Can short-term pain yield long-term gains?

2025 BOK FINANCIAL MIDYEAR OUTLOOK

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Base case outlook

U.S. economy

After falling negative in the first quarter due to an increase in imports and a decrease in government spending, U.S. economic growth will likely return to the positive, albeit at a slowing pace. In financial markets, stock market volatility will probably continue, but overall performance should remain positive, especially as news headlines like the extension of the Tax Cuts and Jobs Act (TCJA) counteract concerns around growth. Credit spreads are not forecasting a recession, and the yield curve has steepened. Earnings expectations have declined but remain positive year-over-year. That said, in the unlikely chance a recession occurs, there could be material corporate earnings declines and widening credit spreads.

Risks: Higher unemployment, escalated geopolitical events and persistent higher tariffs.

International

Tariffs will continue to be a large factor impacting global trade and countries' economies, as the implementation of large U.S. tariffs could have a detrimental effect on developing countries that export manufactured goods to the U.S, such as Vietnam. They may look to importing liquefied natural gas (LNG) from the U.S. as a way of narrowing the trade deficit and avoiding these tariffs. Meanwhile, there is some evidence of "de-dollarization" by trading partners of the U.S.—but not to the extent that the dollar may lose its title as the world's reserve currency.

Risks: High tariffs returning, especially between U.S. and China; heightened geopolitical conflict in the Middle East and between Russia and Ukraine.

Energy

The race to develop more advanced artificial intelligence (AI) is broadening beyond the U.S. and China, as major tech corporations look to expand data centers to regions with an abundance of natural gas, which can provide cheap, reliable energy. Nuclear power will also be considered as an energy source for AI and data centers, particularly in Europe. The Trump administration's pro-drilling stance could lead to an oversupply of oil on the market, but geopolitical conflicts, particularly in the Middle East, could lead to a drop in global oil supply. At the same time, slowing global economic growth could slow oil demand.

Risks: Impacts of geopolitical conflicts and/or tariffs, supply-demand imbalances.

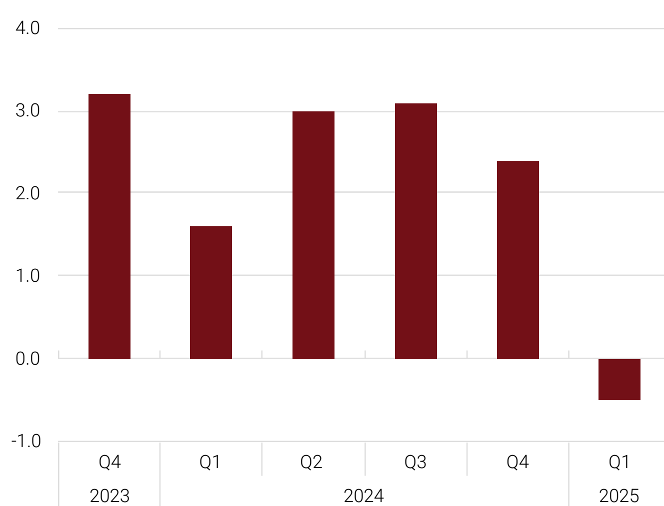
Where are we now?

The transition to the Trump administration has put the U.S.—and, with it, the world—in a new economic direction. This change in U.S. presidents was a known variable going into 2025, and in our annual outlook we surmised that the administration's policies on tariffs and immigration could have a large impact on the U.S. and world economies.

We did not know just how large and sweeping those changes would prove to be. In April, at the height of the U.S.-China trade war so far this year, the U.S. tariff rate on Chinese imports effectively totaled 145%. China's levies on U.S. goods totaled 125%. Fortunately, both countries agreed to a pause, and whether those high tariff rates return remains to be seen. Still, as this market outlook will explore, changes in trade, immigration, government spending, regulation and taxes are having ripple effects throughout the country and in other nations, with some economic impacts remaining unclear as policies unfold further.

In some of these cases, the pain that is collectively being felt now could yield long-term improvements, if the policies and processes are handled well. However, that is a *could*, not a *will*, and an *if*, not a *when*.

Real GDP, Percent Change from Preceding Quarter



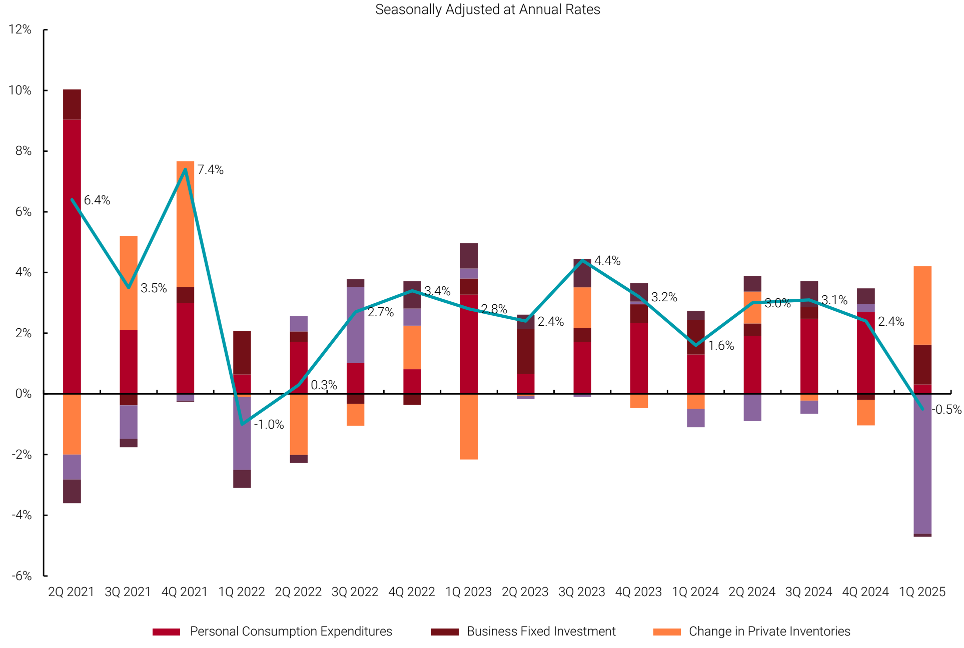
SOURCE: U.S. BUREAU OF ECONOMIC ANALYSIS

Due to rapid nature of these changes, uncertainty and fears of recession circulated during much of the first two quarters of the year—driven by concerns that tariffs would slow economic growth while elevating inflation, a phenomenon known as "stagflation." Fueling these fears of a slowing economy, the Bureau of Economic Analysis's (BEA) advance gross domestic product (GDP) estimate for the first quarter showed that growth decreased by 0.5% when adjusted for inflation. That was the first quarter since the first quarter of 2022 that there was a decline in economic activity.

However, the reasons behind this drop in inflation-adjusted GDP tell a larger story. First, a major factor was the increase in U.S. imports during the first quarter, as companies sought to get ahead of the implementation of tariffs. (Imports are subtracted when GDP is calculated). Decreases in federal government spending during the quarter also contributed to the decline in GDP. At the same time, the strong, but now weakening, job market has helped buoy consumer spending, which has helped contribute to GDP growth. For these reasons, our base-case outlook has remained that the U.S. will avoid a recession—a view that we held even after the surprisingly high Liberation Day tariffs were announced by the White House.

Contributors to Real GDP Growth

Seasonally Adjusted at Annual Rates



SOURCE: BUREAU OF ECONOMIC ANALYSIS. DATA AS OF JUN. 26, 2025.

Since then, the trade deal between the U.S. and China has increased investors' optimism about the economy, driving them back to stocks. However, it's important to keep in mind that the trade deals between the U.S. and other countries have so far been temporary, so much depends on the overall outcomes. Nevertheless, the risk of recession has declined, and we still do not anticipate a recession this year unless a dramatic event happens in the U.S., such as Liberation Day-level tariffs returning or the U.S. entering a war.

In the pages that follow, we'll explain our outlook for these and other aspects of the U.S. and world economy for the remainder of 2025, including what's ahead for energy markets. We'll include deeper dives into these topics:

- Can immigration solve the population problem in the US?
- Weighing the 'pain' and 'gain' from tariffs
- Race for AI expands beyond US and China

We thank you for reading and for your continued trust and confidence in BOK Financial®.

01

U.S. outlook

U.S. economic growth is likely to have returned to positive ground in the second quarter, and it should remain that way through the remainder of 2025, driven by the relative strength in the job market and consumer spending. As of this writing, the Federal Reserve Bank of Atlanta's GDPNow forecast was 2.6%. Nevertheless, many uncertainties persist, especially surrounding the economic impacts of policies on trade and immigration.

Due to these uncertainties, the Federal Reserve may wait to resume rate cuts until they see clear signs of higher unemployment and/or broad economic weakness. Although short-term Treasury yields are signaling that the Fed should ease soon, longer-term rates are indicating that the outlook for growth and inflation is not so simple. If the Fed cuts rates too quickly, they increase the risk of an echo wave of inflation, especially given the inflationary aspects of some policies such as tariffs. For this reason, it's unlikely that the Fed will quickly lower rates unless economic activity deteriorates rapidly.

Consumers contending with high interest rates and prices, weaker job market

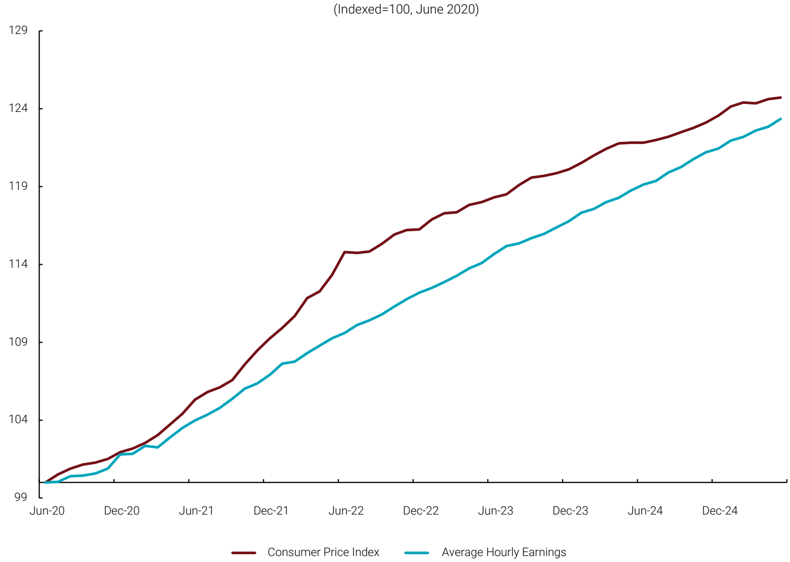
Year-over-year inflation remains above the Fed's 2% target and progress toward it has slowed, with the Fed moving cautiously to minimize the risk of an "echo wave" of inflation. This echo wave is a common phenomenon, as bouts of inflation in the U.S. have tended to come in multiple waves. Although lowering rates slowly helps mitigate this risk, ironically, the best defense against an echo wave of inflation might be an economic recession, as painful as that would be.

Moreover, although year-over-year inflation has come down substantially, it's important to remember that headline inflation may not accurately reflect the lived experiences of consumers and businesses. For one, they are dealing with the aggregate effects of inflation. In other words, prices are not going down to where they were before; they're just increasing at a slower pace. Second, many of the prices of essentials remain high, especially in relation to wages.

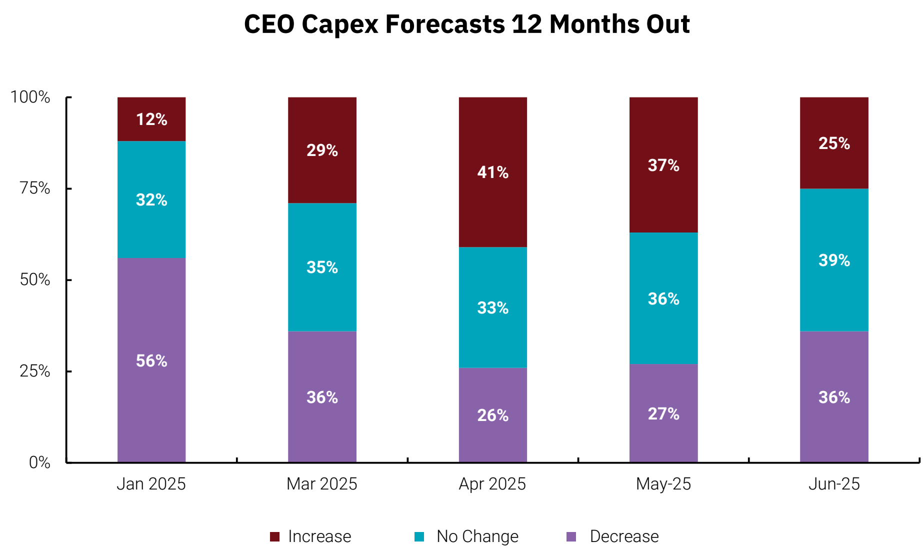
Consumers' financial health is tightly connected to the health of the job market, and both of these factors are important to the U.S. economy. Simply put, people with jobs are in a much better position to continue supporting economic growth. Although the job market is weakening on multiple levels, it's still supporting positive economic growth. However, without policy clarity and a path forward for further growth, that could change. Already, the number of open jobs is now about equal to the number of unemployed persons, which is making it more difficult for job seekers to find a job than in recent years.

Consumer Price Index vs. Hourly Earnings

(Indexed=100, June 2020)



SOURCE: U.S. BUREAU OF LABOR STATISTICS VIA FRED®. DATA AS OF JUN. 11, 2025.



SOURCE: CHIEF EXECUTIVE MAGAZINE, JUNE POLL.

Businesses contending with uncertainty but may benefit from reduced regulations and tax changes

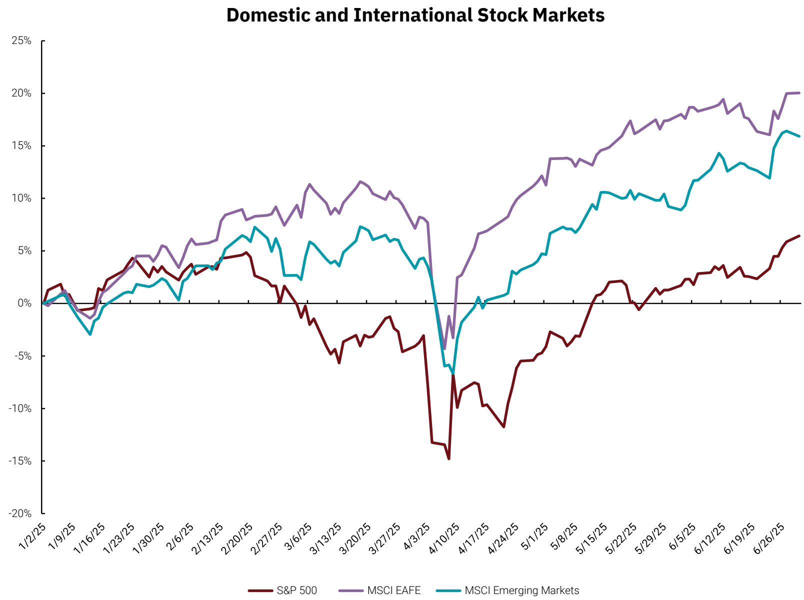
Employers are hesitant to cut a lot of jobs but are also slowing their new hiring and reducing their overall capital expenditure (capex) plans because of the high level of uncertainty. Most of the shift has occurred from companies that were planning to increase capex to now expecting to decrease capex, but further clarity on trade policy could help improve this outlook.

The Trump administration's initiatives to reduce regulations across industries may have a particularly beneficial impact on small businesses, as they generally have a tougher time affording the high price of regulations. Consequently, small business optimism quickly climbed higher following Trump's win based on the expectation of a less burdensome regulatory environment. However, since then, small business optimism mostly has been falling due to the economic uncertainty affecting businesses of all sizes.

Uncertainty also reflected in financial markets

Meanwhile, financial markets are also being impacted by the uncertainty surrounding U.S. policies and economic growth. After being subdued in 2024, stock market volatility has increased in 2025, with domestic stocks even approaching bear market levels due to the large size of the Trump administration's initial tariff announcements.

Domestic stocks have since fully recovered tariff-induced losses, but the concentration of S&P 500 returns in the top 10 stocks (which includes technology giants such as Microsoft, Nvidia and Apple) remains an issue. Almost 70% of the S&P 500's return in 2023 was driven by just these 10 top stocks and, although other areas of the equity markets performed well in 2024, S&P 500 performance still remained relatively concentrated last year. Looking ahead, a further broadening of the market would be welcome, as this concentration in technology-focused stocks raises diversification concerns.



SOURCE: BLOOMBERG. DATA SHOWN AS OF MAY 31, 2025.

Against this backdrop of U.S. economic uncertainty, both developed international and emerging market stocks have been outperforming U.S. indices in 2025. However, it's important to keep in mind that U.S. stocks have outperformed international and emerging market stocks by a very wide margin since the global Financial Crisis, and foreign central banks and governments have more room to provide stimulus than the U.S. does.

Meanwhile, as U.S. interest rates are still at relatively high levels, pockets of opportunity remain in the domestic fixed-income market, which is showing positive real rates of return. That said, we are watching the bond market closely for signs of stress. Credit spreads are one of the most utilized tools to gauge the level of fear in the financial markets, and high-yield spreads are the first to increase during economic downturns. As of this writing, credit spreads have been tightening with less concerns about a recession.

Looking further forward, economic growth will be key not only to financial markets, but also as a path forward for the U.S. to improve its debt-to-gross domestic product (GDP) levels over time. A cogent immigration policy may be a significant factor in this needed growth, which is the topic of the next article.

A DEEPER LOOK AT IMMIGRATION

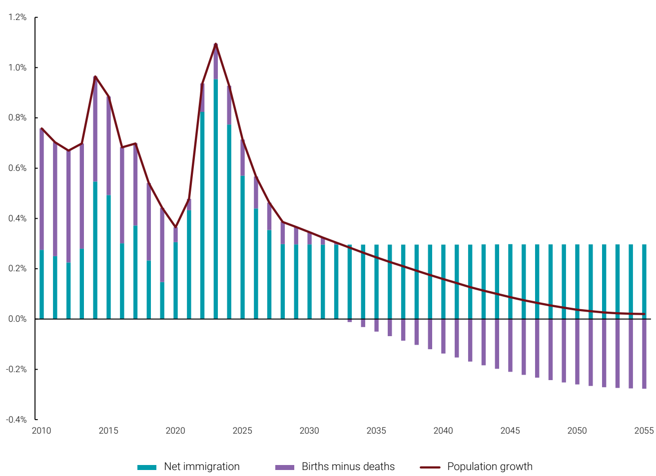
Can immigration solve the population problem in the US?

Shrinking labor force may lead to wage inflation, slowing economy

As in many developed countries, the population of the U.S. is aging and growing at a slowing pace, which experts say could mean workforce shortages—and, consequently, challenges with economic growth and rising inflation—down the road.

This year, the U.S. population is projected to grow by a nominal 0.1%, when taking into account births minus deaths without immigration, according to the Congressional Budget Office. Then, that figure is expected to drop to the negative, falling to -0.1% by 2035, and then continue declining to -0.3% in 2055, meaning that the U.S.'s population will shrink each year, based only on the expected birth and death rates.

Population Growth and Contributing Factors



SOURCE: CONGRESSIONAL BUDGET OFFICE

CAPTION: WITHOUT NET IMMIGRATION, THE U.S. POPULATION WILL START SHRINKING IN 2033.

However, factoring in net immigration paints a different picture. For instance, even a net immigration rate of only 0.3% would result in positive population growth in 2035, according to the CBO. As the nonpartisan government office explains, "Net immigration becomes an increasingly important source of population growth. Without immigration, the population would shrink beginning in 2033, in part because fertility rates are projected to remain too low for a generation to replace itself."

Why population growth matters to the U.S.

If the U.S. population does start to shrink, it could take economic growth down with it, which could have serious implications for the country, experts caution.

"As we think about how the U.S. can handle rising budget deficits and/or rising national debt levels, being able to do that with a growing economy is much easier," said Steve Wyett, BOK Financial chief investment strategist. Even just small increases in economic growth can dramatically improve the federal government's debt-to-gross domestic product (GDP) levels. For instance, if economic productivity grows 0.5% more quickly than what the CBO expects, federal debt would be 124% of GDP in 2054, instead of 166% of GDP, according to CBO projections.

One way that economic productivity can increase is through advancements in artificial intelligence (AI). However, experts believe that higher productivity from AI alone won't be enough. "In some industries, AI may be transformational," said BOK Financial Chief Investment Officer Brian Henderson. He noted the efficiencies that AI is already creating in investment management. "However, for the broader economy, the increases in productivity from AI will be small increments. It will be a slow build," he continued.

Besides increasing worker productivity through tools such as AI, another way that the U.S. economy can grow is by increasing the number of workers—and this is where immigration comes in, experts said.

"If we don't have immigration, our population is not going to support the kind of economic growth that we need going forward," Wyett explained. "That's where the challenge and the opportunity for a cogent immigration policy from Congress could make all the difference in the world for us as we are moving forward."

What would a cogent immigration policy look like?

This "cogent immigration policy" should be somewhere in between the two extremes of having open borders, which could impact the economy and pose national and local security risks, and aggressive deportations, which also could have negative effects on the economy, experts said.

As Wyett explained, "If the U.S. gets overly aggressive with deportations, then it will shrink the labor force. If we shrink the labor force, that probably means more competition for the remaining workers. If competition goes up, that might mean wages go higher. If wages move higher, that's going to be a problem from an inflation standpoint, and it would put the Federal Reserve in a position where they can't lower interest rates. If the U.S. has slower growth and higher inflation, that's called stagflation—and that's not the outcome that anyone wants."

There were around 11 million immigrants in the U.S. in 2022, the most recent year that there is data available. However, the Pew Research Center is working on a new estimate based on the Census Bureau's assessment that a net of 2.8 million people migrated to the United States between 2023 and 2024.

If 8.3 million undocumented immigrant workers are deported, that would cumulatively increase the Consumer Price Index (CPI) by an estimated 9.1% by 2028, according to data from Strategas and a Peterson Institute for International Economics working paper. That's due to the fewer number of workers in the economy leading to greater competition for workers, which theoretically should bring up wages. By contrast, deporting 1.3 million undocumented immigrant workers would result in an estimated 1.5% cumulative CPI increase.

Comparatively, the data shows that even an additional 60% increase in U.S. tariffs on China would only create an estimated 0.7% increase in CPI, if China doesn't retaliate, and a 1.1% increase, if China does.

Estimated Cumulative Change in Consumer Price Index by 2028

Deportation of Unauthorized Immigrant Workers	1.3 million 8.3 million	1.5% 9.1%
Additional 10% Increase in U.S. Tariffs on all Trading Partners	No Retaliation With Retaliation	0.8% 1.8%
Additional 60% Increase in U.S. Tariffs on China	No Retaliation With Retaliation	0.7% 1.1%
Revoking Federal Reserve Independence		11%
Combination of Polices	Low Scenario High Scenario	13.9% 22.8%

SOURCE: STRATEGAS, PETERSON INSTITUTE, MCKIBBIN, HOGAN, AND NOLAN, TABLE 3, SEP. 2024.
THE INTERNATIONAL ECONOMIC IMPLICATIONS OF A SECOND TRUMP PRESIDENCY | PIIE

Is there an alternative?

For some countries, it is more important to have low rates of immigration than to grow its population and economy by that means, Henderson and Wyett noted, pointing to Japan as an example. “Japan is a very closed society. It’s very difficult to immigrate into that country, and their population has been actually shrinking for some period of time,” Henderson said.

On one hand, Japan is contending with the same drags on population as the U.S.—an aging demographic and low birth rate—but also with very low net migration. For instance, Japan’s fertility rate was 1.4 in 2024 (representing the average number of children born per woman of child-bearing age, between 15 and 45), compared to a fertility rate of 1.6 in the U.S. that year. Meanwhile, net migration into Japan was 153,357 in 2024, compared to a net migration of 1,286,132 into the U.S, according to World Bank figures.

From the 1990s onward, Japanese companies such as Sony started responding to the country’s worker shortages by moving production or operations to other countries, including to the U.S., to maintain overall economic growth.

More manufacturing jobs may be coming to the U.S.—possibly with too few workers

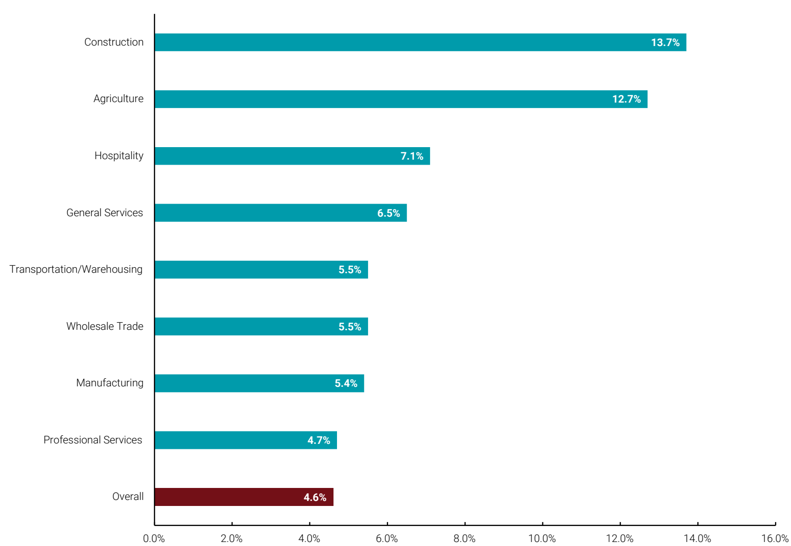
Meanwhile, the Trump administration is taking the opposite approach from Japan, as both the administration's tariff and corporate tax policies aim to encourage U.S. companies to move or maintain manufacturing and operations domestically, Henderson said.

These new manufacturing facilities would likely go in Middle America, where wages tend to be cheaper and there likely would be more workers to fill these types of positions, noted Matt Stephani, president of Cavanal Hill Investment Management, Inc., a subsidiary of BOK Financial Corporation

Manufacturing has a significant number of undocumented immigrants in the workforce, according to data from Statista. More than 5% of the U.S. manufacturing workforce is made up of undocumented immigrants, the data shows. However, in other sectors, such as construction, agriculture and hospitality, that percentage is much higher at 13.7%, 12.7% and 7.1%, respectively.

An overly aggressive deportation policy likely would mean that there won't be enough workers to fill the jobs that already exist in these fields, Wyett cautioned. "It's not like there's a huge amount of slack in the labor market showing that there are people here who can fill those jobs," he said. "Those industries might not be able to operate."

U.S. Industries with the Highest Share of Undocumented Immigrants in Their Workforce

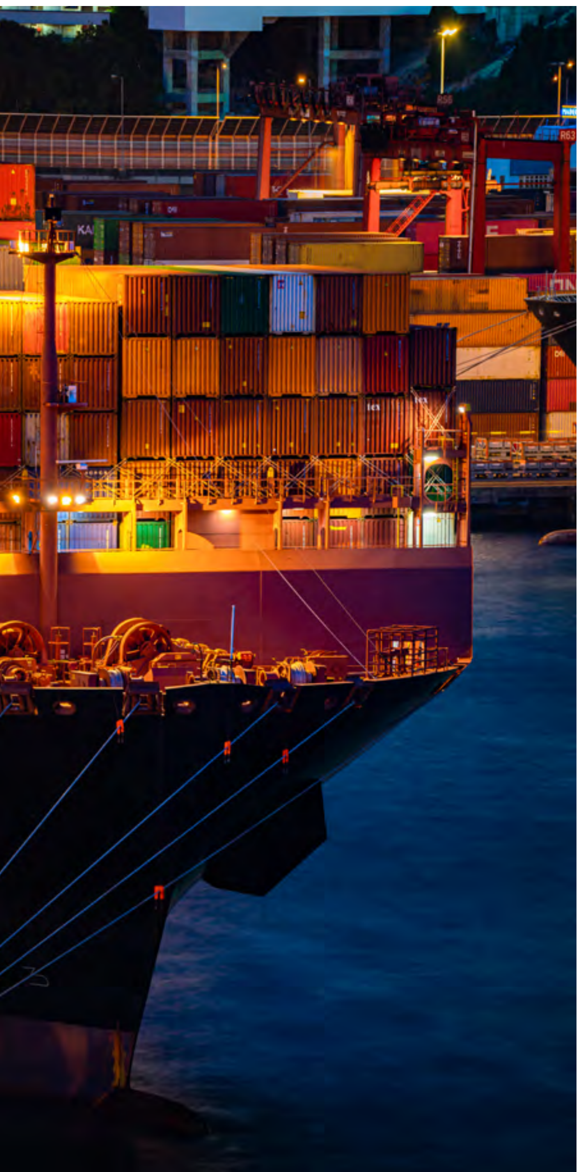


SOURCE: STATISTA. AMERICAN IMMIGRATION COUNCIL ANALYSIS OF 2022 AMERICAN COMMUNITY SURVEY DATA (PUBLISHED OCT. 2024)

02

International outlook

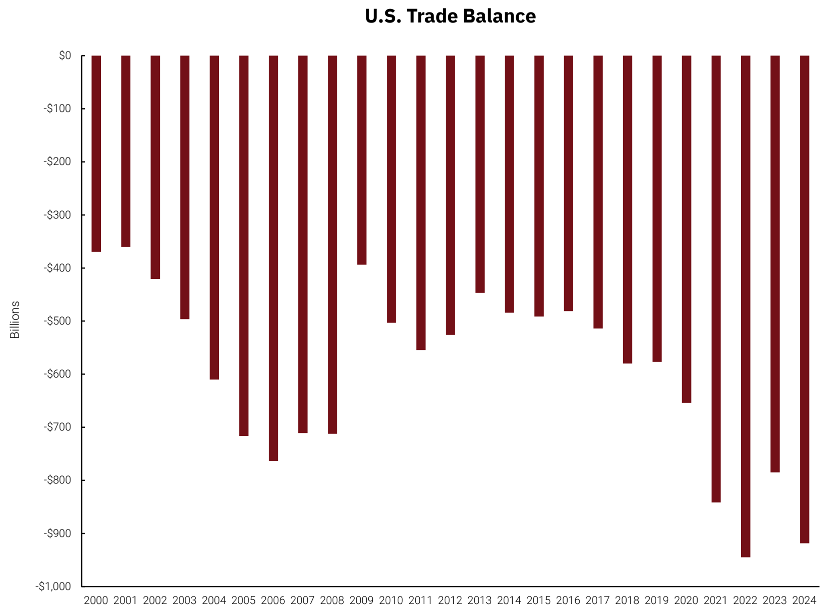
Going into 2025, we anticipated that U.S. tariffs, their impact on global trade and the speed of deglobalization would be major factors impacting international markets. We also expected geopolitical conflicts to continue posing a risk to supply chains and global growth. Although we were correct on both fronts, we, like many, did not foresee how large the trade policy changes would be nor how much geopolitical conflict would escalate in the first half of this year.



Trade policy in a transition phase but will have material impacts around the globe

The broadness and magnitude of the initially announced, “Liberation Day” tariffs—a baseline 10% tariff on all imports to the U.S., as well as retaliatory tariffs of up to 50% on goods from nearly 60 countries—sent financial markets reeling in April. Since then, the tariffs have been scaled back or paused and, as noted earlier, domestic stocks have recovered their initial losses. However, no one knows where these tariffs ultimately will land.

Looking beyond the current transition phase, there are multiple tariff scenarios possible with smaller or larger impacts due to varying import amounts. For instance, on the lower end of the impact scale, an additional 10% increase in U.S. tariffs on all trading partners with no retaliation would result in an estimated 0.8% rise in the Consumer Price Index (CPI) by 2028, according to data from Strategas and a Peterson Institute for International Economics working paper (please see the “Estimated Cumulative Change in Consumer Price Index by 2028” table on page 14). On the higher end of the impact scale, an additional 60% increase in U.S. tariffs on China with retaliation would cause a 1.1% CPI rise.



SOURCE: U.S. BUREAU OF ECONOMIC ANALYSIS, MARCH 2025

Furthermore, the actual impact on prices in the U.S. will depend on consumer and company decisions in response to the tariffs. For example, companies may choose to absorb some of the tariffs to reduce the impact on prices, which could mean that prices don't rise as much and, consequently, there is less of a negative impact on demand. Alternatively, if the higher costs from tariffs are passed onto consumers, they may decide not to buy at these higher prices, which would reduce the demand (and, consequently, prices—at least theoretically). As we will explore in the article starting on page 22, this short-term pain from tariffs could lead to the long-term gain of narrowing the existing U.S. trade deficit, among other benefits.

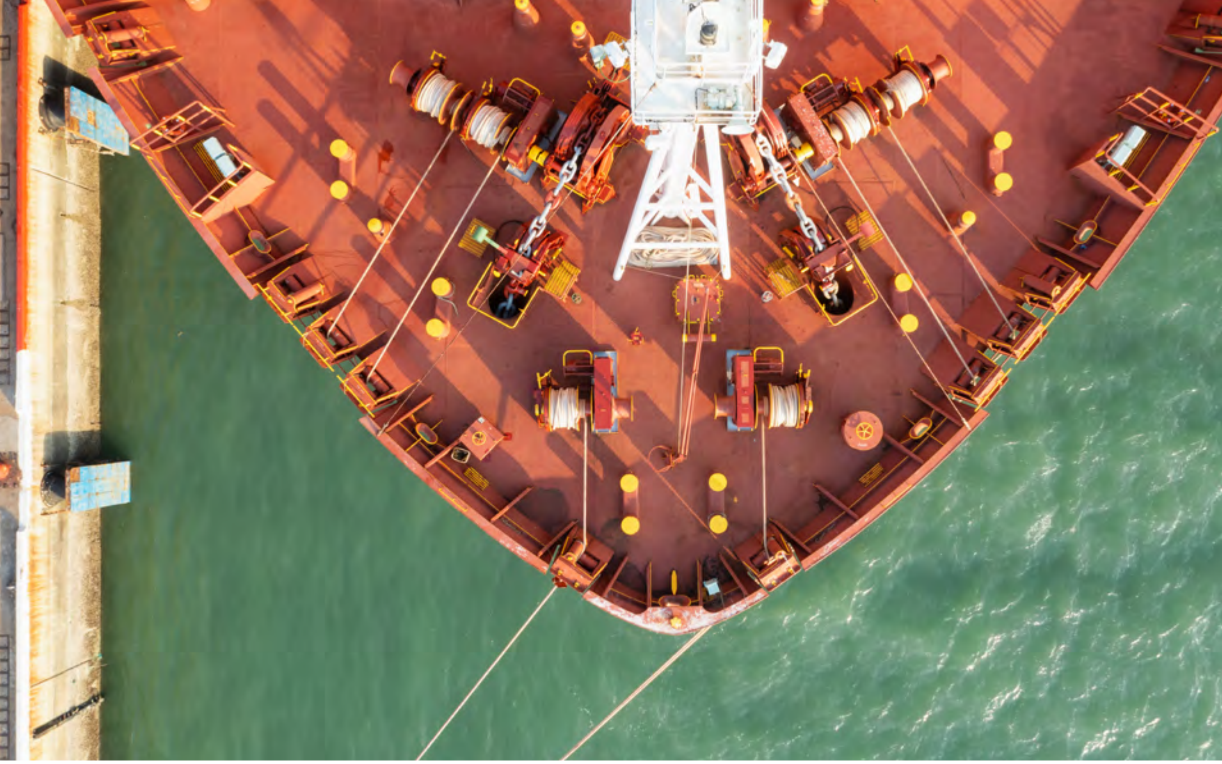
Trade and conflict in a deglobalizing world

The Trump administration's trade policies are likely to accelerate the speed by which deglobalization occurs, which will impact not just the U.S. but also the world. As part of this process, countries will move from a global economy characterized by manufacturing in places where labor has historically been less expensive, such as China, to more onshoring and "friendshoring." In early 2024, this "friendshoring" resulted in Mexico overtaking China as the largest source of imported goods for the U.S. for the first time in more than two decades. However, the current tariffs on goods imported from Mexico could change this.

In addition to tariffs, 2025 also has been characterized by an escalation of geopolitical conflicts. Going into this year, we saw the wars between Russia and Ukraine, and Israel and Hamas as having the potential to disrupt or alter supply chains and further accelerate deglobalization. Now, as of this writing, a third conflict has been added to the mix: the airstrikes between Israel and Iran. We'll discuss this conflict's potential impact on energy markets in Section 3 of this report, starting on page 26.

U.S. Imports of Goods by Customs Basis from Mexico

SOURCE: U.S. CENSUS BUREAU VIA FRED®



The dollar in flux

The U.S. dollar rose against other currencies on the news of the Israel-Iran airstrikes, based on the perception of the dollar as the world's "safe-haven" currency. However, this upward movement was on the heels of a dollar sell-off precipitated by U.S. policy uncertainty, and hence economic uncertainty. As we'll explore in the next article on tariffs, having a lower U.S. dollar makes U.S. exports more competitive, so lowering the currency's value could be part of the Trump administration's aim to increase American manufacturing and decrease imports.

A DEEPER LOOK AT TARIFFS

Weighing the 'pain' and 'gain' from tariffs

Trade policy aims to make US economy more resilient—but with the potential costs of higher inflation and interest rates

Figuratively speaking, the U.S. economy is going to the gym—and taking consumers and businesses with it. Meanwhile, the impacts are being felt around the world.

"Tariffs, tax policy, energy policy, regulation—all of these changes are moving very quickly because President Trump knows he has a short period of time, and there's going be some economic pain in the process," said Steve Wyett, BOK Financial chief investment strategist. "Trump is trying to get the economy through this initial pain to a point where some of the benefits can be seen so there will be motivation to continue on that path. However, with midterms coming, there's the timing of the 'pain versus gain' to consider."

Wyett likens the economic pain that consumers and businesses may be feeling now from increased uncertainty, financial market volatility, higher inflation and higher-for-longer interest rates to the physical pain that someone feels when they just start going to the gym. At the beginning, there are sore muscles and tiredness, but over time, if the person keeps exercising, they will start to see the benefits. But they must make it through the period of pain first.

Tariffs, tax changes may spur American manufacturing

With the evolving tariffs implemented by the Trump administration, this time at the "gym" could yield a more independent and resilient U.S. economy, as well as a possible resurgence of American manufacturing. As Wyett said, "If the U.S. finds itself in a position where we are highly dependent on a foreign country for a good or service, we risk an inability to get that good and service, whether it's an ally or not."

However, those end goals will take time—with potential financial costs to American consumers and businesses along the way—he and other experts cautioned. For instance, the Federal Reserve may not be able to cut interest rates as much, and mortgage rates may also stay higher this year.

For perspective on these added costs to achieve the goal of U.S. resiliency, Wyett gave the analogy of a business model. "A resilient business model is not the cheapest business model," he said. "You don't build resilience to handle everything when things are going great. You build resilience, so you can stay in business when things are not going well. However, as you do that, you're taking on some added cost to have that resilience."

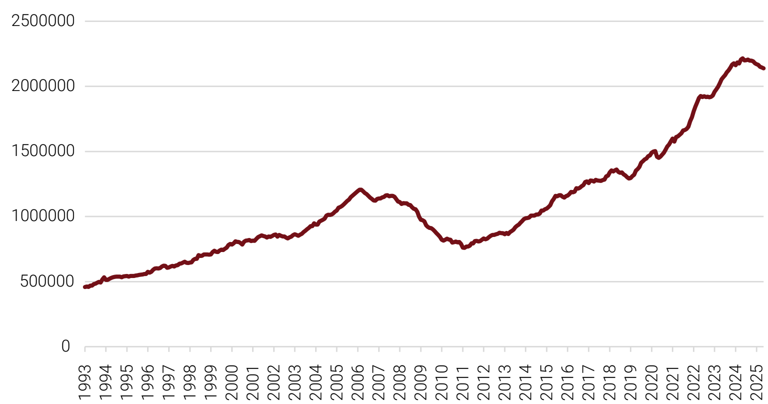
Tariffs and the corporate tax changes are intended to work together to help build that resilience by discouraging foreign exports into the U.S. and encouraging U.S. companies to conduct their operations and manufacturing domestically, noted Brian Henderson, BOK Financial chief investment officer.

“President Trump believes that, if corporate taxes are low enough and tariffs are high enough, it will make it very punitive for companies that don’t have operations here to simply export goods into the U.S.,” he said.

For instance, one of the most overlooked, yet important, aspects of the “One Big Beautiful Bill Act” will allow U.S. companies to fully expense the money spent on manufacturing facilities in year one, noted Matt Stephani, president of Cavanal Hill Investment Management, Inc. “I think the effects are going to be much bigger than people think now and over the next 10 years,” he said. “I expect that will help drive investment in America to rebuild our manufacturing sector.”

Already, spending on the construction of U.S. manufacturing facilities has increased sharply over the past five years, though it has been declining slightly in recent months as companies deal with uncertainty, according to data from the Federal Reserve Bank of St. Louis.

Total Construction Spending: Manufacuring in the United States



SOURCE: U.S. CENSUS BUREAU VIA FRED®

Extent and duration of changes remain to be seen

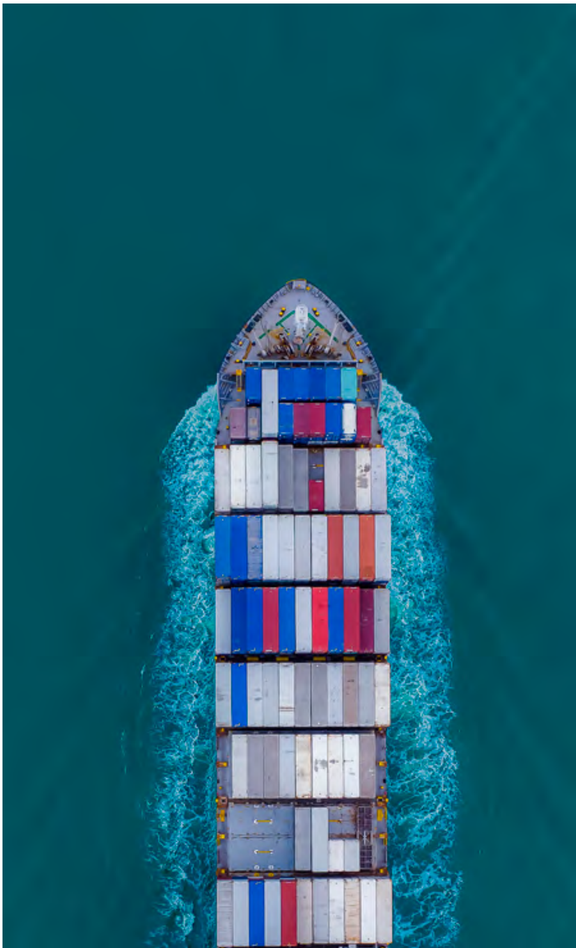
Looking forward, how much foreign companies are willing to spend to build facilities in the U.S., rather than just exporting goods into the U.S., depends on how long-lasting they think the trade policies will be, Stephani noted. "If a company has a big facility that they need to build in the United States, they really have to make a calculation of whether the tariff will stay in place or not—and that's not a simple answer. They may decide to wait and see."

Another overarching question is just how much global trade will be reshaped by the Trump administration's trade policy changes. Although the value of the U.S. dollar has been falling against other currencies, which makes U.S. exports more competitive, it remains the world's reserve currency, so there's always demand for it, Stephani noted. That's one factor working against the reshaping of global trade.

Yet, at the same time, some reshaping of global trade has already begun as part of the ongoing deglobalization stimulated by the Covid pandemic and polarization of world politics, Stephani said.

Another lingering question surrounds these U.S. trade policy changes coinciding with geopolitical factors such as the alliance of Iran, China and Russia on one side and the U.S. and its allies on the other, he continued.

"Trump is trying to address the trade imbalances he sees, but the fact is he's doing it against a backdrop where the globe is starting to fracture," Stephani said.



03

Outlook for energy

The energy market is always characterized by a degree of volatility, which is why it's omitted from core inflation measures. Still, energy prices tend to work their way into other aspects of inflation, such as transportation costs. Additionally, they have a material impact on consumers' and businesses' well-being, whether it's from pain at the gas pump or increased travel and heating costs.

Whether the US will ‘drill, baby, drill’ remains to be seen

Because of energy’s direct impact on consumers and businesses, as well as on U.S. self-sufficiency and exports, the Trump administration has made energy a focus of his second term. On one hand, Trump’s pro-drilling stance should come as no surprise. He did say in his inauguration speech that the U.S. would “drill, baby, drill,” after all. Furthermore, increasing drilling is a key part of Treasury Secretary Bessent “3-3-3” economic plan that includes increasing economic growth to 3%, cutting the budget deficit to 3% of gross domestic product (GDP) and increasing U.S. energy production by three million barrels a day.

However, as our energy experts have noted, oil demand and, consequently, oil prices have to be high enough in order for oil producers to be persuaded to drill at these levels and, if the demand for more oil isn’t there, some oil producers fear that the market will become oversupplied. That’s especially if higher tariffs are reinstated, which could push global oil demand lower due to slowing economies in China and other export-heavy countries. Meanwhile, slower economic growth in the U.S. also could push demand lower, which could, in turn, discourage oil producers from drilling more, which would lower supply and raise prices again substantially in the future.

Rising conflict in the Middle East could disrupt oil supplies

At the same time, this combination of pro-drilling in the U.S., potentially high tariffs returning and possibly slowing global growth is occurring against the backdrop of escalating geopolitical conflicts. Going into 2025, we saw the wars between Russia and Ukraine and Israel and Hamas as the largest geopolitical risks to energy markets.

We did not foresee the airstrikes between Israel and Iran, which began in June and have since subsided, as of this writing. Although oil prices initially spiked on the news, they started to return to pre-attack levels within a few days, as traders realized that Iran's ability to export oil had so far not been affected significantly. However, prices rose again on Trump's statement that Tehran should evacuate and consequently fears that the conflict would escalate even further. If there had been any disruption to oil being exported from the Middle East, oil prices would have spiked significantly.

Future looks bright for US liquified natural gas (LNG) and nuclear

LNG exports may benefit from U.S. tariffs on developing countries that manufacture goods to export to the U.S. These countries, such as Vietnam, may look to buying U.S. LNG into order to reduce the U.S. trade deficit with them and thus help avoid large tariffs.

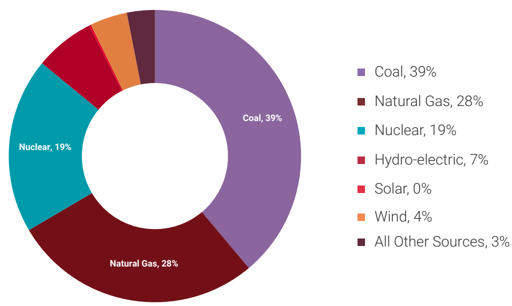
Meanwhile, there likely will be increased demand for both natural gas and nuclear energy, as the race to develop and power more advanced artificial intelligence (AI) and data centers continues and broadens beyond the U.S. and China. Electricity demand is already climbing and shows no abating as tech giants race to build out the artificial intelligence complex—a topic that we delve into further in the next article, starting on page 30. Data centers are expected to see a substantial increase in electricity demand to build capacity for the increase in data usage required for the new technology.

Looking beyond 2025, more electricity will be needed to meet these growing power needs. We believe that the electricity supply will have to come from different sources, and although the U.S. has built out more capacity from green energy sources in the past decade, an increasing amount of energy will have to come from sources such as nuclear power and natural gas. This increased reliance on natural gas continues an ongoing trend. In 2013, natural gas made up only 28% of the energy generated in the U.S., compared to 44% in 2024.

Nuclear energy also may become an important power source for data centers and AI because its inexpensive and reliable once a nuclear power facility is up and running. The first new U.S. nuclear reactor since 2016 opened in 2023, and more are expected in the coming years. However, it's important to keep in mind that nuclear power plants tend to take a long time to build, so even with this increased support for nuclear power, increases in the number of nuclear plants won't be seen for some time. For this reason, we believe that natural gas, not nuclear, will be the biggest supplier of the immense power needs on the horizon.

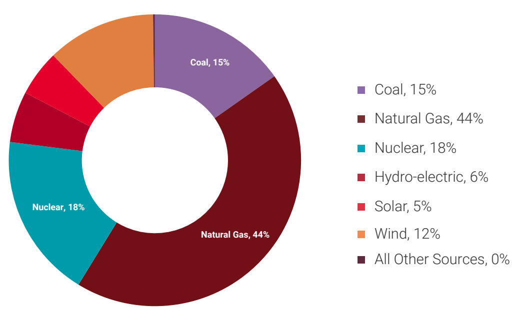
2013 Electricity Generation by Sector

(Million Kilowatt Hours)



2024 Electricity Generation by Sector

(Million Kilowatt Hours)



SOURCE: U.S. ENERGY INFORMATION ADMINISTRATION.

A DEEPER LOOK AT ENERGY

Race for AI expands beyond US and China

'Hyperscalers' looking for energy deals for future, potentially massive power needs

Early this year, discussions on the race to develop more advanced AI centered upon the Chinese startup DeepSeek and whether the new AI model it developed could nearly match its U.S.-developed competitors while only taking a fraction of the time and cost to build.

DeepSeek's claims sent financial markets reeling, sending the stocks of U.S.-based technology companies such as Nvidia plunging on concerns about America's lead in the artificial intelligence (AI) sector, as well as the large amounts of money these U.S. companies have invested in AI models and data centers.

Half a year later, it seems that DeepSeek's claims were "largely exaggerated, but it encouraged U.S. companies to accelerate development," said Matt Stephani, president of Cavanal Hill Investment Management, Inc., a subsidiary of BOK Financial Corporation.

"There will be winners and losers. There will be early adopters, there will be those who are fast followers, and then there will be the 'late-to-the-party' companies," Stephani explained. "I think that the winners will be the early adopters who get it right."

In the U.S., the race is largely between the "hyperscalers"—companies such Amazon, Meta, Alphabet/Google, Microsoft and Oracle. Among these companies, there's no real forerunner, according to Stephani. "They're all working on projects that kind of leapfrog each other one at a time."

Looking forward, the companies that end up being the laggards will be the ones that either make major mistakes in the expansion of AI and data centers, or the ones that don't put enough money into the space, Stephani surmised.

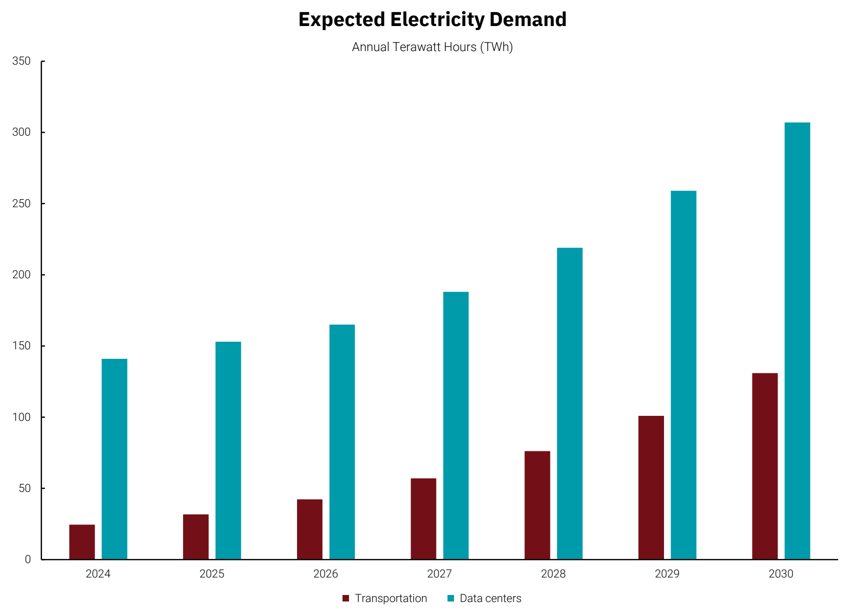
Money, reliable energy, rare metals needed to 'win' in the AI space

Developing advanced AI models doesn't come cheap, as reflected by the hyperscalers' large capital expenditures. For example, Amazon's 2025 capital expenditure budget is projected to top the scales at $100 billion. Stephani estimates that, altogether, the 2025 capital expenditure budgets of Oracle, Microsoft, Alphabet, Amazon and Meta will total around $340 billion. Fortunately, they have the money to pay for it, having a combined $360 billion or so of cash on their balance sheets, according to Stephani's calculations.

But it takes more than sheer money to win the development and power of increasingly advanced AI.

For this reason, the race is now becoming a global phenomenon, as companies and political leaders look to places with an abundance of cheap, reliable energy and low-cost land like the Middle East, Stephani said.

The poster child of this race is currently Stargate UAE, which would be one of the world's largest data center hubs when finished. The multi-billion-dollar deal, funded by the Emirati AI development holding company G42, would be built in the United Arab Emirates (UAE) using U.S. technology from companies such as Nvidia, OpenAI, Cisco and Oracle, along with Japan's SoftBank. The first phase is estimated to go online in 2026, but some U.S. concerns about the security conditions continue to persist, which is hindering finalization of the deal.



SOURCE: RYSTAD ENERGY, CNBC

Stephani believes that one of the reasons why tech giants are looking to the Middle East is the abundance of natural gas in the region, which could help fulfill data centers' immense power needs. In the U.S. alone, the expansion of traditional and AI data centers and chip foundries is expected to increase energy demand more than twofold from 2023 to 2030, to around 307 terawatt-hours (TWh), according to a report from Rystad Energy. To put this number into perspective, the entire electricity consumption in the U.S. was 4,010 (TWh) in 2022.

Due to the immensity of this demand, data centers need not just any energy, but rather cheap, reliable energy such as natural gas and nuclear, Stephani said. Being the world's largest supplier of natural gas may give the U.S. an edge in that regard; however, non-U.S. allies such as Russia, China and Iran make up the other top four world natural gas suppliers, according to the International Energy Agency (IEA)'s 2022 ranking.

Meanwhile, another factor in the AI race is access to rare earth metals such as graphite, titanium, lithium and beryll, noted BOK Financial® Chief Investment Officer Brian Henderson. And this is where the U.S. may struggle—even with its significant reserves of copper, another key metal. China produces 60% of the world's rare earth metals and processes nearly 90%, which "has given China a near monopoly," according to commentary by the Washington-based Center for Strategic and International Studies.

One way that the Trump administration has sought to reduce its dependency on China for the metals that the U.S. lacks was through a deal with Ukraine, which also has deposits. That would have given the United States billions of dollars in Ukrainian minerals as repayment for military aid, Henderson explained. However, the eventual deal included a provision for the U.S. to offtake future mineral resources on "market-based commercial terms," but not as repayment as Trump wanted.

It's for these reasons that energy, trade policy, geopolitics and technology all intertwine, Henderson said. "Trump's policies are from the perspective that the 'United States is currently the most powerful country in the world, and these policy changes are to maintain this global power into the future.'"

As always, we will continue to monitor the topics in this outlook and their impact to markets—and your money—closely. Subscribe for regular updates.

Meet our experts

Brian Henderson is chief investment officer for BOK Financial, a position in which he leads the Alternative Investments Group, Strategic Investment Advisors and Cavanal Hill Investment Management, Inc.

Steve Wyett is chief investment strategist for BOK Financial, a role in which he communicates the organization's investment management message and serves on a variety of investment-related committees.

Matt Stephani is president of Cavanal Hill Investment Managements, Inc., a position in which he is responsible for the fixed income, cash and equity management teams of Cavanal Hill.

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