



Brennan Barometer

Analysis of the Economy of
Wyoming Valley of
Northeastern Pennsylvania

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Foreword

In this issue of Brennan Barometer we take a deeper look at the regional economy by focusing on the region's labor markets, housing markets and credit conditions. We also report the results of a survey of business sentiment in downtown Scranton. In addition, we analyze the issues of inflation and recession for the national economy.

Aram Balagyozyan would like to thank and acknowledge several undergraduate students in the Frank P. Corcione Business Honors Program who have conducted the survey of business sentiment in downtown Scranton. Those students are Alice Dierkes, Angelina Veve, Camille Schwabe, Christian Messana, Cinthia Garcia, Dean Finan, Derek Halligan, Grace Bolye, Jerry Klein, Justin Newell, Karleigh Capobianco, Logan Muniz, Molly Gaffney, Nicholas Tollefsen, Olivia Miller, Sean Davis, Sinead Gilmartin, William Shallow, and Zachary Cruz.

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However, we solely are responsible for our analysis and any errors or omissions.

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Executive Summary

Labor Markets

The labor market in The Scranton - Wilkes-Barre - Hazleton Metropolitan Statistical Area (SC-WB-HZ MSA) continued to be strong, following the broad patterns of the labor markets of the nation and the state of Pennsylvania. Over the last one year, the seasonally adjusted unemployment rate declined steadily reaching the record low unemployment rate of 4.2% in August 2023. The three counties: Luzerne, Lackawanna and Wyoming also experienced significant fall in unemployment rates. In July 2023, both Luzerne and Lackawanna counties experienced their lowest unemployment rates in recorded history. In the MSA and in all three counties, the reduction in unemployment rate was accompanied by an increase in employment that outpaced the expansion of the labor force. The three largest cities in the region: Scranton, Wilkes-Barre, and Hazleton also recorded significant reduction in the unemployment rate between August 2022 and August 2023, with Scranton leading the way.

Between August 2022 and 2023, in the SC-WB-HZ MSA, 9,300 new jobs were created. During the same period, the service sectors provided 84.5% of the new jobs. Professional and Business Services industry added most jobs – 3,800 or 40.9% of all new non-farm jobs, followed by the Health Care and Social Assistance industry and the Leisure and Hospitality Industry. Based on the strength of the labor market and the level of employment in the MSA and the individual counties, we have concluded that in the regional economy the recovery from the Covid-19 recession was complete by March 2023.

Housing Markets

Between January and July 2023, there has been a slight increase in the number of approved housing permits in the US, Northeast, and Pennsylvania, suggesting positive housing market conditions despite high mortgage rates and tight monetary policy. The SC-WB-HZ MSA has been experiencing a housing construction boom that has started in late 2021 and extended into July 2023.

In August 2023, the real-estate market in the SC-WB-HZ MSA was hotter compared to the previous month and the same month in the previous year. Although the inventory of for-sale housing remained relatively low, recent trends suggest a slight increase in housing inventory. Housing prices have been rising in 2023, although at a slower pace than in the previous year, likely influenced by higher mortgage rates. Since the beginning of 2023, home rental prices in the Scranton area also continued to rise, though at a slower pace compared to 2022. Nevertheless, rents in Scranton remained more affordable than in Philadelphia and the US in general.

Credit Conditions

In the first quarter of 2023, the percentage of the "subprime population" (those with credit scores below 660) in Lackawanna, Luzerne, and Wyoming counties was slightly higher than the national average.

than in the first quarter of 2022. Nevertheless, this metric remained stable and significantly lower than its pre-pandemic levels.

Downtown Scranton Business Conditions

In April 2023, a survey of downtown Scranton storefront businesses indicated positive sentiment. Various business types were represented, with bars and restaurants, retail shops, and others in the sample. Most businesses expected increased activity in the next six months. Between March and April 2023, input and selling prices were either stable or increased for many, with prevalent expectations of rising prices in the future. Employment remained strong, with businesses expecting to increase workforce and work hours. Businesses expressed optimism for general business conditions and planned capital and technology spending.

The Big Picture

In August and September 2023, inflation in the the nation remained mostly stable at 3.7%. The largest contributors to inflation in the recent months have been the increase in shelter costs and gasoline prices. Inflation expectation also remained high. Although the recent inflation rate is much lower than what we experienced in 2022 or even a few months back, it seems likely that the Fed will again increase the interest rate before the end of the year.

The national economy still has not experienced a recession, thanks to the strengths of the labor market, the housing markets, and, above all, continued robust consumption spending. But because of a substantial build up of business inventories and fall in the personal savings rate, a recession in 2024 cannot be ruled out.

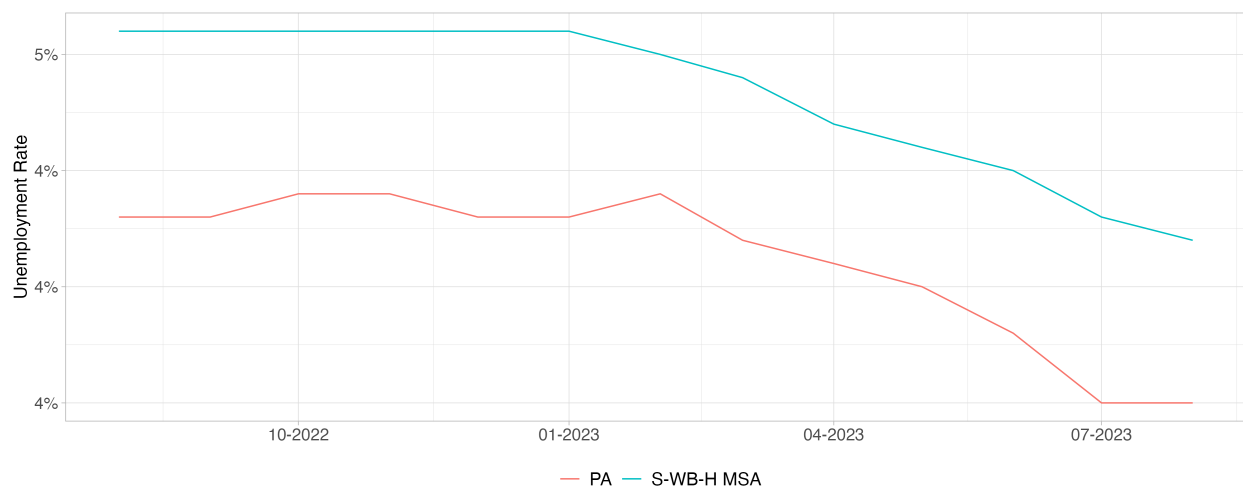
Labor Markets

Satyajit Ghosh

Employment, Unemployment in the Local Economy

The labor market in The Scranton - Wilkes-Barre - Hazleton Metropolitan Statistical Area (SC-WB-HZ MSA) continues to be robust. Over the last one year, the seasonally adjusted unemployment rate declined steadily reaching the record low unemployment rate of 4.2% in August 2023 - the month for which the most recent data is available for the region. Regional records have been maintained since January 1976. Between August 2022 and August 2023, the unemployment rate in the MSA fell by 0.7 percentage points: from 4.9% to 4.2%. Since March 2023, the unemployment rate never exceeded 4%.

This pattern of a low unemployment rate in the MSA is consistent with the experience of the state of Pennsylvania and the nation as a whole. The national unemployment rate continued its mostly declining trend over the the past year, reaching 3.4% in April 2023. The last time the country experienced such a low rate was in May 1969, about 54 years ago. Since then, the rate went up slightly and stayed at 3.8% in August and September, 2023.



Data Source: PA Dept. of Labor and Industry

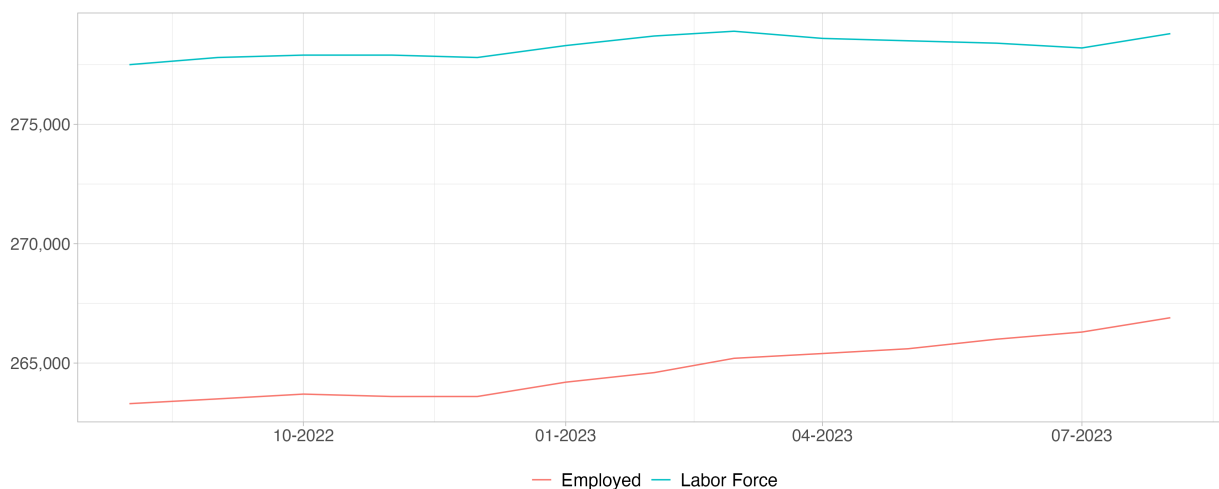
Figure 1: Unemployment Rate in Pennsylvania and the SC-WB-HZ MSA

As it has been the case with the SC-WB-HZ MSA, the state unemployment rate in Pennsylvania also fell to a historic low of 3.5% in August and July, 2023. Statewide, in Pennsylvania, the unemployment rate continued to decline steadily. Since May 2023, the unemployment rate never exceeded 4 %. Between August 2022 and August 2023, the seasonally adjusted unemployment rate fell by 0.8 percentage point – from 4.3% in August 2022 to 3.5% in August 2023. Pennsylvania now ranks sixth among all the states in the country in terms of reduction of the unemployment rate over the last 13 month period,

dating back to August 2022. Of all its neighboring states, only Maryland experienced a larger reduction of the unemployment rate: 1.7 percentage point and ranked number one in the country in terms of reduction in unemployment rate between August 2022 and August 2023. Among its other neighbors, Ohio (ranked 9th) as its unemployment rate fell by 0.7 percentage points; West Virginia (ranked 17th) reduced the unemployment rate by 0.5 percentage points; Delaware (ranked 19th) experienced a 0.4 percentage points reduction in the unemployment rate; New York ranked 34th as its unemployment rate remained unchanged, and New Jersey ranked 51st in the country, as its unemployment rate increased by 1.2 percentage points

The strength of the labor market in the state is further evidenced by the fact that between August 2022 and August 2023, employment in the state increased by 76000, while the labor force expanded by 23000, leading to a net decline in the volume of unemployment by 53000.

Likewise, in the SC-WB-HZ MSA, between August 2022 and August 2023, the fall in the unemployment rate was combined with growth in employment that outpaced the growth rate in the labor force.



Data Source: PA Dept. of Labor and Industry

Figure 2: Labor Force and Number of Employed in the SC-WB-HZ MSA

During these thirteen months, the labor force in the MSA increased by 1300, while employment grew by 3600, leading to a net fall in the volume of unemployment by 2500. Although, the widespread perception is that the SC-WB-HZ MSA is not a "new jobs driver" in the state, the MSA tied for the third highest in terms of the unemployment rate among all MSAs in the state in the month of August 2023. In terms of net nonfarm job creation between August 2022 and 2023, the MSA ranked the fourth highest in the state – behind only Philadelphia-Camden-Wilmington, Pittsburgh, and Harrisburg MSAs. During this time period, the seasonally adjusted total nonfarm jobs in the MSA increased by three-tenths of a percentage point, to reach a new record high level of 270,400.

The labor markets in the three counties of the MSA followed by and large the same trend of the MSA and the state. All three counties: Luzerne, Lackawanna and Wyoming recorded a significant reduction in the unemployment rates between August 2022 and August 2023. In Luzerne county – the largest in the MSA – the unemployment rate fell by 0.8 percentage points between August 2022 and August 2023 – from 5.4% to 4.6%. In July 2023, the county had reached its lowest unemployment rate in the recorded history – 4%. Since March 2023, the unemployment rate in the county was always below 5%. The unemployment rate was even lower in Lackawanna county, where the unemployment rate fell to an all time low 3.4% in July 2023. Between August 2022 and August 2023, the county's unemployment rate fell by 0.7 percentage point – from 4.6% in August 2022 to 3.9% in August 2023. The declining trend of the unemployment rate has been quite robust; since March 2023 the unemployment rate in the county was always below 4%.

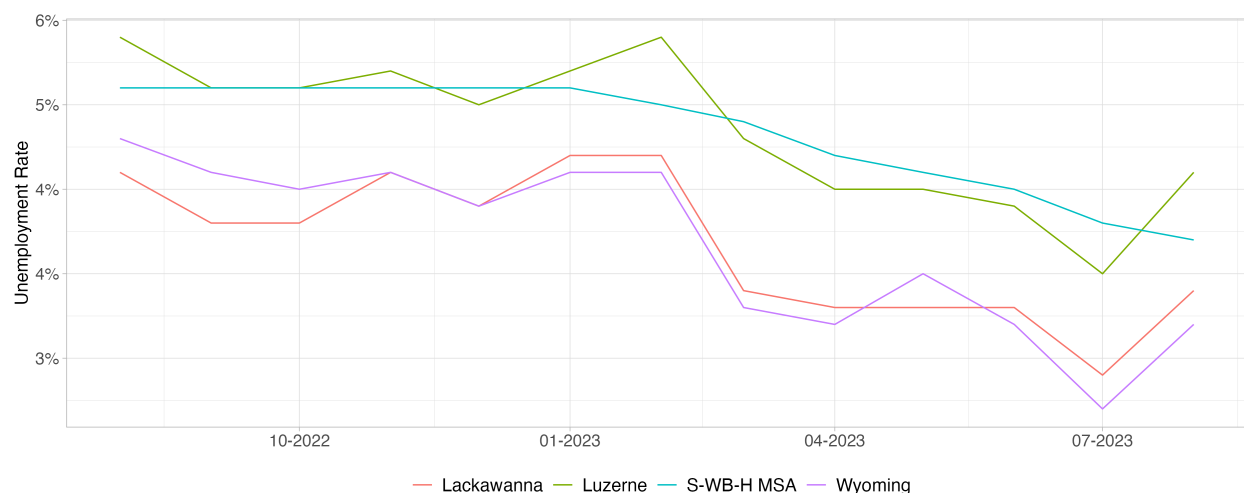


Figure 3: Unemployment Rates in the Lackawanna, Luzern, Wyoming Counties, and SC-WB-HZ MSA

Even in Wyoming county –the smallest county in the MSA – where the labor market usually does not show significant changes, the unemployment rate fell from 4.8% in August 2022 to 3.7% in August 2023, recording a net fall of 1.1 percentage points. Since March 2023, the unemployment rate never exceeded 4%, and in July 2023, the county reached its lowest ever unemployment rate –3.2%.

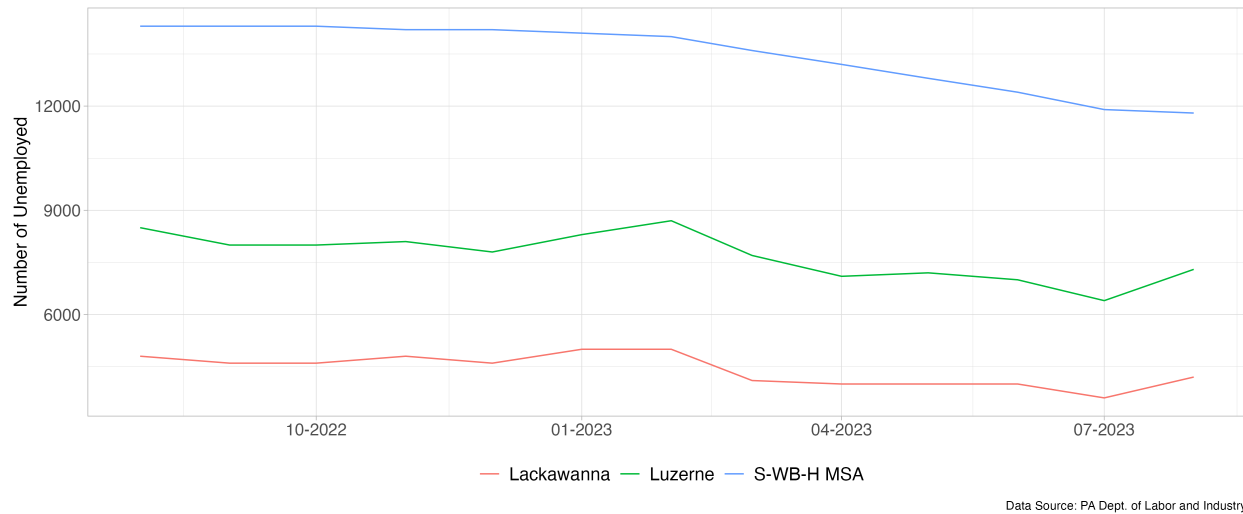


Figure 4: Number of Unemployed in the SC-WB-HZ MSA and Lackawanna and Luzerne Counties

In all three counties, the reduction in the unemployment rate was accompanied by an increase in employment that outpaced the expansion of the labor force. In both Luzerne and Lackawanna counties, these indicators were particularly noticeable.

In Luzerne county, between August 2022 and August 2023, the labor force increased by 2200 or 1.4% while employment increased by 3300 or 2.2 percent, leading to a reduction in the volume of unemployment by 1200 or 14%.

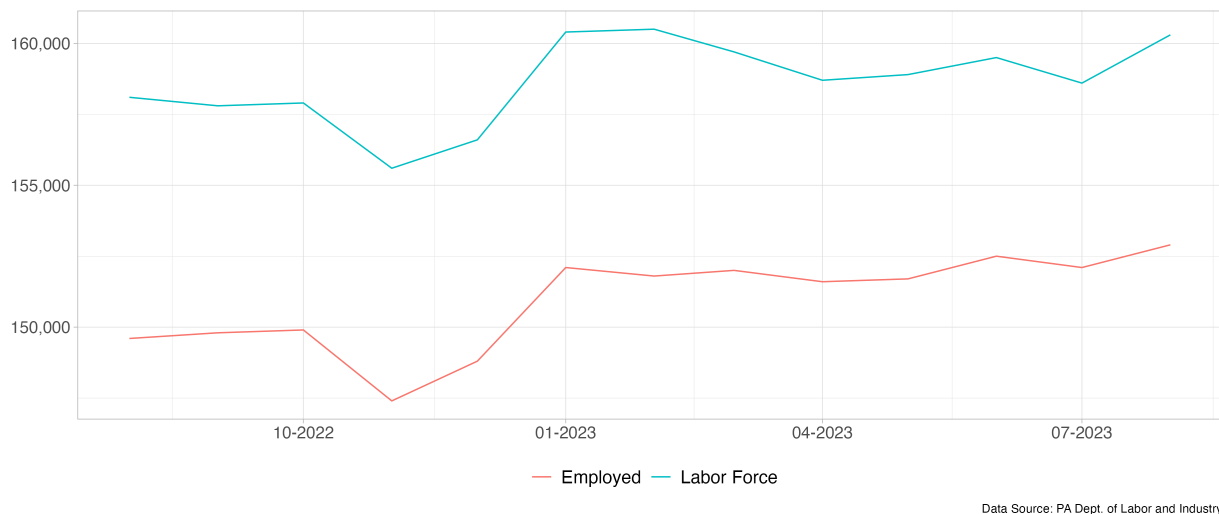


Figure 5: Labor Force and Number of Employed in the Luzerne County

During the same time period, in Lackawanna county, the size of the labor force expanded by 1600 or 1.5%, while employment in the county increased by 2200 or 2.2%, causing the

number of unemployed workers to fall by 600 or 12.5%.

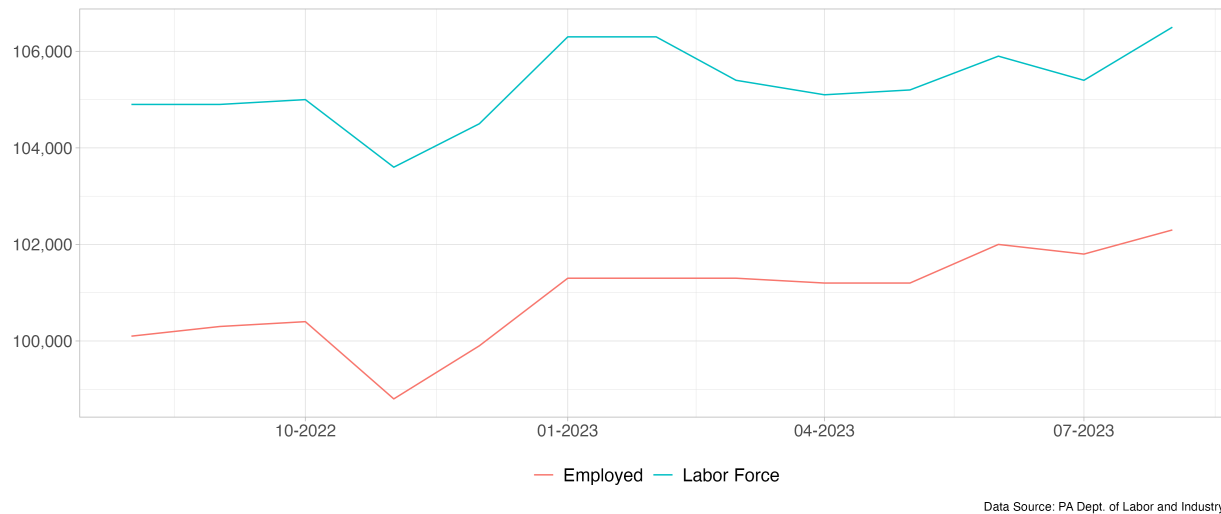


Figure 6: Labor Force and Number of Employed in the Lackawanna County

The three largest cities in the MSA, Scranton, Wilkes-Barre, and Hazleton, also experienced a reduction in unemployment between August 2022 and August 2023. Particularly in December 2022, all of them experienced the lowest unemployment rates. The data for the cities are available from January 1990.

Table 1: Labor Market Indicators in the Cities, August 2022- 2023
(Data not seasonally adjusted)

Indicators	Scranton	Wilkes-Barre	Hazleton
Unemployment rate (Aug. 2023)	4.6%	5.6%	6.7%
Unemployment rate (Aug. 2022)	5.5%	6.9%	7.9%
Total Employment (Aug. 2023)	35,300	17,700	10,800
Total Employment (Aug. 2022)	34,500	17,300	10,600
Total Unemployment (Aug. 2023)	1,700	1,000	800
Total Unemployment (Aug. 2022)	2,000	1,300	900
Labor Force (Aug. 2023)	37,000	18,700	11,600
Labor Force (Aug. 2022)	36,500	18,600	11,500

In December 2022 and again in April 2023, Scranton's unemployment rate fell to 3.5% – the lowest among all the big cities in the MSA. During these two months, the total number of unemployed workers in the city also fell to its lowest level – 1,300. However, between August 2022 and August 2023, the size of the labor force mostly stayed stable – reaching its highest level in August 2023, but the level of employment fell by more than 8% during this time period.

In Wilkes-Barre, the unemployment rate fell to its lowest level – 4.6% in October and December 2022. In three consecutive months, October to December 2022, the city's total number of unemployed workers fell to its lowest level of 800. Between August 2022 and August 2023, the total number of employed workers remained mostly stable and reached its highest level for this period in August 2023. The size of the labor force remained stable.

In Hazleton, the unemployment rate fell to its lowest level – 5.5% in December 2022. The last time it reached this level was December 2000. In December 2022, the total number of unemployed workers also reached its lowest level of 600. The last time when it fell to that level was May 2007. Both the size of the labor force and the level of total employment remained mostly stable during August 2022 and August 2023.

Jobs in the region

As for the source of jobs in the region, most jobs are provided in the service providing industries. Out of the total non-farm jobs of 269,500 (not seasonally adjusted) in the MSA in August 2023, goods-producing industries (that include manufacturing) provided 41,900 or 15.5% of jobs, and the service-providing sectors (that includes local and federal governments) accounted for the remaining 227,600 or 84.5% of jobs.

Between August 2022 and August 2023, in the MSA, 9300 new non-farm jobs (based on not seasonally adjusted data) were created. The goods producing sectors created 700 or 7.5% of new jobs. Out of those, manufacturing contributed 200 or 28.6% of jobs, while mining, logging, and construction provided the remaining 500 or 71.4% of the goods producing sector's jobs.

In this increasingly service oriented region, the service providing sectors added 8600 or 92.5% of new non-farm jobs. 7500 or 87% of all service sector jobs were in private sectors. 1100 or 13% of all service jobs were in the government sector. Local government educational services accounted for about 81.8% or 900 of all government-sector jobs.

Of all the private service-providing industries, the following are particularly important: Transportation, Warehousing and Utilities, Retail Trade, Professional and Business Services, Health Care and Social Services and Leisure and Hospitality. Collectively, in August 2023 they accounted for 78.8% of all private service sector jobs which amounted to 68.9% of all service sector jobs or 58.3% of all non-farm jobs in the MSA.

The Professional and Business Services industry, which in August 2023 accounted for 11.8% of all non-farm jobs, added most jobs – 3,800 or 40.9% of all new non-farm jobs created between August 2022 and August 2023. By the very nature of the service provided by this industry, it acts as an important indicator of the health of all industries in the region – service providing as well as goods producing. The industry suffered significantly during the Covid-19 lockdown and in its aftermath. The employment in the industry hit a low of 27,900 in August 2022. Since then the employment in the industry increased steadily. Most of its expansion occurred between March 2023 and August 2023 when it added 3,100 jobs.

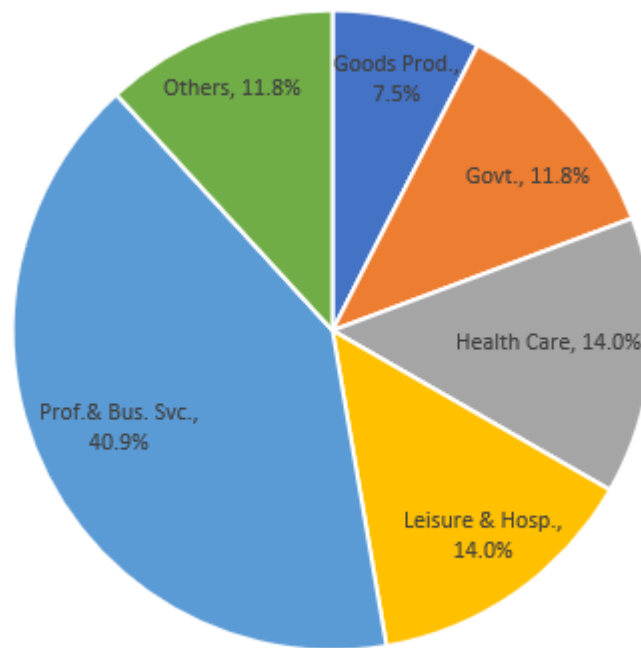


Figure 7: Contributions to New Non-farm Jobs in SC-WB-HZ MSA
August 2022-August 2023

The Health Care and Social Assistance industry has long been one of the most important industries in the area not just because of its importance given the regional demography, but also for its role in providing well-paying jobs. In December 2019, it provided 45,900 jobs. However, the industry was the most hard hit during pandemic and it never fully recovered. In August 2023, the level of employment in the industry was 43,500 accounting for 19.1% of all service sector jobs and 16.1% of all non-farm jobs. Between August 2022 and August 2023 it added 1,300 jobs, which amounted to 14% of all new non-farm jobs. Much of the recovery of the industry occurred between March 2023 and August 2023 when it added 1000 new jobs.

The Leisure and Hospitality industry, that includes Accommodation, food services and drinking places, also added 1300 new jobs (14% of all new non-farm jobs) between August 2022 and August 2023. This industry perhaps suffered the most due to the Covid-19 lockdown. After the reopening of the economy and relaxation of the pandemic related restrictions, employment in the industry increased sharply. However, from August 2022 the industry faced significant difficulty in hiring, and employment in the industry steadily declined until February 2023 when it fell to 21,800. Since then, employment in the industry improved substantially and between February 2023 and August 2023 it added 2200 new jobs, leading to the total employment of 24,000 in August 2023. Retail trade, which is a part of the Trade, Transportation, and Utilities supersector and includes Grocery and Convenience retailers and General Merchandise retailers, is a stable source of jobs in the

region. In August 2023, total employment in the industry was 29,000 which accounted for 12.7% of all service sector jobs and 10.8% of all non-farm jobs. During August 2022 and 2023, the industry remained mostly stagnant and between April 2023 and August 2023 it added 600 jobs.

The story of the Transportation, Warehousing, and Utilities sector, which is also a part of the Trade, Transportation and Utilities supersector, is a story of a reversal of fortune when compared with the Professional and Business Services industry. Because of the growing importance of warehousing dating back to the Covid-19 pandemic, the sector flourished and between December 2021 and December 2022, every three out of four new service sector jobs were created in the industry. Between August 2022 and December 2022, the Transportation, Warehousing, and Utilities industry added 3800 new jobs which amounted to 42.7% of all new non-farm jobs (8,700) that were created in those five months. Its employment reached a peak of 33,000 in December 2022, which amounted to 12.3% of all non-farm jobs at that time. But from January 2023, the industry started to lose jobs at a fairly rapid pace and although it added 500 jobs in August 2023, between December 2022 and August 2023 the industry lost 4,100 jobs. In August 2023, employment in the industry was 28,900 which accounted for 10.7% of all non-farm jobs and 12.7% of all private sector jobs. At this point, it is not clear whether the industry will add substantial number of jobs between now and the end of the year following some internal cycle of employment in the industry. But even if that happens, it implies that the industry may not be relied upon for a source of stable year-round jobs.

Is the region's recovery complete?

For the national and also the state economy, recession and recovery are gauged using multiple indicators such as the Gross Domestic Product (GDP), personal income, level of employment among others. For a regional economy, because of the lack of availability of reliable data, recession, recovery or expansion of the regional economy can be analyzed based on only the level of employment. Thus, for a regional economy, the recovery from a recession can be determined to be complete if the level of employment reaches and exceeds the pre-recession peak. It is important to note that the rise in employment needs to be sustained and cannot fall back below the pre-recession peak level. In the February 2023 issue of Brennan Barometer, based on the data that was available until December 2022, we concluded while the region experienced a substantial fall in the unemployment rate, the recovery was not yet complete since the level of employment did not catch up with the pre-recession peak of February 2020. But, as the following table shows, that has changed.

From March 2023, the level of employment in the Scranton–Wilkes-Barre–Hazleton MSA exceeded the February 2020 level and continued to increase after that.

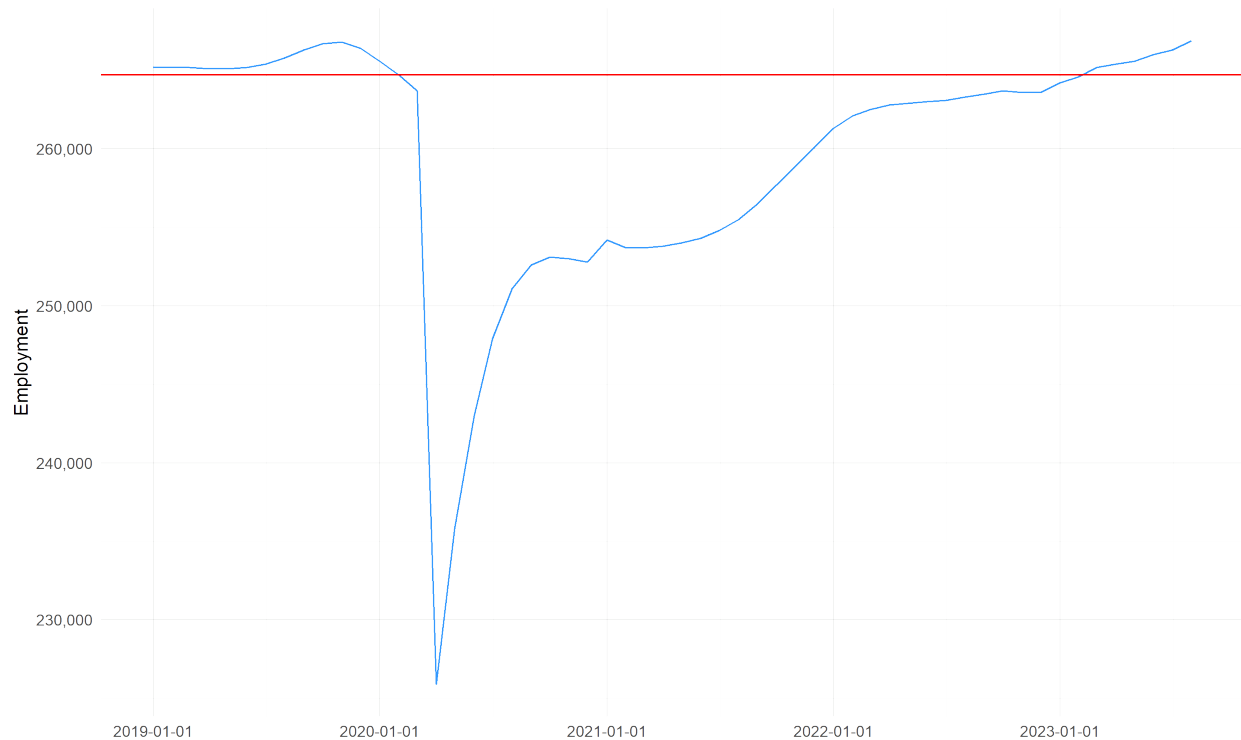


Figure 8: Recovery in SC-WB-HZ MSA

Although normally, economic recovery is not measured at the county level, Table 2 shows that the same pattern is observed for the three counties for March 2023 and in the later months.

Table 2: Recovery from Covid-19 Recession

Area	Employment, Feb.2020	Employment, March 2023
SC-WB-HZ MSA	264,700	265,200
Lackawanna	100,700	101,300
Luzerne	150,100	152,000
Wyoming	13,000	13000

However, it should be noted that in Lackawanna and Luzerne counties, the pre-recession peak level of employment was reached and exceeded in January 2023 and after that, the employment level of the counties continued to increase. For the Wyoming county, where the levels of employment or unemployment do not tend to fluctuate much, the February 2020 level of employment was reached in March 2023 and was exceeded in April 2023. It remained at a higher level from June 2023 to August 2023. These differences between the MSA level data and county level data can be attributed to the difference in the methods of seasonal adjustment that are applied to the MSA level data and the county level data. Thus, we can conclude that in the regional economy, the recovery from the Covid-19 recession was complete by March 2023.

Housing Markets

Aram Balagyozyan

Building Permits and Housing Starts

The number of approved housing permits is one of the ten components of the Index of Leading Economic Indicators computed by the Conference Board, and is a leading indicator closely tied to consumer confidence.

The graph in Figure 9 illustrates the number of housing permits approved in the US, Northeast, and Pennsylvania. Between January and July 2023, the number of approved housing permits in the US has exhibited a slight upward trend. This suggests robust housing conditions and positive expectations across the US, despite the continuation of tight monetary policy and high mortgage rates. A somewhat similar upward trend was observed in the Northeast and Pennsylvania. As of July 2023, the number of housing permits approved in Pennsylvania and the Northeastern region was 1,817 and 8,946, respectively. These numbers align with long-term trends.

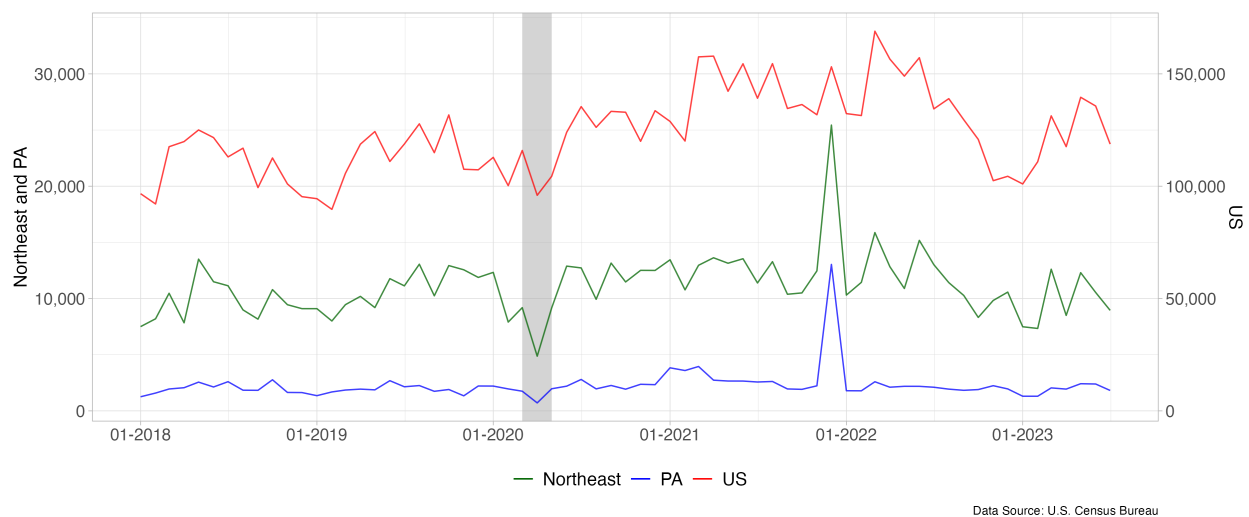


Figure 9: Total Number of Housing Permits in the Northeast, PA, and the US

The data presented in Figures 10 and 11 illustrate the number of approved housing permits and their year-over-year changes in the Scranton-Wilkes-Barre-Hazleton Metropolitan Area (SC-WB-HZ MSA). The figures show that starting in January 2022, the area has been experiencing a housing construction boom that has persisted through July 2023, despite the presence of tight monetary policy and high borrowing costs. It's worth noting that the recent mildness in the annual changes in construction permits should not be seen as negative news. Instead, it indicates a stability since the explosive growth of permits in 2022.

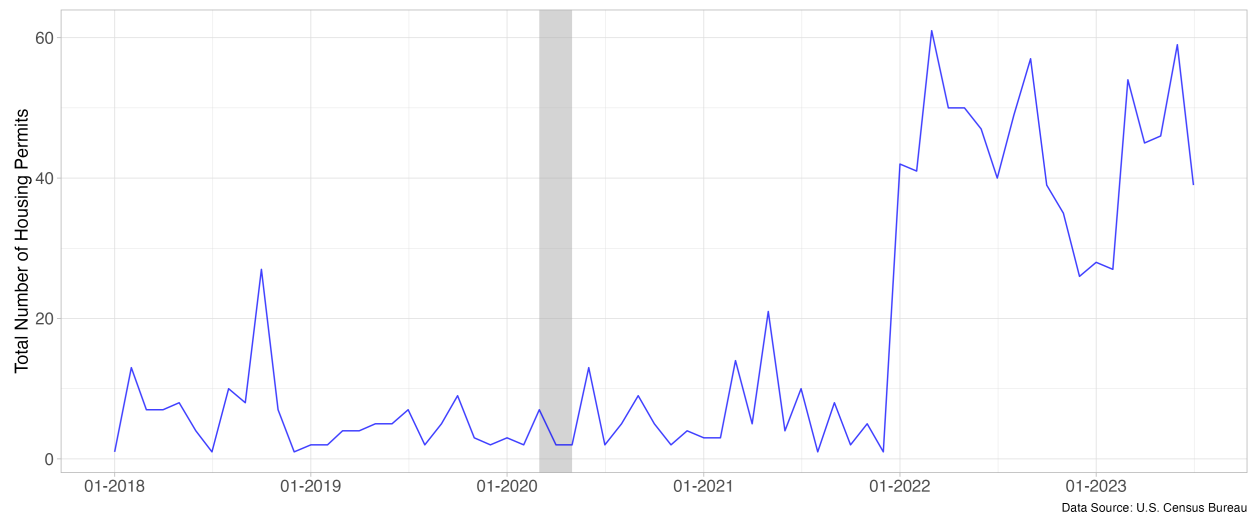


Figure 10: Total Number of Housing Permits in the Scranton – Wilkes-Barre – Hazleton MSA

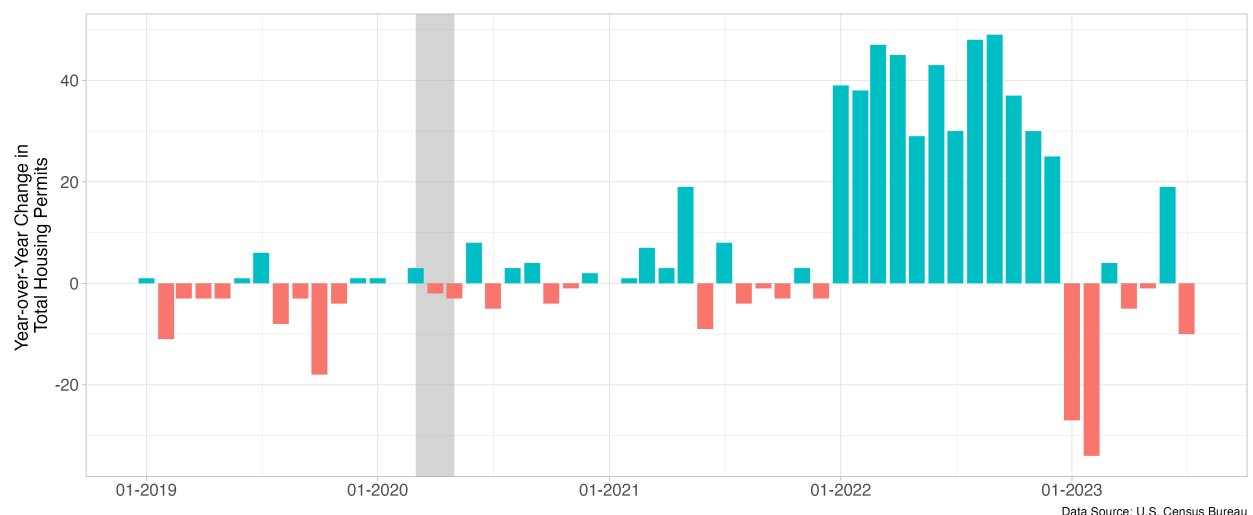


Figure 11: Year-over-year Change in Total Number of Housing Permits in the Scranton – Wilkes-Barre – Hazleton MSA

Real-Estate Market Hotness

Realtor.com publishes data on the market hotness index. The index (shown on Figure 12) is an equally-weighted composite metric of a market's supply score (based on days on market) and demand score (based on Realtor.com listing views). In August 2023, the value of the index was 78.6, up 2.2 points compared to July 2023 and up 7 points compared to August 2022. This means that in August 2023, the real-estate market in the SC-WB-HZ MSA area was hotter than a month before and a year before. According to

Realtor.com¹, in June 2023, the median number of days that a for-sale housing property remained in the market was 37 days with the housing inventory moving 27% slower than last year and 6.5 days faster than the US overall. Properties in the area were viewed on average 2 times more than the US average. With the June score of 76.9, the area ranked number 53 out of 300 metropolitan areas in the country.

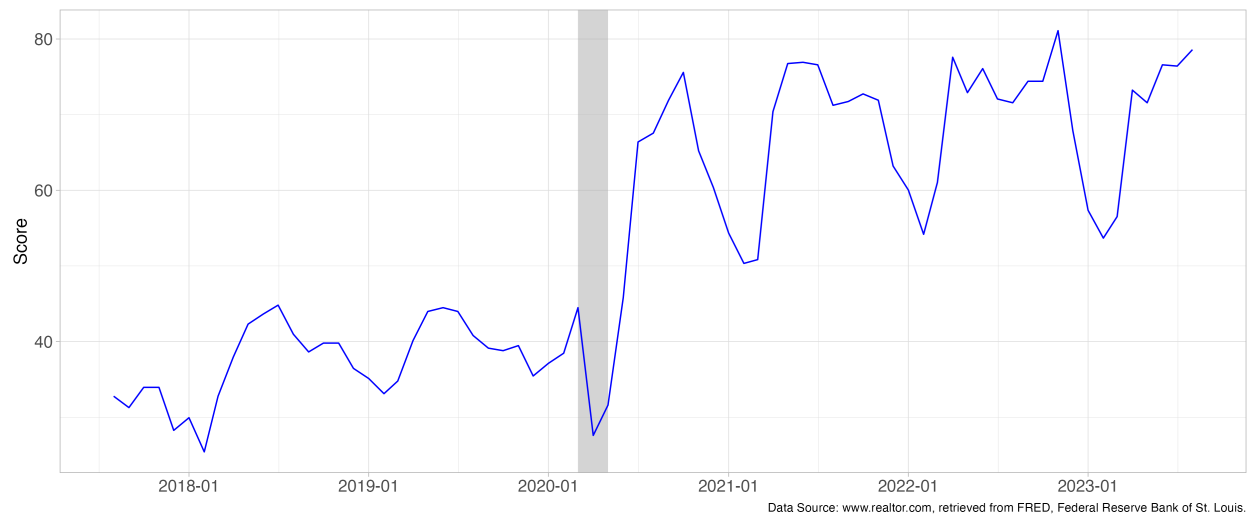


Figure 12: Real-Estate Hotness Score, SC-WB-HZ MSA

Home Sales Inventory

Realtor.com also publishes the count of active single-family and condo/townhome listings for a given market during the specified month (excludes pending listings).² With lower numbers representing fewer houses listed for sale, this statistic is often viewed as an overall indicator of the tightness of the housing supply. One significant trend during the COVID-19 pandemic was an increased demand for larger housing spaces and units, driven by a growing number of workers transitioning to remote work. By examining Figure 13, which illustrates the monthly for-sale housing inventory in the United States and the SC-WB-HZ MSA, it's evident that there was a decrease in housing supply and a tightening of the housing market following the pandemic. However, when looking at Figure 14, which displays the year-over-year percent change in housing inventory, it becomes clear that by the end of 2022, both the SC-WB-HZ MSA and the U.S. had more for-sale inventory than the previous year, indicating a softening housing market. Nevertheless, this softening trend appears to have reversed since early 2023. In August, the number of for-sale housing units in the SC-WB-HZ MSA was 2.8% lower than during the same month in the previous year. For the U.S., in August 2023, the for-sale housing inventory was down 7.9% compared to the same month in the previous year. This again suggests

¹<https://www.realtor.com/research/reports/hottest-markets/>

²<https://www.realtor.com/research/data/>

that, in spite of tight monetary policy measures and high borrowing costs, the housing market has not yet softened back to the pre-pandemic levels.

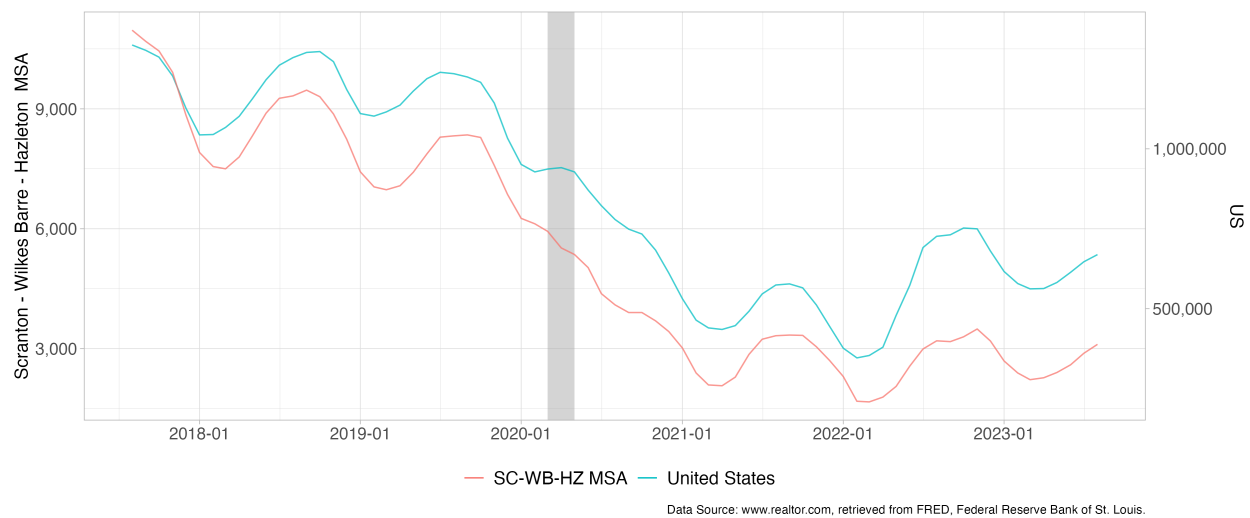


Figure 13: Monthly Number of For-Sale Housing Inventory

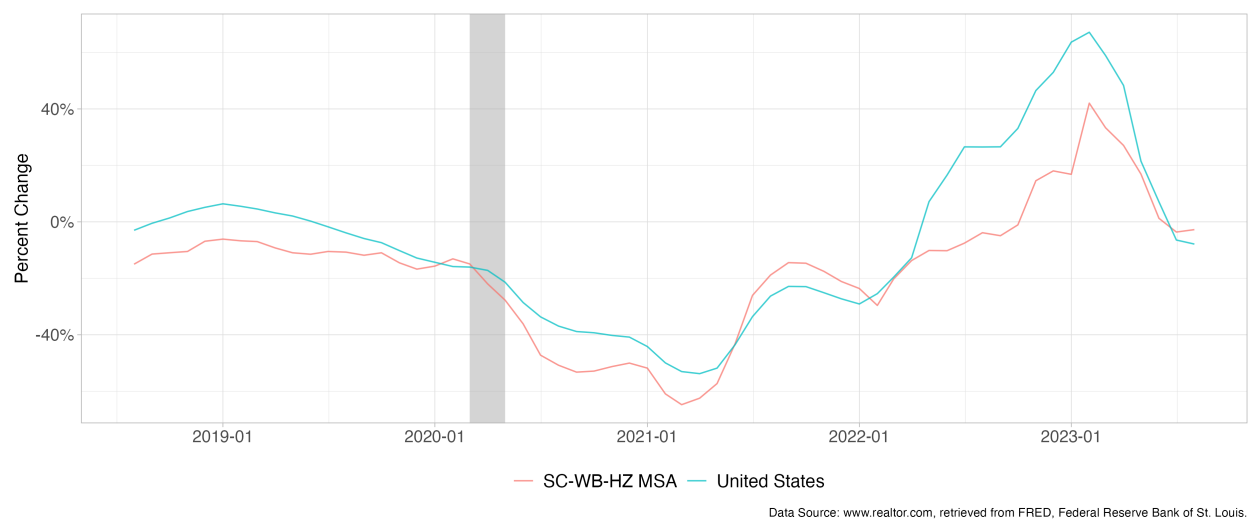


Figure 14: Year-over-Year Percent Change in Monthly Number of For-Sale Housing Inventory

Home Prices and Rents

While an increase in home prices is welcomed news among current homeowners, it is inversely related to housing affordability and a cause for concern for prospective home buyers. Since the beginning of 2023, housing prices have continued to rise, albeit at a noticeably slower pace. The slowing growth of housing prices was most likely caused

by the higher mortgage rates. Figure 15 exhibits year-over-year growth of the quarterly housing price index published by the Federal Housing Finance Authority (FHFA) for the SC-WB-HZ MSA, Pennsylvania, and the US. The data reflect all metro-area transactions. It is evident from the chart that housing price growth in 2023 has remained relatively strong across all three areas, with SC-WB-HZ MSA, PA, and the US recording annual growth rates of 4.7%, 5.9%, and 4.5%, respectively. As a comparison, the annual PCE inflation in the US for the second quarter was 6.03%. However, starting in the second quarter of 2022, this growth has steadily declined, most likely due to higher borrowing costs. It is worth noting that historically, housing price growth in Pennsylvania exceeded that in the SC-WB-HZ MSA. However, since the beginning of the pandemic in 2020 and especially in 2022, housing prices in the local area have grown noticeably faster than in Pennsylvania. This trend slightly reversed in the second quarter of 2023.

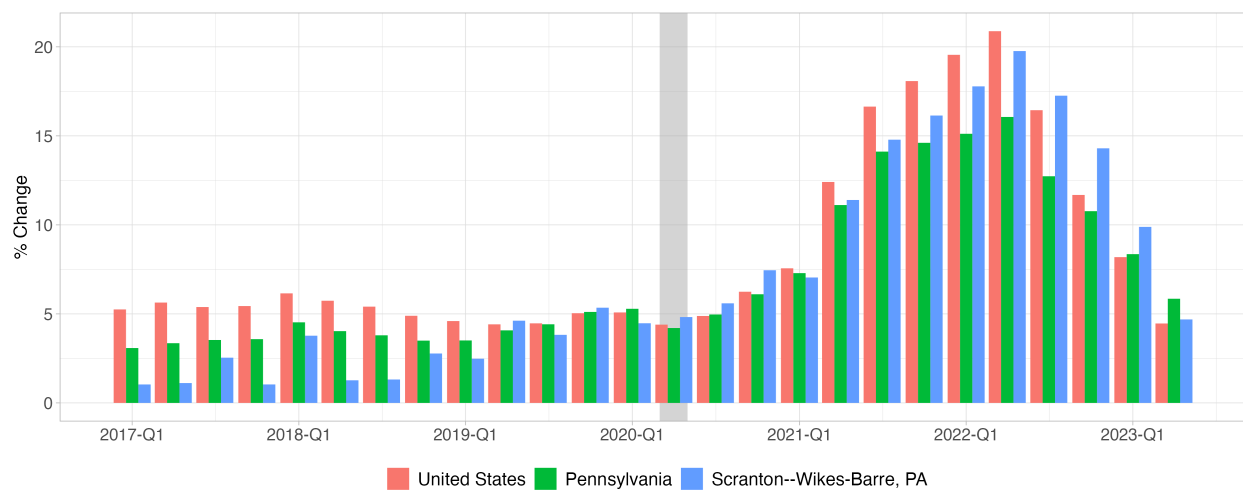


Figure 15: Year-over-Year Percent Change of the FHFA Quarterly Housing Price Index

Still, housing in the SC-WB-HZ MSA remains much more affordable. Realtor.com also publishes historical data on the median listing price of single-family and condo/townhome housing within the specified geography during the specified month.³ Figure 16 exhibits the historical monthly data of this metric for the SC-WB-HZ MSA, Pennsylvania, and the United States. In August 2023, the median home value in the SC-WB-HZ metropolitan area was \$321,815, around three quarters of the median house price in Pennsylvania (\$441,266) and less than half of the median house price in the United States (\$760,362). Figure 17 displays the year-over-year percent change in the median house price. It is clear from the chart that while housing price growth in the SC-WB-HZ MSA slightly outpaced that in Pennsylvania and the US since early 2021, starting in early 2023, it became more consistent with state and national figures. For the months between January and August 2023, the average annual housing price growth in the SC-WB-HZ MSA, PA, and the U.S. was 5.38%, 4.43%, and 3.00% respectively. Again, as a comparison, the average annual inflation (as measured by the PCE price index) was around 6%.

³ibid. see the footnote on page 14.

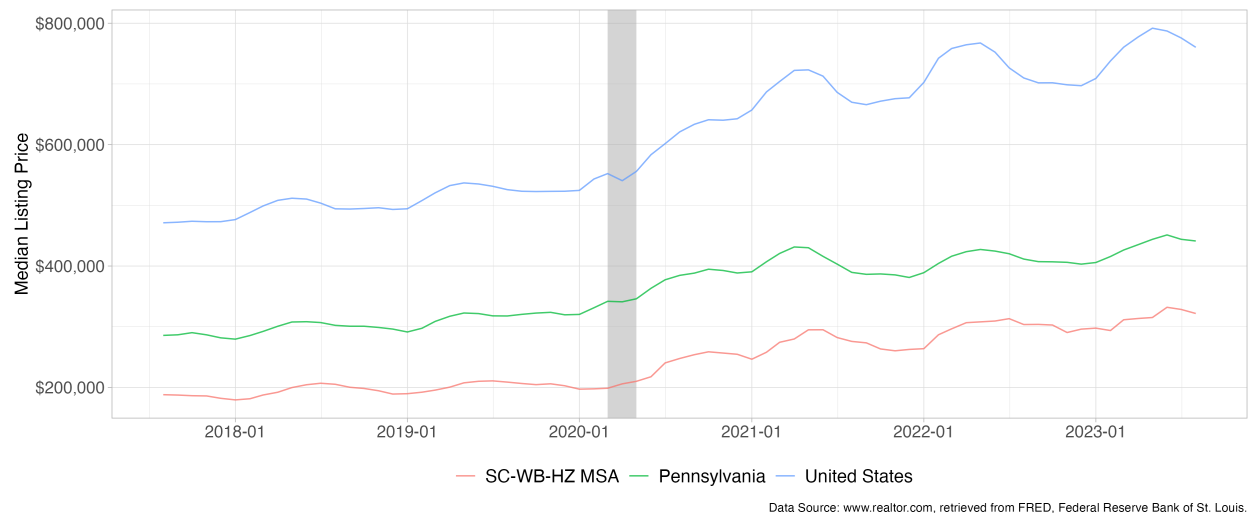


Figure 16: Median Housing Listing Price on Realtor.com

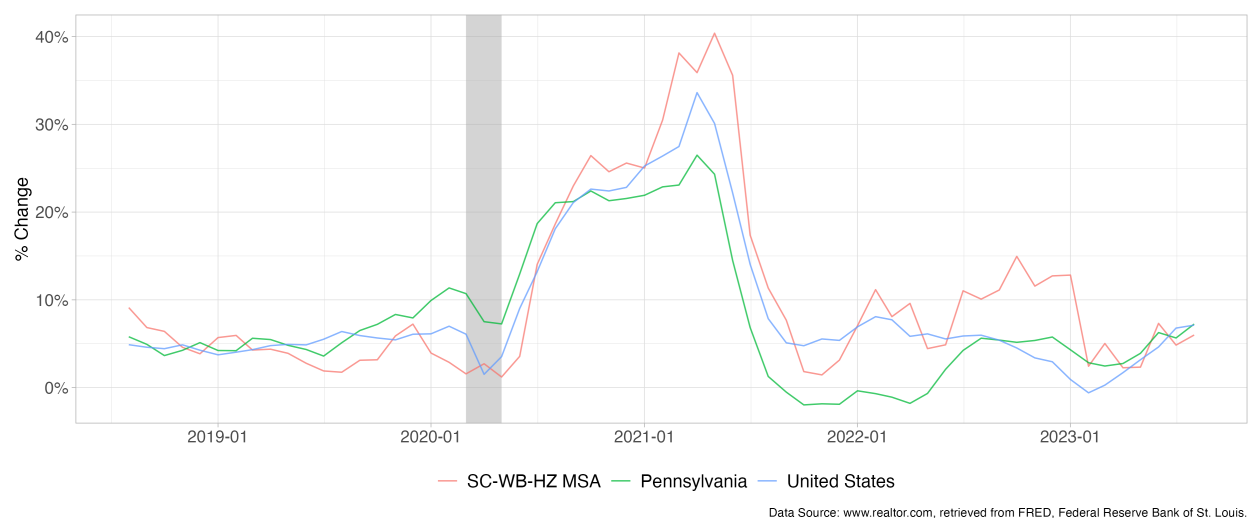


Figure 17: Year-over-Year Percent Change of the Median House Price Index

A similar conclusion can be reached regarding rental prices in the area. We source our data on rents in the Scranton metro area from zillow.com, that publishes its Observed Rent Index (ZORI) for different types of geographies (metro area, city, ZIP code, etc.).⁴ ZORI is a measure of typical observed market rent in a region; it represents repeat rents as well as the rents of those homes that are currently listed for-rent. The index is computed by considering the mean of listed rents that fall into the 40th to 60th percentile range for all homes and apartments in a given region. Figure 18 shows the mean rents in Scranton, PA, Philadelphia, PA, and the US over time. The chart reveals that rents in the Scranton metro area on average have been and still are much lower than in the Philadelphia metro

⁴<https://www.zillow.com/research/data/>

area or in the US in general. In December 2023, the average rent in Scranton, Philadelphia, and across the US were \$1,204, \$1,837, and \$2,052 respectively. One may wonder whether the relatively lower rent in the Scranton area translates directly into more affordable rental housing. The answer depends on the comparison group. According to the 2020 US Census data, the median annual household incomes in Scranton, Philadelphia, and the US were \$41,687, \$49,127, and \$67,000, respectively. These numbers imply that in July 2023, a median household in both the Scranton area and the US spent approximately 35% of their 2020 income on rent, while the same measure of rental affordability for Philadelphia was around 45%. This means that renting a house in the Scranton metro area was as affordable as the US on average but more affordable than in Philadelphia, PA.

Figure 19 illustrates the year-over-year growth rate of the Zillow Rent Index. As the figure indicates, the post-COVID rent boom that was observed in the Scranton metro area has subsided in 2023 and 2023, aligning more closely with rent growth in Philadelphia and the US.

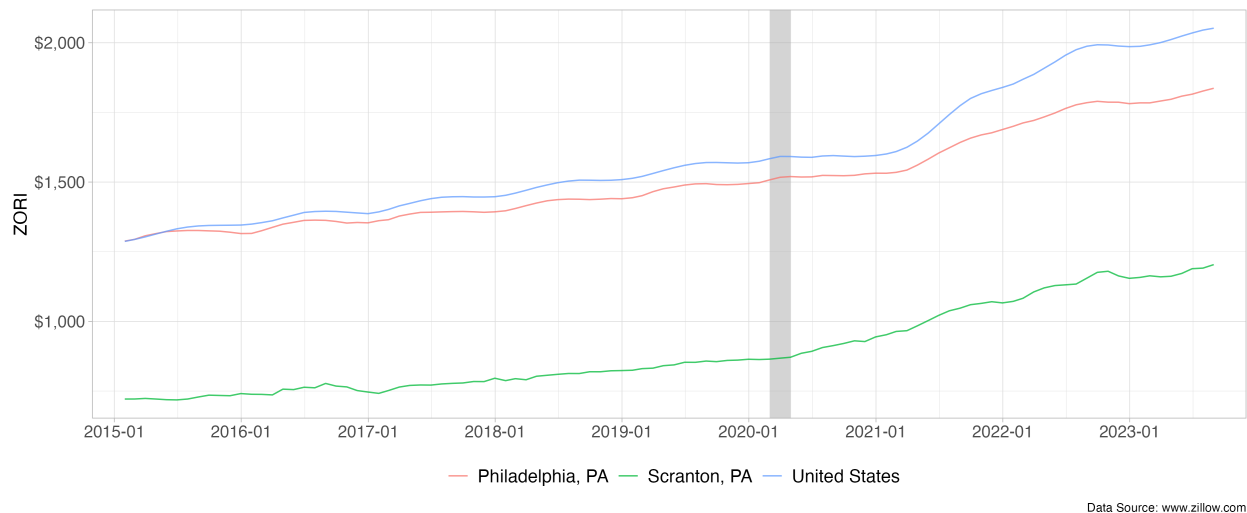


Figure 18: The Zillow Monthly Observed Rent Index (ZORI)

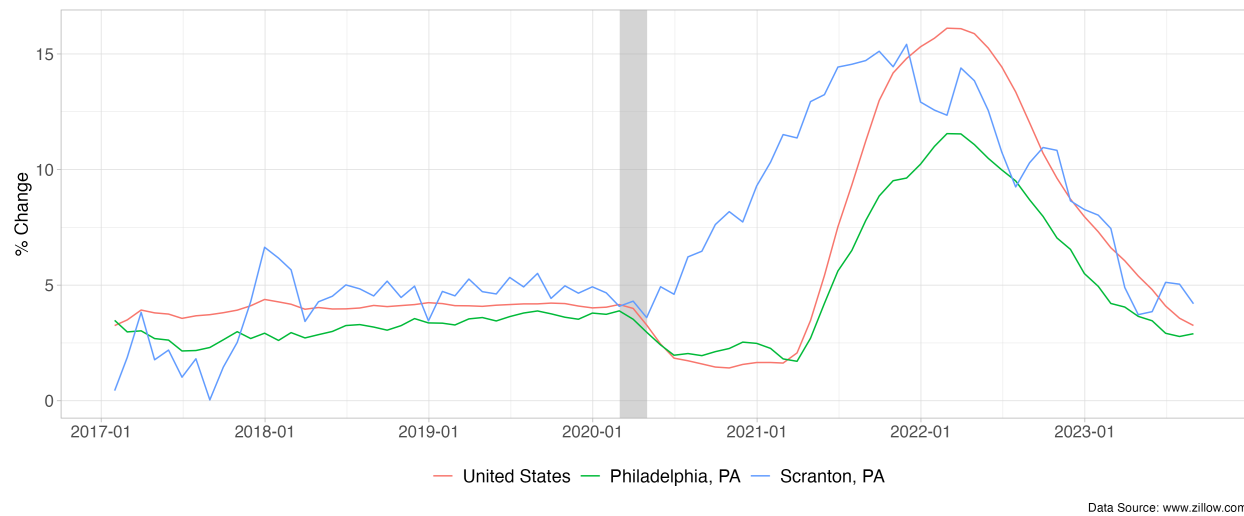


Figure 19: Year-over-Year Percent Change of the Zillow Monthly Observed Rent Index (ZORI)

Credit Conditions

Aram Balagyozyan The state of consumer credit is an important coincident indicator of how well households are doing financially. It is also a leading indicator of economic conditions in the region as it predicts consumer spending on goods and services. One metric that allows us to gauge consumer credit conditions in the region is the estimate of "subprime population," percentage of population with a credit score below 660. This quarterly metric is produced by Equifax and Federal Reserve Bank of New York, and we retrieve these data for Lackawanna, Luzerne, and Wyoming counties from FRED, Federal Reserve Bank of St. Louis. As Figure 20 indicates, during the second half of 2022 and the first quarter of 2023, credit conditions in these three counties remained slightly elevated but stable, following a sharp decline at the beginning of the pandemic. In the first quarter of 2023, subprime population of Wyoming, Lackawanna, and Luzerne counties were 18.79, 22.21, and 24.17 percent respectively. This disparity and recent trend appear to be a mirror reflection of the recent unemployment rates in the region (in April 2023, the unemployment rates in Wyoming, Lackawanna, and Luzerne counties were 3.7, 4.2, and 4.7% respectively)

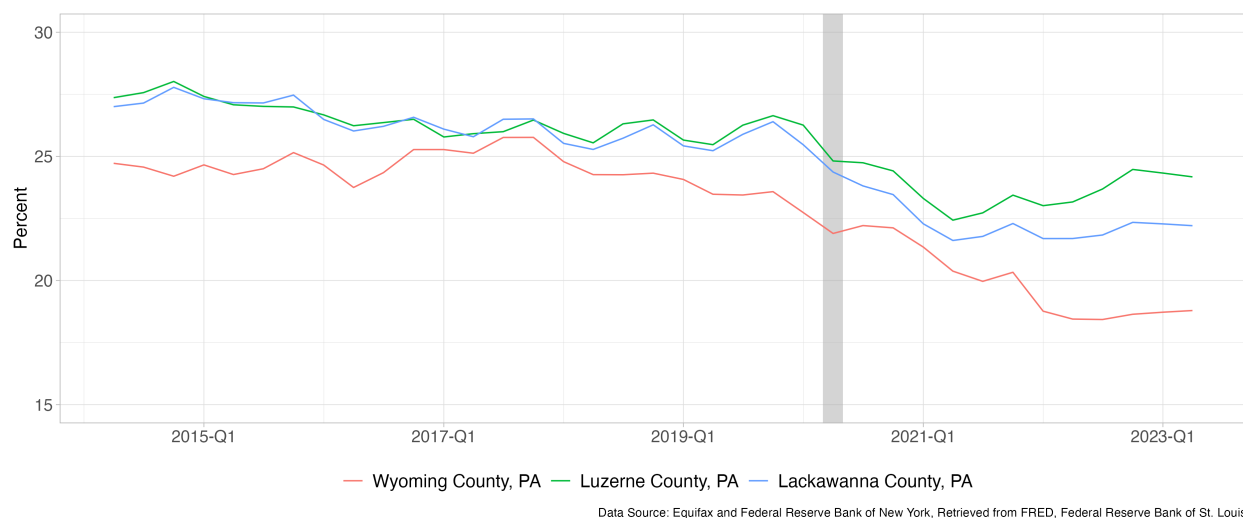


Figure 20: Equifax Subprime Credit Population

Downtown Scranton Business Survey

Aram Balagyozyan

In April 2023, we surveyed forty-three downtown Scranton storefront businesses to assess their current and expected business conditions. The surveyed businesses in our sample encompassed various types, including bars and restaurants (37%), retail shops (28%), pharmacies (9%), fitness clubs (7%), personal care salons (2%), art and recreation establishments (12%), as well as businesses offering hospitality (2%) and financial (2%)

services. Businesses were asked to assess the most recent changes in their current conditions and their expectations for the next six months in six areas: general business conditions, the prices they pay, the prices they receive, their workforce size, average employee work hours, and their projections for technology spending and capital expenditure, such as store improvements or expansions. The actual survey is presented in the Appendix.⁵ The survey results are presented in Figures 21-26. Figure 21 indicates that in April, most establishments were thriving and expected increases in overall activity within the next six months. For the majority of surveyed businesses, input prices either increased (26%) or remained similar to the previous month (70%). However, just under half of businesses anticipated higher input prices six months from now. A similar pattern emerges concerning selling prices. The majority either maintained their selling prices (39.5%) or raised them compared to the previous month (58.1%). Nonetheless, while 53.5% expected to increase their prices within the next six months, 37.2% anticipated lowering them. Current labor market indicators remained robust, compared to March. Looking ahead, nearly half of the businesses planned to increase their workforce, and almost a third of them thought that work hours will increase. Indicators for expected general business conditions and future capital and technology spending suggest that in April, businesses sentiment regarding the near future was quite bullish. More than a third of surveyed businesses expected to boost their capital expenditure, and over half anticipated increasing their technology spending.

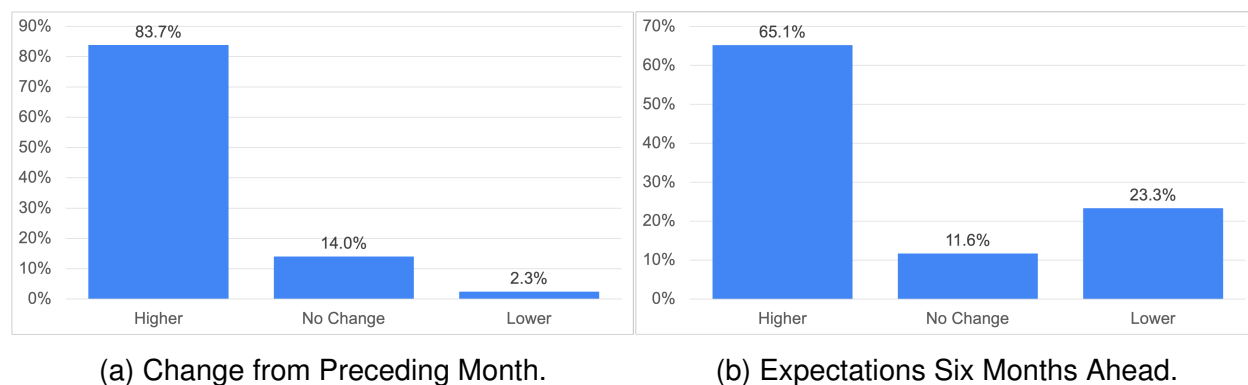
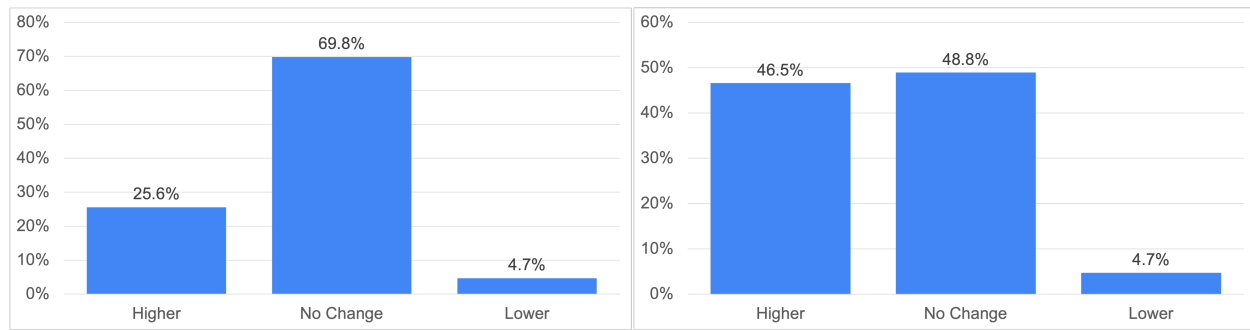


Figure 21: General Business Conditions, Downtown Scranton, April 2023.

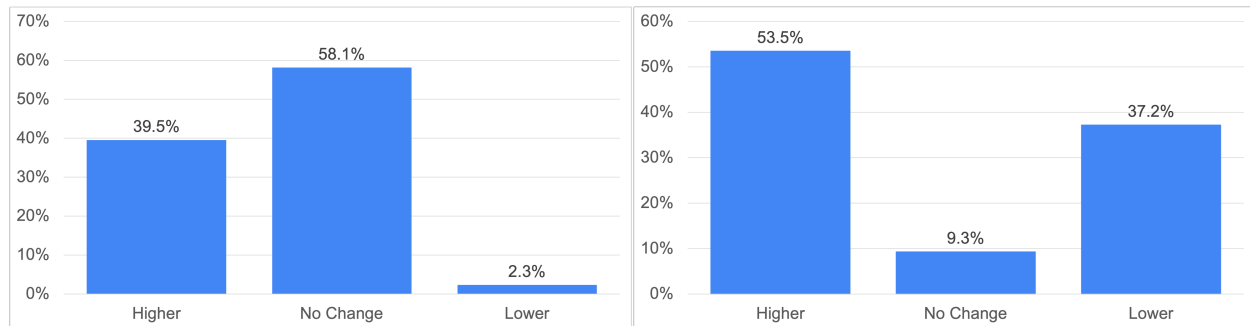
⁵The survey questions were adopted from the NY Federal Reserve Bank's Empire State Manufacturing Survey: https://www.newyorkfed.org/medialibrary/media/research/regional_economy/mfg_survey/surveyform.pdf



(a) Change from Preceding Month.

(b) Expectations Six Months Ahead.

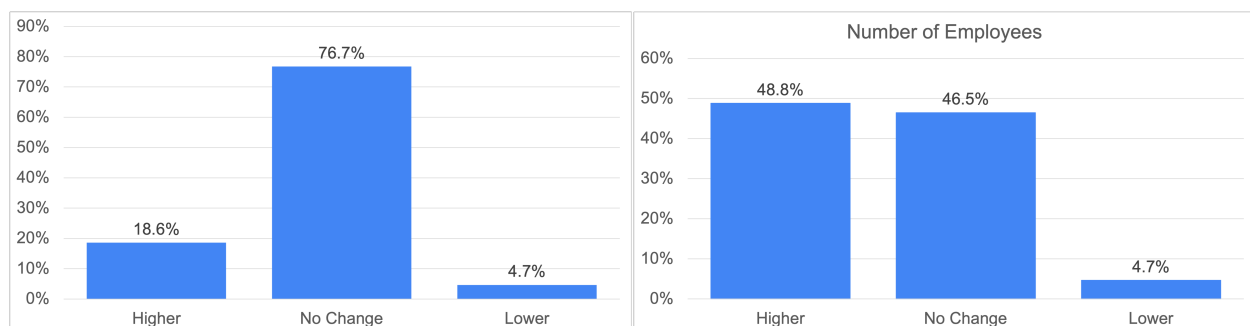
Figure 22: Prices Paid, Downtown Scranton, April 2023.



(a) Change from Preceding Month.

(b) Expectations Six Months Ahead.

Figure 23: Prices Received, Downtown Scranton, April 2023.



(a) Change from Preceding Month.

(b) Expectations Six Months Ahead.

Figure 24: Number of Employees, Downtown Scranton, April 2023.

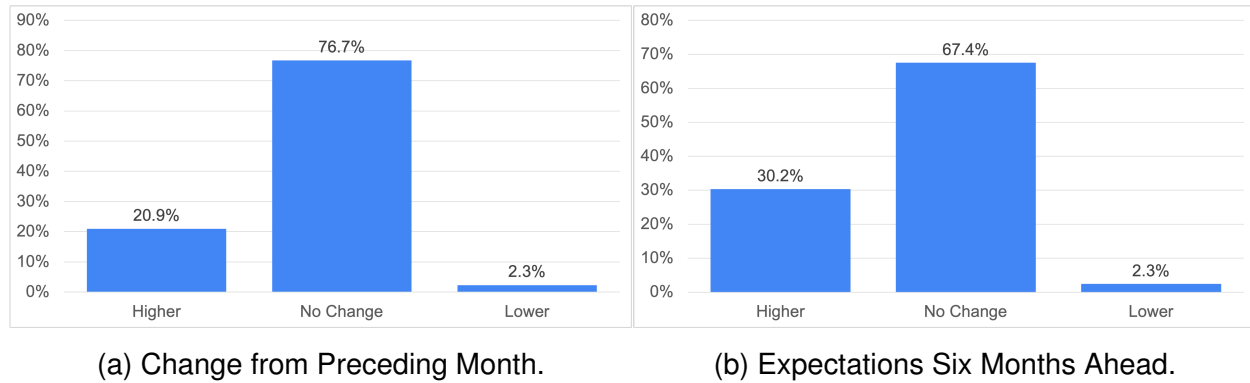


Figure 25: Average Employee Workweek, Downtown Scranton, April 2023.

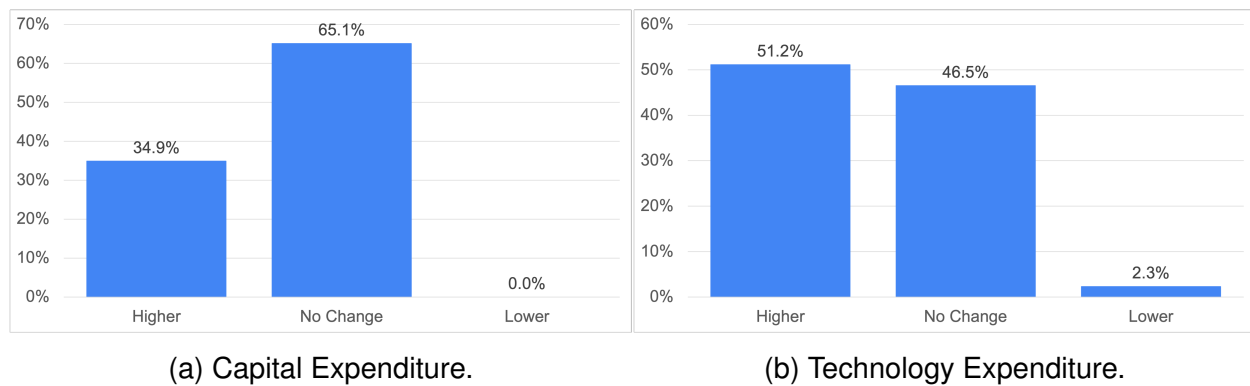


Figure 26: Six Months Ahead Expected Capital and Technology Expenditure, Downtown Scranton, April 2023.

The Big Picture

Satyajit Ghosh

Inflation Watch

In September 2023, the seasonally adjusted Consumer Price Index for All Urban Consumers (CPI-U), the most popular measure of inflation, increased 0.4 percent in the nation. The annual inflation was 3.7% before seasonal adjustment, unchanged from August. For all items less food and energy, the two most volatile categories of consumer expenditure, the inflation rate – which is known as the Core rate of inflation – stood at 4.1%, falling slightly from the August rate of 4.4%. The Chained CPI (C-CPI-U), which is designed to be a closer approximation to a cost of living index, increased at an annual rate of 3.7% based on seasonally unadjusted data – unchanged from the August rate. So, all things considered, inflation in September was somewhat stable. Although it was higher than the rates in June (3.0%) and July (3.2%), it was a far cry from inflation of March 2022 through September 2022 when the CPI based year-over-year inflation exceeded 8% in every month. It was also lower than the inflation rates between January 2023 and May 2023 when inflation ranged between 6.5% and 4.0%. In the Middle Atlantic Division of the Northeast region, that includes Pennsylvania, New Jersey, and New York, the CPI-U inflation rate was 3.2% over the one year period ending in September 2023.

As reported by the Bureau of Labor Statistics (BLS) on October 12, the largest contributor to inflation in September was the cost of shelter which increased by 0.6 percent from August after seasonal adjustment and at the rate of 7.2 over the last 12-months before seasonal adjustment. The rise in the cost of shelter, which included rent, owners' equivalent rent, and lodging away from home, contributed to more than half of the inflation in September. Increase in price of gasoline was also a large contributor to the recent increase in inflation in the last two months. After a 10.6% increase in August over July, cost of gasoline increased by another 2.1% in September over August. This recent increase in the cost of gasoline is largely due to the reduction in output by the OPEC countries and Russia. Cost of food increased at the stable monthly rate of 0.2 percent over the previous month (or 3.7% over the past 12 months). The cost of food at home increased by 0.1 percent over August (at an annual rate of 2.4%) – a drop from the last two months, while the cost of food away from home increased by 0.4 percent over August – marking a 6.0% increase over the last year.

Other items with a substantial increase in price in September also included new vehicles, whose price increased over the past year by 2.5%, and transportation services, whose price increased by 9.1% in September over the past 12 months. Transportation services include motor vehicle insurance whose price increased by 18.9% over the past 12-month period and motor vehicle maintenance and repair, the cost of which increased by 10.2%. Of the few items that experienced a reduction in price in September, most notable was used cars and trucks, whose price in September fell by 2.5% compared to August, marking an 8% fall over the past 12 months.

As we discussed here in Issue 1 of Brennan Barometer in February 2023, at the onset of the rapid inflation in 2021-2022, the following reasons for inflation were put forward: the supply bottlenecks due to shipping problems and worker shortages caused by Covid-19, an increase in the energy prices due to the war in Ukraine, an increase in consumer expenditure – first fueled by the government assistance during the pandemic and then due to the strong labor market, and an increase in wage cost leading to increase in the cost of production. But now that the supply bottlenecks are mostly smoothed out, the energy price effects of Russian invention are internalized, the labor market has somewhat cooled down, what is driving the sustained inflation? It is the increase in consumer expenditure; the increase in the cost of rent and other services along with the increase in retail expenditure as evidenced in the Census Bureau's September retail sales report. In September, retail sales were up 0.7 percent from August 2023, and up 3% above last year. Internet sales were up 8.4 percent from last year, while the sales at food services and drinking places were up 9.2 percent from September 2022.

Although the current pace of inflation is lower than what we experienced even a few months back, there are reasons to believe that relatively elevated inflation may continue and not fall rapidly. The producer price index, a measure of the change in costs of suppliers' goods and services, rose 0.5 percent in September, following even higher increases in July and August. The index is considered a leading indicator of what might happen down the road to the consumer prices, as businesses pass higher costs down to their customers.

Consumers also are not expecting lower inflation in the immediate future. In the September Survey of Consumer Expectations conducted by the New York Federal Reserve Bank, the median inflation expectations was 3.7% percent and 3% at the one- and three-year-ahead horizons, respectively, but decreased to 2.8 percent at the five-year-ahead horizon. On October 27, the University of Michigan's one year ahead inflation expectation was revised up from 3.2% to 4.2%. Inflationary expectation is very important for charting the path of actual inflation. If workers expect higher inflation, businesses pay higher wages and salaries to adjust for an expected cost of living increase. This increases business costs which leads to a further increase in consumer prices. The inflation rate is still too high for the Fed's comfort and another interest rate hike before the end of the year still seems likely.

Recession? What Recession?

Not too long ago, the general consensus was that the US economy will soon get into a recession. The question that most economists were wondering about was if a "soft landing" was possible, so that the drop of the Gross Domestic Product (GDP) or the increase in unemployment may not be too harsh. There were good reasons to expect a recession for the US economy. The Fed was committed to raise the interest rate to combat inflation by controlling spending. This brought back the memory of the "Volcker recession." The core rate of inflation in 1980 averaged in excess of 13%. This prompted Paul Volcker, then Chair of the Federal Reserve, to increase the interest rate sharply,

which eventually brought down inflation but at the cost of a deep and long recession from July 1981 to November 1982, when the unemployment rate shot up to 10.8%. No one expected such a deep and long recession in the current period, but a recession seemed almost inevitable.

There were signs of slowdown in the economy. After the strong turn around in 2021, when the real GDP (GDP corrected for inflation) grew at an annual rate of 5.8%, in 2022 the annual rate of growth was just 1.9% with the first two quarters showing a decline in real GDP. Also, in July 2022, the investors in the financial market noticed an "inversion of the yield curve." Generally, a yield curve, that plots yields or interest rates of bonds with different maturities, is upward sloping, demonstrating that the long term rates are higher than the short term rates. An inverted yield curve indicates that the long term rates are lower than the short term rates and investors expect that the Fed will reduce its policy rate (the federal funds rate) to encourage consumers and businesses to increase spending to pull out of a recession. Thus the inversion of the yield curve is viewed as a predictor of an impending recession, which can happen within the next ten to twelve months. On July 5 2022, the yield on 2-year Treasury bond rose above the 10-year Treasury yield and the yield curve has remained inverted since then. By the historical pattern of the inversion of a yield curve and the following recession, the US economy should be in the middle of a recession by now. But the strong labor market – posting an unemployment rate of 3.8% for the last two months while adding about 563,000 jobs preceded by even lower unemployment rates dating back to the beginning of the year – belies that notion.

In Brennan Barometer, 2023, Issue 1 (February), we argued that a deep or prolonged recession may not be the inevitable outcome of the Fed's tight monetary policy. "However, since the labor market is very strong, the cyclical slowdown may avoid a recession or lead to a shallow and a short recession when the unemployment rate may still continue to be low." ⁶. Although the labor market has somewhat cooled down, there are indications of continued strength of the labor market – besides the low unemployment rate and substantial increase in payroll jobs.

The quit rate, measured as the ratio of the total number of quits to total employment, has fallen to 2.3 % in July and August in 2023 compared to the peak of 3% in April 2022 or 2.8% in August 2022, as workers are less inclined to leave jobs. The job openings rate, measured as the ratio of total number of job openings to the sum of job openings and employment, fell to 5.8% in August as firms find themselves under less pressure to find workers. The job opening rate was much lower than the peak of 7.4% in March 2022, but was considerably higher than the pre-pandemic level of 4.4% in February 2020. The strength of the labor market was further evidenced by the number of unemployed persons per job openings which stood at 0.7 in August. Although lower than the average of 0.5 for the entire year of 2022, it was substantially lower than the peak of 4.9 in April 2020.

The housing market usually suffers substantially during a recession. Often the downturn of the real estate market is a leading indicator of a recession. A common fear is that the high interest rate policy of the Fed can significantly affect the housing activities. But in

⁶Satyajit Ghosh: "The Big Picture" Brennan Barometer, 2023, Issue 1, February, p.14

spite of the high borrowing and mortgage interest rates, housing activities have remained mostly stable due to low housing inventory. The same trend is also noticed in the region. As noted in this issue's Housing Market section, the region's housing market has not yet softened back to the pre-pandemic levels.⁷

The most important marker to gauge if an economy is in recession or heading towards one is the level of real GDP (GDP adjusted for inflation) and its growth. After moderate and perhaps sub-par GDP growth of 2.2% and 2.1% in the first two quarters of 2023 – the rates that led most to believe the inevitability of a recession by the end of the year – the preliminary estimate of the third quarter's GDP growth rate turned out to be a robust 4.9%, putting the fear of an imminent recession to rest. Personal consumption spending, which accounts for two-thirds of GDP, increased by 4% percent annual rate, contributing to 2.69% of GDP growth. Growth in Private investment contributed to 1.47% of GDP growth, and increase in Government Expenditure contributed to 0.79% of GDP growth.

While the sharp increase in real GDP is good news, a closer scrutiny reveals some weakness for the economy. The increase in private investment is not mostly due to an increase in fixed capital that increases the productive capacity of the economy. The bulk of the increase in private investment is due to an increase in private inventory – accounting for 1.32% growth in real GDP – which is a drag on the economy. The third quarter's growth is mostly driven by an increase in personal expenditure. In September alone, personal consumption expenditure, adjusted for inflation, increased by 0.4%. But in the same month, the after-tax personal income adjusted for inflation dropped by 0.1%. Thus, the increase in personal consumption expenditure was actually funded by reduction in savings. In September, the personal savings rate fell to the annual rate of 3.8%, and in the third quarter, the personal savings rate fell from 5.1% in the previous quarter to 3.4%. It is doubtful if the consumption expenditure can be sustained at that level just by reducing the savings rate. Thus, a recession in 2024 may not be beyond the realm of possibility.

⁷Aram Balagoyzyan: "Housing Markets" Brennan Barometer, 2023, Issue 2, October, p.16

Appendix

Downtown Scranton Business Survey

Part 1: Firm and Respondent Information

Firm Name: _____

Date: _____

Respondent Title: _____

Respondent Last, First Names: _____

Part 2: General Business Conditions

Question	Higher	No Change	Lower
1. Compared to last month, what is your general evaluation of the current level of business activity			
2. Six months from now, do you expect the level of business activity to be			

Part 3: Additional Questions Relating to Your Facilities in Scranton

Question	Higher	No Change	Lower
3. Compared to last month, the prices your company pays are			
4. Six months from now, do you expect the prices your company pays to be			
5. Compared to last month, the prices your company is receiving are			
6. Six months from now, do you expect the prices your company receives to be			
7. Compared to last month, the number of employees (including contract workers) in your company is			
8. Six months from now, do you expect the number of employees in your company (including contract workers) to be			
9. Compared to last month, the average number of hours that employees work is			
10. Six months from now, do you expect the average number of hours that employees work to be			
11. Six months from now, do you expect your company's spending on technology to be			
12. Six months from now, do you expect your company's capital spending (such as improvement or expansion of the physical plant) to be			