STEPHEN F. AUSTIN STATE UNIVERSITY
Center for Business and Economic Research

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Our Economy: East Texas and Beyond

Director's Welcome

The research staff at CBER is pleased to bring you our fourth issue of East Texas and Beyond*, our newsletter. In this summer edition, we discuss the natural gas sector. We also assess the current inflation landscape: what the latest data tell us, how US compares to Europe, and what the central banks are doing. Finally, we also take a look at the other national, state, and local economic conditions and comment on where the economy appears to be headed. As always, if you have a suggestion for a topic you would like to see covered, please get in touch with us.*

In This Issue

The State of US Natural Gas

by R. DAVIS

Since the mid-2000s, natural gas has been at the forefront of the US energy scene. With the technological breakthroughs associated with horizontal drilling with the combination of hydraulic fracturing, natural gas production has steadily risen for nearly a decade, and last year was no different.

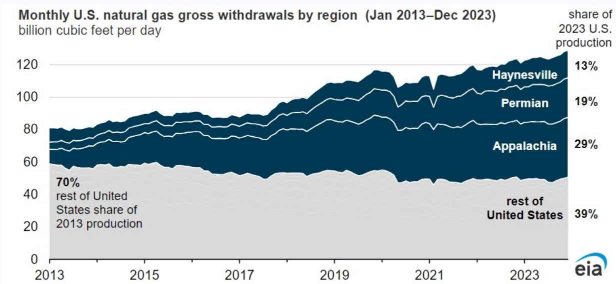
According to the Energy Information Administration (EIA), US natural gas production grew by 4 percent in 2023; specifically, the Haynesville region in Louisiana and Texas was responsible for 13 percent of production last year. While this was a drop from its 2022 share of production, the Permian region in western Texas and New Mexico picked up some of the slack, accounting for 19 percent of production in the states.

Growth in natural gas production for the Permian region was caused by the increased production of oil as oil prices were high enough in 2023 to support drilling activity. The natural gas produced in the Permian region was *associated gas* that is produced during oil drilling.

The Appalachia region in the Northeast produced the most natural gas last year with 29 percent of US production, but the region faces a growing problem: it does not have enough pipeline capacity to transport additional natural gas out of the area to final markets.

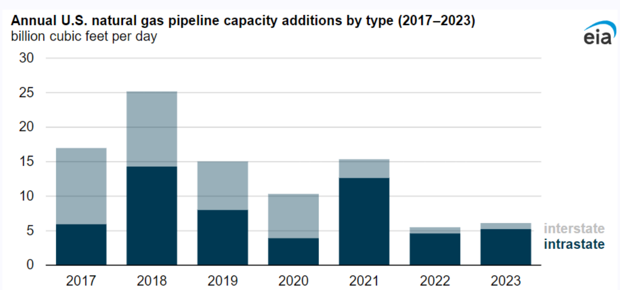
Natural Gas Pipeline Capacity

Natural gas is primarily transported via pipeline in the US. There are intrastate pipelines and interstate pipelines. Intrastate pipelines are located within a single state and are regulated by state agencies, while interstate pipelines cross state lines and are regulated by the Federal Energy Regulatory Commission (FERC).



Data Source – U.S. Energy Information Administration, Drilling Productivity Report, Monthly Crude Oil and Natural Gas Production Report, and Natural Gas Monthly

The EIA reported that intrastate pipeline capacity additions overtook interstate additions in 2023. Most of the intrastate pipeline capacity increases were located in Texas and Louisiana as a result of higher demand in the Gulf Coast markets for exporting liquified natural gas (LNG). Interstate pipeline additions accounted for only 14 percent of total new capacity last year, and, in general, new interstate additions have decreased since 2018. As interest rates have risen, the costs of financing capital-intensive investments, like natural gas pipelines, have increased, which can help explain some of these reductions in added capacity year over year.

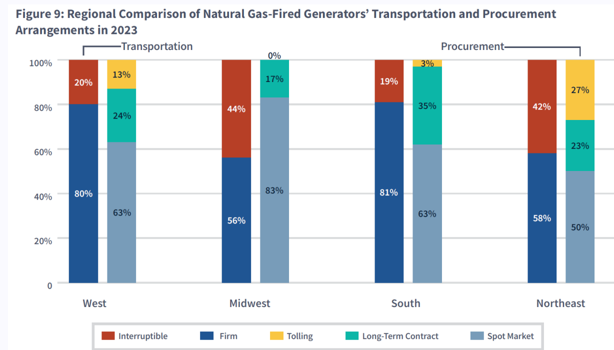


Data Source – U.S. Energy Information Administration, Natural Gas Pipeline Projects Tracker

One of the main users of natural gas pipelines is electric power plants. Natural gas-fired electricity generators commonly have two main methods for fulfilling their natural gas transportation needs. The first is called *interruptible pipeline service*. This type of transportation service allows customers to claim natural gas along a pipeline when capacity is available, but interruptible service is not guaranteed. It is cheaper than the alternative, but these customers are a lower priority for pipeline capacity.

The second is a *firm transportation contract*. Customers have a specified amount of capacity on the pipeline reserved to ensure higher priority service by paying more, typically in the form of a reservation charge. The only way a firm transportation contract is inhibited is in the case of unforeseeable circumstances.

According to FERC, natural gas-fired generators located in the West and South utilized firm transportation contracts for their pipeline needs at least 80 percent of the time last year, while the Midwest and Northeast generators used firm transportation contracts only 50 to 60 percent of the time in 2023, below the national average.



Source – Federal Energy Regulatory Commission 2023 State of the Markets; Data Source - U.S. Energy Information Administration Form 923 Schedule 5

The breakdown of firm versus interruptible pipeline capacity contracts by region is interesting. Cold weather is common in the Northeast, but extreme cold weather events have been problematic. Per FERC, the Northeast uses more interruptible pipeline services than other regions, meaning natural gas-fired electric generators in the Northeast are often a low priority customer for pipeline capacity. In the event of extreme cold weather, natural gas generators are main producers of electricity, particularly for heating homes, but they may be left without the necessary fuel they need to ramp up electricity production at a critical time.

In fact, in a joint analysis of Winter Storm Elliott that occurred in 2022, FERC and the North American Electric Reliability Corporation (NERC) determined "natural gas-fired generators that lacked firm supply or transportation contracts to meet their winter peak electricity output faced challenging and often insurmountable fuel procurement issues when natural gas supply and available pipeline capacity became scarce."

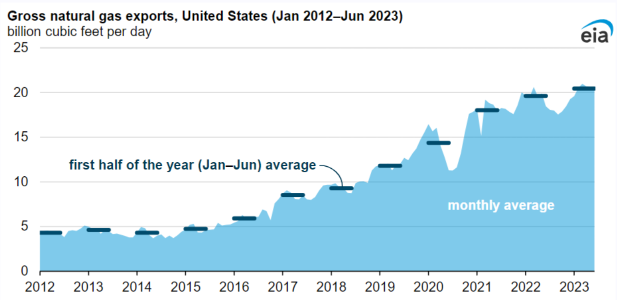
Exports and Imports

Some interstate pipelines for natural gas cross country borders, where possible. The other methods of transportation of natural gas are by ship or truck. If natural gas is transported by ship, it is first turned into LNG. Natural gas in its liquid form is significantly smaller by volume than in its gaseous form.

The US became a net exporter of natural gas in 2017, which was the first time this occurred since the 1950s. In the first half of 2023, the US exported more natural gas than it had in the same period in any previous year, and LNG was the main driver of this increase. According to the

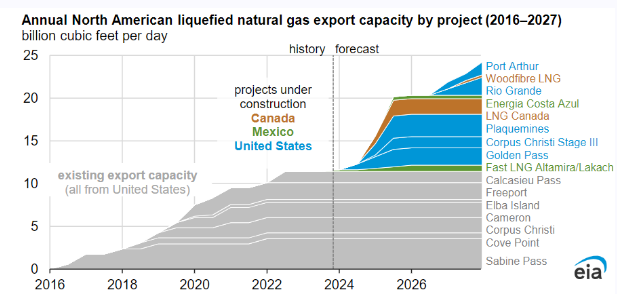
EIA, the US was the largest supplier of LNG to Europe in 2023, supplying nearly half of all LNG imports to Europe with Qatar and Russia supplying the second- and third-largest amounts, respectively.

Exports by natural gas pipeline also increased last year, with the majority of exports going to Mexico and Canada.



Data Source – U.S. Energy Information Administration, Natural Gas Monthly

Though the US is a net exporter of natural gas, there are instances when the country imports natural gas, primarily from Canada. Imports from Canada generally peak in January or February due to seasonal fluctuations in natural gas consumption. In the first half of last year, US imports of natural gas by pipeline from Canada decreased by 5 percent compared to 2022. LNG imports from Canada go almost completely to the Northeast during the winter months when there are periods of high demand for natural gas supply.



Data Source – U.S. Energy Information Administration, Liquefaction Capacity File, and Trade Press

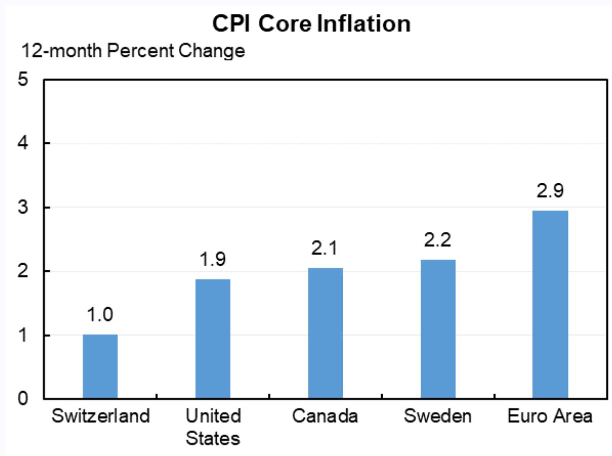
The EIA projects LNG export capacity from North America to drastically increase by 2027, with over 75 percent coming from additions to existing LNG capacity in the US and the remaining attributable to the first LNG export terminals going online in Mexico and Canada. Planned additional LNG capacity in the US stems from five projects that are currently under construction: Golden Pass, Plaquemines, Corpus Christi Stage III, Rio Grande, and Port Arthur. Golden Pass LNG in Texas and Plaquemines LNG in Louisiana are expected to export LNG beginning sometime in 2024.■

Inflation: The Latest

The headline-grabbing inflation number we heard most recently is that the 12-month rate remains higher than what the Fed wants to see: The most recent yearlong period gave us 3%. While this is lower than the same measure we observed in Q1 2024 of 3.5%, it is not enough for the Fed officials to announce an interest rate cut, and so they have stayed put once again this time.

This deserves some additional context and discussion. By all accounts, there are signs of inflation coming down. The one-month "headline" CPI for May is essentially 0%, and the core CPI – the measure that strips away volatile food and energy prices – is up 0.16% for the month, which is equivalent to a 2% annual rate. That is encouraging news any way you look at it, but it is just one month, and the Fed waiting to see more of the same to confirm that inflation is on its way down makes sense.

On the other hand, we have the Fed's counterparts, the central banks in Europe (ECB), Sweden, and Canada all announcing cuts in their respective key interest rates this month. This is in spite of US inflation being lower and our GDP growth higher than in Europe (whether taken together or as individual countries). It is becoming clearer that the Federal Reserve wants to be more cautious before loosening its monetary policy – or, conversely, more aggressive in wringing out whatever inflation remains.



It is also worth pointing out that comparisons of inflation measures between the US and Europe are complicated. Without getting too far into the weeds, Europeans use something called the Harmonized Index of Consumer Prices, which is akin to the CPI methodologically but does not include the owner-equivalent of rent – i.e., a measure of the cost of housing. For the CPI consumer basket, housing makes up a very large portion of the calculation, so the proper comparison requires that we wait until the BLS releases the comparable index data for the US. This often comes with a delay, and by then the comparison to Europe is less meaningful.

Nonetheless, the Fed has signaled that it is not ready to cut rates and may only do it once this year.

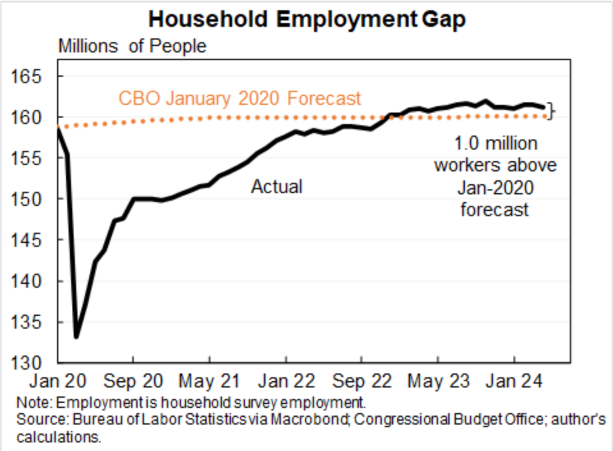
Economic Snapshot: National and Local Conditions

There are some mixed signals among the usual economic indicators (which is, itself, becoming a theme – the uncertainty, that is). Add in the upcoming November presidential election, and you have the perfect recipe for the “anything can happen” near future. Nevertheless, let’s dive in to some details.

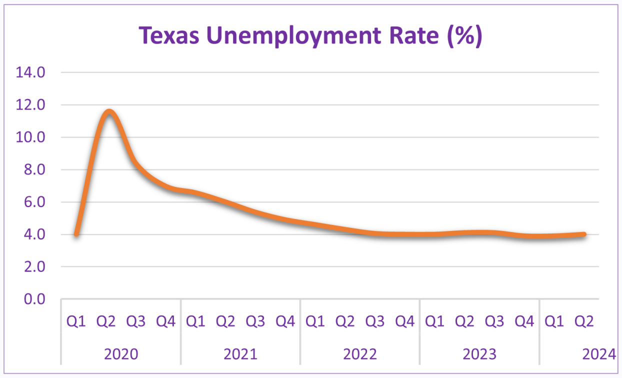
Labor Markets

Nationally, the labor market seems to be “tight.” The economy is creating jobs at a very fast pace, and the unemployment rate is still low. In May, 272,000 jobs were added, and for the 12-month period May-2023 to May-2024, we are at 2.7 million new jobs.

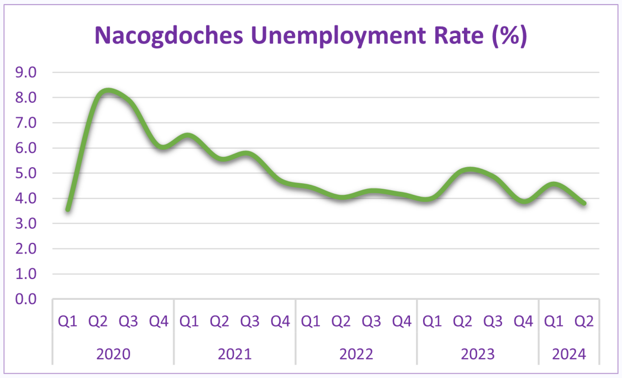
At the same time, May unemployment went up slightly to 4 percent from 3.4 percent in April. That unemployment rate is still low, historically speaking, and rapid job creation signals positive future outlook. In this sense that the market is somewhat tight; it’s only slightly looser than right before COVID in 2020.



So, why is this a mixed signal? The unemployment rate increasing, even slightly, always makes economists nervous. First, it’s not what we want to see, especially as we’re still working the remaining inflation out of the economy. Second, unemployment is a *lagging indicator*, which means it typically reveals some trouble in the labor market that is already underway. In any event, this is something to watch in the next few months.

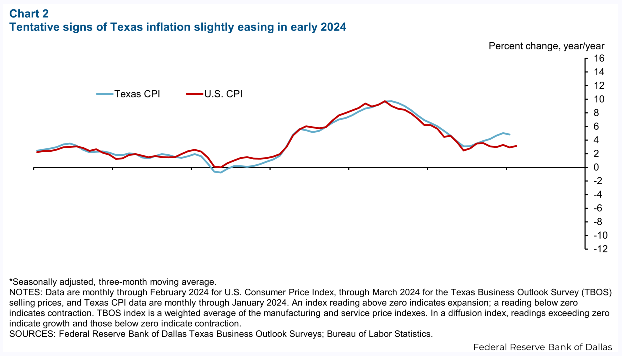


The Texas and Nacogdoches graphs shown here do not include these latest data (they are not available yet), and the overall trends we have now seen for several months are encouraging: falling unemployment, both statewide and locally, with no obvious signs of a recession-like slowdown.

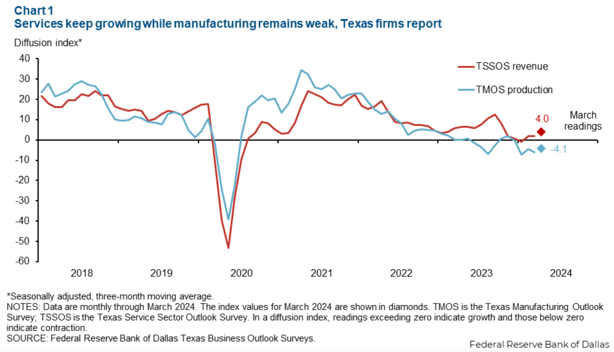


Price Levels and Cost of Living

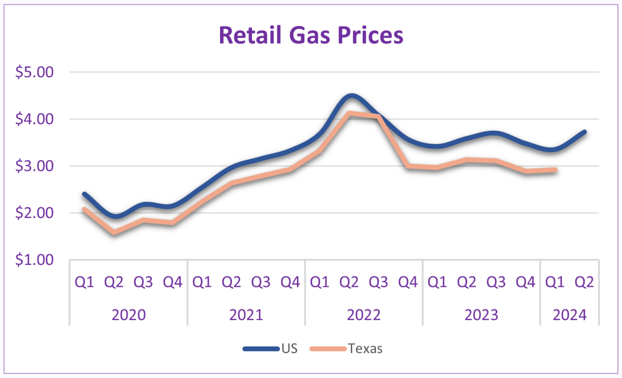
In Texas, inflation is usually higher than in the US overall, and that remains the case now. But there are signs that it is slowing. It remains a concern on the mind of business owners, not surprisingly: According to Texas Business Outlook Surveys, businesses in Texas expect growing demand over the next six months, but many cited worries about inflation.



The optimism among business owners is a good signal, but the data on recent sector activity is mixed. Services output has expanded modestly this spring, but the manufacturing sector in Texas has actually shrunk.



Overall, the Dallas Fed forecasts growth in the state economy of about 2.5% in 2024, above the 2% prediction they issued at the beginning of the year. Most of the increase is driven by significant growth in the labor force, including from domestic as well as foreign migration into the state. That growth rate in the state economy, if it materializes, should outpace the growth in the US economy, which is typical for Texas.

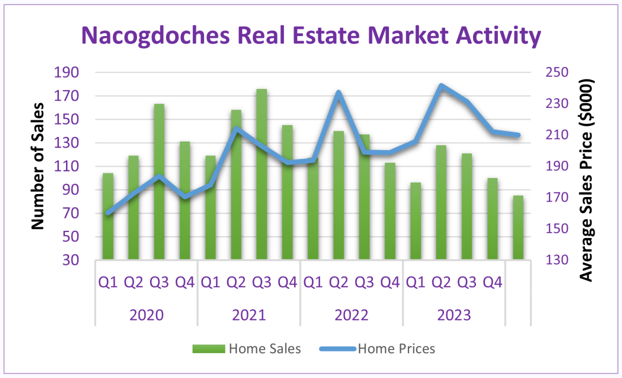


Gas prices are continuing to stay relatively low, and as always Texas fares better than the US overall – and certainly better than states on either coast. Summer months bring with them significantly more demand for driving, so we can expect higher prices shortly.

Housing Markets

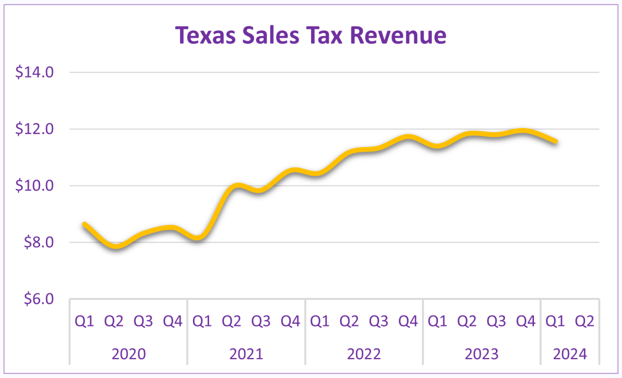
As the mortgage rates have remained high – and there is no immediate relief in the form of the Fed cutting its rates – the real estate sector has cooled off considerably. The graph below shows home sales and prices in Nacogdoches, and this is representative of housing more broadly: fewer sales of existing homes, some new construction (but not as fast as we saw in 2021), and prices that are higher than pre-pandemic but coming down.

The housing market is suffering from the same pattern we have now seen for close to a year: existing 3% mortgage holders are reluctant to sell their homes because the prospect of buying another house with a mortgage rate of 6-7% is not appealing. In other words, both supply of homes and demand for homes is constricted by the high cost of borrowing.



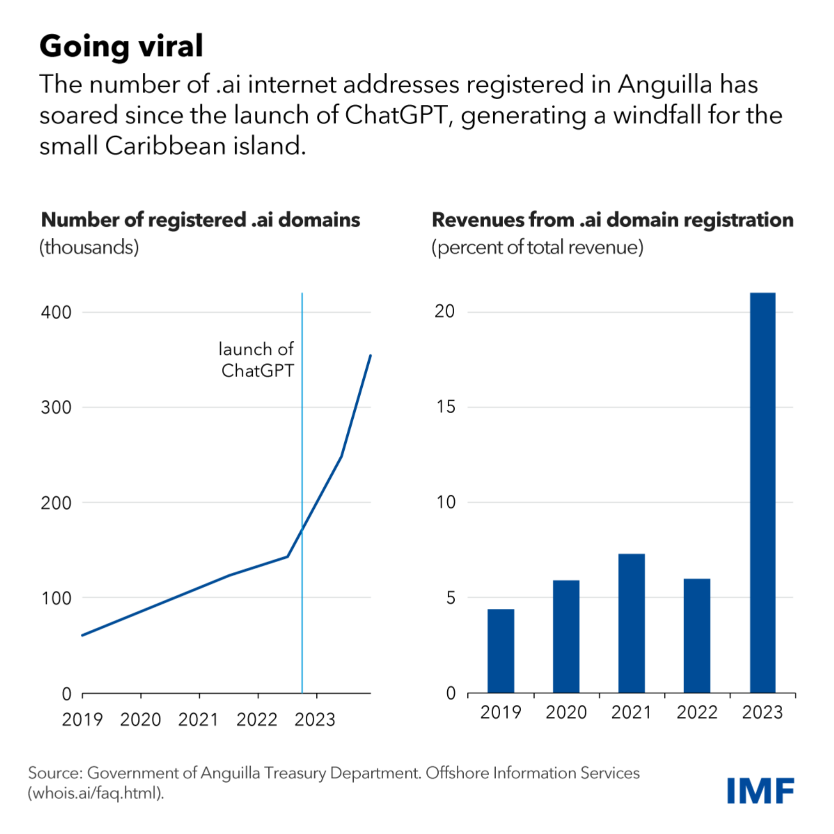
Sales Tax Revenues

Sales tax collections are, of course, a mirror of consumption: when consumer spending is going well, so is the state's ability to collect revenue through sales tax. Throughout 2023, we saw a steady climb in the line graph shown below. There is a slight blip in the first quarter of 2024, but that is common – a seasonal phenomenon where the post-December spending ticks down a little – and should not be a concern.



An Interesting AI Factoid

The small Caribbean nation of Anguilla has a top-level internet domain, **.ai**, much like the United Kingdom uses .uk, Canada has .ca, and France .fr. Because so many of the new products and services utilizing artificial intelligence are trying to brand themselves online in a way that is easily recognized, they are buying and registering web addresses with the .ai domain.



CBER: Who We Are

Meet the team of faculty members in Stephen F. Austin State University's Department of Economics and Finance who are affiliated with the center.

Dr. Rebecca Davis
Energy and Environmental Economics
PhD, University of Tennessee

David Kaiser
Banking and Financial Services
MBA, Western Washington University

Dr. Stephen Kosovich
Labor Economics
PhD, University of Oregon

Dr. Mikhail Kouliavtsev
Industrial Organization, Antitrust Policy
PhD, Temple University

Dr. Beverly Mendoza
International Economics and Trade
PhD, Indiana University

Dr. Mark Scanlan
Tax Policy
PhD, University of Florida

CBER Staff in the Media

- ☞ Features of business bank accounts and mistakes to avoid when selecting one. (M. Scanlan *WalletHub*)
- ☞ Credit card terms and what they can tell us about the economy. (R. Davis *WalletHub*)
- ☞ Advice for people with bad credit looking for a personal loan. (D. Kaiser *WalletHub*)

  also comments from M. Jaramillo
- ☞ Navigating decisions in looking for an installment loan while dealing with bad credit. (M. Kouliavtsev *WalletHub*)
- ☞ Pros and cons of debt consolidation. (R. Phelps *WalletHub*)
- ☞ What should people with bad credit do when researching balance-transfer credit card offers? (M. Scanlan *WalletHub*)
- ☞ Why does Wells Fargo not use celebrities in its endorsements? (M. Kouliavtsev *WalletHub*)
- ☞ Explanation of GAP insurance. (B. Mendoza *WalletHub*)
- ☞ Quick tips to follow when shopping for car insurance. (M. Scanlan *WalletHub*)
- ☞ Advice and insight into the best consolidation loans for bad credit. (M. Jaramillo *WalletHub*)

Other Research by Our Colleagues

- ✓ Jaramillo, M., Lacombe, D., Diosdado, L. (2024). A Comparison of Financial Risk Willingness Between Same-Sex and Different Sex Couples: A Quasi-Experimental Approach. *Journal of Consumer Affairs.*
- ✓ Kouliavtsev, M. S. (2024). What Sections of Courses Fill up First? Investigating Class Selection by Business Students. *Journal of the Academy of Business Education.*
- ✓ Kosovich, S. M. (2024). Data-Driven Curriculum Development: Using Publicly Available Data to Identify the Workforce Needs for Undergraduate Business Students.
- ✓ Mendoza, B., Lopatin, N., Westenberg, J. (2023). Section 301 and Politics: Analysis of Tariff Exemptions. *Economics & Politics.*
- ✓ Phelps, R. T., Smith, J., Percell, H. (2024). From Excel to Business Intelligence: Modernizing Data Reporting for a Non-Profit Healthcare Provider. *Southeast Case Research Journal.*
- ✓ Wich, H., Harris-Lagoudakis, K., Conlin, M., Haughey, C., Jung, S. (2024). Consumer food purchase behavior and the COVID-19 pandemic. *Applied Economic Perspectives and Policy.*