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Real Wages, Immigration, and the Election

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INTRODUCTION

In retrospect, the Biden **Administration ran an unprecedented** political economy experiment: What happens when a massive jolt of investment spending runs into historic levels of immigration? The outcome turned out to be an odd and confusing mixture of good news and bad news that no one expected. **Gross domestic product and** employment both soared well above pre-pandemic forecasts. These strong headline macroeconomic indicators gave many Democrats a false sense of security going into the 2024 election 1

But despite the unanticipated strength of hiring, real wage growth slowed to a crawl. In its August 2019 economic outlook, the Congressional Budget Office had forecast that private sector wages and salaries, adjusted for inflation, would rise by about five percentage points over the next five years.² In fact, by this measure, real wages did not rise at all from 2019 to 2024 — a "wageless economic boom" that soured many voters on Democratic candidates. Figure 1 shows how the actual time path of real wages and salaries (red line) fell well below the prepandemic trend (blue dashed line).



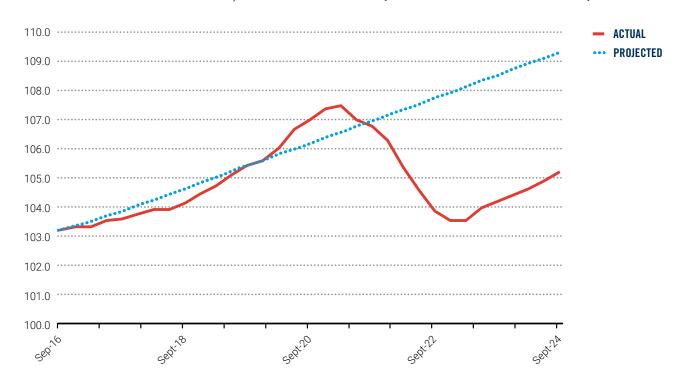


FIGURE 1: REAL WAGES AND SALARIES, ACTUAL AND PROJECTED (BASED ON PRE-PANDEMIC TRENDS)

Data: BLS, PPI
Note: Constant dollar employment cost index for private sector wages and salaries, projection based on extrapolating December 2016-December 2019 growth rate. Four-quarter average.

Real wages surged during the early days of the pandemic, fell during the inflationary period, and then started to climb again. But, surprisingly, the gap between the projected real wage and the actual real wage did not narrow in 2023 and 2024.

What happened? The obvious answer is inflation. Rising prices for food, energy, housing, and other essentials created a cost-of-living crisis, which eroded real wages. As PPI has written, the surge in inflation was at least partly due to high levels of government spending, including Biden's hallmark investment legislation.³

But government spending alone doesn't explain the inability of wages to keep up with rising prices, which had such an impact on the election. All other factors being equal, after the initial inflationary shock, strong job growth and lots of job openings should have allowed workers to negotiate higher wages with employers. Instead, wages showed a weak response to inflationary pressures.

So why did real wages not rebound faster in 2023 and 2024? The Federal Reserve's attack on inflation by raising interest rates is likely part of the cause. But GDP growth stayed strong, and the economy never came close to recession.

Given the timing, one important potential contributor to the real wage slowdown is the historic surge of immigration in 2022, 2023, and 2024, which added millions of new workers to the labor market in a short period of time.⁴ New estimates from the Census Bureau, released in December 2024, confirm that foreign-born immigration soared to over 2.5 million in 2023 and over 3 million in 2024.⁵



BLS data shows that foreign-born workers accounted for 89% of employment growth from 2019 to 2024.⁶ And a May 2024 paper from the Federal Reserve of Kansas City draws a link between immigration and wages, at least for the post-pandemic period:

....Industries and states that experienced larger increases of immigrant workers tended to see more deceleration in mean hourly earnings growth rates between 2021 and 2023.⁷

Let's be very clear. PPI believes that, in the long run, increased legal immigration represents a clear positive for the country in both the economic and social sense. We strongly support expanding pathways for legal immigration to help meet America's future demographic, workforce, and innovation aspirations, while taking sustained action to minimize illegal immigration in a manner consistent with our values. This balance is necessary for keeping America the vibrant, resilient, and robust culture and nation it is today.

However, it's increasingly clear that Democrats made a huge political mistake in the 2024 election by not acknowledging the short-term economic impacts of historic levels of immigration. This policy brief will draw connections between the time path of real wages, the unexpected immigration surge of 2023 and 2024, and the outcome of the 2024 elections. We will not be discussing here whether the Biden Administration should have followed different investment spending or immigration policies. These are complicated questions that require weighing a variety of short-term and long-term benefits and costs.

Rather, our goal is to offer a possible explanation of the divergence between the rosy headline macroeconomic indicators in 2024 and the consistent negativity of voters about their

economic prospects. This negative real wage shock amplified voter concerns about issues such as immigration, trade, technology, and housing. Immigration is especially important for understanding the election.

We can't say for certain that the weakness in wage growth in recent years was caused by the latest surge in foreign immigration. Whether or not immigration was responsible for slow wage growth during this period, voters do not think like economists. As such, it is not surprising that many made a connection between the immigration surge and the weakness in real wages, given what they see in their daily lives.

This analysis has several political implications. First, voters were not suffering from misinformation when they blamed Biden for the economy. People knew that their real wages and real incomes were below pre-pandemic trends, and they resented the Democrats telling them how well they were doing.

Second, Democrats likely were held accountable not simply for the 2021-22 inflationary surge but for the inability of real wages to recover back to trend in 2023 and 2024. Third, this analysis offers insight into what could have been done better and how Democrats can avoid the same pitfalls moving forward. In particular, Democrats need to use real wages to help set a political context for policy goals. This time, the issues were government spending, inflation, and immigration. In the next election, the key issues may be different. But taking changes in real wages seriously will help align Democrats with the concerns of working Americans.

WHAT ECONOMISTS SAW

Headline macroeconomic indicators such as real GDP and employment consistently outperformed expectations during the Biden years. In August



2019, the nonpartisan CBO projected that the projected 5-year growth rate of real GDP would be 1.8%, and the projected 5-year growth rate of nonfarm payroll employment would be a meager 0.3% (Table 1). In fact, the actual 5-year growth rate of real GDP was 2.3%, and the actual 5-year

growth rate of nonfarm payroll employment was 1.0%. To put it a different way, by the end of 2024, employment was 2 million jobs higher than pre-pandemic forecasts, with most of those gains coming in the last two years of the Biden Administration.

TABLE 1: GROWTH, JOBS, INFLATION, WAGES: PRE-PANDEMIC FORECAST VS WHAT HAPPENED

| | GROWTH RATE, 2019-24 | |
|----------------------------|--------------------------|--------|
| | AUGUST 2019 CBO FORECAST | ACTUAL |
| REAL GDP | 1.8% | 2.3% |
| NONFARM PAYROLL EMPLOYMENT | 0.3% | 1.0% |
| CONSUMER INFLATION | 2.4% | 4.2% |
| REAL WAGES* | 1.0% | 0.0% |

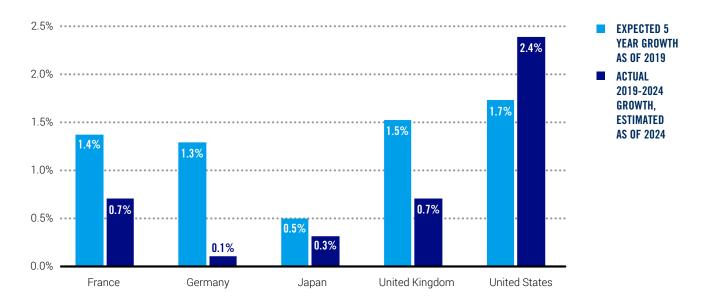
*Employment cost index for wages and salaries for private sector workers, deflated by consumer price index Data: Congressional Budget Office, PPI. Fourth quarter to fourth quarter

It's worth noting that other major countries did not show the same pattern. In October 2019 — before the pandemic — the economists at the International Monetary Fund (IMF) forecast that the annual GDP growth rate for the U.S. would average 1.7% over the next five years (2019-2024).8 Instead, the U.S. substantially outperformed expectations, with the real GDP growth rate for 2019 to 2024 clocking in at a robust 2.4%, despite the pandemic and its inflationary aftermath.

By comparison, other major industrialized economies like France, Germany, Japan, and the United Kingdom all substantially underperformed the IMF's 5-year forecasts of economic growth. For example, in October 2019, the IMF forecast that the 5-year growth rate for Germany would average 1.3% per year. The actual German growth rate turned out to be a meager 0.1% (Figure 2).



FIGURE 2: U.S. GROWTH VERSUS OTHER COUNTRIES: WHAT WAS EXPECTED IN 2019-2024 VERSUS WHAT ACTUALLY HAPPENED



Data: IMF October 2019 World Economic Outlook, PPI

The Bad News for Wages

With the economy growing and the labor market generating jobs at a rapid clip, many Democrats and observers expected a positive response from voters. As Jennifer Rubin of the Washington Post wrote: "President Joe Biden will leave office with one of the strongest economic legacies in memory."9

Nevertheless, pre-election polls and exit polls showed widespread disapproval of President Biden's handling of the economy and a sense of economic pessimism.¹⁰ For example CNN's exit polls showed that 47% of voters polled reported that their family's financial situation was "worse than four years ago."¹¹ Only 24% reported that their family's financial situation was better than four years ago.

Many analysts blamed the negative economic perceptions of Biden on misinformation or poorly informed voters.¹² A Reuters/Ipsos survey, taken in October 2024, argued that "misinformed views" on

the economy were correlated with a preference for Trump.¹³

One negative factor for voters was obviously inflation, triggered by a combination of high levels of government spending, supply chain problems, and the Russian invasion of Ukraine. PPI's post-election survey of working-class voters pegged inflation as the most important issue to them. All told, consumer prices in 2024 were about 10% higher than the CBO forecast in 2019.

But perhaps more surprising was the inability of wages to keep up with rising prices of goods and services. The labor market was quite strong in 2022 in terms of job creation, hiring activity, the unemployment rate, and the number of job openings. For example, BLS surveys showed more than 10 million private sector job openings for 2021 and 2022, the highest level on record. Yet real wages plunged in 2021 in response to the inflation surge. More problematically, real wages didn't catch back up again, even after inflation slowed.



To put it another way, in August 2019, the CBO's forecast pegged real wage growth at about 1% per year over the next five years. Instead, real wages did not rise at all — a wageless economic boom.

This calculation is based on using the employment cost index for wages and salaries for the private sector. But the same pattern shows up in other measures of real wages, such as the usual median real weekly earnings of full-time workers, and average real hourly wages of private sector workers.

We use the beginning of the pandemic as a natural dividing line for measuring wage growth. Table 2 shows that real wages and salaries grew at a 0.7% annual pace in the three years before the pandemic, compared to a 0.0% growth rate. Median weekly earnings of full-time workers grew at a 1.1% annual rate in the three years before the pandemic, compared to a 0.6% growth rate since then. Similarly, the growth rate of real hourly earnings slowed from 0.8% in the pre-pandemic period to only 0.4% since then.

TABLE 2: MEASURING THE REAL WAGE SLOWDOWN (GROWTH AT ANNUAL RATE)

| | PRE-PANDEMIC TREND | PANDEMIC AND BIDEN YEARS |
|-------------------------------|---------------------------------|---------------------------------|
| | DECEMBER 2016- DECEMBER 2019 | DECEMBER 2019- DECEMBER 2024 |
| REAL WAGES AND SALARIES* | 0.7% | 0.0% |
| REAL MEDIAN WEEKLY EARNINGS** | 1.1% | 0.6% |
| REAL HOURLY EARNINGS*** | 0.8% | 0.4% |

^{*}Employment cost index, private sector, through October 2024, four quarter moving average

This real wage slowdown is extremely important for understanding the negative attitude of many voters towards the Biden economic record. Voters are not stupid. They knew that real wage growth was lagging compared to the pre-pandemic years. While Democrats spoke about a healthy post-pandemic recovery, these snapshots did not capture the realities that the American people faced. Americans perceive the economy in terms of trends in metrics like real wages, reflecting how their purchasing power changes from month

to month. After months of inflation outrunning nominal wage gains and decreasing their purchasing power, voters are understandably not receptive to figures showing that year-over-year inflation is leveling off. People correctly perceive that prices have risen, and with the hard truth that they will never return to previous levels, they view the economy as it has changed over time rather than its standing in the present moment.

^{**}Household survey, usual median real weekly earnings of full-time workers, four quarter moving average

^{***}Establishment survey, average for all private sector workers, 12-month moving average Data: BLS, PPI



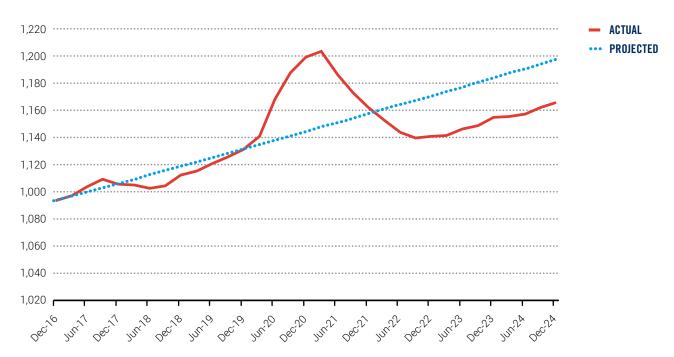
WHAT VOTERS FELT: REAL WAGE SHOCK

The time path of real wage growth is extremely important for understanding the 2024 election. Figure 3 extrapolates the wage growth trends of the pre-pandemic Trump administration, using real median weekly earnings of full-time workers (the dashed line). We see that real wages soared during the pandemic, fell during the inflationary period of 2021-2022, and then started to rise again. Across the board, real wages peaked in the first quarter of 2021 — just as President Joe Biden took office. As inflation began to surge through 2021, it outpaced

wage growth, not only nullifying but even reversing the impact of the nominal income gains.

Though inflation ultimately came under control through the end of 2022, the damage to purchasing power had been done, and real wages had fallen significantly below their pre-pandemic trend. Though real wages began to increase once again, they barely matched pre-pandemic growth rates. As a result, the negative shock to real wages did not disappear in 2023 and 2024, despite decent economic growth.

FIGURE 3: REAL MEDIAN USUAL WEEKLY EARNINGS , ACTUAL AND PROJECTED (BASED ON PRE-PANDEMIC TRENDS) (2024 DOLLARS)



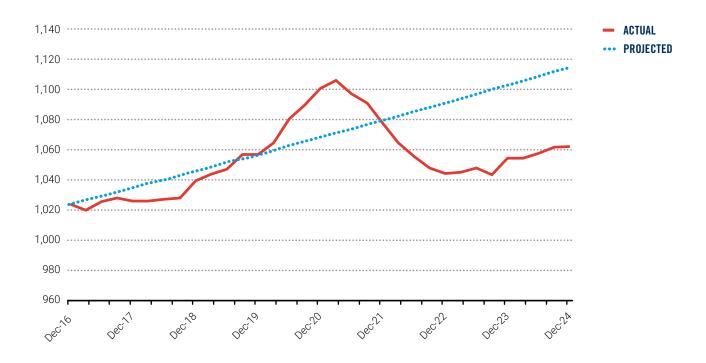
Data: BLS, PPI. Four-quarter moving averages, 2024 dollars

Moreover, the expected income gap increased for many groups going into the election. Especially hard-hit were workers with some college or an associate degree, but without a bachelor's degree. This group, which includes both the median worker and the median voter, saw real wages plummet during the inflationary surge. As of the fourth quarter of 2024, the real wages of workers with

some college or an associate degree were 4.5% below their pre-pandemic trend, with no sign of recovery back to trend. (figure 4). It should not be a surprise that according to ABC exit polls, 57% of voters with an associate degree voted for Trump in 2024, very close to the share of workers without any college at all.¹⁵



FIGURE 4: WORKERS WITH SOME COLLEGE, REAL MEDIAN USUAL WEEKLY EARNINGS, ACTUAL AND PROJECTED (BASED ON PRE-PANDEMIC TRENDS)



Data: BLS, PPI. Four-quarter moving averages, 2024 dollars, workers with some college

Real Wages and Immigration

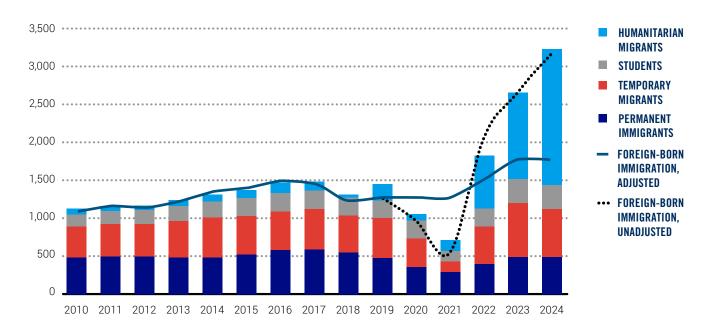
After the initial inflationary shock, why didn't real wages recover to their long-term trend? After all, the overall economy was not weak, as employer hiring continued at a solid pace in 2023 and 2024, adding 2 million private sector jobs per year. Similarly, the topline GDP growth continued at a solid 2.8% annual pace in those years, higher than the 10-year trend.

It's possible that the Federal Reserve's war on inflation could have depressed wage growth. By raising short-term interest rates, the Fed could have discouraged household and business borrowing, and thus restricted demand for workers. Indeed, the labor market seemed ready to pause. But then job growth picked up again.

It's important to note that the real wage weakness coincided with an enormous surge of immigrants, both legal and illegal, into the country. After running at roughly 1 million per year over the previous decade, estimates from the Census Bureau now peg foreign-born immigration at over 2.5 million in 2023 and over 3 million in 2024. Figure 5 is reproduced from the Census Bureau, and displays their survey-based, foreign-born immigration estimate (solid line); the total number of foreign-born immigrants by year using administrative data (bars), and their latest adjusted estimate for foreign-born immigration that combines survey and administrative data (dotted line).



FIGURE 5: FOREIGN-BORN IMMIGRATION ESTIMATES AND BENCHMARK DATA BY CATEGORIES: ESTIMATE YEARS 2010-2024 (THOUSANDS)



Note: Data refers to the year ending July 1. Source: Census Bureau

Many of these new entrants are showing up in the labor market. Foreign-born workers accounted for 89% of employment growth since 2019 (Table 3). This gain, which includes a substantial number of foreign-born workers with a college degree, reflects both the immigration surge and the aging

of the existing workforce. As a result, 19.2% of workers in 2024 were foreign-born, up from 17.5% in 2019. (Figure 6). (These numbers are likely to be revised as BLS adjusts for better estimates of immigration).

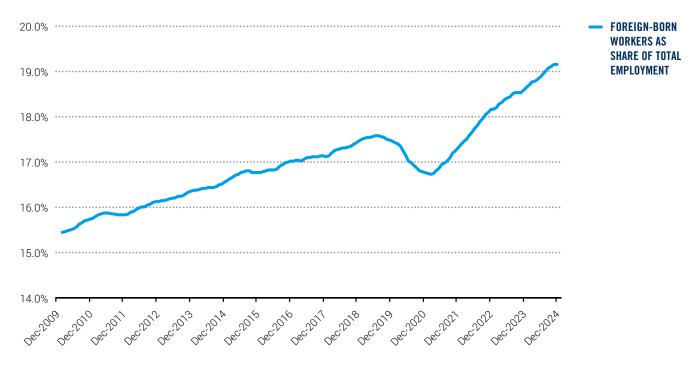
TABLE 3. IMMIGRANTS DOMINATE EMPLOYMENT GROWTH

| | CHANGE IN EMPLOYMENT, DECEMBER 2019-December 2024 (Thousands, 12-Month Moving Average) | SHARE OF EMPLOYMENT GROWTH |
|--------------|--|-------------------------------|
| FOREIGN-BORN | 3406 | 89% |
| NATIVE-BORN | 401 | 11% |
| TOTAL | 3807 | |

Data: BLS

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Source: BLS

This immigration surge has several macroeconomic implications. First, without the wave of immigrants in 2023 and 2024, GDP and employment growth would have been significantly less. New immigrants, filling many newly created jobs and taking up existing open positions, helped to spur additional economic activity and fuel impressive job creation numbers. In addition, the immigration surge may have helped the Fed successfully reduce inflation without a recession.

From an economic perspective, it is difficult to directly attribute the real wage weakness to the immigration surge. Most previous economic research shows a small positive effect of immigration on wages, or at worst, no impact.¹⁷ But from a political perspective, the connection between immigration and wages is clear. American workers of all races and ethnicities could see that they faced increased competition in the labor market that the Biden Administration was not acknowledging. Immigrants, constituting a large

pool of new workers, contributed to moderating the tight labor conditions that otherwise would have boosted real wages.

BROADER POLITICAL IMPLICATIONS

From a messaging perspective, there are important lessons to be learned from recent economic events. The Biden Administration adopted important investment-oriented policies, such as the CHIPS and Science Act and the Inflation Reduction Act (IRA). Though these massive bills were undoubtedly major milestones providing sorely needed long-term investments in the American economy, they helped boost inflation while providing few immediate benefits to working families in the short term.

Meanwhile, the Biden Administration grappled with the difficult issues connected with the immigration surge. As this paper has discussed, voters do not view the economy in the same way as economists. Immigration does have material impacts on



the daily lives of Americans, particularly for those living in communities where population changes are large. It's critical to distinguish that the existence of these short-run economic impacts is distinct from unfounded xenophobic grievances and outcry, which are all too common when issues of immigration and its relation to "culture" are discussed. While this distinction means that these sorts of xenophobic arguments should be dismissed, this also means that there is a component of the short-term immigration backlash that is not based in xenophobia but rather a legitimate economic grievance. From a political perspective, it is necessary to consider these short-term impacts on voter sentiment against the long-run benefits that immigration confers when crafting policy.

We will not address the question of what alternative investment or immigration policies the Biden Administration should have followed. However, while high-level macroeconomic figures might resonate with economists or party elites, to the vast majority of Americans, particularly those who pay minimal attention to the details of politics outside of election season, these numbers convey a lack of understanding or sympathy for their daily realities.

One final lesson is that Democrats should pay more attention to movements in real wages as setting a political context for policy goals. Working Americans are profoundly sensitive when their pay falls short of their spending. Conversely, they know when they are gaining ground. This time, the issues were government spending, inflation, and immigration. In the next election, the key issues may be different. But taking changes in real wages seriously will help align Democrats with the concerns of working Americans.

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