ChatGPT

Long-Term Decline in U.S. Labor Demand (1950–Present)

Introduction

Over the past several decades, the United States has experienced a **long-term decline in the demand for labor**, especially for stable, well-paid jobs. Key labor market indicators reveal structural challenges that go beyond normal business cycle fluctuations. Labor force participation has fallen (particularly among prime-age men), underemployment remains elevated even in expansions, and traditional mid-century job mainstays like manufacturing have shed millions of positions. At the same time, wages for typical workers have stagnated despite rising productivity. This report analyzes these trends in detail – drawing on data from FRED, BLS, OECD, and academic research – to show that **job opportunities have eroded due to structural forces** such as automation, globalization, and institutional changes, rather than short-term cyclical swings.

We examine a series of labor market indicators to illustrate this structural decline in labor demand. For each indicator, we present historical data, discuss underlying causes, and include visual or tabular evidence where available. Demographic breakdowns by gender, age, and race are included to highlight which groups have been most affected. In particular, we explore declines in prime-age male labor-force participation, the fall of manufacturing employment, broad underemployment (U-6) trends, youth disconnection (NEET rates), the impact of automation on routine jobs, and the divergence between wage growth and productivity. Where relevant, we note major policy and macroeconomic events – such as trade liberalization (NAFTA, China's WTO entry), minimum wage stagnation, and tax/regulatory changes – that have contributed to or contextualized these long-run trends. The overarching finding is clear: **labor market conditions have steadily shifted in a way that leaves a growing segment of the workforce without access to secure, well-compensated employment**, reflecting deep structural shifts in the economy.

Prime-Age Male Labor Force Participation

One of the most telling indicators of structural labor market decline is the **labor force participation rate of prime-age men (ages 25–54)**. In the mid-20th century, participation among men in their prime working years was nearly universal – around 98% in the mid-1950s – but it has fallen persistently since then [1]. In 1954, about 98% of U.S. prime-age men were either working or actively seeking work, whereas today that figure is only around 88–89% [1]. This decline accelerated after the mid-1960s and has continued through successive decades and recessions. Since 1965, the prime-age male participation rate has fallen by an average of 0.16 percentage points per year, amounting to an overall drop of about **8 percentage points** (from the mid-90s to the high 80s in percentage terms) by the mid-2010s [2]. Importantly, each economic recovery failed to fully restore prime-age male participation to its previous peak, indicating a ratcheting downward trend rather than a temporary cyclical effect.

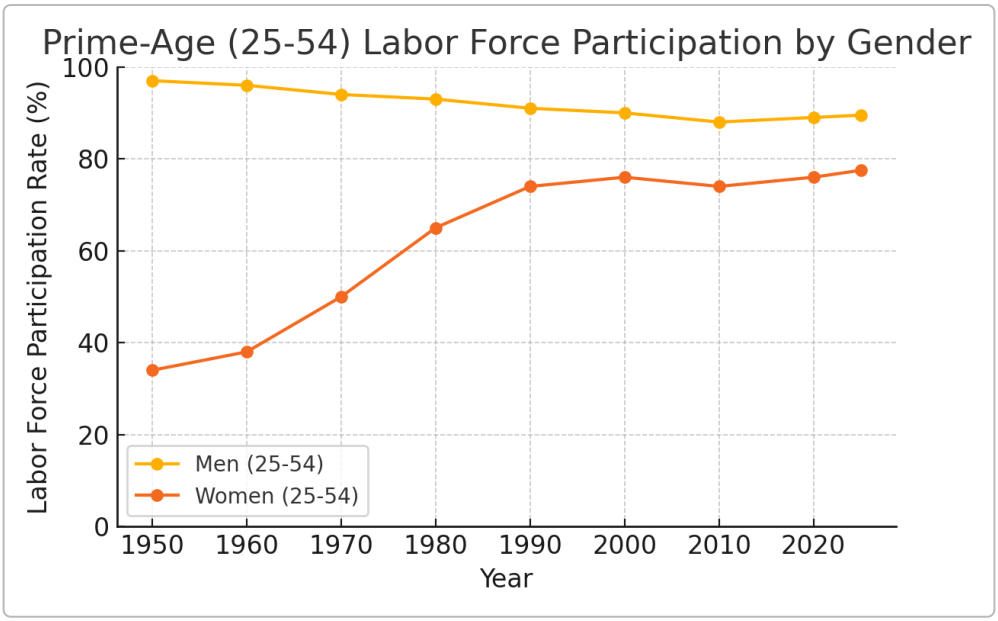

Figure: Prime-age (25–54) labor force participation rates by gender in the U.S., 1950–2025. The male rate (yellow) has steadily declined from near-universal participation in the 1950s to about 89% in recent years, while the female rate (orange) climbed dramatically until about 2000 and then plateaued. Sources: BLS Current Population Survey [1] [3].

Causes: Multiple structural factors explain why many prime-age men have left the labor force. A decline in demand for less-skilled labor, due in part to automation and the offshoring of manufacturing jobs, has reduced the availability of the kinds of stable blue-collar jobs that once employed large numbers of men with high school educations [4] [5]. The men most affected by falling participation have been those with lower education levels: for example, in 1964 about 97% of men with only a high school diploma were in the labor force (nearly matching college-educated men), but by 2015 participation for high-school-educated men had plunged to 83%, far below their college-educated peers [6] [7]. The long-run decline in manufacturing and other routine-heavy occupations (discussed further below) hit prime-age men – especially Black men – particularly hard, since these groups were disproportionately employed in those sectors. Prime-age Black men today have the lowest participation rates among major racial groups, and their rates have fallen more steeply than those of White men in the last few decades [8] [9].

Institutional factors have also played a role. The expansion of the federal Disability Insurance program (especially after eligibility rule changes around 1960) has modestly increased the number of prime-age men exiting the labor force to claim disability benefits [10] [11]. Higher incarceration rates and the difficulties faced by ex-offenders in finding work have additionally depressed labor force participation among less-skilled men [12] [7]. The social stigma or discouragement associated with long-term joblessness can become self-reinforcing – once out of the labor force, some men cease job hunting altogether. These supply-side considerations (more men choosing not to work) are often responses to **weak demand** for their labor: when stable jobs are scarce or wages are too low to justify working, more men simply drop out. Indeed, a large body of evidence links the disappearance of good-paying jobs to “deaths of despair” and other signs of distress among nonworking men, underscoring that the retreat from the labor force is largely involuntary or for lack of opportunity [13].

Historical data: Prime-age male labor force participation peaked in the early 1950s and then **fell steadily for the next 50+ years**, a trend sharper in the U.S. than in most other advanced economies [4]. In 1950, about 97% of men aged 25–54 were in the labor force; by 1970 this had slipped to the mid-90s, by 2000 to ~90%, and by the 2010s to the upper 80s [1]. Notably, the decline was gradual in the 1950s–60s, then became more pronounced after 1970. The U.S. prime-age male participation rate today (around 88–89%) ranks near the bottom among OECD countries – only a couple of nations (such as Italy) are lower – whereas in 1950 the U.S. had one of the highest rates [14] [5]. This comparative decline suggests that domestic policy and economic structure (rather than global trends alone) have contributed to the U.S. shortfall. Periods of economic boom have provided only partial and temporary relief: for instance, the late-1990s tech boom and the pre-2008 expansion briefly stabilized male participation, but after each recession the participation rate reset to a new low. Even the tight labor market of 2019 left prime-age male participation around 89%, still well below mid-century levels. In short, **fewer prime-age men are engaged in work today than at any time in modern U.S. history** (aside from cyclical spikes during recessions), reflecting a long-run structural erosion of labor demand for this group.

Female Labor Force Participation and Overall Trends

In contrast to men, the labor force participation of **women** surged in the latter half of the 20th century – a structural change that partially offset male declines for a time. The overall story of female labor supply is one of **dramatic increase followed by a plateau**. The labor force participation rate of prime-age women (25–54) was only around **33–35% in 1950**, reflecting the mid-century norms that saw many women not formally employed [3]. However, as social norms changed and demand for workers rose, women's participation climbed relentlessly through the 1970s and 1980s. By **1990** the prime-age female participation rate had reached roughly **74%**, and it peaked around **76–77% in the late 1990s** [3]. This increase of over 40 percentage points is one of the most sweeping labor market shifts in U.S. history, sometimes called the "female labor force revolution." It was driven by rising educational attainment among women, the diffusion of service-sector jobs (many of which actively recruited women), changing cultural expectations around women's careers, and economic necessity.

Since about **2000**, however, female labor force participation **stagnated and even slightly declined**. After hitting ~77% around 1997–2000, the prime-age female participation rate dipped to the low 74% range in the early 2010s [3]. Only in the late 2010s did it inch back up, reaching 75–76% by 2019 and around 77% by 2023 (roughly regaining its prior peak) [15]. This plateau suggests that the earlier drivers of rising female participation have run their course, and new structural challenges emerged. Notably, the U.S. has fallen behind other advanced countries in female participation in recent decades; for example, prime-age female participation in the U.S. is now several points lower than in many European countries. Analysts point to inadequate family support policies (like lack of paid maternity leave and affordable childcare) and the same **structural labor demand issues** affecting men (a shortage of stable, middle-skill jobs) as reasons why U.S. women's participation leveled off [3]. In essence, once the large influx of women into the workforce was complete by the 1990s, further gains stalled in an economy that has not been generating abundant high-quality jobs.

It is also important to consider **overall labor force participation**, which combines these gender trends and the effects of an aging population. Total civilian labor force participation (for ages 16 and up) rose from about **59% in 1960** to a peak of **67.3% in early 2000**, driven largely by women entering the labor force. Since 2000, however, the overall participation rate has **fallen to around 62–63%** in recent years [16] [17]. Part of this decline is due to the aging of the population (more retirees cause a lower aggregate

participation rate). But even among **prime working-age adults**, participation today is lower than it was two decades ago – indicating that the decline is not *just* a demographic artifact of baby boomers retiring, but also a reflection of fewer opportunities or greater barriers for those in their prime years. For instance, between 2000 and 2019 the prime-age (25–54) participation rate for the total population fell from roughly 84% to around 82% [18], and only in 2022–2023 did it climb back above 83%. This suggests a structural shortfall in employment during the 2000s and 2010s, often termed the **"jobless recovery"** phenomenon (as seen after the 2001 and 2008 recessions when GDP recovered but employment didn't fully rebound). The combination of prime-age men's continued exit and prime-age women's plateau created a worrying trend: **fewer Americans in their most economically productive years are engaged in the labor market than in past generations**, even outside of recession periods [19].

Demographic breakdowns: In addition to gender, labor force participation trends vary by race and education. Prime-age Black men have consistently lower participation than White men, a gap that widened after 1980 (due in part to higher incarceration and the collapse of manufacturing in many urban areas) [8]. Black women historically had high participation (often outpacing White women through the mid-20th century), but in recent decades White women closed the gap as more of them entered the workforce [3]. By education level, as noted, those with lower education have seen sharper participation declines. *Youth* (teenagers and young adults) have also reduced participation, as discussed in a later section – more are enrolled in education or unable to find work. On the other hand, labor force participation among **older workers (55+)** initially fell in the postwar years (with early retirements encouraged by Social Security and pensions [20]), but since the 1990s it has actually **increased** somewhat. Many older workers today remain in the labor force longer, whether due to better health, insufficient retirement savings, or the shift away from defined-benefit pensions. This has partially offset the prime-age decline, but not enough to reverse the overall downward trend in participation.

Unemployment, Underemployment, and Labor Underutilization (U-6)

While the standard unemployment rate (known as U-3, measuring those actively job-hunting as a percentage of the labor force) receives the most attention, broader measures show a persistently higher level of **labor underutilization** in the U.S. economy. These broader measures include people who are only marginally attached to the labor force or working part-time when they would prefer full-time – factors indicative of **underemployment** and slack labor demand. The Bureau of Labor Statistics' **U-6** rate captures this broader underutilization: it includes not only the officially unemployed, but also *discouraged workers* (who want a job but have given up searching) and those working part-time for economic reasons (involuntary part-time workers who want full-time hours).

Historical U-6 trends: The U-6 rate is available on a consistent basis since 1994. It tends to track the business cycle – spiking in recessions – but at a substantially higher level than the headline unemployment rate. During the **Great Recession of 2007–2009**, U-6 shot up dramatically, reflecting the fact that millions of Americans were either dropping out of the labor force in discouragement or taking whatever part-time work they could find. The U-6 rate rose from about **8.8% in late 2007 to a peak of 17.2% in late 2009** [21]. This peak U-6 (17.2%) implies that at the worst of the downturn, nearly one in six people in the labor force or on the margins of it were underutilized. By comparison, the official U-3 unemployment rate peaked at 10.0% in October 2009 – meaning the recession's "true" jobless impact was considerably larger than U-3 alone suggested. Even long after the recession, **U-6 remained elevated**: it was still about 9.2% in 2016 and

7.6% in 2018 [21], higher than pre-recession levels (the U-6 was ~8.8% in 2007). It took until 2019 – a decade into the recovery – for U-6 to fall back near 7% (and U-3 to fall to ~3.5%). This slow improvement underscored the *structural* nature of some underemployment. Many workers who lost full-time jobs in the 2000s had to settle for part-time or gig work even years later, and some who left the labor force did not return.

Another concerning trend is the rise in **long-term unemployment** during downturns – and its persistence. In 2010, the share of unemployed workers who had been jobless for ≥27 weeks hit **45%**, the highest on record (comparable to the Great Depression) [22]. Even at the depths of the early 1980s recession – a severe downturn – the long-term share of unemployment was closer to 25%; 2010's 45% was unprecedented in modern times [22]. Such a high long-term unemployment share signals structural issues: skills atrophy, employer bias against hiring the long-term jobless, and regional mismatches between jobs and workers. Indeed, research finds that when unemployment spiked in 2009, many displaced workers (especially older ones) never fully reattached to the labor market [23]. Years into the recovery, long-term unemployment remained above prior norms. As of 2018, for example, the median duration of unemployment was still somewhat higher than it had been pre-2008. This indicates **hysteresis** – prolonged weakness in labor demand can cause lasting damage to workers' employability.

Involuntary part-time and hidden slack: Beyond the unemployed, millions of Americans are **under**-employed – working fewer hours than they want or in jobs that do not fully utilize their skills. In the post-2000 period, involuntary part-time employment (part-time for economic reasons) surged during recessions and did not fully recede. After 2008, for instance, the number of workers stuck in part-time jobs because they couldn't find full-time work jumped to over 9 million [24]. Although this number fell as the economy recovered, it remained somewhat above pre-crisis levels for many years. Additionally, the labor force saw an increase in people who are **"marginally attached"** – not counted as unemployed because they hadn't searched in the past 4 weeks, but who *want* a job and have looked in the past year. The presence of this group (including discouraged workers) implies that the official labor force and unemployment figures understate the true lack of job opportunities. The **labor force participation decline** discussed earlier ties in here: when participation falls due to lack of job prospects, unemployment can paradoxically drop (because discouraged workers aren't counted), even though employment hasn't truly improved. This dynamic was evident in the early 2010s, when the unemployment rate fell partly because people gave up looking for work. In sum, broader metrics like U-6 and long-term unemployment reveal an underutilization of labor that became **chronically higher** in the 21st century than in prior decades. Even in the "good times," a significant share of the workforce has been left on the sidelines or stuck in suboptimal employment – a hallmark of structural labor demand weakness.

Youth Unemployment and NEET (Disconnected Youth)

Young Americans have faced especially tough labor market conditions in recent decades, with **youth unemployment** rates far exceeding overall unemployment, and a growing cohort of "NEET" youth – those **Not in Education, Employment, or Training**. High youth joblessness and disconnection signal a failure to create enough entry-level opportunities and career pathways, which can have long-term scarring effects on a generation's earnings and skills.

Youth unemployment: The unemployment rate for young workers (typically defined as ages 16–24) is consistently higher than for older adults, due to lower experience and higher job turnover. But since 2000, youth unemployment has at times reached crisis levels. In the aftermath of the Great Recession, **youth**

unemployment hit record highs. By July 2010, the jobless rate for 16–24 year-olds was **19.1%**, the highest July rate on record (data back to 1948) [25]. For context, this was roughly double the overall unemployment rate at the time. Certain groups of young people fared even worse: that summer, the unemployment rate for young men 16–24 was 20.5%, for young women 17.5%, and for Black youth a staggering 33.4% [26]. Even in more normal times, teens and young adults often experience double-digit unemployment. During the 1980s and early 1990s recessions, youth unemployment peaked around 18–20%. In the COVID-19 pandemic shock of 2020, it briefly skyrocketed again (approaching 25% for 16–24-year-olds) as service sector jobs in retail and hospitality – heavily staffed by young workers – were slashed. High youth unemployment not only reflects cyclical downturns but also longer-run structural shifts: **fewer entry-level jobs** that pay a living wage, more competition (as older workers take jobs that might previously have gone to youth), and a rising bar to employment (many jobs now demand postsecondary credentials or prior experience, creating a catch-22 for young jobseekers).

A related measure is the **employment-population ratio** for youth, which captures the share of the age group that is employed. This has seen a secular decline. In July 1989, for instance, about 68% of 16–24-year-olds were employed during that summer peak season; by July 2010, that ratio was down to 48.9%, the lowest on record at the time [27]. In other words, the proportion of young people with jobs dropped by 20 percentage points over two decades [28]. Some of this is due to more youth attending college (and thus not working), but even among those not in school, job prospects have worsened. The long-term consequences are serious: unemployment early in one's career can depress earnings for years, and can lead to skill loss or failure to accumulate work experience (often termed the "scarring" effect of youth unemployment).

NEET rates (Disconnected youth): The term "NEET" refers to young people who are **not in education, employment, or training** – essentially disengaged from both work and schooling. This is a critical indicator because it identifies youths who may be at risk of long-term socio-economic problems. In the U.S., the NEET rate rose significantly during the 2000s. Around **2010–2012**, in the wake of the recession, roughly **17% of 18–24-year-olds** in America were NEET (neither working nor enrolled in school) [29]. This was an extremely high level, reflecting millions of young adults adrift. As the economy improved, the NEET share declined to about **13% by 2019** [29], which was an historic low. However, the pandemic then caused a spike in youth disconnection again in 2020. Even excluding temporary summer vacation effects, an estimated **13.8% of young adults (18–24) were disconnected in 2020**, the highest rate on record, before improving slightly to 13.3% in 2022 [30]. In total numbers, a **Pew Research** study found that in 2015 about *10.2 million* Americans aged 16 to 29 were NEET – roughly 17% of that broad age group [31]. U.S. youth disconnection rates are higher than in many other rich nations.

These averages hide large disparities: **rural youth** have very high disconnection rates (~20% are NEET) compared to urban youth (~15%) [32]. Young Black adults have the highest NEET rates among racial groups (e.g. nearly 24% in cities, compared to ~12–14% for young White adults) [33]. Those with lower family income and lower educational attainment are far more likely to be NEET [34]. Essentially, the structural decline in accessible jobs hits marginalized youth hardest. For many, the lack of a foothold in either the education system or the labor market at a formative age can lead to a lifetime of lower earnings and intermittent employment.

Causes of youth disconnection: A combination of **educational, economic, and social factors** is at work. On the one hand, more youth today pursue higher education than in the 1950s–60s, which delays their entry into the labor force (and can raise short-term NEET rates while they are in school). However, the flip side is that those not in college may struggle more than ever to find decent jobs with just a high school

diploma. The decline of industries like manufacturing and the shrinking of vocational training opportunities have removed traditional paths to stable employment for non-college youth. Instead, many get trapped in low-wage service jobs or joblessness. Additionally, rising college costs and uneven college completion rates mean some youth start college but drop out and are left with debt and no job – another pathway to NEET status. Structural changes such as the growth of unpaid internships (often inaccessible to lower-income youth) and the higher experience requirements for even entry-level jobs have made it harder for teenagers and young adults to transition smoothly into careers. Moreover, neighborhoods with concentrated poverty often lack the job networks and resources to connect young people to work or training, perpetuating cycles of disconnection.

Implications: High youth unemployment and NEET levels represent a *serious underutilization of labor* and a potential drag on future economic growth. If a significant share of a generation does not acquire skills and work experience early on, it can reduce the economy's productive potential in the long run. It also has social costs – idle youth are more likely to experience poor mental health, engage in crime, or rely on public assistance. From a structural standpoint, these trends underscore that the labor market has not been creating enough **entry-level jobs and career ladders** for young workers, even during expansions. This is a demand-side failure that complements the supply-side issue of education/training misalignment. Policies like youth apprenticeships, workforce training programs, and targeted job creation or hiring incentives have been proposed to tackle this structural problem.

Decline of Manufacturing and Middle-Skill Jobs

No single sector's decline has had as profound an impact on U.S. labor demand as the **erosion of manufacturing employment**. Mid-20th-century America was a manufacturing powerhouse that provided tens of millions of stable, well-paid blue-collar jobs (often to workers without college degrees). Since around 1980, however, manufacturing employment in the U.S. has been in **absolute decline**, and its share of total employment has collapsed – a clear indicator of structural change due to automation and globalization.

Historical trends: U.S. manufacturing jobs **peaked in 1979** at about **19.6 million workers** [35]. That peak was the culmination of decades of post-WWII industrial growth. After 1979, manufacturing employment entered a steady downward trajectory. By June 2019 (pre-pandemic), manufacturing employed only **12.8 million** Americans [35]. In other words, over 6.7 million manufacturing jobs were lost from the 1979 peak to 2019, a 35% decline [35]. The drop was even more dramatic by 2010, when manufacturing hit a trough of around 11.5 million jobs in the aftermath of the Great Recession (a roughly 40% decline from 1979). While there was a modest rebound in the 2010s (manufacturing gained a couple million jobs from its low point), it never came close to regaining its former level. As of 2025, manufacturing employment is around 12.7 million – still about one-third lower than in 1979.

[36] [35] **Figure:** Long-run decline in U.S. manufacturing employment. Manufacturing's share of total nonfarm employment peaked at **32% in 1953** and has trended down ever since, falling to **just 8%–9% by 2019** [36] [35]. In absolute terms, manufacturing jobs fell from ~19.6 million in 1979 to ~12.8 million in 2019 [35]. Recessions have an outsized impact – each downturn in the 1980s, 2000s, etc., cut manufacturing jobs that never fully came back during recoveries [37]. This structural decline signifies the shrinking role of factory work in the U.S. economy over time.

The **shrinking share** of manufacturing is even more striking. In the early 1950s, about **30% of all U.S. nonfarm workers were in manufacturing** [36]. This share fell gradually in the 1960s and 70s (as service

industries grew), then plummeted after 1980. By 1990, manufacturing was ~16% of employment; by 2010 it was down to ~9%; and today it is around **8%** [36]. In other words, where roughly 1 in 3 American workers once worked in factories, now fewer than 1 in 12 do. This reflects both the loss of manufacturing jobs and the simultaneous expansion of service-sector and white-collar jobs.

Causes – Automation: A major driver of manufacturing job loss has been **automation and productivity growth**. U.S. manufacturing output (real GDP) continued to rise or hold steady even as employment fell, meaning fewer workers were needed to produce the same or greater quantities of goods. The introduction of industrial robots, computer-controlled machinery, and process improvements (lean manufacturing, etc.) in the 1980s and 1990s enabled manufacturers to drastically increase output per worker. For example, the automotive industry and electronics assembly saw robots replace many repetitive tasks that used to be done by hand. As a result, even though the U.S. still produces a large volume of manufactured goods (and in fact manufacturing output reached record highs in the 2010s), it does so with far fewer workers. One study found that more than half of the manufacturing jobs lost between 2000 and 2010 could be attributed to productivity gains (automation) rather than trade [38] [39]. This is part of a broader trend of the **"routinization"** of work: tasks that can be codified and automated are increasingly performed by machines or software, displacing human labor in those functions.

Causes – Globalization and trade: The other key factor is **offshoring and import competition**. Manufacturing became a globally traded sector, and the U.S. moved from being a net exporter of many manufactured goods in mid-century to running large trade deficits by the 2000s. Cheaper labor costs abroad and trade liberalization deals led companies to relocate production to countries like Mexico, China, and other emerging economies. Two landmark events stand out: the **North American Free Trade Agreement (NAFTA)** in 1994, and **China's entry into the World Trade Organization (WTO)** in 2001. NAFTA increased trade and investment flows between the U.S. and Mexico; while it benefitted some industries, it also directly caused the loss of an estimated **700,000 U.S. jobs** (net) as production moved to Mexico, with about 78% of those losses in manufacturing [40]. China's integration into the global trading system had an even larger impact. The so-called "**China shock**" – the surge of Chinese imports in the 2000s – devastated many U.S. manufacturing industries (textiles, furniture, steel, etc.). By one calculation, **import competition from China resulted in the loss of approximately 2.4 million American jobs from 1999 to 2011**, including around **1 million manufacturing jobs** that vanished due to Chinese import penetration [41]. This was part of the reason U.S. manufacturing employment fell so steeply in the 2000–2007 period (even before the Great Recession hit). Communities in the Midwest and South, where factories closed en masse, still show depressed employment and wages years later – an indication that the promised "reallocation" of workers to other industries did not fully materialize [42] [43].

It's worth noting that trade is a **two-sided coin**: imports became cheaper, benefiting U.S. consumers, and export-oriented sectors (like aerospace or high-tech manufacturing) saw some growth. But on net, the rapid globalization of supply chains in the late 20th century meant that labor-intensive production left high-wage countries like the U.S. and moved to lower-wage nations. Entire occupational categories (e.g. apparel sewing machine operators, certain electronics assemblers) virtually disappeared from the U.S. workforce. The manufacturing jobs that remain in the U.S. are often more skilled and productive, but they are fewer in number.

Job polarization: The decline of manufacturing is part of a broader pattern of **job polarization**, where middle-skill, middle-income jobs have been disappearing relative to both high-skill and low-skill jobs. Many manufacturing roles, as well as clerical/administrative office jobs, are classified as routine middle-skill

occupations. As these have been **hollowed out**, the labor market has bifurcated: growth is concentrated in high-skill professional jobs (engineers, managers, etc.) and low-skill service jobs (food service, home health aides, etc.), with a gap in the middle. Research by economists Autor, Dorn, and others documents that from the 1970s to 2010s, the share of U.S. employment in routine occupations (which tend to be mid-wage) fell sharply – for example, one study found that **routine occupations made up 60% of employment in 1976 but only 40% by 2012** [44]. The loss of manufacturing and production jobs is a big part of that story. Meanwhile, **non-routine service jobs** (often low-paying, like retail clerks or care workers) and **non-routine cognitive jobs** (high-paying, requiring creative or analytical skills) expanded their shares [45] [46]. This polarization contributes to inequality and also to underemployment: many workers who might have held a solid middle-class factory job in 1975 are today either in a low-end service job or out of work altogether if they couldn't transition.

Consequences for workers: Manufacturing historically provided not just jobs, but *careers* with decent pay, benefits, and job security (often buttressed by labor union contracts). The erosion of this sector has had outsized effects on certain demographics. Workers without college degrees, especially men, saw their avenues to a stable livelihood narrow. Regions that were manufacturing hubs (the "Rust Belt" in the Midwest, parts of the South and Northeast) experienced long-term economic decline, population loss, and social distress (opioid epidemics, etc.) as jobs left. Another effect has been on **wages** – when a large pool of workers is displaced from manufacturing, they often end up competing for lower-paying service jobs, putting downward pressure on wages in those sectors. Additionally, the loss of unionized manufacturing roles contributed to the overall **decline in union membership** (union density peaked at one-third of the workforce in the 1950s and fell to just 10% by 2022) [47]. The weakening of unions further reduced bargaining power for workers across industries, reinforcing wage stagnation trends discussed later.

In sum, the structural decline of manufacturing employment epitomizes the reduced demand for certain types of labor. It stems from powerful technological and global forces. While manufacturing output is still significant, the labor component has been drastically reduced. Policies like trade adjustment assistance, retraining programs, and efforts to reshore certain industries have so far had limited success in reversing these trends. The U.S. economy has transitioned toward services and knowledge work, but not all displaced manufacturing workers have found a foothold in the new economy – contributing to the lower participation and higher underemployment noted above.

Automation, Routine Task Decline, and High-Risk Jobs

Closely linked to the above trends is the impact of **automation and computerization** on the nature of work. Economists often distinguish job tasks as **routine vs. non-routine** (and cognitive vs. manual). Routine tasks are those that follow set procedures and are thus easier to automate or outsource. Over the last few decades, U.S. employment has undergone a marked shift: jobs intensive in routine tasks have declined, while jobs requiring non-routine, abstract, or interpersonal tasks have expanded. This section examines metrics like **Routine Task Intensity (RTI)** and the share of jobs at **high risk of automation** to illustrate how technology is structurally reshaping labor demand.

Routine Task Intensity (RTI) and job polarization: The **routine task intensity index** is a measure used by researchers to quantify how routine an occupation's tasks are. A high RTI occupation (e.g. assembly line worker, typist) involves repetitive procedures, whereas low RTI occupations require flexibility, problem-solving, or human interaction. Over time, the average RTI of the U.S. job mix has **steadily fallen**, indicating fewer routine jobs and more non-routine jobs. As noted earlier, the share of U.S. workers employed in

routine-heavy occupations dropped from about 60% in the late 1970s to 40% by the early 2010s [44]. Routine manual jobs (like production and machine operation) and routine cognitive jobs (like clerical work) both saw declines, particularly after recessions when those jobs were eliminated and not fully replaced [46]. For example, after the 2007–09 recession, routine occupations experienced larger layoffs and slower rehiring, suggesting that the downturn accelerated automation/outsourcing in those roles [48]. Meanwhile, **non-routine cognitive jobs** (professionals, managers, creative roles) rose in share, as did **non-routine manual service jobs** (such as food service, caregiving, security guards, which are hard to automate but often low-paid) [45]. This task-based view reinforces the notion of **job polarization**: middle-skill routine jobs have been the chief victims of structural labor demand shifts.

A vivid example of routinization's impact is the office environment. In 1980, large numbers of clerks, typists, and administrative support staff were employed to process paperwork – jobs which were highly routine. The advent of personal computers, spreadsheets, and eventually the internet automated or eliminated many of those functions. Between 1980 and 2010, clerical occupations shrank considerably as a share of employment. Similarly, bank tellers and cashiers are being gradually supplanted or made more efficient by ATMs and self-checkout machines. **Technology tends to complement high-skill workers while substituting for routine-task workers.** This helps explain why wage gaps widened: demand (and pay) increased for those who could work with or alongside new technology (engineers, analysts, etc.), while those performing automatable tasks saw their jobs deskilled or eliminated.

Jobs at high risk of automation: Looking forward, researchers have attempted to estimate what fraction of jobs is susceptible to automation in the coming decades. While estimates vary, they all indicate a significant share of roles are vulnerable. A widely cited study by Frey & Osborne (2013) claimed that about **47% of U.S. jobs** were at **high risk** of automation over the next 10–20 years [49]. (They defined "high risk" as occupations with at least a 70% probability of being automatable by existing or foreseeable technology.) This alarming figure sparked considerable debate. Later studies offered more conservative estimates: for example, an OECD analysis suggested only about 9% of jobs are at high risk of full automation (because many jobs have tasks that are hard to automate even if some tasks can be) [50]. The U.S. Government Accountability Office summarized research in 2022 and noted estimates ranging **"anywhere from 9% to 47% of jobs" could be automated in the future** [50]. Even the low end of 9% represents millions of jobs potentially displaced. A McKinsey report projected that by 2030, perhaps **one-third of U.S. jobs** may be largely automated (though not necessarily eliminated – some could transition to new tasks), and over **60% of occupations** could be significantly reshaped by AI and automation tools [51].

Which jobs are most at risk? Generally, roles that are **routine, repetitive, and do not require advanced degrees or social intelligence**. This includes a lot of administrative support, production line work, and certain transportation jobs. Indeed, some of the occupations already being affected by advanced automation and AI are **cashiers, retail salespersons, food preparation workers, truck drivers, and administrative assistants** [52] [50]. Many of these do not require a college education and have traditionally been stepping-stone jobs for the middle class or for young workers – raising concerns about the future of work for these populations. There is also a sectoral component: **manufacturing and agriculture** automated earlier (and saw big job losses), whereas **sectors like healthcare, education, and personal services** have been less automatable (thus maintaining or growing employment, albeit often at lower wages for service roles). However, with the rise of artificial intelligence (AI) and machine learning, even some non-routine cognitive tasks are now under threat – for instance, algorithms that can review legal documents (affecting paralegals) or AI that can generate basic news stories (potentially affecting some writing jobs).

It is important to stress that "risk of automation" does not guarantee job disappearance. Often, technology changes the nature of jobs rather than simply replacing them outright. There can be **complementary effects** (e.g., AI might assist a doctor rather than replace the doctor, potentially making the doctor more productive). Also, new technology can create new jobs – classic examples include the rise of software development, digital marketing, and other roles that didn't exist decades ago. Nevertheless, the structural trend is that **tasks requiring manual repetition or simple decision rules are increasingly done by machines**, which **reduces labor demand for those functions**. The workforce must then adjust by moving into tasks that are harder to automate (often those requiring creative problem-solving, complex human interaction, or very dexterous physical work in unstructured environments).

Routine-biased technological change and wage inequality: Automation has not only reduced demand for certain occupations, but also contributed to wage disparities. As routine middle-wage jobs decline, many workers have shifted either upward (if they obtain the skills for higher-paying jobs) or downward (into lower-paying service jobs). This polarization has been a key driver of **wage inequality** since the 1980s. One study found that the relative wages of routine jobs fell significantly, accounting for 50–70% of the rise in U.S. wage inequality over four decades [53]. We see evidence in wage growth data: for example, **low-skill service occupations had wage growth of ~21% from 1980–2015, while traditionally middle-wage occupations like crafts, repair, machine operators saw wage growth under 10% in that period** [54] [55]. In some sense, wages at the bottom grew a bit (due to demand for personal services that can't be automated, and possibly minimum wage increases in some states), wages at the top grew strongly, but the middle sagged – reflecting weak demand for routine operatives and clerical roles.

Policy and response: The prospect of automation displacing workers has led to discussions of policies like **universal basic income (UBI)**, job guarantees, retraining programs, or reductions in working hours to distribute work. Historically, technology has been a net creator of jobs in the long run – but the transition can be painful and prolonged for certain groups. The current wave of AI and robotics is unprecedented in its breadth (potentially affecting cognitive tasks, driving, etc.), raising the urgency of addressing these structural shifts. The U.S. has so far relied on market forces and modest retraining support, but other countries have been more aggressive in apprenticeships and workforce development to help workers move into less automatable roles. Ultimately, the decline of routine jobs underscores the need for **continuous skill upgrading** and an education/training system aligned with the future of work. However, not everyone can be upskilled to become a software engineer or data analyst; there will remain a significant segment of the population whose best fit is in modest-skill jobs. The challenge is ensuring there are decent employment options for them – which might involve expanding sectors that are labor-intensive (e.g., infrastructure, care economy) or revaluing jobs that require the human touch.

Wage Growth, Productivity, and Labor's Share of Income

A key symptom of declining labor demand – or at least declining worker bargaining power – is the **stagnation of wage growth relative to productivity**. In a well-functioning economy, one would expect workers' pay to rise in tandem with labor productivity (output per worker). For roughly the first 25 years after World War II, that was the case in the United States: productivity and the typical worker's compensation grew together, supporting broad-based increases in living standards. However, since the late 1970s, a pronounced divergence opened up between productivity and pay. This reflects structural changes including weaker unions, globalization (which put downward pressure on wages), labor-saving technology, and policy choices around tax and labor laws. The result has been that **labor's share of national income** declined and income inequality widened, with gains concentrating at the top.

Productivity-pay divergence: Between 1948 and the mid-1970s, net productivity (output per hour after accounting for depreciation) and the inflation-adjusted hourly compensation of the typical worker rose at almost the same pace – roughly doubling over that span. Starting around **1979**, these lines split. Productivity kept rising strongly, while median or average worker compensation rose much more slowly. According to data from the Economic Policy Institute, from **1979 to 2020, productivity in the U.S. economy increased about 60–70%** whereas the **hourly pay of typical workers increased only around 15%–20%** in real terms [56]. Another way to put it: *productivity grew roughly 2.7 times faster than worker pay* over the last 40+ years [57]. In numerical terms, EPI finds that from 1979 to 2023, productivity (net output per hour) jumped about **86%** while the hourly compensation of nonsupervisory workers (a proxy for typical workers) rose only **32%** [57]. This growing gap is often illustrated by a chart of two lines – one for productivity, one for pay – that move together mid-century and then split apart around 1980, with the productivity line climbing much higher by the present [56].

For median *annual* earnings (rather than hourly wages), the picture is even starker for certain groups. For instance, the median inflation-adjusted earnings of male full-time workers are roughly **the same today as in the 1970s**, implying zero real growth for a generation [58]. Overall, the median household income has grown modestly (mainly due to more dual-earner households), but nowhere near the rate of GDP per capita growth. Essentially, a disconnect emerged: the economy can expand and become more productive, but the gains do not flow through to the majority of workers as higher pay.

Labor share of income: One macro-level indicator is the **labor share** (the portion of GDP that is paid out as wages, salaries, and labor benefits). In the postwar era, the U.S. labor share was relatively stable, around 63–65% of nonfarm business income. Since about 2000, the labor share has trended downward, hitting around 56–58% in the 2010s – a multi-decade low [59] [60]. A declining labor share means a larger slice of economic output is going to capital (profits, dividends, etc.) rather than compensation for workers. This is consistent with a world where automation (capital) replaces labor, and where globalization allows capital owners to bargain down labor costs by offshoring or outsourcing. It also reflects weakened worker bargaining power as unionization rates fell (from 1 in 3 workers in the 1950s belonging to a union to only ~1 in 10 today) [47]. Weaker labor institutions tend to shift income toward employers and high-level executives at the expense of rank-and-file wages.

Minimum wage and low-end wages: A concrete policy example of wage stagnation is the **federal minimum wage**. The U.S. federal minimum wage was last raised in 2009 (to $7.25/hour) and has lost substantial value due to inflation. In fact, by 2022 the inflation-adjusted value of the $7.25 minimum was at its **lowest point in 66 years** [61] [62]. It was worth about 27% less in real terms than in 2009, and **40% less than in 1968** [63]. In 1968 the federal minimum ($1.60 then) was equal to about $12 in today's dollars – well above today's $7.25 [63]. This illustrates how the wage floor has not kept up with overall economic growth or productivity. A stagnant minimum wage drags down wage growth for low-paid workers more generally, since it sets a benchmark. Indeed, one analysis found that if the minimum wage had kept pace with productivity since 1968, it would be over $21/hour today [64] – roughly three times the current level. The failure of the minimum wage to even keep up with inflation (let alone productivity) is a policy choice that has contributed to widening inequality and a proliferation of poverty-wage jobs, even as the cost of living and average output have risen.

Wage inequality: Structural labor market changes have led to **greater inequality in wage growth**. High earners (especially the top 10% and 1%) have seen much larger pay increases, often capturing the lion's share of income gains. CEOs and the financial sector exemplify this – CEO compensation has skyrocketed

(the CEO-to-worker pay ratio in large firms went from ~30:1 in the 1970s to over 300:1 in recent years). Meanwhile, median wages barely budged. The reasons are multi-fold: technological change favoring skilled workers, globalization exerting downward pressure on less-skilled wages, declining union power, and shifts in corporate governance (e.g. prioritizing shareholder value and cost-cutting). Tax policy also played a role: top marginal income tax rates and capital gains tax rates were reduced significantly from the 1960s to today, which indirectly encourages firms to allocate more income to profits and high executive pay (since after-tax returns for the top are larger). Furthermore, the erosion of labor standards (like overtime rules, the weakening of collective bargaining, etc.) left many workers without the leverage to secure wage gains even as their productivity rose.

Evidence of decoupling: Empirical data underscore the structural nature of this wage-productivity decoupling. From 1973 to 2014, net productivity grew about **1.3% per year** on average, while median hourly compensation grew only **0.2% per year** [65]. That tiny 0.2% annual gain for median pay over 40+ years explains why many workers feel left behind despite overall economic growth. Another study found that **over half** of the productivity-median pay gap growth can be attributed to **increased inequality** (higher-income workers and capital owners capturing more of the gains) [66]. The rest was due to factors like higher benefit costs (health insurance premiums rose, eating into wage potential) and differences in how inflation is measured for output vs. consumption. But the core takeaway is that **structural forces have allowed productivity gains to bypass the typical worker**, ending the post-war pattern where a rising tide lifted all boats [67] [68].

Labor market institutions: A structural perspective also points to the weakening of institutions that bolstered wage growth. The **decline of unions** stands out – union membership fell to about 10% overall (and only ~6% in the private sector) [69]. Unions not only raise wages for their members, but also set norms and wage standards that spill over to non-union workplaces. As unions dwindled, especially in industries like manufacturing, workers lost bargaining power. **Collective bargaining coverage** in the U.S. is now a fraction of what it is in many European countries, which helps explain why average wage gains in the U.S. were more skewed. Additionally, changes in corporate norms (tying CEO pay to stock performance, for instance) incentivized cost-cutting and layoffs to boost short-term profits, sometimes at the expense of long-term worker development.

Outcome: The combination of these factors led to a scenario where **GDP and corporate profits can grow robustly while median wages stagnate**. We saw this in the recovery periods of the 1990s, 2000s, and 2010s: economic output and productivity rose, unemployment even fell to low levels by the end of expansions, yet wages (especially after adjusting for inflation) grew slowly for most and even declined for some groups. It was only in the very tight labor market of 2018–2019 that lower-wage workers saw some acceleration in pay – suggesting that with strong enough demand and low unemployment, some of the structural weight can be lifted. However, those late-cycle gains did not fully close decades-long gaps. The COVID-19 pandemic further complicated the picture; while there were wage increases for many low-wage jobs in 2021–2022 (due to labor shortages and inflation adjustments), it remains to be seen if that leads to a lasting shift or if old patterns reassert themselves.

In summary, **wage growth for the typical American worker has lagged far behind what would be expected given the growth in productivity and the cost of living**. This is a fundamental indicator of declining labor demand in a relative sense – employers have not felt the need to bid up wages broadly because structural forces (automation, global labor supply, weakened bargaining institutions) kept workers on the back foot. The result is a divergence between the fortunes of capital vs. labor, and of high-skill vs.

low-skill workers, that is unprecedented in the post-war era. Any policy response to improve job quality and labor demand must reckon with how to realign pay with productivity, whether through strengthening labor standards, fostering tighter labor markets, or other measures.

Conclusion: Structural Erosion of Job Opportunities

The evidence across these indicators – labor force participation, underemployment, sectoral job shifts, automation risk, and the pay-productivity gap – all points to the conclusion that the U.S. labor market has been undergoing a **structural erosion of demand for labor**, particularly in the kinds of jobs that historically provided stable, middle-class livelihoods. Unlike a cyclical downturn which is temporary and followed by robust recovery, these trends show long-term changes that have **persisted and deepened over multiple business cycles**. Prime-age men's continual exit from the workforce, the leveling off of women's workforce gains, the permanently lower share of people employed in manufacturing, and the decoupling of wages from economic growth are phenomena that simple "more economic growth" alone does not solve – indeed, they occurred even as the economy grew substantially larger than in 1950.

Several common themes emerge:

- **Technology (automation)** has reduced the need for certain types of labor (routine, repetitive tasks) and increased productivity without translating into commensurate wage gains or reduced working hours for workers. This is a break from earlier eras where technological progress often led to new industries absorbing displaced labor.

- **Globalization** and offshoring have effectively exported some labor demand abroad, putting U.S. workers in direct competition with lower-paid workers elsewhere. This increased the effective supply of labor globally and squeezed demand for U.S. labor in tradable sectors, contributing to job losses and wage suppression domestically in those sectors.

- **Demographic and social changes** (like the baby boomer retirements, more youth in college, more women in the workforce) changed labor supply dynamics, yet the economy did not adjust to productively employ all who wanted to work – revealing mismatches and shortfalls in labor demand for less-credentialed workers.

- **Policy choices** exacerbated some problems: the failure to update the minimum wage, weakening of labor unions and labor protections, corporate governance favoring shareholders, and tax policies favoring capital gains all shifted the balance away from labor. Major macroeconomic events – e.g., China's WTO entry – were not met with sufficient domestic adjustment assistance, leading to concentrated joblessness in certain communities.

- **Educational and training systems** have struggled to keep up with the pace of change, leading to skills gaps. But even with better education, not everyone can or needs to be in a high-skill job; the economy still requires (and will continue to require) mid-skill and lower-skill roles, which raises the question of how to make those viable careers. The structural decline in demand for non-college labor is at the heart of falling participation and underemployment.

- **Labor force withdrawal and underemployment** are both causes and consequences of the decline in labor demand. As good jobs became scarcer, more people either dropped out or settled for part-time/gig work. That in turn can reduce measured unemployment, masking true slack, and potentially reducing pressure on employers to raise wages – a vicious cycle.

The net impact of these structural trends is a more polarized and less inclusive labor market. On one end, we have highly skilled workers in tech, finance, and other fields doing well, with strong demand for their labor. On the other end, we have a growing segment of the population either not working, working less than they'd like, or working in jobs with low pay and instability. **Job opportunities, especially those that offer long-term security and good pay without requiring advanced degrees, have diminished.** This has societal implications: rising inequality, geographic disparities (thriving metro areas vs. depressed small towns), and political ramifications as well.

It's critical to emphasize that these are *structural* forces. They developed over decades, and reversing or mitigating them likely requires proactive structural solutions – such as investing in new industries and infrastructure to create jobs, reforming education and training, strengthening labor rights, modernizing social insurance (for example, supporting displaced workers better), and perhaps rethinking policies around work (like job guarantees or work-sharing in response to automation). The data from authoritative sources like the BLS and OECD make clear that the challenges are not merely the result of one or two bad recessions, but of long-running trends. The long-term decline in U.S. labor demand is thus one of the defining economic issues of our time, shaping the prospects of current and future generations of workers.

Sources: Official data from the U.S. Bureau of Labor Statistics (Current Population Survey and Current Employment Statistics) were used for historical labor force participation and employment trends [70] [35]. Analysis by the Council of Economic Advisers and other researchers provided insights into demographic breakdowns and causes of participation declines [8] [7]. Broader unemployment measures and their trends are documented by BLS and summarized in economic literature [21] [22]. Manufacturing job loss figures and trade impacts are drawn from BLS publications and studies on the China shock [35] [41]. The routine task and polarization discussion relies on academic research (Autor et al.) and Federal Reserve analysis [44] [71]. Wage and productivity statistics come from the Economic Policy Institute and related analyses [57] [63], highlighting the divergence since the 1970s. These sources collectively reinforce the thesis that the deterioration in stable employment opportunities is rooted in structural shifts rather than transient cycles.

---

[1] [2] [4] [5] [6] [7] [8] [9] [12] [13] [14] obamawhitehouse.archives.gov
https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf

[3] [10] [11] [20] Labor force participation: 75 years of change, 1950-98 and 1998-2025
https://www.bls.gov/opub/mlr/1999/12/art1full.pdf

[15] Labor Force Participation Rate Female: From 25 to 54 Years ... - FRED
https://fred.stlouisfed.org/series/LRAC25FEUSM156S

[16] [17] [19] [21] Unemployment in the United States - Wikipedia
https://en.wikipedia.org/wiki/Unemployment_in_the_United_States

[18] [70] Labor Force Participation Rate - 25-54 Yrs. (LNS11300060) | FRED | St. Louis Fed
https://fred.stlouisfed.org/series/LNS11300060

22 27 Weeks and Counting - Urban Institute
https://www.urban.org/stories/27-weeks-and-counting

23 Long-Term Unemployment and the Great Recession | NBER
https://www.nber.org/reporter/2019number3/long-term-unemployment-and-great-recession

24 U6 Unemployment Rate | MacroTrends
https://www.macrotrends.net/1377/u6-unemployment-rate

25 26 27 28 Youth employment and unemployment in July 2010 : The Economics Daily : U.S. Bureau of Labor Statistics
https://www.bls.gov/opub/ted/2010/ted_20100903.htm

29 COE - Young Adults Neither Enrolled in School nor Working
https://nces.ed.gov/programs/coe/indicator/col/not-in-school-not-working-neet

30 32 33 34 Disconnected Young Adults in the U.S. by Race and Geography
https://www.stlouisfed.org/on-the-economy/2024/aug/not-working-out-of-school-young-adults-us-race-geography

31 Millions of US, EU youth are neither working nor learning
https://www.pewresearch.org/short-reads/2016/01/28/us-eu-neet-population/

35 36 37 Forty years of falling manufacturing employment : Beyond the Numbers: U.S. Bureau of Labor Statistics
https://www.bls.gov/opub/btn/volume-9/forty-years-of-falling-manufacturing-employment.htm

38 39 [PDF] The Surprisingly Swift Decline of U.S. Manufacturing Employment
https://www.usitc.gov/research_and_analysis/documents/Pierce%20and%20Schott%20-%20The%20Surprisingly%20Swift%20Decline%20of%20U.S.%20Manufacturing%20Employment_0.pdf

40 NAFTA's Impact on U.S. Workers | Economic Policy Institute
https://www.epi.org/blog/naftas-impact-workers/

41 42 43 Q&A: David Autor on the long afterlife of the “China shock” | MIT News | Massachusetts Institute of Technology
https://news.mit.edu/2021/david-autor-china-shock-persists-1206

44 45 46 48 Is Job Polarization Holding Back the Labor Market? - Liberty Street Economics
https://libertystreeteconomics.newyorkfed.org/2013/03/is-job-polarization-holding-back-the-labor-market/

47 Labor Unions and the U.S. Economy | U.S. Department of the Treasury
https://home.treasury.gov/news/featured-stories/labor-unions-and-the-us-economy

49 52 Growth trends for selected occupations considered at risk from automation : Monthly Labor Review: U.S. Bureau of Labor Statistics
https://www.bls.gov/opub/mlr/2022/article/growth-trends-for-selected-occupations-considered-at-risk-from-automation.htm

50 Which Workers Are the Most Affected by Automation and What Could Help Them Get New Jobs? | U.S. GAO
https://www.gao.gov/blog/which-workers-are-most-affected-automation-and-what-could-help-them-get-new-jobs

51 These Jobs Will Fall First As AI Takes Over The Workplace - Forbes
https://www.forbes.com/sites/jackkelly/2025/04/25/the-jobs-that-will-fall-first-as-ai-takes-over-the-workplace/

53 [PDF] Tasks, Automation, and the Rise in US Wage Inequality
https://fnce.wharton.upenn.edu/wp-content/uploads/2021/10/pascualtask_displacement.pdf

54 55 71 The Fed - Does Automation Drive the Labor Market?
https://www.federalreserve.gov/econres/notes/ifdp-notes/does-automation-drive-the-labor-market-20170728.htm

56 57 59 60 67 68 The Productivity–Pay Gap | Economic Policy Institute
https://www.epi.org/productivity-pay-gap/

58 The wedges between productivity and median compensation growth
https://ritholtz.com/2012/05/the-wedges-between-productivity-and-median-compensation-growth/

61 62 63 The value of the federal minimum wage is at its lowest point in 66 years | Economic Policy Institute
https://www.epi.org/blog/the-value-of-the-federal-minimum-wage-is-at-its-lowest-point-in-66-years/

64 CORRECTION: This is What Minimum Wage Would Be If It Kept ...
https://cepr.net/publications/correction-this-is-what-minimum-wage-would-be-if-it-kept-pace-with-productivity/

65 Understanding the Historic Divergence Between Productivity and a ...
https://www.epi.org/publication/understanding-the-historic-divergence-between-productivity-and-a-typical-workers-pay-why-it-matters-and-why-its-real/

66 Must-Read: Josh Bivens and Lawrence Mishel: The Divergence ...
https://equitablegrowth.org/must-read-josh-bivens-lawrence-mishel-divergence-productivity-typical-workers-pay-matters-real/

69 How true is the statement that in the 1950s and 1960s 1/3 of ... - Quora
https://www.quora.com/How-true-is-the-statement-that-in-the-1950s-and-1960s-1-3-of-American-workers-were-represented-by-a-union-and-today-it-is-only-10-How-can-the-decline-be-reversed