

US Daily: Do the Official Statistics Fully Capture the Recent Surge in Immigration? (Peng/Walker)

- Several recent studies and our own research agree that net US immigration in 2023 was likely well above the 1.1 million suggested by Census data. In today's note, we look at the data sources statistical agencies use to construct several key economic indicators—including the unemployment rate, nonfarm payrolls, and GDI—and assess the extent to which these data sources may understate the impact of the recent immigration surge.
- The primary reason that the 2023 Census population estimate has failed to capture the recent immigration surge is because Census uses a lagged migration estimate based on the 2022 American Community Survey. As a result, the household survey, which uses the Census population estimate as a benchmark, has also likely understated the size of the labor force and employment. We estimate that incorporating the recent immigration surge would boost the size of the labor force by 1.1 million and household employment by 1 million, leading to a small uptick in the March unemployment rate to 3.9% from the 3.8% currently reported.
- Nonfarm payrolls are less directly affected by underestimates of immigration in the Census, as they are tied to establishments that can report employees regardless of their immigration status. This means that the surge in unauthorized immigration in 2023 likely contributed to the widening of the employment gap between the establishment survey and the household survey. Using state-month level panel regressions, we estimate that nonfarm payrolls likely capture 0.6-0.9 million workers missed by the household survey. This suggests that nonfarm payrolls undercount unauthorized immigrant employment by roughly 0.1-0.4 million.
- An undercounting of unauthorized immigration has likely contributed modestly to the sharp increase in the gap between gross domestic product (GDP) and gross domestic income (GDI) over the last year. We suspect that GDP, which is an expenditure-based measure of economic activity and is constructed using sales and production data, may have captured the consumption boost from recent immigration surge, while GDI, which is an income-based measure of economic activity, may have underestimated the total employment and compensation paid to undocumented workers. Incorporating recent immigrant workers into the wages and salaries component of GDI reduces the GDP-GDI gap by about 0.1-0.2pp.

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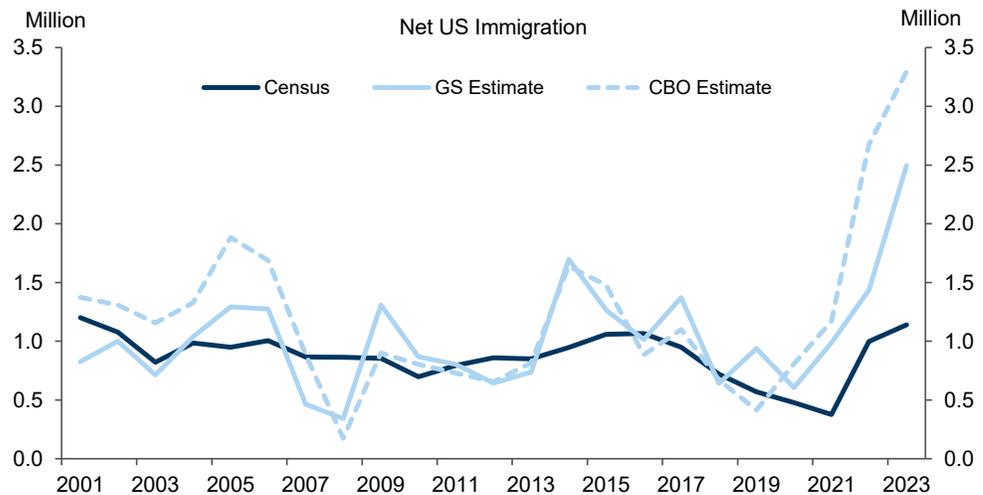
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Do the Official Statistics Fully Capture the Recent Surge in Immigration?

Several studies (see [here](#) and [here](#)) and our own research (see [here](#) and [here](#)) agree that net US immigration in 2023 was likely well above the 1.1 million suggested by Census data (Exhibit 1). In today's note, we look at the data sources statistical agencies use to construct several key economic indicators—including the unemployment rate, nonfarm payrolls, and GDI—and assess the extent to which these data sources may understate the impact of the recent immigration surge.

Exhibit 1: Net US Immigration Has Likely Surged Well Above the 1.1 Million Suggested by Census Data for 2023



Source: Department of Commerce, Congressional Budget Office, Goldman Sachs Global Investment Research

The primary reason that the 2023 Census population estimate has failed to capture the recent immigration surge is because Census uses a lagged migration estimate based on the 2022 American Community Survey.¹ Our own analysis of timelier information on net immigration suggests that the 2023 Census population estimate likely undercounted net migration by 1.4 million.

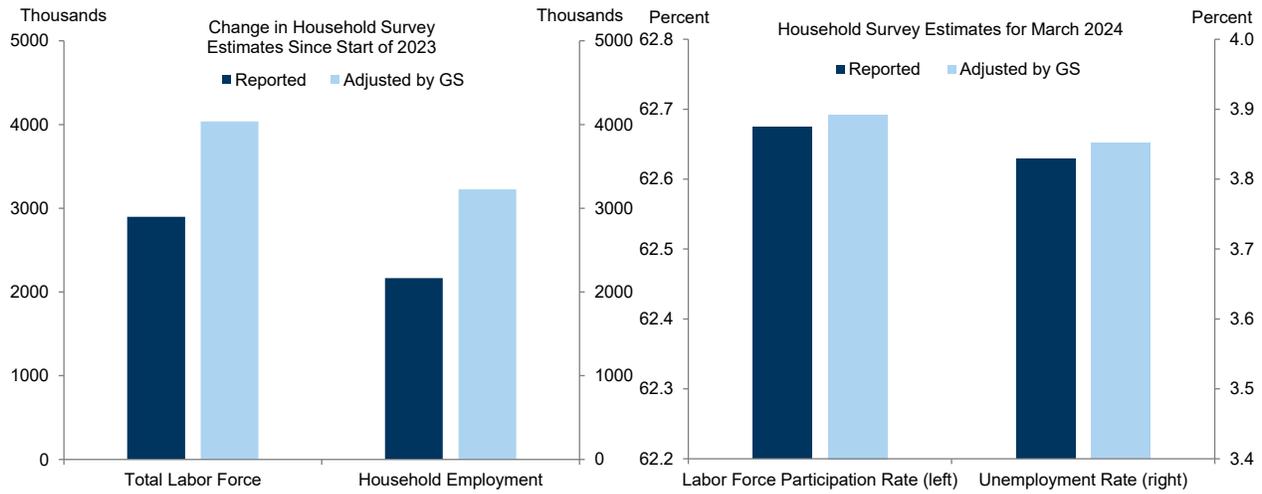
As a result, the household survey of the employment report, which uses the Census population estimate as a benchmark, has also likely understated the size of the labor force and employment. The left side of Exhibit 2 shows that incorporating the recent immigration surge would boost the size of the labor force by 1.1 million (from the currently reported level of 167.9 million to 169.0 million) and employment by 1 million (from 161.5 million to 162.5 million). Because new immigrant workers are more likely to be unemployed compared to native workers, the increase in the new immigrant population would also nudge the unemployment rate slightly higher: from 3.83% as reported in March to 3.85% (right side of Exhibit 2).

We expect the next annual revision to the household survey, which will coincide with the January 2025 employment report, to incorporate information from the new 2023

¹ See "Methodology for the United States Population Estimates: Vintage 2023," Census Bureau, 2023.

American Community Survey, and to reflect these *upward* adjustments.

Exhibit 2: The Household Survey Likely Underestimates the Labor Force by 1.1 Million and Employment by 1 Million; Incorporating the Increase in Recent Immigrants Boosts the March Unemployment Rate From 3.83% to 3.85%



Source: Department of Labor, Department of Commerce, Goldman Sachs Global Investment Research

Nonfarm payrolls are less directly affected by underestimates of recent immigration than the household survey, as they are informed by monthly surveys of establishments where employers can record employees regardless of their immigration status. This means that the surge in unauthorized immigration in 2023 likely contributed to the widening of the gap between the employment in establishment survey and the employment in household survey.

Indeed, using state-month level panel regressions, we find that, for each additional unauthorized immigrant worker, the gap between nonfarm payrolls and employment from household survey increases by 0.6-0.9 (column 1 and 2 in Exhibit 3), suggesting that the establishment survey likely captured about 60-90% of the recent immigration that the household survey failed to capture. Furthermore, a placebo test using a 2021-2022 sample—when the household survey’s immigration assumptions were realistic—does not find a statistically significant correlation between immigration and the gap, further suggesting that the issue is related to underestimating immigrant workers in the 2023 Census (column 3 and 4 in Exhibit 3).

Exhibit 3: The Surge in Unauthorized Immigration in 2023 Explains the Widening Gap Between Nonfarm Payrolls Employment and Employment in Household Survey

	2023-2024		2021-2022 (Placebo)	
	(1)	(2)	(3)	(4)
One Additional Increase in Unauthorized Worker	0.64*** (0.1)	0.93*** (0.2)	0.37 (0.2)	0.06 (0.5)
Number of Observations	476	476	812	812
R-squared	0.1	0.4	0.002	0.3
State Fixed Effects		Y		Y
Time Fixed Effects		Y		Y

Note: The regression sample is a state-month panel dataset. The key independent variable is the monthly net unauthorized worker, approximated by the number of net cases filed for immigrants living in a state (new cases that did not result in detention - new cases that had resulted in deportation). The dependent variable is the monthly change in gap between nonfarm payroll employment and household survey employment. Standard errors are reported in parentheses. *, **, *** denote statistical significance at the 10%, 5%, and 1% level.

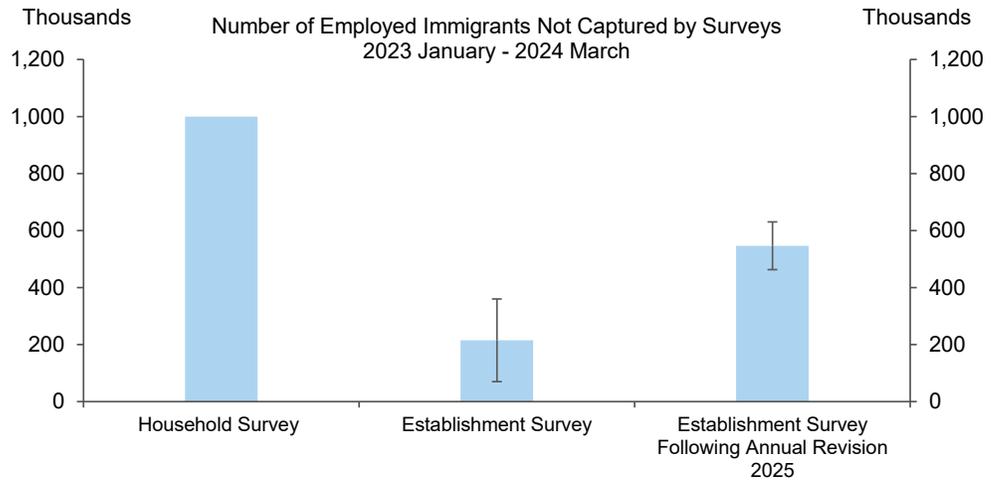
Source: Goldman Sachs Global Investment Research

Using the relationship from Exhibit 3, we estimate that nonfarm payrolls likely capture 0.6-0.9 million workers missed by the household survey but still undercount unauthorized immigrant employment by roughly 0.1-0.4 million (middle bar in Exhibit 4).

We suspect that the next annual revision to nonfarm payrolls, unlike household survey employment, is likely to result in *downward* revisions. Why? The annual revision will result in nonfarm payrolls being benchmarked to the Quarterly County Employment and Wages (QCEW). The employment information from QCEW is determined by state unemployment insurance records that we suspect are more likely than the monthly establishment survey to exclude unauthorized immigrants who are unable to obtain legal authorization to work in 2023. About 64% of immigrants in 2023 are unauthorized, and one-third of them have likely filed for asylum, which allows them to also apply for work authorization after 150 days.² This means that, out of the 0.6-0.9 million increase in immigrant workers captured by nonfarm payrolls, about 0.2-0.4 million workers might be revised out of nonfarm payrolls in the next annual revision in January 2025. This would worsen the understatement of payroll employment; in contrast, revisions based on new Census data should reduce or eliminate the understatement of household employment.

² See [reports](#) from US Department of Justice on the number of asylum applications.

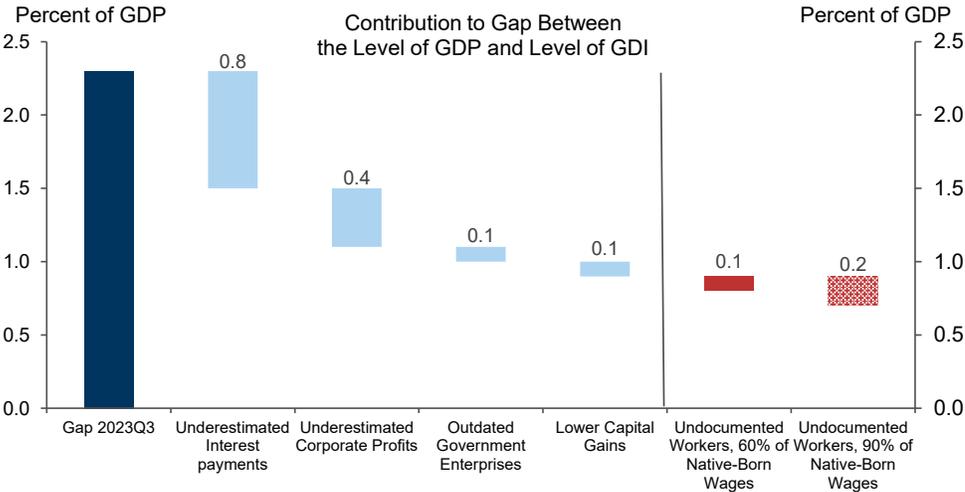
Exhibit 4: Nonfarm Payroll Employment Is Likely Already Understated by 0.1-0.4 Million; The 2025 Annual Revisions to Payrolls Could Revise Out Another 0.2-0.4 Million Undocumented Workers



Source: Department of Labor, Department of Commerce, Goldman Sachs Global Investment Research

It is also worth noting that gross domestic income (GDI), which relies on employment and compensation information from QCEW, may also understate the increase in immigrant workers. We think this undercounting issue contributed modestly to the increase in the gap between gross domestic product (GDP) and GDI in 2023, in addition to drivers like mismeasurement of interest payments and outdated government enterprise classification explored in [our prior analysis](#). GDP, which is an expenditure-based measure of economic activity and is constructed using sales and production data, likely captures the consumption boost from recent immigration surge, while GDI, which is an income-based measure of economic activity and is based on QCEW data, may underestimate compensation paid to undocumented workers. With unauthorized immigrants representing 0.5% of the workforce and likely earning lower wages than the native-born workforce (we assume 60-90%), incorporating their wages and salaries into the wages and salaries component of GDI (which makes up 44% of GDI) reduces the GDP-GDI gap by about 0.1-0.2pp.

Exhibit 5: Undercounting Compensation to Recent Undocumented Workers May Have Contributed to the Understatement of Gross Domestic Income by Enough to Widen the GDP-GDI Gap by 0.1-0.2pp in 2023



Source: Department of Commerce, Goldman Sachs Global Investment Research

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Disclosure Appendix

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We, Jan Hatzius, Alec Phillips, David Mericle, Spencer Hill, CFA, Ronnie Walker, Manuel Abecasis, Tim Krupa, Elsie Peng and Jessica Rindels, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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