

MARKET INSIGHTS

THIRD QUARTER 2021

SOUTH PASADENA

NEWPORT BEACH

SAN FRANCISCO

RENO

PORTLAND

SEATTLE

THE ROAD TO FULL EMPLOYMENT

INTRODUCTION

The U.S. economy maintained its strong momentum in the second quarter. Earnings estimates for the next 12 months also continued to rise on the heels of a robust economic recovery. As a result, the U.S. stock market generated solid returns in the second quarter. The S&P 500 index rose by 8.5% while the Russell 2000 index gained 4.3%. Bond yields remained surprisingly subdued despite a pronounced rise in inflation.

The most notable economic development in the second quarter was a surge in inflation at all levels. A closer examination of the data revealed that more than $1/3^{rd}$ of the annual rise in prices was attributable to the pandemic – a "base effect" related to lockdown lows from a year ago and unusually high inflation in select categories because of component shortages.

Bond yields initially moved higher on the news but then declined as investors began to align their views on inflation with those of the Federal Reserve Bank.

The Fed conducts monetary policy to fulfill its dual mandate of promoting maximum employment and stable prices. In balancing these objectives, the Fed has clearly articulated that the uneven post-pandemic jobs recovery remains a bigger concern than the risk of higher inflation.

Even as inflation picks up, the Fed is willing to tolerate it for two reasons. One, the Fed expects the rise in inflation to be transitory. And two, it believes that letting inflation run above 2% for as long as it was below 2% will lead to a more sustainable economic recovery.

The trajectory of job growth from here on, therefore, plays a big role in the Fed's monetary policy. As investor attention shifts from inflation to the labor market, we focus on the road to full employment in the U.S. economy.

We examine the U.S. labor market in detail to better understand the following issues.

Investors worry
that the labor
market may already
be too tight and
that accommodative
Fed policy may,
therefore,
be misguided.

We believe there is enough slack in the labor market to allay those concerns.

- Notion of full employment
- Impact of demographics on the labor force
- True extent of slack in the labor market today
- Appropriateness of current monetary policy

THE DIFFUSE NOTION OF FULL EMPLOYMENT

The concept of full employment is intuitive to grasp and yet elusive to quantify. The natural rate of unemployment which brings the economy to full employment, and the labor market to equilibrium, is not easily observable and is, therefore, hard to measure or predict.

In its most simple definition, the natural rate of unemployment is compatible with a steady inflation rate and an economy operating at its full potential GDP. In other words, the natural rate is the rate of unemployment that would prevail in the absence of any cyclical fluctuations induced by changes in the economic cycle.

As intractable as the notion of the natural rate is, it is important for policy makers to understand its determinants, its changes over time and its relation to the actual rate of unemployment. An actual rate of unemployment which is below the natural rate is likely to trigger persistent inflation.

Let's understand the basic components of the unemployment rate.

The unemployment rate at any point is derived from three different types of unemployment – frictional, structural and cyclical. The first two components, frictional and structural unemployment, define the natural rate of unemployment. Cyclical unemployment causes the actual unemployment rate to deviate from its natural rate during different phases of the business cycle.

Frictional unemployment is always present in an economy and arises from the natural impediments to the movement of labor. Structural unemployment arises from a mismatch of skills between what employers need and what workers can offer.

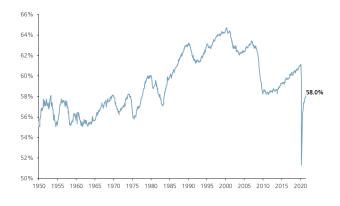
Both frictional and structural unemployment exist even in a healthy economy. As a result, the natural rate of unemployment is always above zero. Both can change over time which causes the natural rate to vary over time as well. As an example, changes in public policy for unemployment benefits can change structural unemployment.

While the discussion so far helps us understand full employment conceptually, it falls well short of any practical insights and takeaways. We, therefore, turn to empirical evidence to gauge how close we are to full employment today.

We will look at the labor market in considerable detail in later sections. At this point, we address the topic of full employment by looking at two simple measures – one based on employment levels and the other based on unemployment rates.

We first look at all employed people in the U.S. as a percentage of the civilian population in Figure 1. The Civilian Noninstitutional Population (referred to as "CNP" from here on) is comprised of all people above 16 years of age who are not part of institutions such as the U.S. Armed Forces, nursing homes or prisons.

Figure 1: Employment as Percentage of CNP



Source: Bureau of Labor Statistics as of 6/30/2021

The high point in this data is not necessarily the true limit of full employment. But it is certainly a useful marker for what maximum employment has been so far in the U.S. economy.

Over the last 70 years, the highest level of employment as a percentage of the CNP was about 65% in early

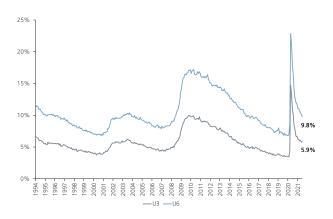
2000. After declining through the Global Financial Crisis, employment had inched back up to around 61% of CNP just before Covid hit. Today, it stands at 58%.

The proportion of active workers within CNP has declined in recent years and employment is, therefore, unlikely to reclaim its previous high of 65%. Nonetheless, at 58%, it remains well below what is the likely true level of full employment at this time.

Let's revisit the notion of full employment by looking at unemployment rates instead of employment levels. We reach a similar conclusion by looking at historical unemployment rates in Figure 2.

The U3 rate of unemployment is the most widely reported metric based on the proportion of unemployed workers within the labor force. We also show the U6 rate, a broader gauge of unemployment, which includes discouraged workers and under-employed part-timers.

Figure 2: U3 and U6 Unemployment Rates



Source: Bureau of Labor Statistics as of 6/30/2021

We can see in Figure 2 that the all-time lows in U3 and U6 were achieved just prior to Covid. These historical lows of 3.5% and 6.8% for U3 and U6 respectively in early 2020 serve as a useful, albeit imprecise, proxy for levels of full employment today. The current U3 and U6 unemployment rates of 5.9% and 9.8% are still well above their historical lows.

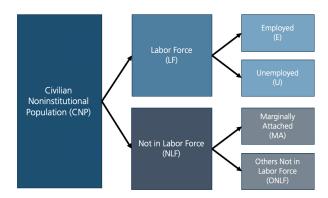
Our early assessment so far suggests that we are well removed from full employment at this point.

We next address the shrinking share of the labor force within the CNP and its likely impact on slack and wage inflation.

LABOR MARKET COMPOSITION

We break down the Civilian Noninstitutional Population into its different components in Figure 3.

Figure 3: Labor Market Composition



Source: Bureau of Labor Statistics

There are three key lines of segmentation in Figure 3.

- a. The CNP is composed of people who are in the labor force (LF) and those who are not in the labor force (NLF); CNP = LF + NLF.
- b. The labor force is made up of workers who are either employed (E) or unemployed (U);
 LF = E + U. Employed workers also include those working part time for economic reasons (PTER).
- c. People who are not in the labor force include those who are marginally attached to the labor force (MA) and others who are not in the labor force (ONLF) on a permanent basis; NLF = MA + ONLF.

This framework now allows us to define one other important and related concept. While we looked at employment levels and unemployment rates earlier, we now analyze them jointly by studying the entire labor force within the civilian population.

The labor force participation rate (LFPR) is simply the

proportion of the labor force within the CNP; LFPR = LF / CNP.

We frame our first key question for analysis.

1. Has the decline in the labor force participation rate been driven mainly by recent recessions ... and will a recovery, therefore, cause it to snap back and ease inflationary pressures?

We believe the answer to this question is more secular in nature and less cyclical.

PARTICIPATION RATE AND DEMOGRAPHICS

Economic downturns clearly play a role in the size of the labor force and the level of under-employment. This happens in a couple of different ways. Using Figure 3 for reference, a subset of unemployed workers (U) become marginally attached (MA) and drop out of the labor force during a recession. Some employed workers (E) also shift to working part time for economic reasons (PTER).

Both of these effects were at play during the Global Financial Crisis (GFC) of 2008 when labor force participation declined. If this decline was cyclical in nature, one would have expected it to rebound in the ensuing economic expansion.

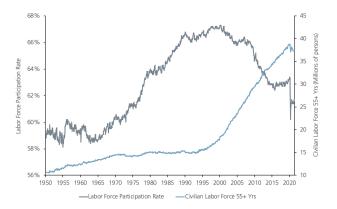
But it did not! The labor force participation rate continued to decline through the post-GFC recovery. We look for other explanations of declining participation rates and find the answer in underlying demographic shifts.

The age distribution within a population can have a major impact on labor force participation. The population cohort of 25-54 years tends to have a higher level of labor force participation than younger or older people. Most of the variation in the labor force participation rate can be explained by changes in the composition of the U.S. population.

The baby-boom generation is generally defined as people born between 1946 and 1964. For many decades now, the aging of this generation has significantly affected the size and composition of the labor force.

The sharp increase in labor force participation during the 1970s and 1980s coincided with babyboomers entering the 25-34 and 35-44 age groups. By the same token, the decline in the labor force participation rate also coincided with the aging of baby-boomers. We show this inverse relationship in Figure 4.

Figure 4: Participation Rates and Demographics



Source: Bureau of Labor Statistics as of 6/30/2021

Figure 4 shows the remarkable rise in the labor force participation rate during the 1970s and 1980s. The sharp increase in labor force participation in that period was driven by two factors. Women entered the labor force in large numbers. And baby-boomers entered prime working age.

Labor force participation peaked in early 2000 at around 67% and has steadily declined since then. While the participation rate of women has been relatively steady in recent decades, we see an important shift in the age distribution of the CNP.

The oldest baby-boomers were born in 1946 and turned 55 in 2001. The decline in the labor force participation rate coincides remarkably with this inflection point in the aging of the U.S. population.

In the last 20 years, Figure 4 shows clearly that the number of people 55 years and older has risen sharply. We believe that the aging of the CNP has played a big role in the decline of labor force participation rates.

Because demographic forces are secular in nature, we expect the inexorable downward pressure on labor force participation to continue.

We, therefore, do not expect a big uptick in the labor force participation rate to provide a ready source of workers to ease potential wage inflation.

Let's focus then on just how tight the labor market really is. We think of labor market slack in the context of both the demand for labor and the supply of labor.

We have read a lot about labor shortages of late as more jobs become available during the reopening. One of the more telling statistics on that front is that the number of job openings (9.2 million) is now almost the same as the number of unemployed people (9.5 million).

This allows us to frame our second important question for investigation.

2. If labor force participation is likely to remain well below its prior highs, how much slack is there in the labor market to ease wage inflation pressures?

STILL SIGNIFICANT SLACK

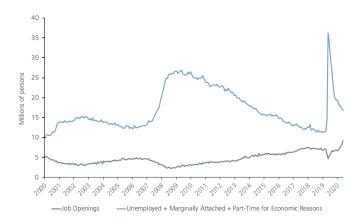
The short answer to this question is that there is still considerable slack left in the labor market. The answer initially seems counter-intuitive – in light of how tight the labor market appears to be in terms of job openings (JO) and unemployed workers (U).

The key to deciphering this apparent anomaly is to account for the current level of under-employment in addition to a likely partial rebound in labor force participation.

As the economic recovery continues, a number of marginally attached people (MA) may get drawn back into the labor force. At the same time, under-employed workers who are part-time for economic reasons (PTER) could return to full-time employment.

We re-designate the available pool of workers as U + MA + PTER. Figure 5 shows how this leads to significant excess slack in the labor market.

Figure 5: Still Significant Slack



Source: Bureau of Labor Statistics as of 5/31/2021

Here are the key observations from Figure 5.

- i. There are 9.2 million job openings in the latest available data for the month of May. The available pool of workers to absorb these jobs is 16.0 million ... which includes 9.5 unemployed workers, 1.9 marginally attached workers and 4.6 part-time workers.
- ii. While U + MA + PTER has always exceeded JO, the gap between the two is bigger today than it has been historically.
- iii. We estimate that it could well take 2-3 years for the spread between U + MA + PTER and JO to approach its pre-Covid level.

LABOR MARKET AND FED POLICY

The Fed recently revised its interest rate projections at the June FOMC meeting. The median forecast from the Fed is now 2 rate hikes by 2023. 11 out of 18 voting members now expect the Fed funds rate to be at 0.5% or higher in 2023.

The Fed has linked the future path of monetary policy to developments in the labor market. It is, therefore, useful to look at the Fed's projected unemployment rate in 2023. The Fed expects the U3 unemployment rate to decline to 3.5% in 2023 – curiously the same level as its pre-Covid all-time historical low.

The Fed forecasts 2 rate hikes by the time the unemployment rate goes to 3.5% in 2023. It also forecasts no rate hikes and a 3.8% unemployment rate in 2022. We can, therefore, infer that the first rate hike will likely be at unemployment levels of 3.6-3.7%.

So here is the third key question confronting investors.

3. Is this timeline of Fed policy actions appropriate or not? Will it be too late to hike because the labor market is already too tight?

At this point in the commentary, our views are probably apparent to the reader. In our discussion of Figure 5, we suggest that it could well take another 2-3 years for the labor market to reach its pre-Covid equilibrium. We do not believe that the labor market is overly tight at the moment or that wage inflation is imminent.

We are sympathetic to the Fed's stance of erring on the side of being too dovish and risking some inflation instead of being too hawkish and risking another downturn.

SUMMARY

The Fed is willing to trade off higher inflation to ensure that the labor market heals fully and evenly. We examine the labor market in detail to address investor concerns that the labor market may already be too tight and that accommodative Fed policy is, therefore, misguided.

Here are our key insights.

- Even though the notion of full employment is nebulous, empirical evidence suggests that we are far from it at this point.
- An aging population has pushed the labor force participation rate lower in the last two decades. While it may recover somewhat, it is unlikely to rebound anywhere close to its previous highs.
- There is still significant slack in the labor market based on both potential re-entrants into the labor force and under-employed workers.
- The slack in the labor market is likely to persist for a couple of years. We, therefore, do not believe that the Fed is on the cusp of a major policy misstep in terms of its tightening agenda.

We acknowledge the unusual times in which we live. The pandemic is not fully behind us, especially outside the U.S., and unprecedented stimulus may well trigger some unexpected adverse outcomes.

Through this uncertainty, we remain constructive on the economy and markets and advocate a pro-cyclical tilt in client portfolios.

WHITTIER TRUST COMPANY

 South Pasadena
 1600 Huntington Dr., South Pasadena, CA 91030 | 626.441.5111

 Newport Beach
 4695 MacArthur Ct., Ste 1500, Newport Beach, CA 92660 | 949.216.2200

 San Francisco
 505 Montgomery St., Ste 1200, San Francisco, CA 94111 | 415.283.1850

THE WHITTIER TRUST COMPANY OF NEVADA, INC.

Reno 100 W. Liberty St., Ste 890, Reno, NV 89501 | 775.686.5400

Seattle 520 Pike St., Ste 1415, Seattle, WA 98101 | 206.332.0836

Portland 111 S.W. Fifth Ave., Ste 3150, Portland, OR 97204 | 503.444.3428

Investment and Wealth Management Services are provided by Whittier Trust Company and The Whittier Trust Company of Nevada, Inc., state-chartered trust companies, which are wholly owned by Whittier Holdings, Inc., a closely held holding company. All of said companies are referred to herein, individually and collectively, as "Whittier".

The views expressed by the Author are as of a particular point in time and are subject to change without notice. This document is provided for informational purposes only and is not intended, and should not be construed, as investment, tax or legal advice. Please consult your own legal and/or tax advisors in connection with financial decisions. This document does not purport to be a complete statement of approaches, which may vary due to individual factors and circumstances.

Certain information contained in this document may constitute "forward-looking statements." No representations or warranties are made as to the accuracy or completeness of such statements, and actual events or results may differ materially from those reflected or contemplated herein. Company references are provided for illustrative purposes only and should not be construed as investment advice or a recommendation to purchase, sell or hold any security. Although the information provided is carefully reviewed, Whittier is not responsible for any direct or incidental loss resulting from applying any of the information provided. Past performance is no guarantee of future results and no investment or financial planning strategy can guarantee profit or protection against losses. These materials may not be reproduced or distributed without Whittier's prior written consent.