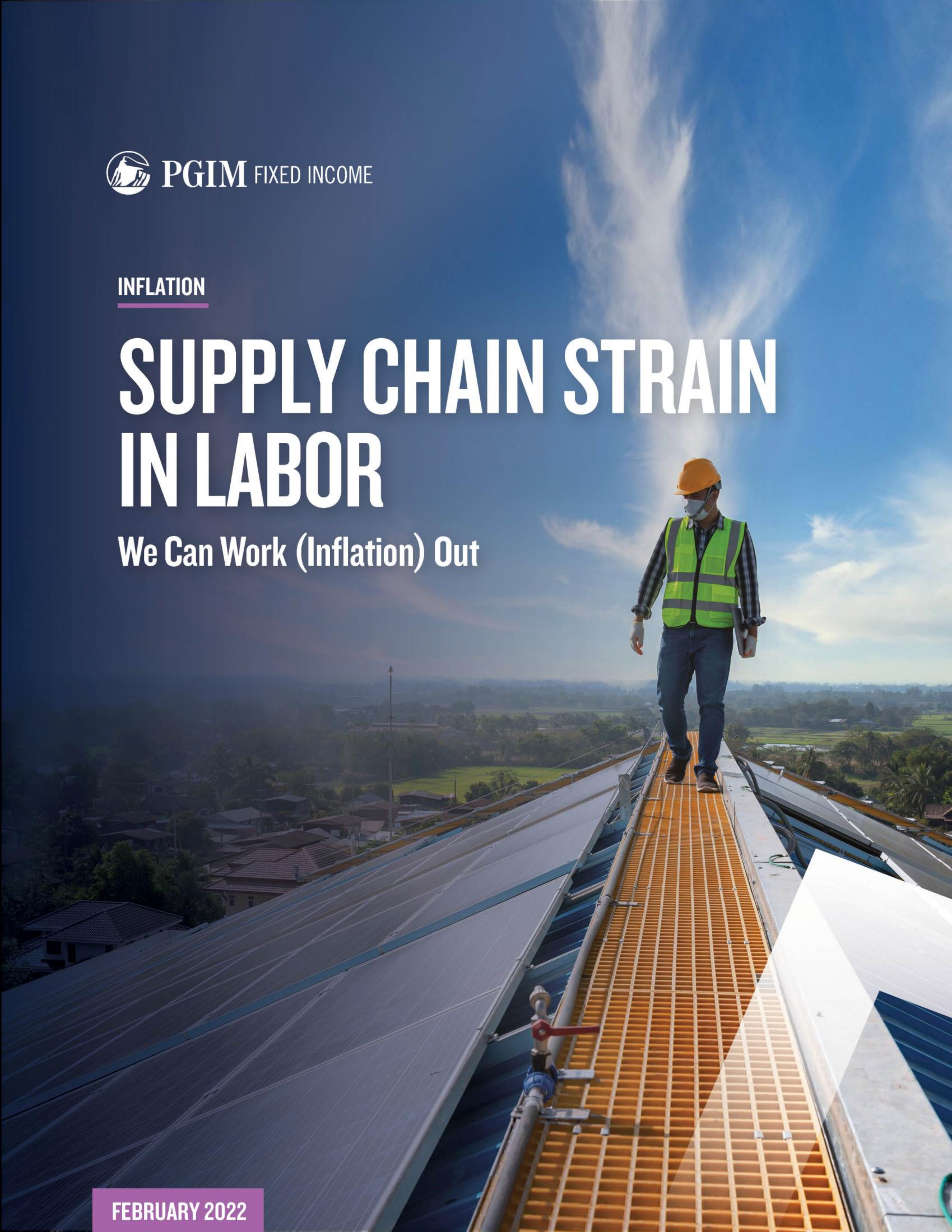

PGIM FIXED INCOME

INFLATION

SUPPLY CHAIN STRAIN IN LABOR

We Can Work (Inflation) Out

FEBRUARY 2022

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EXECUTIVE SUMMARY

- The second paper in our supply chain series assesses the extent of labor market disruptions in two of the world's largest economies, and we find modest near-term labor market shortages in the euro area. In the U.S., labor shortages are more widespread and acute, but are expected to lessen over time as demand moderates, more workers return, and technology picks up the slack.
- While wage trends in Europe have been fairly subdued, accelerating wage growth in the U.S. has become a concern, although it is still lagging inflation. In the past, trailing wages have sown the seeds of inflation's eventual demise as companies' pricing power dissipates in the face of eroding consumer purchasing power.
- Meanwhile, a historically high degree of labor market churn in the U.S. holds open the possibility of stronger productivity gains and a more durable economic recovery. But at present, increased churning also risks becoming an Achilles heel for our inflation outlook, if, for example, it were to lead to widespread wage bargaining and the possibility that automatic cost-of-living adjustments (COLAs) could become more pervasive again. This risk is expected to diminish, though, if much of the supply bottlenecks in goods sectors dissipate this year and consumer price pressures consequently moderate.
- In Europe, the pre-existing skills gap has likely been magnified by furlough schemes and accelerated trends towards digitalization, which could weigh more heavily in the medium term.

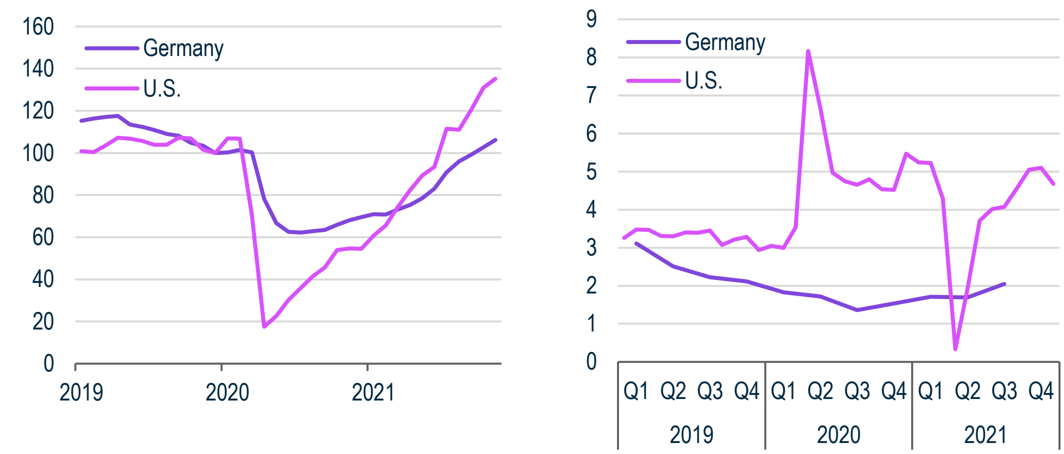
TIGHT LABOR MARKET IN THE U.S.; LESS SO IN THE EURO AREA

As the COVID risks to public health appear to wane and policymakers turn their focus to inflation, all eyes are on the labor markets. Supply chain disruptions and higher oil prices may be global issues, labor markets are not as integrated, showing divergence across major economies.

In the U.S., the labor market is nearly 40% tighter than pre-pandemic, as measured by the ratio of job openings to the number of unemployed, while average hourly earnings accelerated from a ~3% pace ahead of the pandemic to almost 5% by the end of 2021. However, in Germany, the largest economy in the euro area, the labor market is just 6% tighter and wage growth remains depressed.

Figure 1: Variations in the U.S. and German labor markets

Labor market tightness* (index, 2019 Dec. = 100)   Average hourly earnings (annual percentage Δ)



Source: FRED, PGIM Fixed Income as of January 2022. * Measures ratio of vacancies to unemployment until November 2021.

U.S. fiscal support for workers was directed mainly at the unemployed, in contrast to Europe's furlough schemes designed to keep employment intact during a recession.

In large part, these variations can be explained by differences in lockdown and fiscal policies. As is typical in the U.S., fiscal support for workers was directed mainly at the unemployed, but measures went a step further in the COVID crisis as eligibility requirements for unemployment benefits were loosened significantly. Individuals no longer had to be actively searching for a new job to qualify, while gig workers and other self-employed individuals not previously covered became eligible overnight. Labor force participation rates thus fell rapidly, while the average workweek lengthened notably as many lost jobs were part-time and those who remained employed notched up overtime.

Europe, in contrast, channeled much of its fiscal support into furlough schemes designed to pay companies to keep their workforce intact. While workers ended up working fewer hours as business activity plunged during the shutdowns, employment conditions have appeared much more stable in Europe than in the U.S.[1]

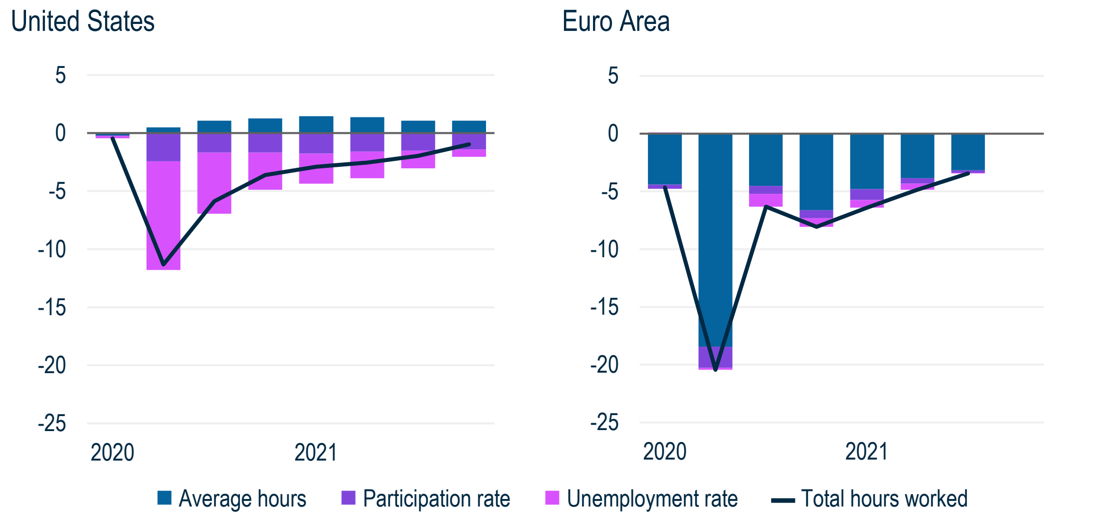
Labor markets in the U.S. are typically more flexible than in Europe, leading to soaring U.S. unemployment during a recession, but ultimately a recovery to structurally lower unemployment rates than in Europe. This same pattern has played out during the pandemic, with job losses bearing the brunt of the adjustment in the U.S. labor market. In contrast, employment in the

[1] See Boissay, Kohlscheen, Moessner and Rees, Labour markets and inflation in the wake of the pandemic, BIS Bulletin 47, October 2021.

euro area has remained remarkably stable, but the average workweek has borne most of the adjustments in the labor market (Figure 2).

Figure 2: Decomposition of the change in total hours worked[1]

(since 2019 Q4, percentage points)

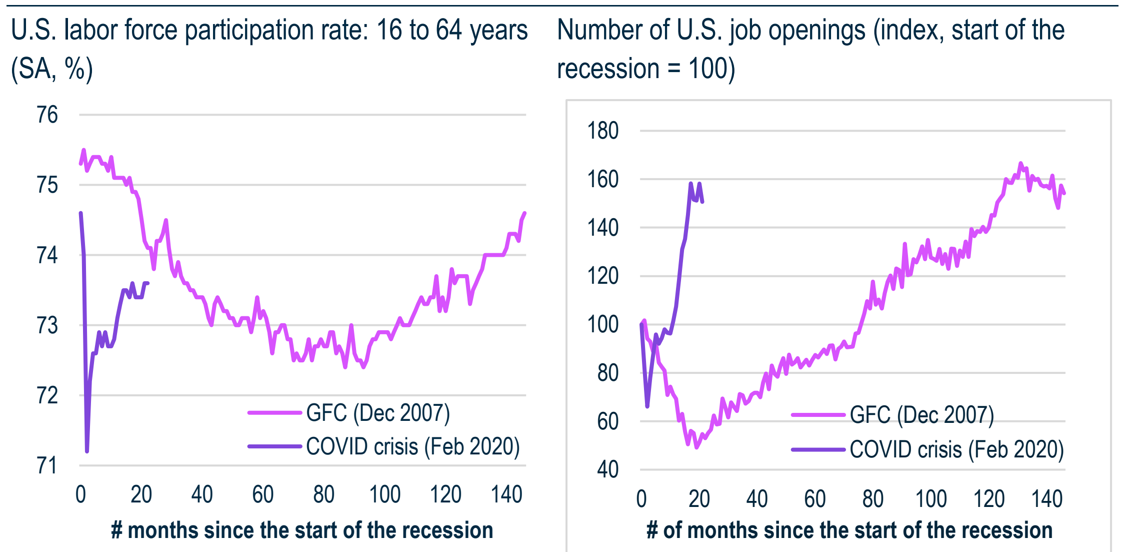


Source: BIS, FRED, Eurostat, and PGIM Fixed Income as of January 2022.

The real anomaly in the U.S. has been the surging demand for labor alongside torrid aggregate demand conditions, generated in large part by massive direct government cash payments to households.

One of the most consequential differences in U.S. fiscal policy compared to that in Europe and in previous U.S. cycles, however, were the massive direct government cash payments to households, which helped generate a rapid and strong resurgence in aggregate demand, despite high levels of unemployment during the crisis. Surging aggregate demand conditions in turn led quickly to surging demand for workers—all much earlier than is typical for a recovery (Figure 3). Companies have been posting a record number of jobs for well over a year now and, despite strong hiring, a record number of job openings remain unfilled. Even with waves of additional COVID variants, the cycle of economic activity has consequently played out in a significantly accelerated and compressed fashion, with a tight U.S. labor market more typical of the late stages of a cycle emerging as a result.

Figure 3: The real anomaly in the U.S. COVID crisis has not been the decline in the supply of labor, but rather the surge in demand



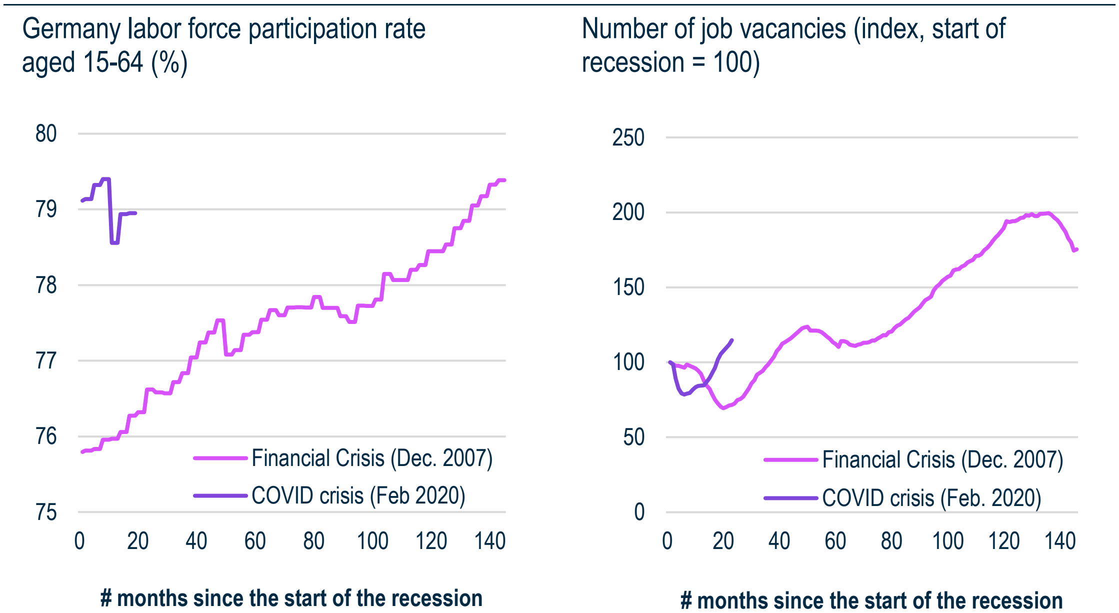
Source: FRED, PGIM Fixed Income as of January 2022.

In comparison, the strength of demand in the euro area looks relatively muted. Euro area GDP —unlike the U.S.—remains below its pre-pandemic trend. As discussed in a previous blog post, excess savings accumulated during the lockdowns were largely driven by lower consumption rather than higher disposable income. Excess savings accumulated via reduced consumption are less likely to be spent and drive inflation higher.

Given this backdrop, the recovery in labor demand (Figure 4) does not look particularly unusual when compared to previous expansions, such as in the years following the Financial Crisis. Where pandemic related labor market pinch points exist, they appear to be largely confined to particular sectors.

In contrast, the recovery of labor demand in Europe does not look particularly unusual when compared to previous expansions, such as in the years following the Financial Crisis.

Figure 4: Germany's job vacancies do not look particularly unusual in this recovery



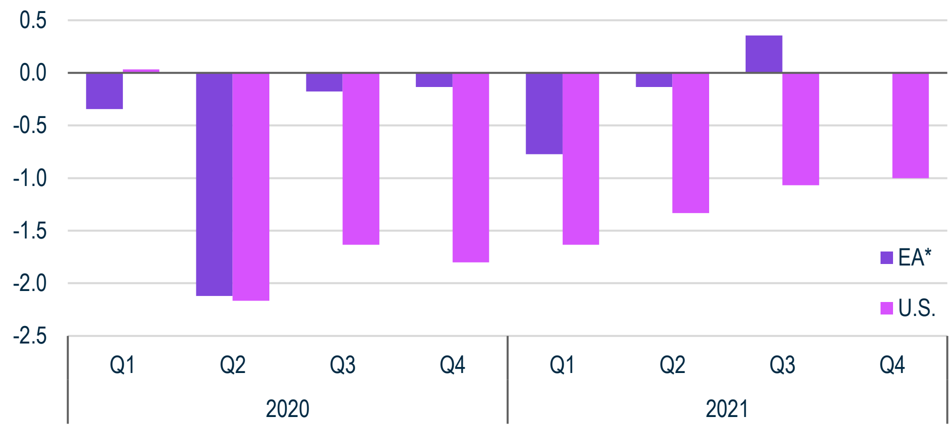
Source: FRED, PGIM Fixed Income as of January 2022.

Also, average hours remain well below pre-pandemic levels, suggesting continued slack in the labor market. This picture of ample labor supply is further corroborated by labor market participation rates, which fell markedly in Q2 2020, but have largely recovered since (Figure 5). The recovery in labor force participation rates in the U.S. has been slower, but the improvement continued through late last year and is now further along.

Our base case is that these factors will not be sufficiently large in the euro area to be inflationary at the macro level. In the U.S., we anticipate the acute labor market shortages to improve if consumer demand comes off the boil in the coming quarters as expected.

Figure 5: Labor participation has been recovering

Change in prime-age (25-54) labor force participation since 2019 Q4 (percentage points)



Source: Haver Analytics, PGIM Fixed Income as of January 2022. *2021 Q4 data not available.

NEAR-TERM LABOR SHORTAGES TO LESSEN

Looking ahead, Europe still presents a more balanced picture of labor demand and supply. For example, euro area negotiated wage growth fell to 1.35% in Q3 2021, the lowest rate since 1991, suggesting little inflationary pressure. More timely negotiated wage data at country level corroborate this picture. A reduction in wage bargaining power due to reforms following the European sovereign debt crisis should also help contain a price-wage spiral in the region. While we will monitor for potential vaccination requirements for essential workers and a second surge of activity next spring as potential sources of labor market disruption over the next 12 months, our base case is that these factors will not be sufficiently large to be inflationary at the macro level.

In the U.S., we anticipate the acute labor market shortages to improve if consumer demand comes off the boil in the coming quarters as expected. Although U.S. nominal wages accelerated in 2021, they are still falling short of inflation, pushing real wages down 2.4% in 2021. Moreover, companies are keeping a lid on benefits costs, helping to contain overall increases in labor compensation. Where possible, businesses are expected to persist in adopting both labor-saving and labor-enhancing technologies that could provide a workaround in some of the areas where labor market conditions are tight. In fact, the pandemic appears to have accelerated the pace at which companies are adapting their business models. Over time, that accelerated trend should provide a boost to labor productivity and help keep inflation pressure tempered over the medium to long term.

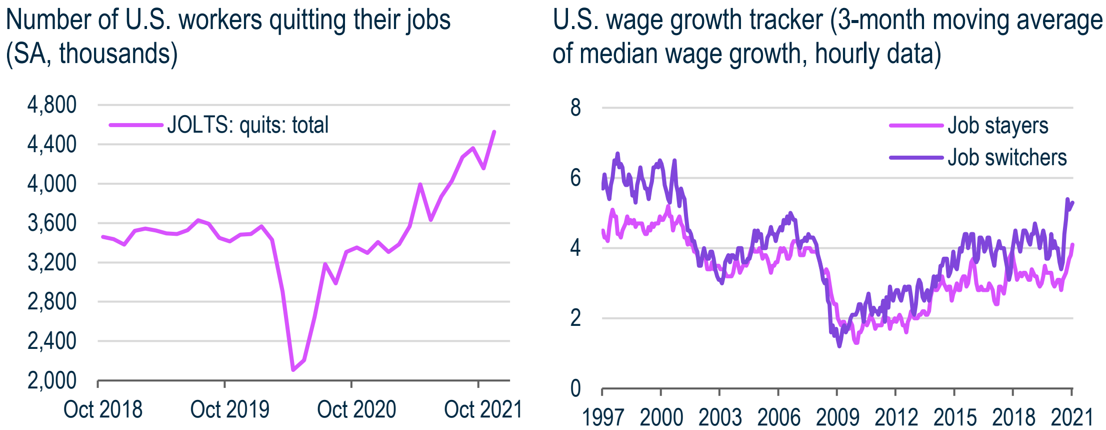
CONTINUATION OF LABOR MARKET TRENDS

Taking a step back, it's important to acknowledge that the variations in labor market dynamics we observe are in many cases amplifications of pre-existing trends. Labor market churn was much more elevated in the U.S. than in the Europe well before the pandemic. Workers with bargaining power—new or younger entrants, or those willing and able to switch jobs—have long commanded higher pay increases than other workers. As the business cycle lengthens and the labor market tightens, the divergence in wage gains widens for those with more bargaining power. What appears to have been different over the past year is the elevated number of workers that fall into categories with higher bargaining power. Quit rates in the U.S. are at an historic high, with most of these individuals shifting to new—often higher paying—industries and

Taking a step back, it's important to acknowledge that the variations in labor market dynamics we observe are amplifications of preexisting trends.

companies (Figure 6). The "Great Resignation" can thus also be thought of as the "Great Reallocation," with higher wages creating an incentive for workers to shift to potentially more productive positions.

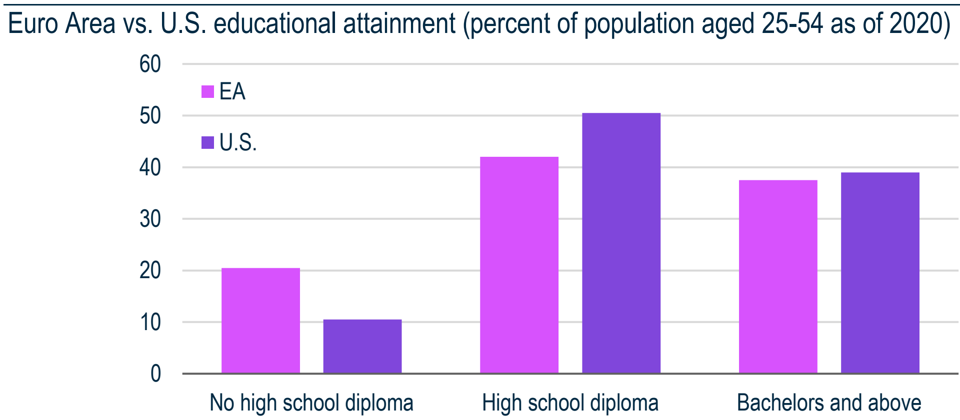
Figure 6: Both quitters and job switchers have increased substantially in the U.S., suggesting the "Great Resignation" is also the "Great Reallocation"



Source: Haver, PGIM Fixed Income as of January 2022.

In Europe, the drawback to adopting short-time work schemes is that it can make labor-market inefficiencies more entrenched by keeping workers in ill-matched jobs from which they'd otherwise be laid off. Skills mismatch, as reflected in lower levels of educational attainment compared to the U.S. (Figure 7), has been a problem across the euro area for many years. Such labor market mismatch is likely to be made worse by accelerated trends due to the pandemic in areas such as retailing and digitalization.

Figure 7: Relatively low educational attainment in Europe is contributing to a skills gap



Source: Eurostat, OECD, PGIM Fixed Income as of January 2022.

Next Generation EU stimulus is aimed at addressing some of these labor supply issues, but the impact is likely to be a slow burn.

Other structural weaknesses in the European labor market, such as low labor market participation of older workers, will likely remain challenging given limited appetite for pension reform and pandemic-related health concerns. In countries such as Italy, female labor market participation rates remain exceptionally low relative to peers. The structural reforms and public investments promised in the Next Generation EU stimulus, including education and childcare provision, are aimed at addressing some of these labor supply issues, but the impact is likely to be a slow burn.

CONCLUSION: LABOR MARKET UNLIKELY TO DRIVE INFLATION OVER MEDIUM TO LONG TERM

The anomalous rebound in consumer demand in the U.S. has driven a surge in job vacancies and greater churn in the labor market. If demand conditions moderate, supply bottlenecks improve, and inflation consequently moderates over the course of this year, the risk of a price-wage spiral taking hold should diminish as well. Over the medium-term, a reallocation of workers to potentially higher productivity positions could put the U.S. economy on a better footing. Meanwhile, the widespread adoption of furlough schemes has helped temper near-term labor market dislocation in Europe. While Europe looks to have largely avoided the near-term labor constraints observed in the U.S., greater concern is put on the prospect of weaker labor market dynamism.

Figure 7: Summary comparison of U.S. and EA labor markets

	United States	Euro Area
Near-term labor supply shortage?	✓ Anomalous strength in demand has created a surge in labor demand, but that should moderate as consumption comes off the boil; labor supply also expected to strengthen modestly further.	✗ Furlough helped retain employer/employee job match, reducing near-term frictions which are expected to further dissipate over the next ~12 months.
Medium-term labor supply shortage?	✓ Flexible labor markets should facilitate a reallocation toward fast growing sectors, but adjustments are likely to be ongoing, keeping labor markets tight.	✓ Furlough and accelerated trends likely to have exacerbated existing skills mismatch.
Near-term implications for inflation?	✓ Firms have had pricing power in the pandemic to push higher wage costs through to consumers. As long as aggregate wage gains continue to lag inflation, though, this pricing power should dissipate.	✗ Unlikely to be key factor behind near-term inflation overshoots given modest recovery and reduced wage bargaining.
Long-term implications for inflation?	✗ Reallocating workers to higher growth industries could increase productivity and dampen inflation despite a tight labor market over the long-run.	✓ Continued low productivity and aging demographics expected to weigh on medium-term inflation outlook.

Source: PGIM Fixed Income as of January 2022.

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Source(s) of data (unless otherwise noted): PGIM Fixed Income as of February 2022.

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