree on the reasons why workers have dropped out of the labor market altogether instead of taking new, lower paying jobs. We have not yet found anything resembling a consensus among experts to inform our recommendations.

In addition, significant parts of this problem have been insufficiently studied by economists. The most comprehensive analysis, by Abraham and Kearney (2018), examines the decline in the employment-to-population ratio since 2000. We use this measure as a proxy for analyzing causes of the decline of LFP over the same period. Prime-age LFP declined three percentage points between 1999 and 2016, while the employment-to-population ratio declined 4.5 percentage points over the same period. Abraham and Kearney were able to explain about half the decline in employment-to-population since 2000. That nevertheless leaves almost three-fourths of the decline since the end of World War II unexplained.

Policymakers need economists and labor market experts to do similar analysis of the significant LFP declines in the five decades before 2000. Policymakers also need from economists a better understanding of why U.S. LFP is lower and has declined more than in other developed countries.

Our problem diagnosis is therefore uncertain. We offer a combination of our best educated guess about the core explanation and a list of additional plausible hypotheses.

8. Diagnosis

CORE EXPLANATION

Demand for low-skilled, non-college-educated American labor has declined over time, driven by a combination of skill-biased technological change (i.e., automation / robots) and competition from low-wage overseas workers (i.e., trade). Firms have been increasingly substituting machines and foreign labor for American workers, and especially for those workers with fewer skills and/or lower levels of educational attainment.

If long-term labor supply is perfectly inelastic, we would expect the reduced demand for labor would translate over time into lower real wages and no change in labor force participation.
This reduced demand combines with supply-side limitations that cause these workers to either be unable to find a new job, or unwilling to take the new, possibly lower wage, job. It appears the following three supply-side factors are most quantitatively significant.

1. Government payments for disability make not working more financially viable and increase a worker’s reservation wage. Abraham and Kearney (2018) identified two programs for which this was particularly true: Social Security Disability Insurance and Veterans Disability Payments.

2. The minimum wage precludes some of the lowest skilled workers from working.

3. Incarceration removes potential workers from the labor force. It also makes those released from incarceration less attractive to potential employers and therefore lowers their market wage, both because of the stigma and the loss of skills.

Our core diagnosis, then, is that, at least over the past 18 years, the following factors account for about half the decline in LFP:

\[ \text{automation + increased trade + disability insurance + minimum wage + incarceration} \]

\[ \rightarrow \text{low and declining labor force participation} \]

**OTHER HYPOTHESES**

We identified nearly 20 additional plausible hypotheses about why LFP is low and declining. Some of them may be quantitatively significant—we just don’t know yet. In each case, we are either less certain about their impact, or think their impact is smaller than the primary factors we have identified. We again emphasize that policymakers need economists to do more work analyzing these various hypotheses and trying to quantify their effects. For now, we just list them.

Hypotheses: “Low and/or declining labor force participation results from…”

1. **Search problems**—People have a hard time finding available jobs
2. **Decreased geographic mobility**—People are unwilling or unable to move to where the jobs are
3. **Occupational licensing**—State rules create barriers to new entrants in certain fields
4. **Decreased unionization/bargaining power**
5. **High marginal tax rates on 2nd earners**  
6. **High effective marginal tax rates on the poor and near-poor from benefit payment phaseouts**  
7. **The cost of child /elder care** discourages 2nd earners from entering the workforce  
8. **Incentives in Social Security** encourage workers to retire early  
9. Increases in **drug addiction**—especially opioids  
10. The availability of **non-time-limited safety net payments** for food stamps and health care (Medicaid and Affordable Care Act subsidies)  
11. **Rising spousal income**  
12. Young people **living at home with their parents**  
13. Increased attractiveness of **leisure activities**—especially video games and television  
14. **Immigration**—Increased immigrant or migrant workers  
15. **Underground income**  
16. Displaced workers are psychologically **anchored to their prior higher wages**  
17. **Male resistance to “pink collar” jobs**  
18. Loss of confidence / **depression**  
19. **Increased cultural acceptance of not working**  

### 9. Why this Policy Problem is Hard to Solve

- Lower LFP is in part caused by reduced demand for lower-skilled labor driven by a combination of skill-biased technological change (automation) and increased trade. Policies to increase and improve the human capital of these workers are being addressed by another working group, so here we focus principally on the supply-side factors.

- The problem diagnosis is uncertain.

- It is therefore difficult to quantify the expected benefits—the anticipated increase in LFP—of any particular policy change.

- The policy tools are blunt and poorly targeted: in most cases, the effects on LFP are only a small portion of the broader effects. Reducing opioid addiction,
Part II: Increasing Prime-Age Labor Force Participation

for instance, might increase LFP, but the opioid problem is much larger than just a labor force issue. Labor force effects might be only a small consideration when policymakers are trying to reduce opioid addiction.

- In addition, there may be an imperfect linkage between the causes of declining LFP and the optimal policies to increase it. As an example, skill-biased technological change is a cause of lower LFP, but we would not recommend slowing that change.

10. Our Recommendations

While we have focused on structural LFP, the cyclical component is critical. In the short run, a strong economy and labor market are the most important factors determining labor force participation. Economic growth and increased demand for labor, especially that of low-skilled workers, are the critical path to higher participation. Policymakers should remember this benefit when debating policies to strengthen the short-term health of the U.S. economy.

The human capital proposals and income subsidies of the other two working groups would increase LFP. In addition to those policies, we think the following package of reforms is well-suited to increase labor force participation.

1. Tighten eligibility rules for Social Security Disability Insurance
2. Reduce incarceration & improve labor force reentry for former prisoners
3. Rural area experiments: Infrastructure, wage subsidies, and relocation vouchers
4. Reduce state licensing requirements through a legislative fast-track process
5. Test certification alternatives to a four-year degree

Because our problem diagnosis is imperfect, and because of the difficulties described earlier, we offer a word of caution on these recommendations. While we are confident these policies would increase LFP, we cannot quantify the likely magnitude of those effects. These policies will, we think, help but not solve the participation problem.

1. Tighten eligibility rules for Social Security Disability Insurance (SSDI)

SSDI has expanded over time, from a program to insure against physical or mental disability, to one that, for some, also serves as either an early retirement safety net, or as an alternative long-term unemployment insurance policy. SSDI should be returned to its original policy goal.
In addition, over time many of those qualifying for SSDI have done so because of physical and mental conditions that are difficult to assess objectively. When combined with a complex, multi-stage appeals process, the eligibility criteria have created perverse incentives for both applicants and physicians.

Rather than choose from among the various public SSDI reform proposals, we recommend policy directions and goals for SSDI reform.

- The overall goal should be to return SSDI to its original policy of insuring those with physical and mental disabilities against economic loss.

- To do this, eligibility criteria should be narrowed and the application process simplified and rebalanced to avoid the temptation to treat SSDI as a more general safety net against economic hardship.

- Eligibility criteria should include only physical and mental capacity. Nonmedical factors such as vocation, age, and English-language competency should be eliminated as criteria for new eligibility determinations. The eligibility appeals process should be massively simplified, and structural incentives for treating physicians to game the system should be eliminated.

2. Reduce incarceration & improve labor force reentry for former prisoners

Incarceration is an economic issue. Reducing incarceration, improving reentry into society and the paid workforce, and reducing the stigma of incarceration could increase LFP. We think the following economic objectives are most important to increasing LFP:

- Sentencing reforms (such as eliminating or reforming mandatory minimum sentences) can expand the pool of available workers.

- Exit paths and reentry opportunities should be improved, both for those eligible for release, and for those who already have been released or are on parole.

- We commend those now working on federal prison, sentencing, and criminal justice reform. We also note that the federal prison population is only about a tenth of the total incarcerated population in the United States. To make a significant quantitative dent, states must pursue similar parallel reforms. Improvements across a range of state prison systems may present even more opportunity for sizable LFP improvements than would successful federal reforms.
3. **Rural area experiments: Infrastructure, wage subsidies, public works jobs, and relocation vouchers**

We are concerned that many rural areas have particularly low LFP, and so we recommend that policymakers explore a range of geographically targeted solutions to address problems in these areas. Four concepts appear promising:

- **Wage subsidies** - Aimed at higher pre-policy wages than the EITC, wage subsidies are the most obvious and direct option for attracting people into the labor force.

- **Rural infrastructure** - Policymakers should take a fresh look at geographically targeted investment, focusing on rural areas of economic distress and concentrations of low LFP. We recommend prioritizing investment in physical infrastructure, including rural broadband, to help these communities rebuild and to encourage economic growth that may attract more people in these communities back into the labor force.

- **Public works jobs** – Localities should experiment with public works jobs, possibly in the infrastructure described above, with a goal of creating entry-level opportunities for nonparticipating workers to reenter the paid workforce.

- **Relocation vouchers** - Others need to move where the good jobs are. To help them, vouchers can subsidize both their job search and their relocation.

4. **Reduce state licensing requirements through a legislative fast-track process**

In some states more than others, government licensing requirements create significant barriers to entry. Those already employed in an industry pressure the legislature to impose these barriers. A collective action problem develops, in which the legislature finds itself unable to resist interest group pressures to incrementally raise these barriers.

We recommend that an innovative governor work with his or her legislative counterparts to create a process similar to federal “fast-track” trade authority, or similar to the federal military “Base Realignment and Closing” (BRAC) commission of the 1990s. The legislature would grant to the governor authority to make a package of recommended changes to and repeals of state licensure requirements. The legislature would, through this fast-track process, be required to vote on the package without amendment. The legislature would vote “up-or-down” on the governor’s entire package, thus eliminating the ability of interest groups to whittle it down or pick it apart. We think this process might allow state leaders to scale back licensing rules and expand job opportunities, especially for those looking to enter a new line of work.
5. Test certification alternatives to a four-year degree

We are concerned at reports of “credential inflation,” in which employers are increasingly requiring a bachelor’s degree for jobs that had previously had no such requirement. We recommend policymakers look for opportunities to encourage more skill-building pathways and certificates as alternatives to a four-year college degree. Our goal is to expand the range of opportunities for workers who cannot afford four years of college, while respecting private employers’ need to find the best talent available.