Labor Woes Affect the Economy, Not Tie Demand

By Petr Ledvina

As Jerome Powell noted in a recent press conference, there are about two open jobs for every one applicant. Across the economy, imbalances in the labor market contribute to inflationary pressures and also to supply chain issues. Labor shortages are also reported by railroads (RRs) and the hardwood industry.

For the RRs, the lack of locomotive engineers is a serious issue. For sawmills, labor is generally in short supply, and the lack of truck drivers particularly impacts productivity (*Hardwood Market Report*, 5/27/2022). At the same time, Russia's invasion of Ukraine and the subsequent trade embargo on Russia and Belarus have caused further disruption in the supply of commodities, contributing to inflationary pressures. And stock market performance may also affect labor force participation.

The article "Employment Situation Analysis – Little Optimism for Quick Relief" in the March/April edition of *Crossties* outlined overall labor trends, asserting that the aging U.S. population and the retirement of Baby Boomers present a challenge for the supply of labor and will depress the labor force participation rate. The article also points to the immediate short-term challenge of inadequate labor supply. The article enumerated a shortfall of 2.3 million workers based on the previous participation rate and the current estimate of the working age population.

Total population growth in the United States depends on birth, death, immigration and emigration rates. The birth rate in the United States did in fact resume its decline in 2007, and in 2020, the decline accelerated as the recession and pandemic unfolded. Preliminary data for 2021 suggests a slight rebound (Figure 1). Conversely, despite the expectation that COVID-related death rates will decline, many workers' lives have been lost since March 2020.

Also, immigration to the United States slowed in the previous decade (Figure 2). The annualized growth rate was 5.7 percent between 1990 and 2000, 2.5 percent in 2015, and only 0.9 percent in 2018 (Pew Research Center). With COVID-related travel restrictions, this growth rate may be even less now (Lawful Permanent Residents Annual Flow Report, 9/28/2021, Department of Homeland Security) Unlawful immigrants typically represent about a quarter of the total number of immigrants annually. Historical trends could not be found for emigration from the United States, but American Citizens Abroad estimates the total number to be between 4.5 and 6.5 million, which is twice as many as 15 years ago (aetnainternational.com). With all of these factors in mind, the long-term trends in the supply of labor are not favorable, although they can be offset to some degree by increased productivity (increased automation/robotization, more freight on railroads, etc.).

RTA analysis of current labor shortfall suggests several factors to consider, beginning with the considerably higher number of workers retiring in the last two years. Regardless of the reasons, between 2008 and 2019, the retired population (ages 55 and older) grew by about 1 million retirees per year, while in the past two years, the ranks of retirees have grown by 1.75 million annually (Pew Research Center). This suggests an excess of 1.5 million retirees over the last two years.

Another factor is the COVID-19 pandemic. Over the past two years, it would be safe to assume a 300,000-person reduction of the labor supply based on the number of deaths reported by CDC (RTA calculations). In contrast, the gain in non-farm payrolls reported on June 3, 2022, was 390,000.

It is difficult to estimate the impact of the working population that took sick leave to recover from COVID-19. The average daily infection rate since the onset of the pandemic was about 77,000 people per day, 70 percent of whom were in their working years. Taking a very conservative estimate that about 20

Figure 1

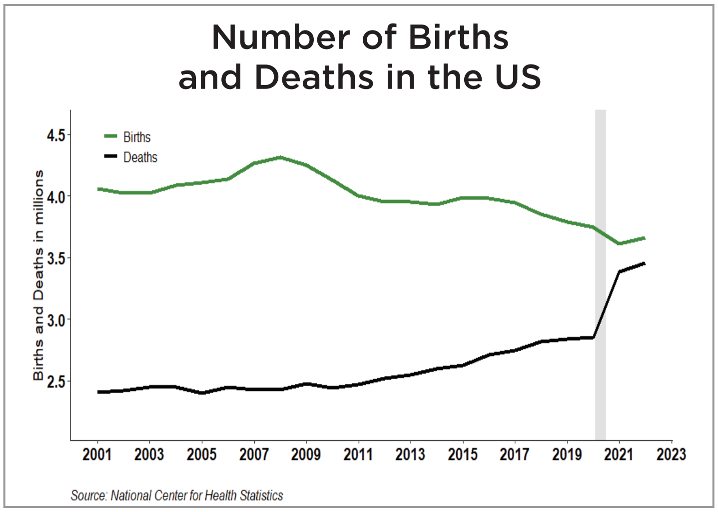
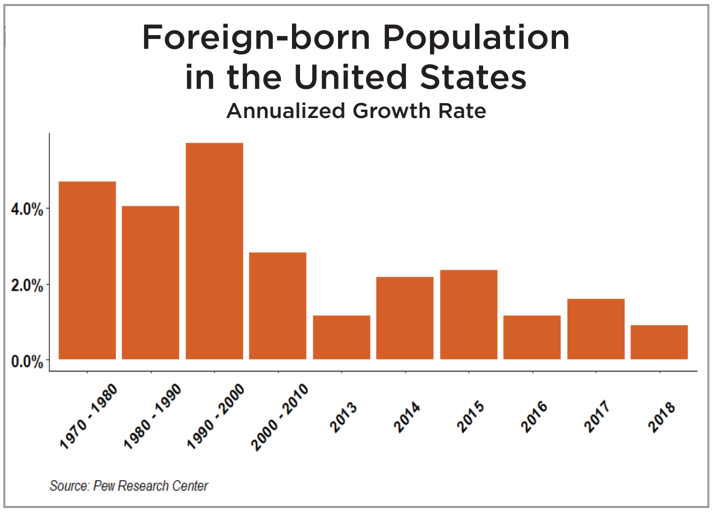


Figure 2



percent of infected people took sick leave with about 14,000 people infected per day, which is about 70,000 people not working per day when you consider five days of sick leave taken (RTA calculations). This is not a trivial number and is probably even higher. Needless to say, these workers are counted in the labor force data, resulting in lower productivity rates.

This is one of the reasons companies like Amazon hired more people than it normally would have in a given year as e-commerce accelerated. Based on Amazon and Walmart quarterly reports, RTA estimates that these two companies hired about 0.7 million extra workers in the last two years compared to pre-pandemic employee growth. The increase in labor hired by these two companies alone has taken a toll on labor availability in other sectors of the economy.

Finally, fraud may be behind some of the missing labor force participants. The Department of Justice reported that fraud in the Paycheck Protection Program (PPP) could be as much as $80 billion. Significantly, the Bureau of Labor Statistics reported that business applications accelerated during the 2020-2021 period (Figure 3) by about 100,000 per month above the average number of business applications for the previous two years. According to advocacy.sba.gov, 81 percent of small businesses have no employees.

The final report for the PPP program concluded that the average loan size was $67,000, and the Transportation and Warehousing sector received the second highest number of loans with about 8 percent of the total dollar value (Small Business Administration report, 5/31/2021). However, it is not clear how many labor force participants this number represents.

To summarize, COVID created unprecedented dislocations in the economy by making workers sick and therefore lowering productivity and significantly increasing employee turnover. In addition, COVID encouraged many workers to retire, and in some cases resulted in their premature death. Possible fraudulent activity may also have skewed certain data as well. With about 1.5 million people retiring and 300,000 workers dying due to COVID19, that leaves about half a million workers outside the labor

Figure 3

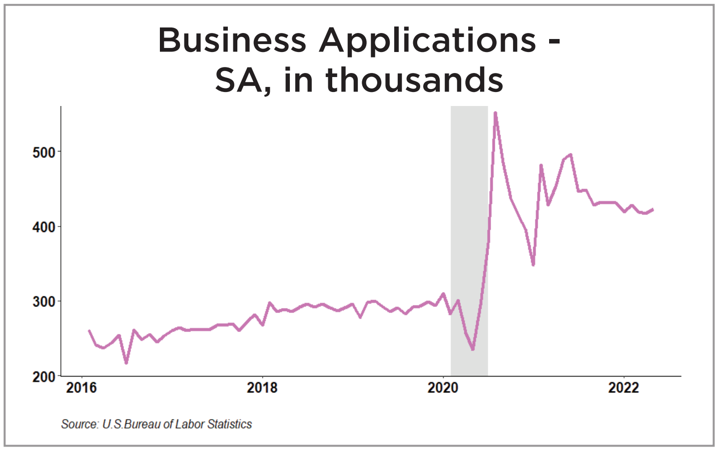
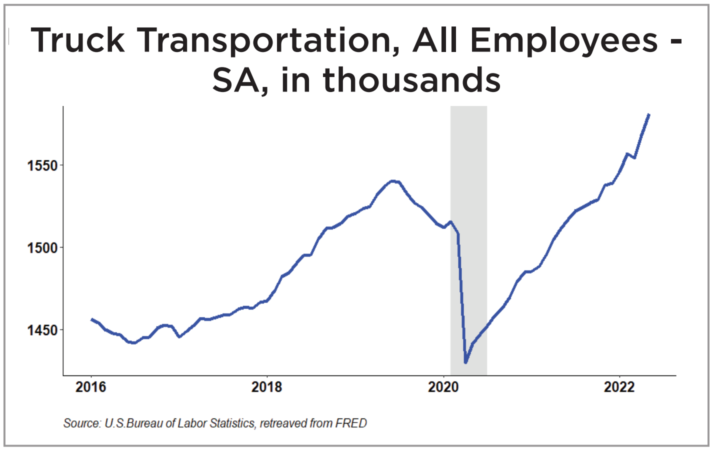


Figure 4



force for other reasons, such as those mentioned above.

Currently, a number of factors are at play that may or may not normalize the labor market: stock market performance, COVID-19 variants and worker vaccination status, the possibility of "on-shoring" and infrastructure upgrades, and, most importantly, FED rate hikes and inflation. There is also evidence that a significant decline in the stock market may cause some retired people to rejoin the labor force (Pew Research Center, "Does Stock Market Performance Influence Retirement Intentions?", *The Journal of Human Resources*, Fall 2012, Vol. 47, University of Wisconsin Press).

At this time, COVID-19 case numbers are "relatively" low, with the seven-day moving average about 98,000, down almost tenfold from the levels during the Omicron variant wave. Thus, the number of people calling in sick should be significantly lower, which should improve labor productivity. However, there is considerable uncertainty about whether the 'bug' will come back with a vengeance in the fall.

Also, any substantial "on-shoring" to streamline supply chains would increase demand for labor depending on the speed of implementation. Similarly any major increase in repairing and upgrading our infrastructure would cause additional demand for labor.

Last but not least, the FED is increasing interest rates in response to inflation, and wage growth is lagging inflation. These two facts should both act to slow demand in the economy and, in turn, ease labor supply issues.

Still, the *Hardwood Market Report* recently pointed out that labor in general is still in short supply, and the lack of truck drivers affects sawmills most acutely. For Class I RRs, the pressing issue has been the lack of locomotive engineers (various Class I conference calls).

Fortunately, the situation for Class I RRs seems to be improving based on their reports. While the railroad companies could not control the weather, they did take steps to ensure the availability of locomotive engineers. Through increased hiring and crew training, the RRs are positioning to bolster service to customers.

In the hardwood industry, truck driver shortages should begin to ease as well. Some relief may come from the railroads, since they are making new connections to ports on the east and west coasts in Canada and Mexico, potentially releasing some pressure at jammed U.S. ports. In addition, railroads are making strides in competing with the trucking industry via pricing and better inland connections.

There is also some evidence of increased interest among the labor force in truck driver training, and the number of drivers has already increased above pre-pandemic levels (Figure 4). Also, some truck drivers may become available as e-commerce slows down, with brick and mortar stores bringing some customers back.

Even though the economy is slowing and the probability of recession is rising, this should have only a marginal effect on tie demand in the near term. There are still relatively low inventories in the business and retail sectors, and most retailers and wholesalers continue to report elevated consumer demand for goods. In addition, the invasion of Ukraine and the resulting sanctions on Russia and Belarus provide additional opportunities for the rails to increase shipments such as coal, potash and grain. This results in a stable outlook for tie demand (Table 1).

Table 1

New Wood Crossties (in thousands)

Year	Real GDP	Class 1 Purchases	Small Market Purchases	Total Purchases	Percentage Change In Total Purchases
2019	2.3%	14,471	4,105	18,575	-13.0%
2020	-3.4%	15,309	3,175	18,483	-0.5%
2021	5.7%	14,613	4,148	18,761	1.5%
2022	2.4%	14,267	4,341	18,608	-0.8%
2023	2.0%	14,311	4,507	18,818	1.1%