Engineering & Construction Contracting Association

ECC Extra

February 1, 2024

The Global Economic Outlook

A Look At The Opportunities And Risks Ahead

Bernard Baumohl
Chief Global Economist
The Economic Outlook Group, LLC
475 Wall Street, Princeton, NJ 08540
(609) 529-1300

The Economic Outlook Group LLC

www.EconomicOutlookGroup.com

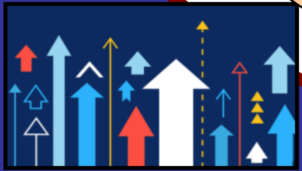
Forces that will impact the US & international economy 2024 – 2025

Geopolitical risks:
- War in the Middle East
- Russia's invasion of Ukraine
- 40+ national elections (2024)

Inflation & interest rates:
- Global central bank policies
- Path of inflation / interest rates?
- Cost of capital

China and Europe:
- When will their economies come back on line?

Fragmentation of global trade:
- From globalization to regionalization
- The restructuring of supply chains



GEOPOLITICAL ASSUMPTION 1:

Israel - Hamas conflict winds down by end of Q1 2024.

Scenario 1: (Prob: 45%): Conflict is contained and will cease by early spring. Attacks in the Red Sea subsides.

Impact:
- **WTI oil to range \$70 - \$85 bbl.**
- **Minimal global economic fallout**

Scenario 2: (35%): Full-scale Middle East/Persian Gulf war: Draws in Iran, Lebanon, Yemen & other nations.

Impact:
- **Reroutes & delays shipping of fuel and cargo.**
- **WTI oil climbs \$95 - \$120 bbl.**
- **Inflation accelerates; interest-rates move up.**
- **Global financial asset values plummet!**
- **Global GDP growth reduced 1.00% - 1.75%**

Scenario 3: (20%) War expands, but limited to Lebanon (Hezbollah) and West Bank

Impact:
- ***Depends on intensity & duration.***
- **US\$ rises & capital flows to safe harbors**
- **WTI oil to range: \$85 - \$90 bbl.**
- **Global GDP growth is reduced by 0.25%**

Source: The Economic Outlook Group - Risk Assessment Model

GEOPOLITICAL ASSUMPTION 2: War in Ukraine rages well into 2024

Scenario 1: (Prob: 55%) Russia continues conflict thru 2024.

- Believes US and EU are weary of providing significant aid to Ukraine.
- Putin hopes outcome of US Presidential elections will be favorable to Russia.
- Russian Presidential election in March: Putin wins, of course.
- China & N. Korea greatly fear a collapse of Russia; Willing to send Moscow aid.

→IMPACT: Minimal effect on US, but delays a European economic recovery.

Scenario 2: (30%) War at a stalemate: Russia & Ukraine cease hostilities.

- Russia's economy exhausted; Suffers inflation, weak ruble, high interest rates, brain drain & capital flight. Ukraine lacks resources to completely evict Russia.
- Russia's once vaunted military exposed as mediocre.

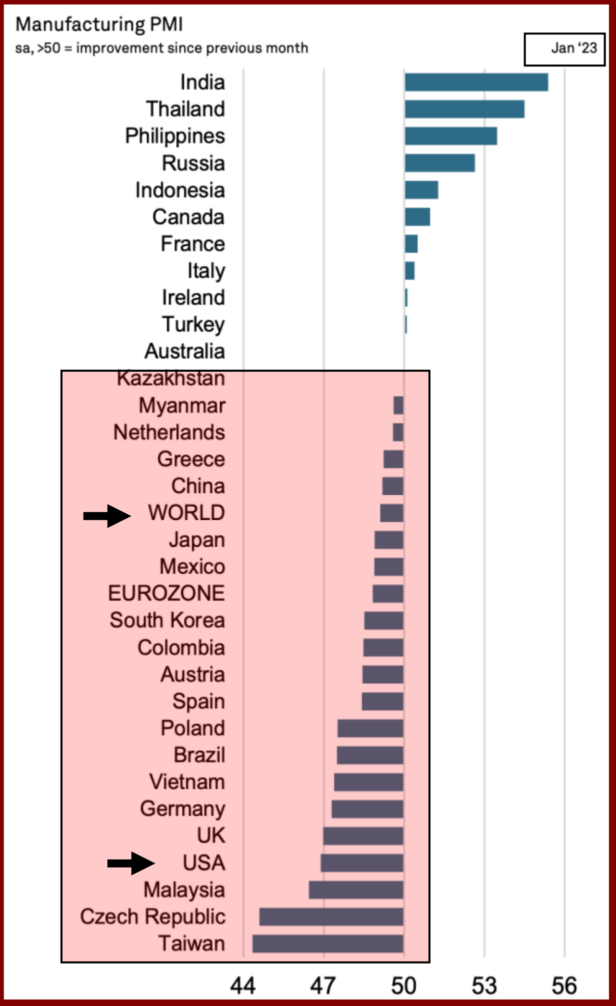
→ IMPACT: An end to the conflict would lift US & EU growth.

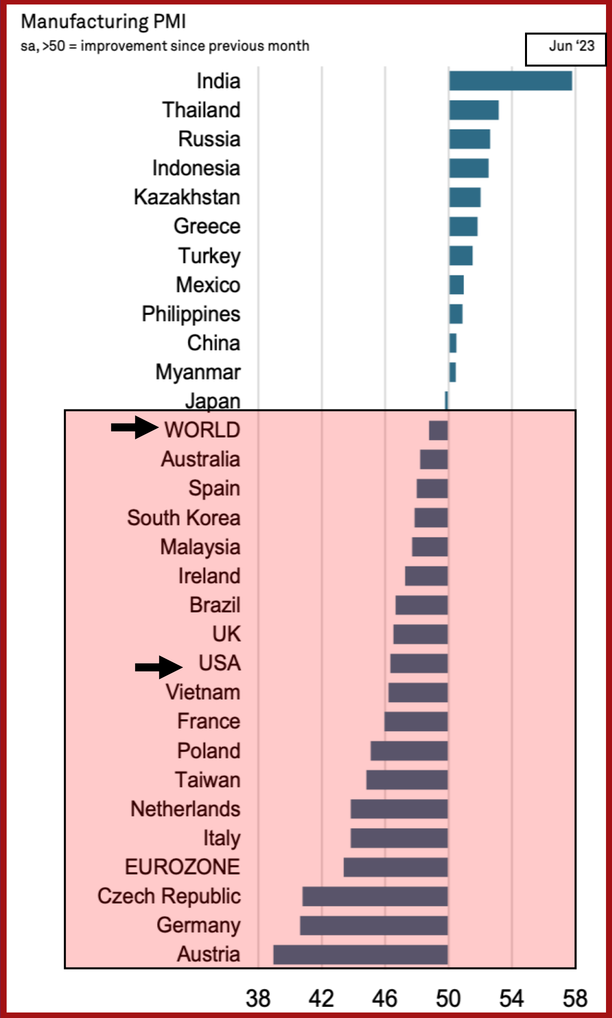
Scenario 3: (15%) Russia expands war to NATO countries.

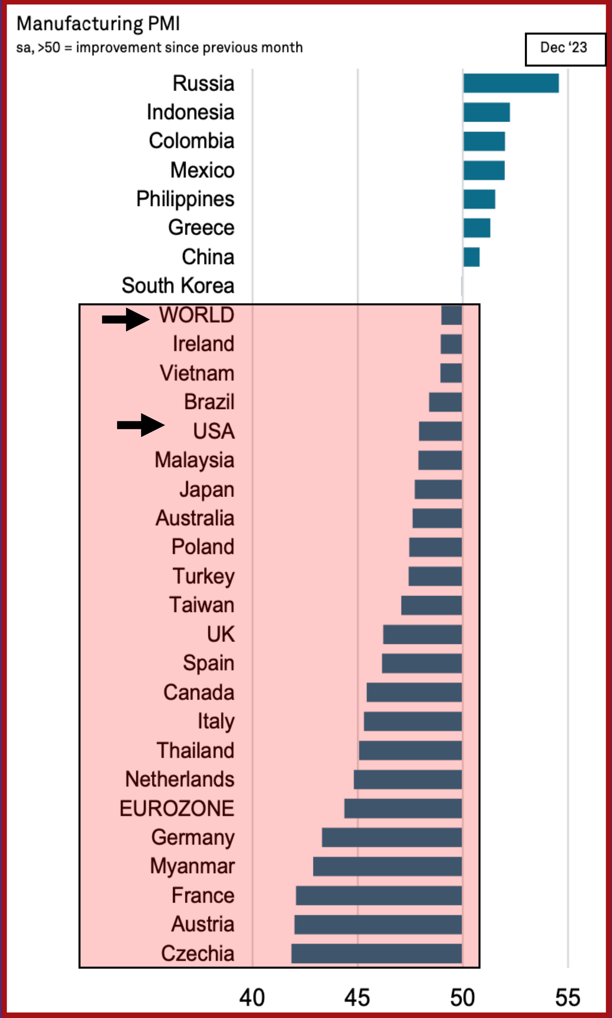
- Use of WMDs (battlefield nuclear weapons, chemical & biological weapons)
- Attacks NATO members in Baltic states (Estonia, Latvia, Lithuania).
- Activates article 5 of NATO Treaty. US becomes directly involved in combat.

→ IMPACT: Potentially catastrophic economic consequences for the global community.

Source: The Economic Outlook Group - Risk Assessment Model

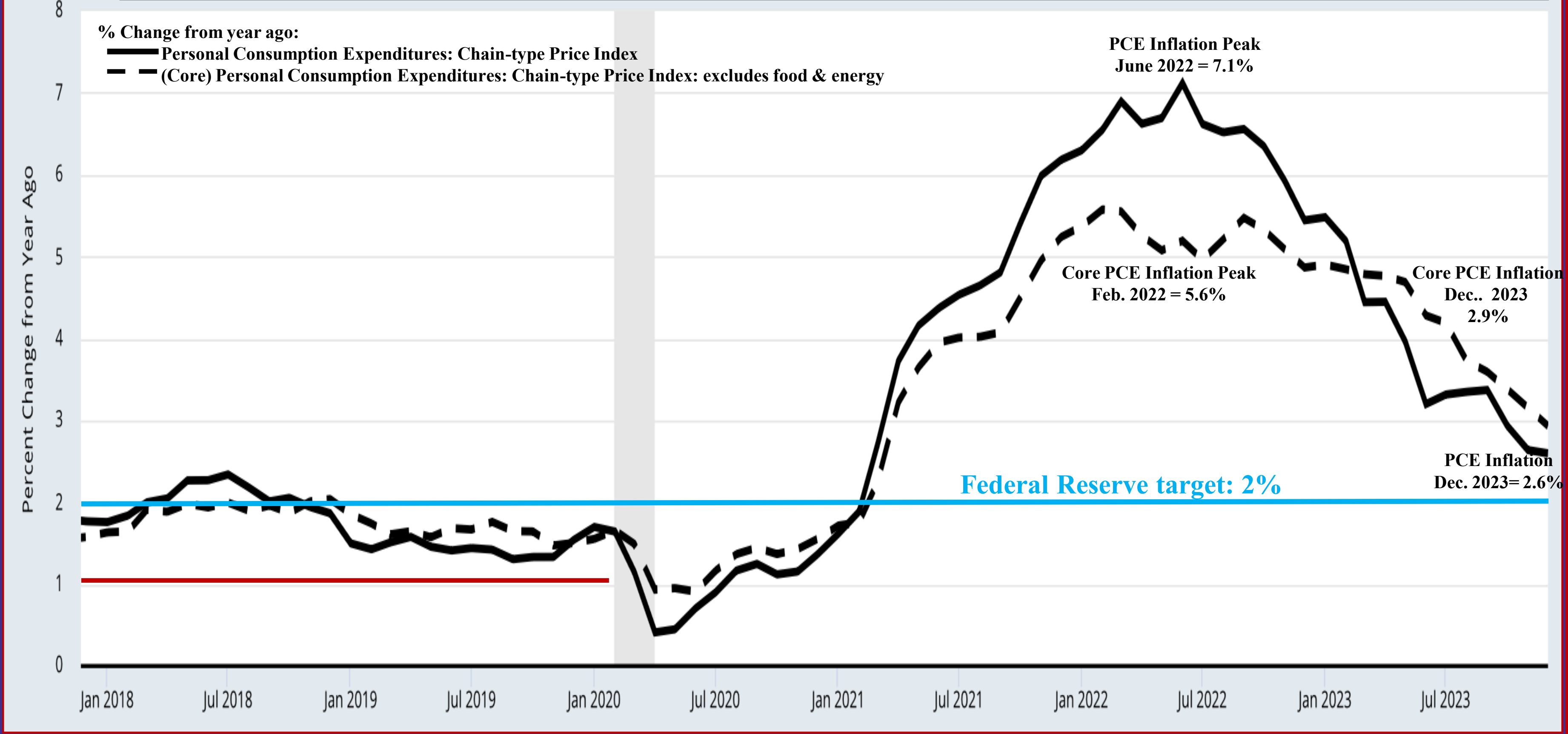






Source: J.P. Morgan Global Manufacturing PMI

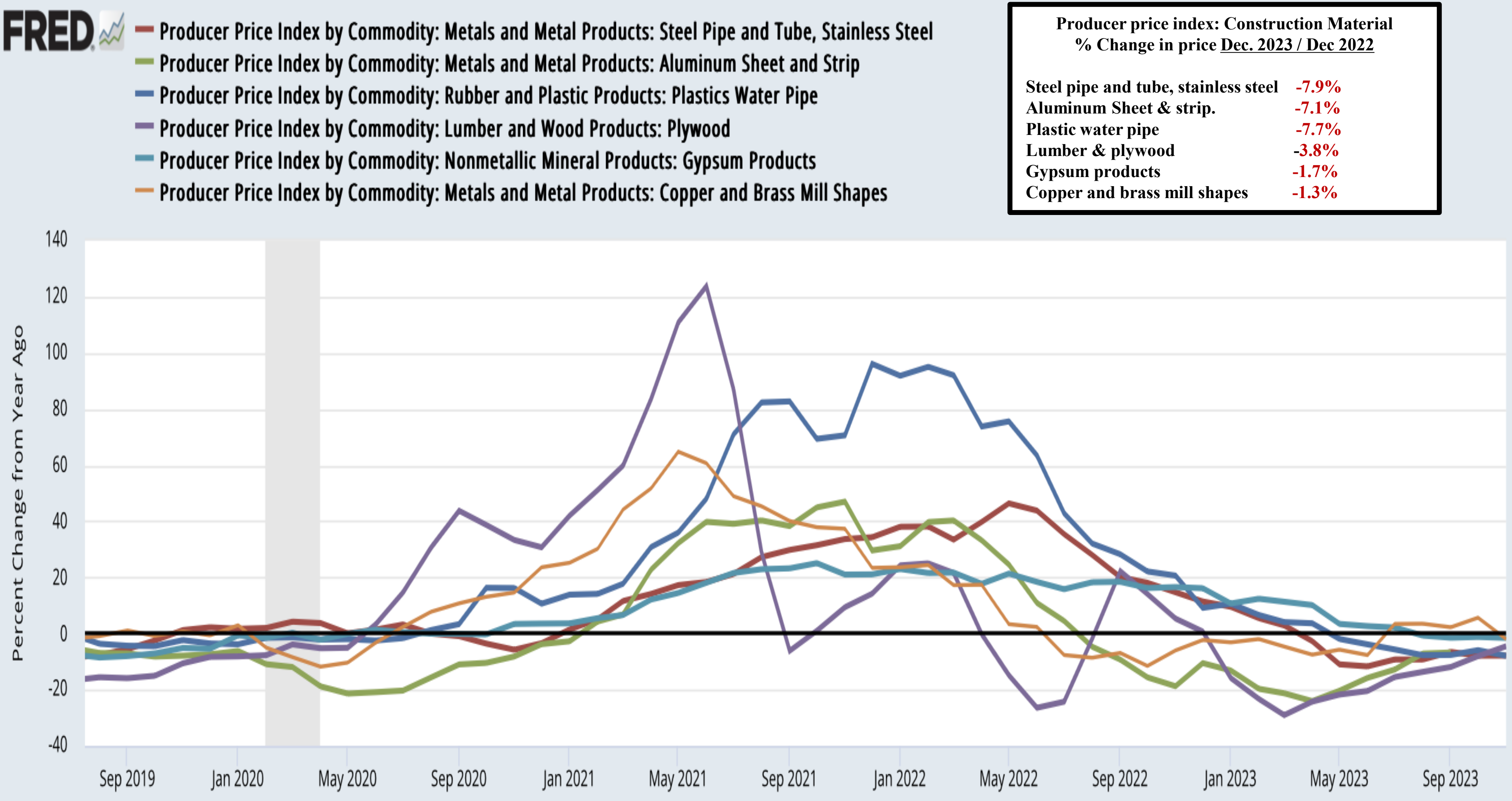
Inflation (PCE price index) tumbled since mid 2022 and now has a 2% handle!
The Fed's preferred indicator, "core inflation," is the lowest in nearly 3 years!



Source: Bureau of Economic Analysis via FRED

Producer price index: Construction Material
% Change in price Dec. 2023 / Dec 2022

Steel pipe and tube, stainless steel	-7.9%
Aluminum Sheet & strip.	-7.1%
Plastic water pipe	-7.7%
Lumber & plywood	-3.8%
Gypsum products	-1.7%
Copper and brass mill shapes	-1.3%

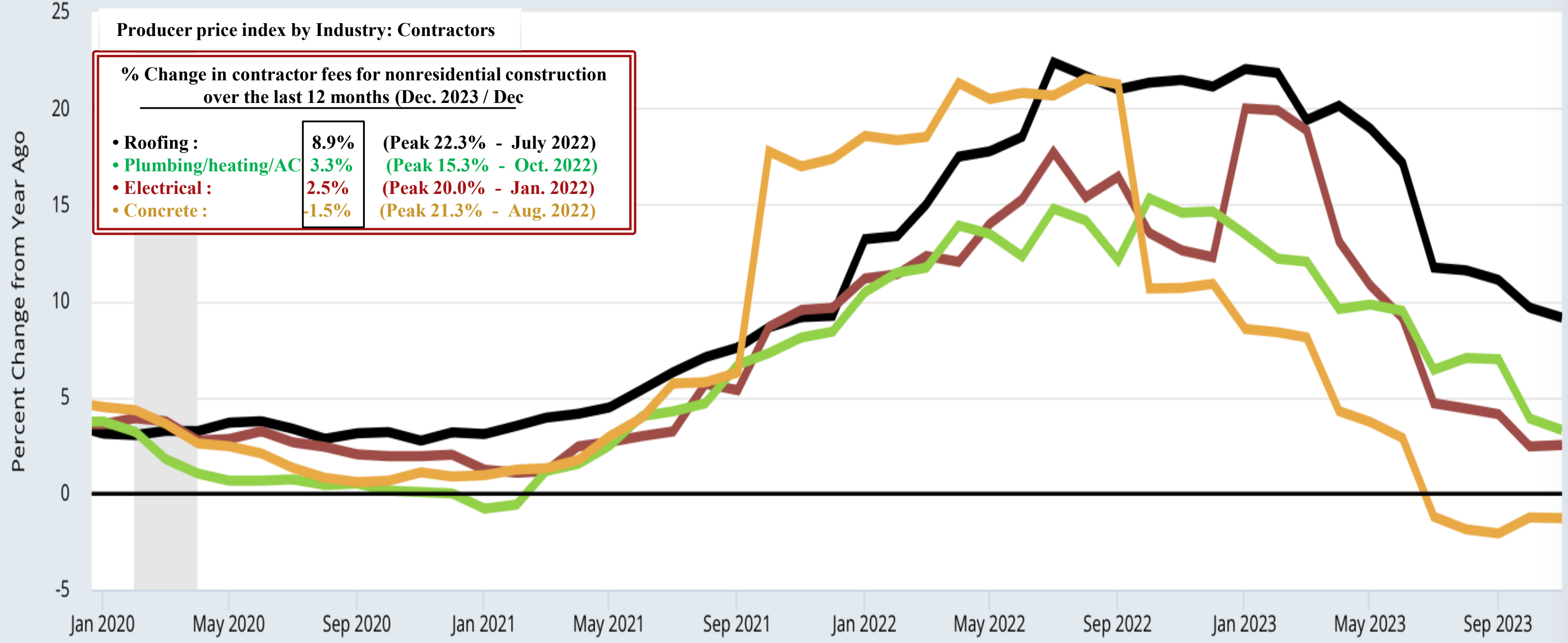


Source: Bureau of Labor Statistics via FRED

FRED

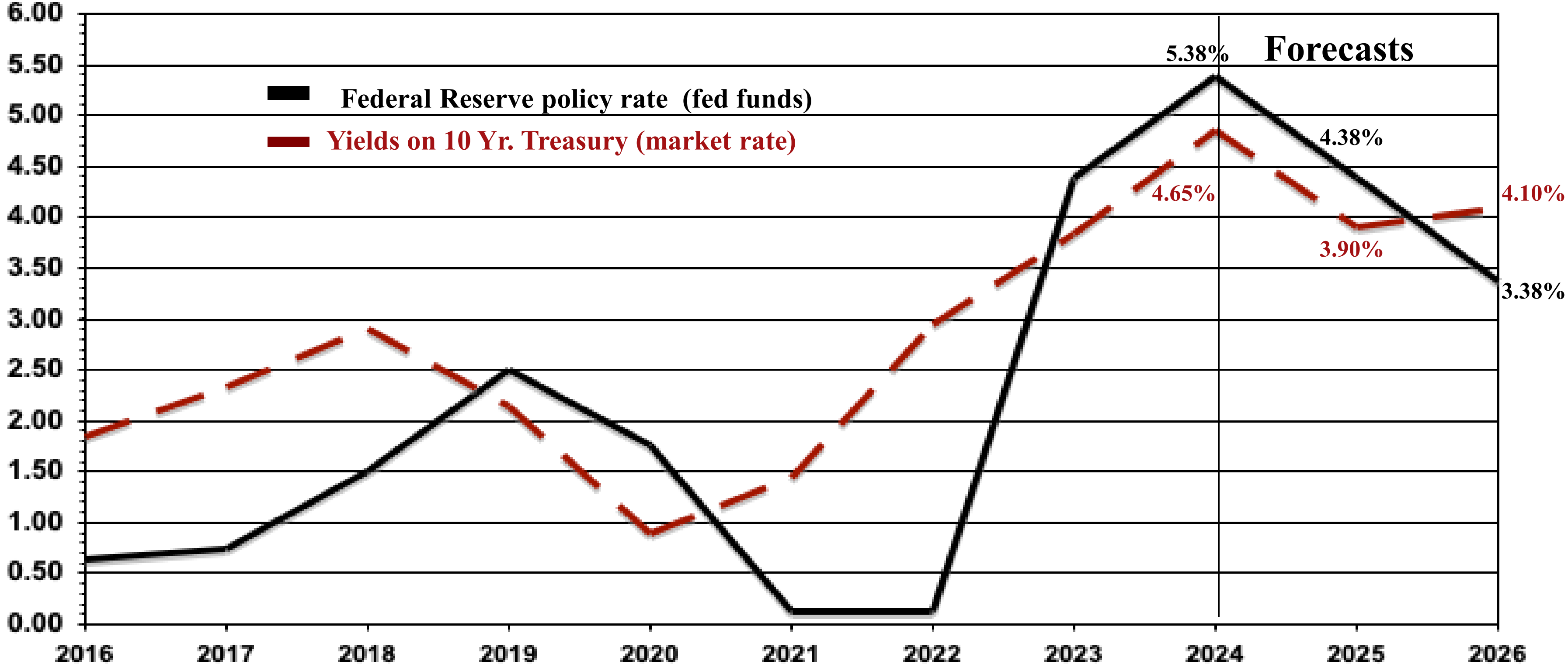
Contractor fees on NONRESIDENTIAL construction have moderated since peaking in 2022.

Fees to rise by 2025 as RESIDENTIAL and NONRESIDENTIAL compete for labor & equipment.



Source: Bureau of Labor Statistics via FRED

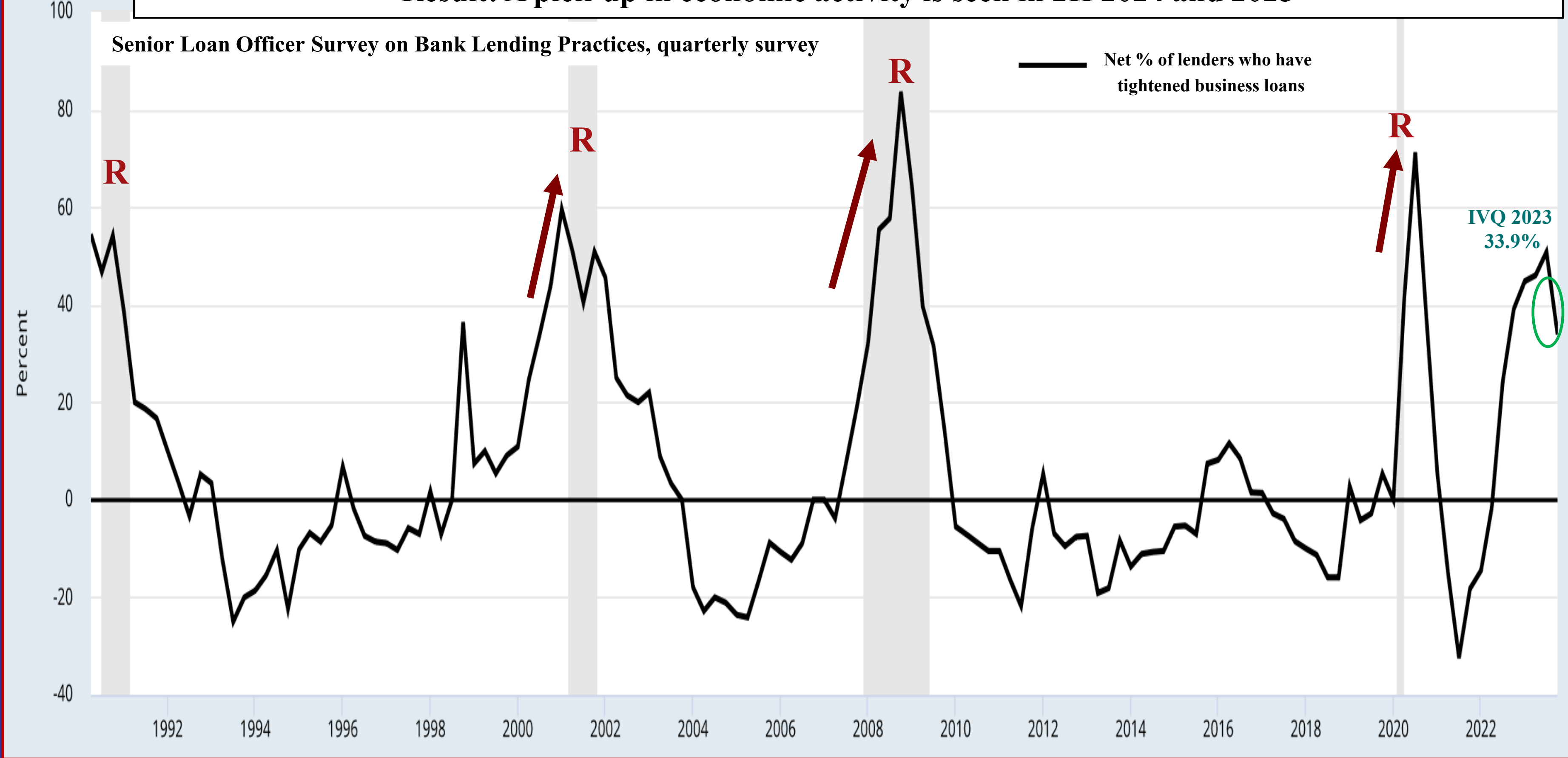
GOOD NEWS: With inflation in descent, the Fed is expected to begin cutting rates by mid-2024. Projected cuts: 100 basis point in 2024 (to 4.38%) and another 100 bp in 2025 (3.38%).



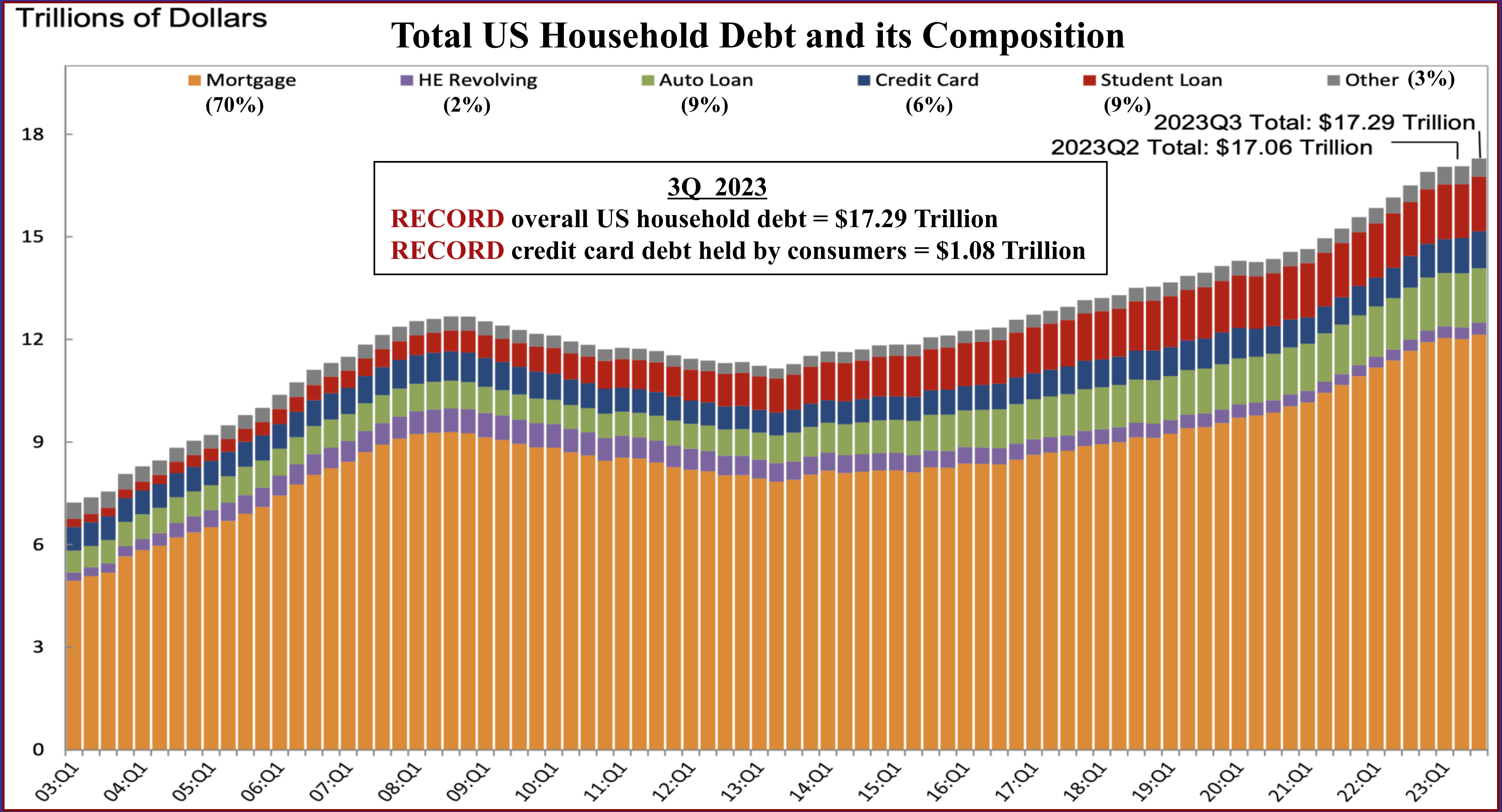
Sources: Federal Reserve (Summary of Economic Projections - September 20, 2022)

Banks are starting to loosen lending standards as recession risk fades and interest rates drop.

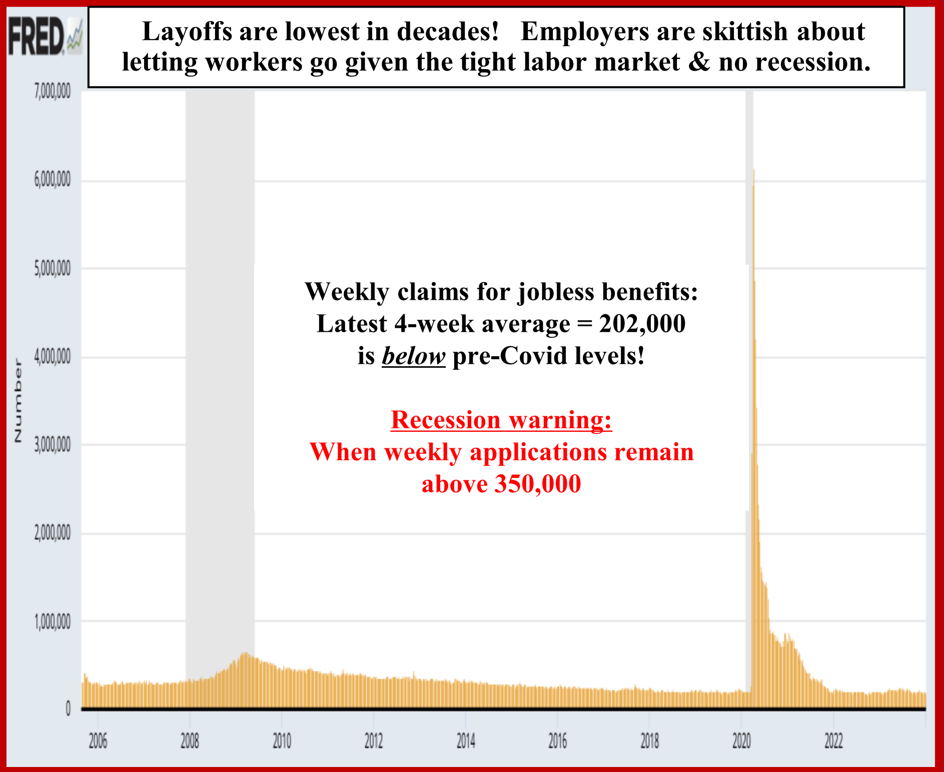
Result: A pick-up in economic activity is seen in 2H 2024 and 2025

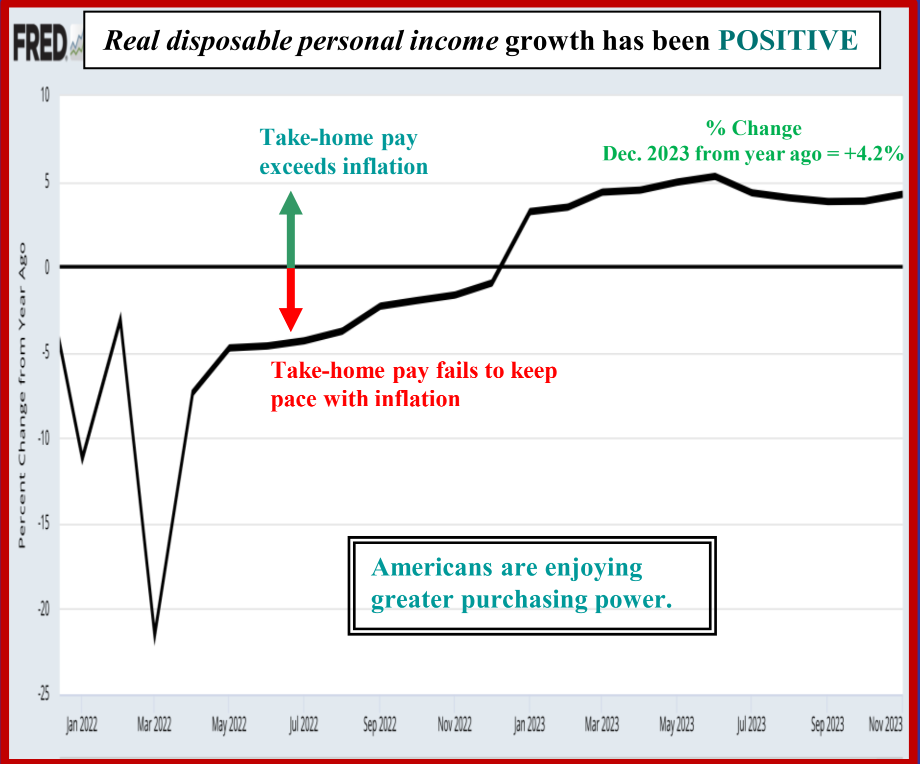


Source: Federal Reserve



Source: Federal Reserve Bank of New York

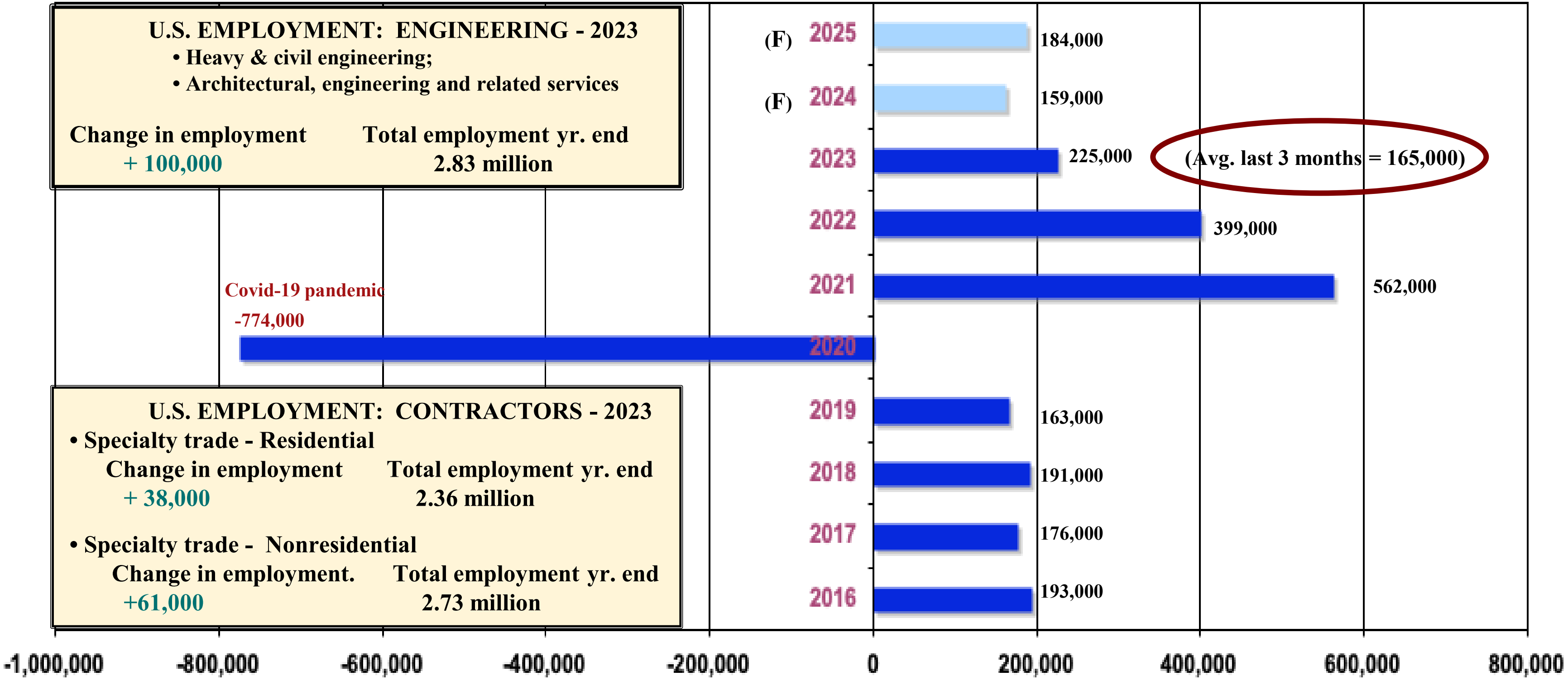




Sources: Bureau of Economic Analysis; Bureau of Labor Statistics via FRED

Slight slowdown in US hiring seen for 2024; Rebound expected in 2025.
Firms remain reluctant to lay off workers — and that should help sustain household spending.

Average monthly growth in payrolls by year



U.S. EMPLOYMENT: ENGINEERING - 2023
- Heavy & civil engineering;
- Architectural, engineering and related services

Change in employment	Total employment yr. end
+ 100,000	2.83 million

U.S. EMPLOYMENT: CONTRACTORS - 2023
- Specialty trade - Residential

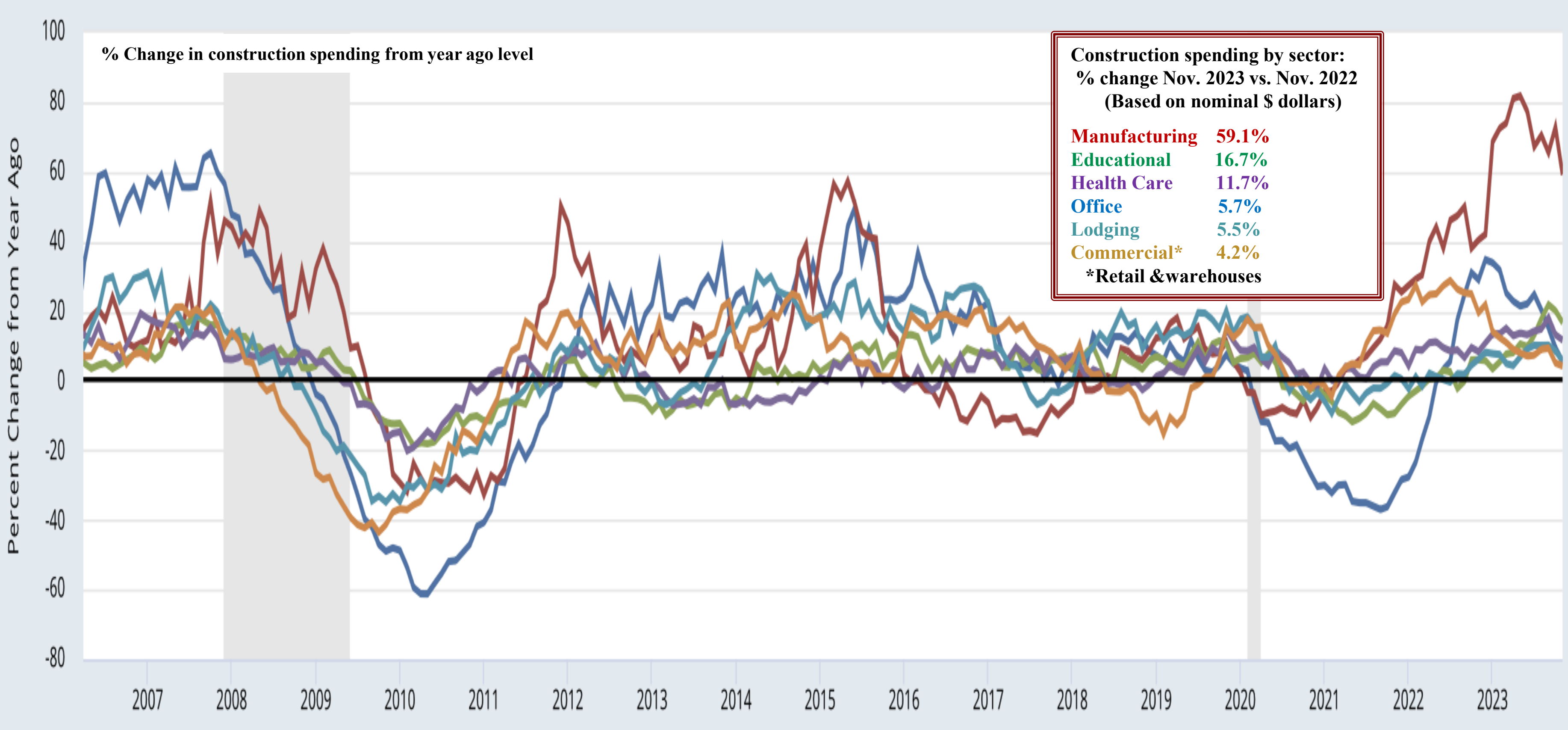
Change in employment	Total employment yr. end
+ 38,000	2.36 million

- Specialty trade - Nonresidential

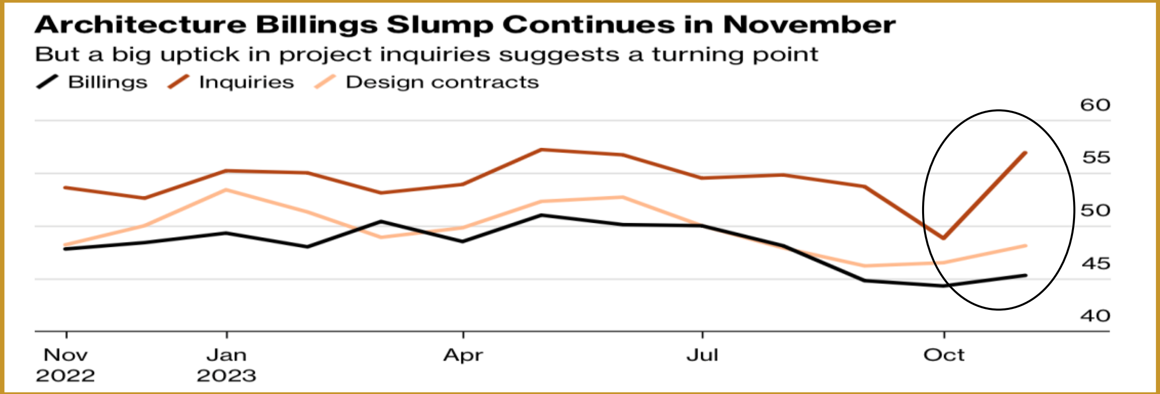
Change in employment.	Total employment yr. end
+61,000	2.73 million

Source: Bureau of Labor Statistics

Total construction spending climbed 11%+ over the past 12 months, spurred by investments in MANUFACTURING, EDUCATIONAL and gov’t INFRASTRUCTURE projects.



Source: Census via FRED



Nonresidential construction spending outlook

(% increase over the previous year, nominal $ dollars)

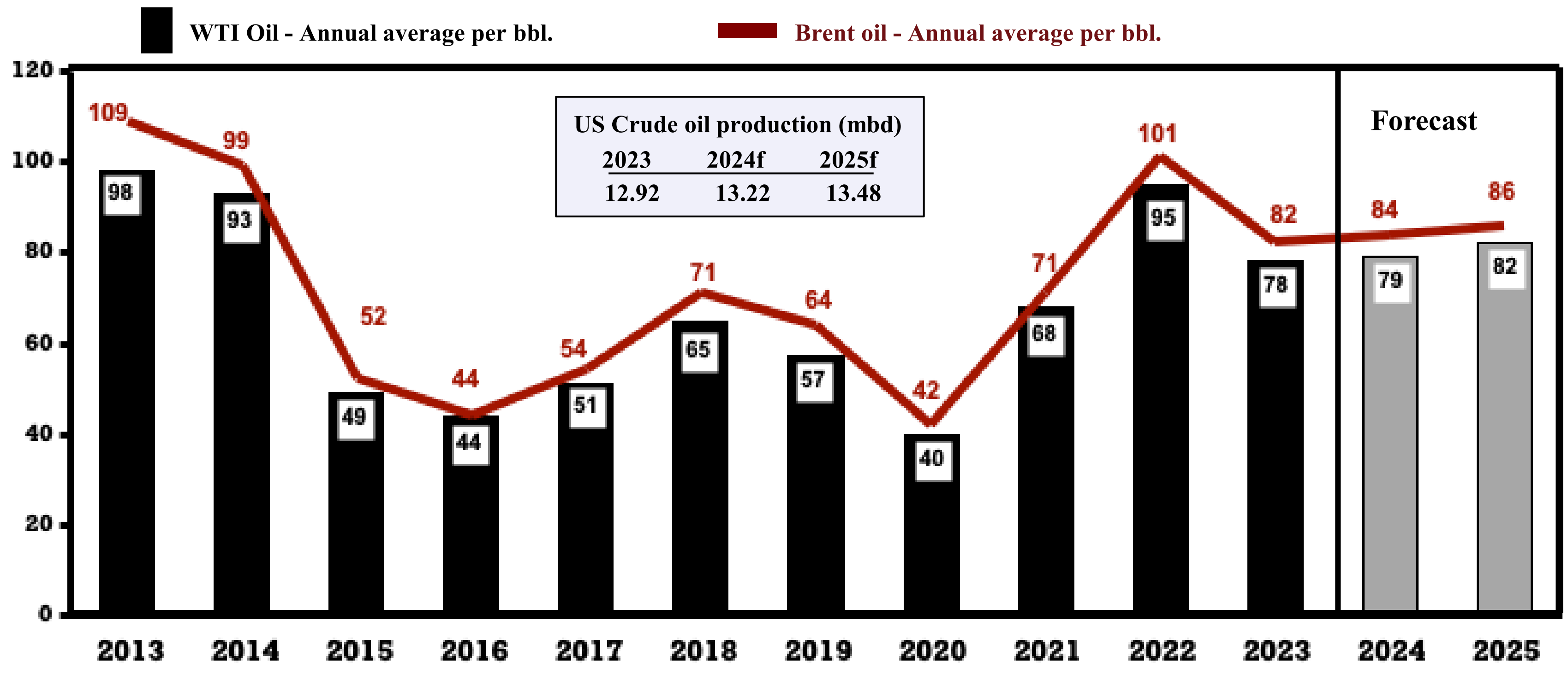
f = forecast

	2022	2023f	2024f	2025f
Office	2.0%	7.1%	3.5%	5.2%
Manufacturing	39.8	69.1	22.1	13.3
Health Care	8.9	13.3	3.4	6.3
Education	1.2	12.8	11.1	4.8
Retail (+ warehouses)	24.6	7.2	-4.7	1.1
Lodging	3.5	17.9	1.5	9.3
Public infrastructure	3.1	14.3	13.2	12.2

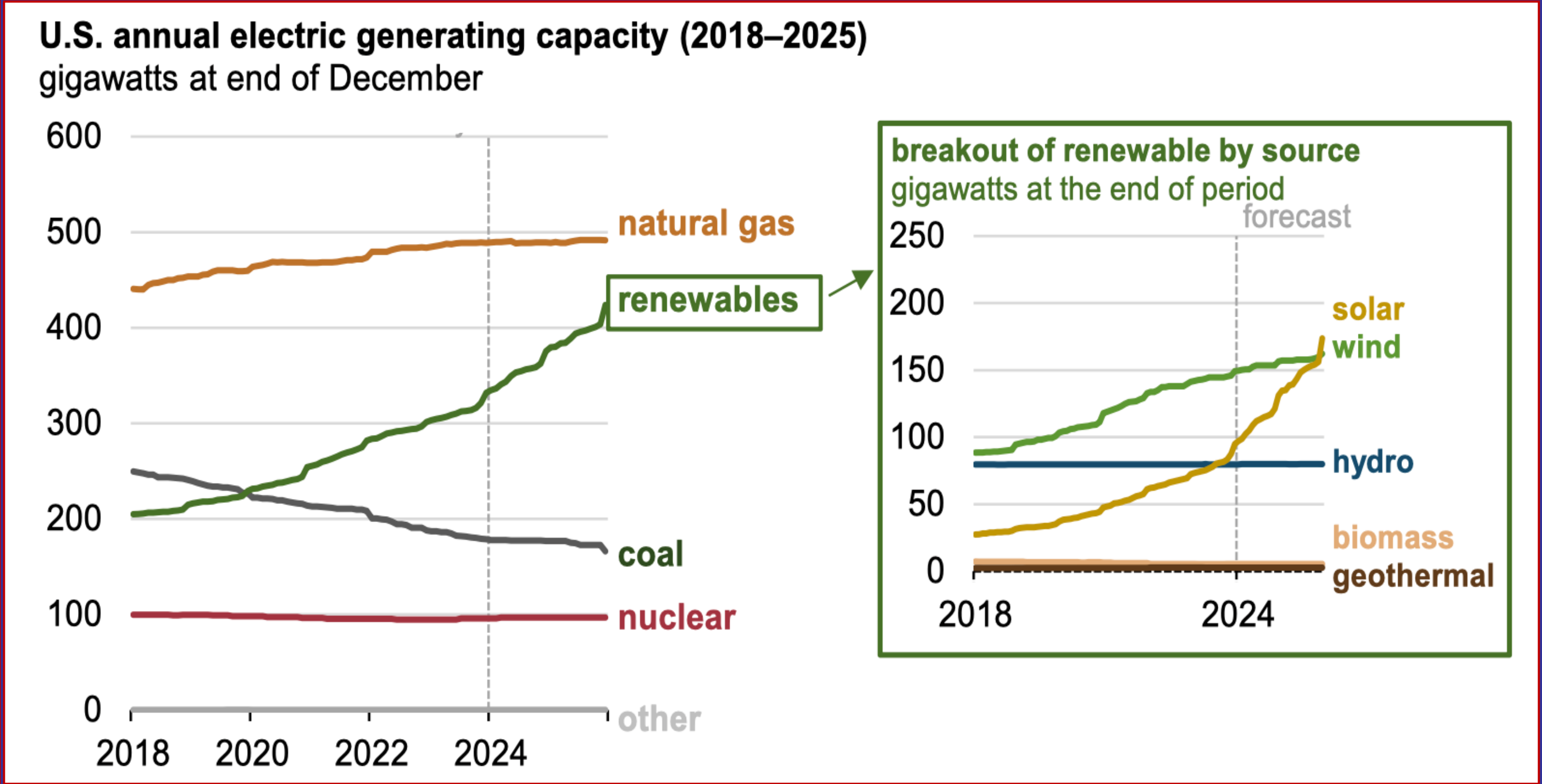
Sources: AIA/Deltek's Architecture Billings Index; Census via FRED; The Economic Outlook Group (forecasts);

Price of oil (WTI and Brent) in 2024 will remain close to 2023 levels, then rise in 2025.

Global demand for crude will be soft in 1H 2024, before picking up in 2H and continue through 2025.



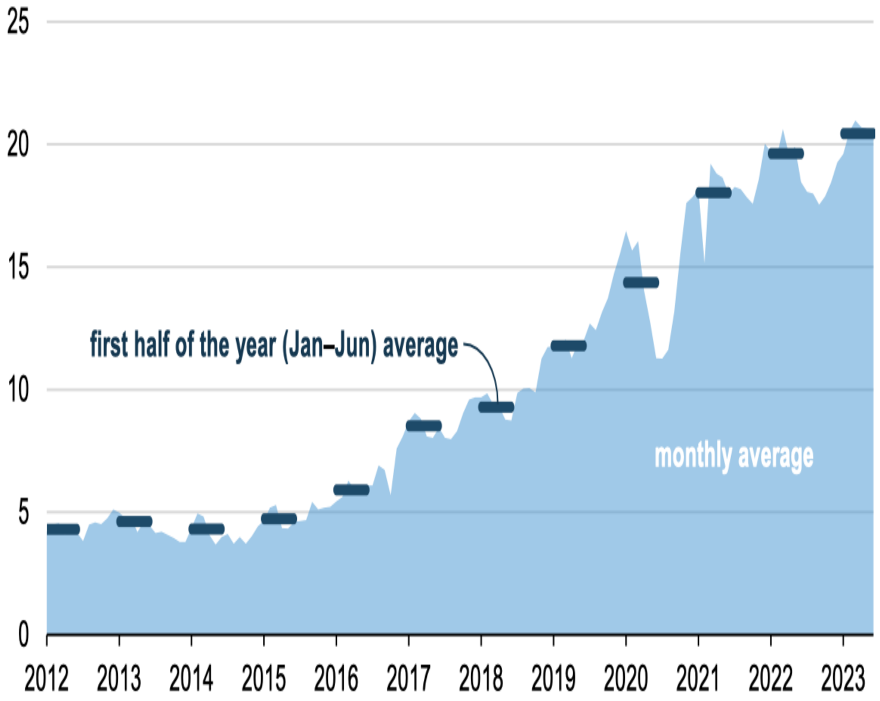
Sources: US Energy Information Administration; (Historical) The Economic Outlook Group (Forecasts)



Source: U.S. Energy Information Administration

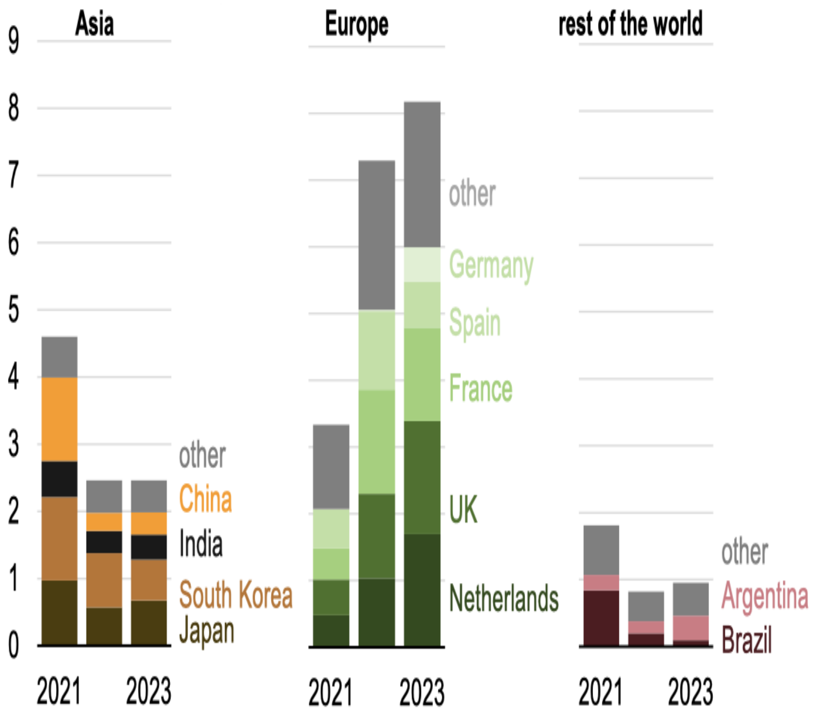
US is the world’s largest exporter of liquid natural gas (LNG)

Gross natural gas exports by U.S. (billion cubic feet per day)



US LNG exports by destination country (Jan 2021 - June 2023)

(billion cubic feet per day)



Source: U.S. Energy Information Administration

Houthi attacks in the Red Sea disrupts shipping traffic thru Suez Canal.

--12% of world trade cross the Red Sea
--30% of global container traffic
--10% of oil trade (9.2 million bbl/day)
-- 8% of natural gas

- Ships that now enter the Red Sea pay costly "war insurance" premiums.
- Ships that reroute around Africa add 2 weeks to travel & spend $1 million more on fuel.
- Cuts supply of container ships by 25%.

Panama Canal restricts shipping traffic due to chronic drought conditions.

- 5% of world maritime trade
- 40% of all US container traffic

Problem: Lack of water hampers raising and lowering of canal locks.

- Passage slows from 36 ships a day to half that pace.
  "Pay a premium for priority passage"
- More ships choose to detour around South America
- Slows delivery of cars, fuel, food & other commodities

China illegally annexed the SCS and has harassed foreign vessels in this region.

- 60% of world's maritime traffic transit the SCS
- 30% of all oil shipments
- 60% of all natural gas shipments.
- Country dependence on energy supplies via SCS:
  - South Korea 65%
  - Japan 57%
  - Taiwan 60%
  - China 80%

China has built artificial islands to fortify its sovereign control in the SCS.

Sources: CIA, US Commerce Department, International Maritime Organization; The Economic Outlook Group

Pick your favorite euphemism:

De-globalization, re-globalization, decoupling, regionalization, friend-shoring, near-shoring, onshoring...

Problem: Multinationals are exasperated with current global supply routes:

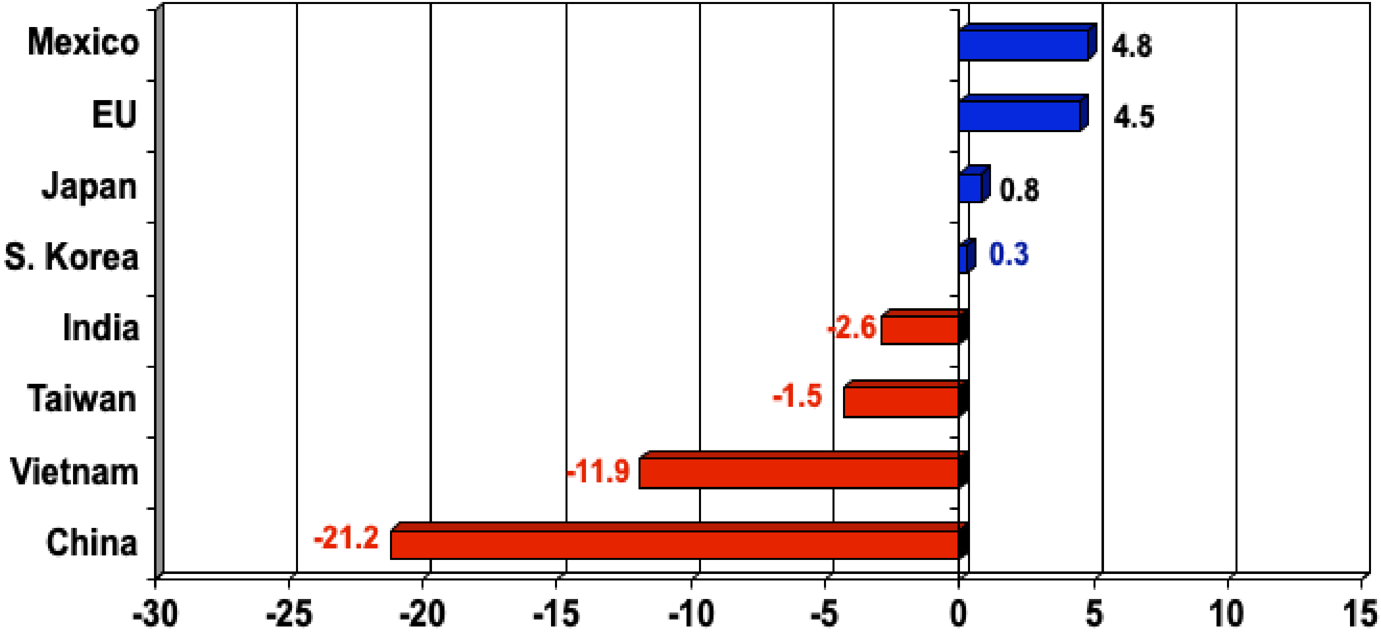
--> Endless trade conflicts with China over SCS & Taiwan
--> Geopolitical clashes in Middle East & Europe
--> "Pay for priority" to cross Panama Canal
--> Rise in trade sanctions for economic & security reasons.
--> Higher foreign labor costs
--> Risk of future pandemics
--> Costly transoceanic shipping

Solution: Companies seek more simplicity, dependability and control over their supply chain.

- Scavenger hunt begins for low wage countries ex-China. But most lack the needed infrastructure?
- Relocate factories to friendlier venues.
- New technologies and gov't incentives *improve the economic calculus for producing in the U.S.*
  --- AI, robotics, 3D printing, cloud computing ---> Digital Deepening of US firms.
  --- New US legislation encouraging the domiciling of vital industries for economic & national security reasons.
  (e.g., *Chips & Science Act of 2022; Inflation Reduction Act of 2022; Infrastructure Investment & Jobs Act of 2021*)
- Environmental sustainability: Alter supply chain routes to reduce carbon emissions.

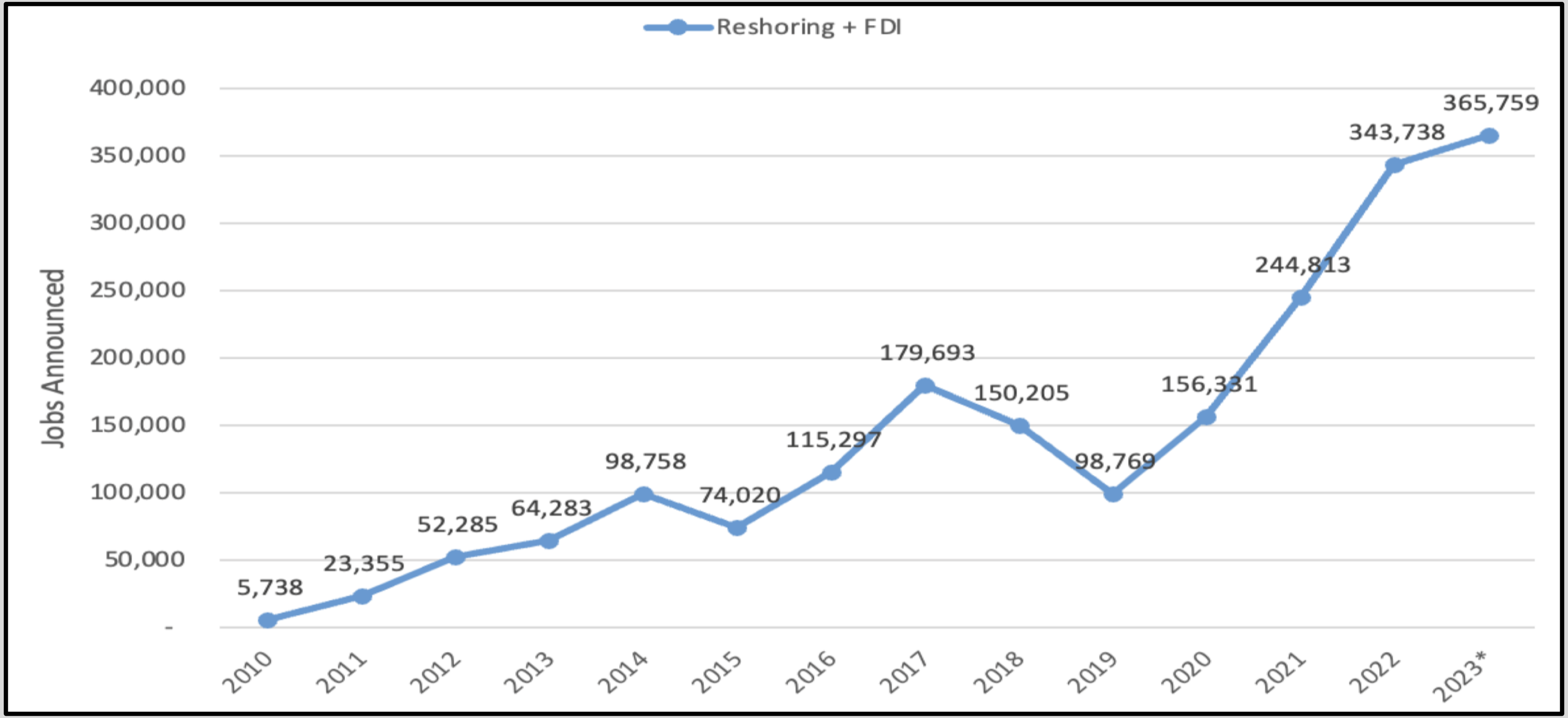
The de-risking of supply chains has already reduced imports from Asia

% Change in US IMPORTS of goods by country (January thru November 2023 vs. same months in 2022)



Source: Bureau of Economic Analysis - Foreign Trade

Increase in employment due to reshoring and Foreign Direct Investments into the US



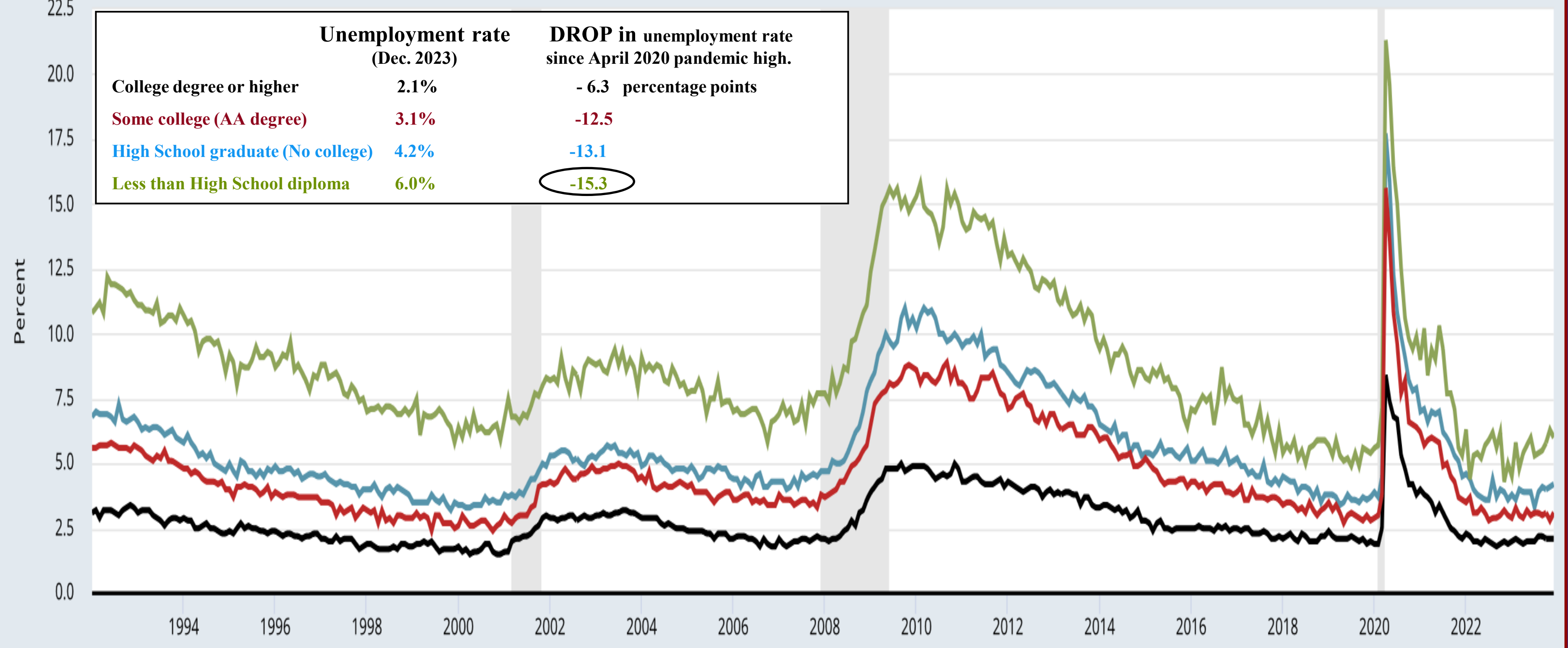
Source: Reshoring Initiative

Unemployment rates by level of education:

The demographic that enjoyed the LARGEST DROP in unemployment since the pandemic peak?

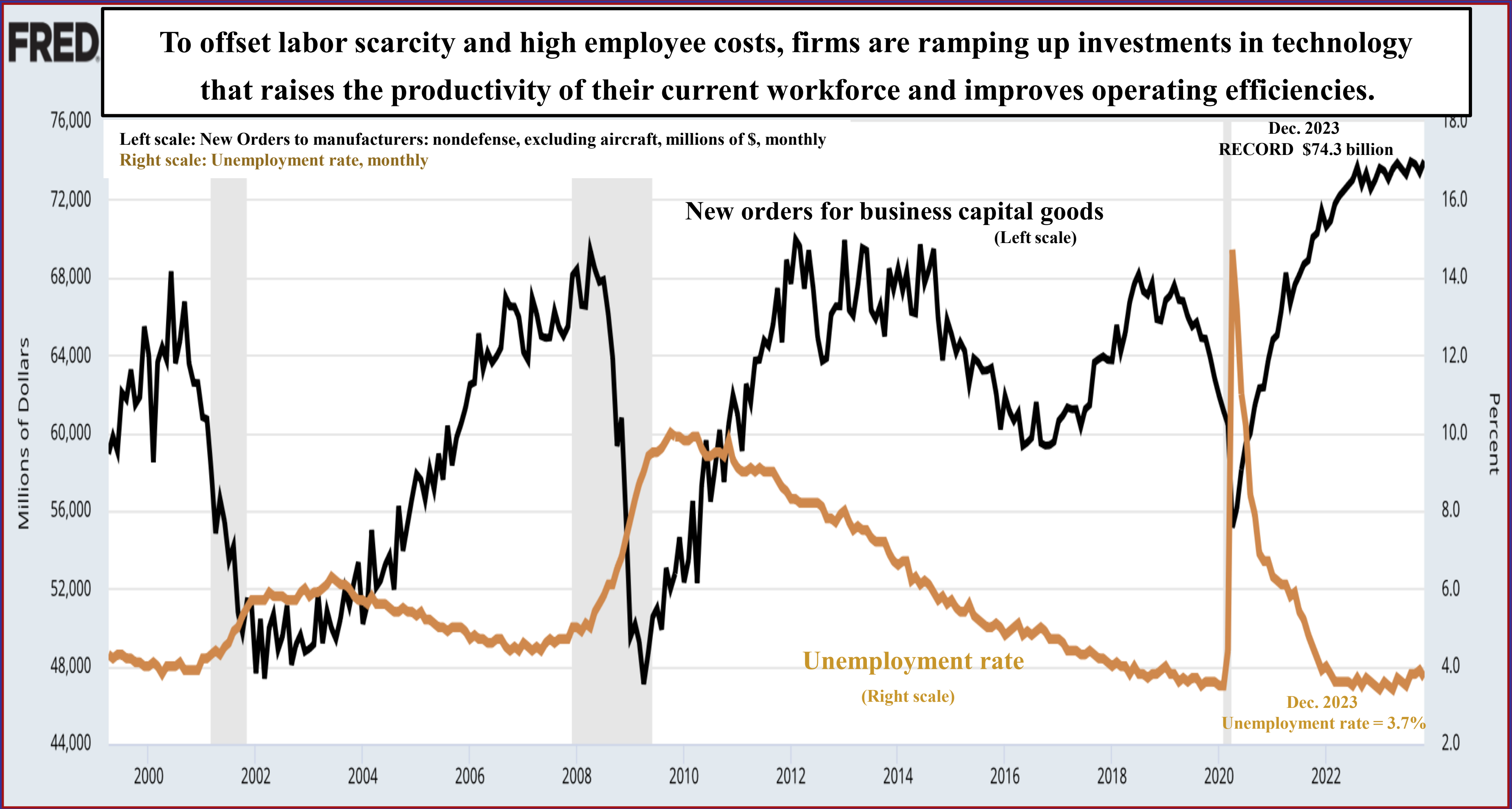
Those *without* a HS degree!

	Unemployment rate (Dec. 2023)	DROP in unemployment rate since April 2020 pandemic high.
College degree or higher	2.1%	- 6.3 percentage points
Some college (AA degree)	3.1%	-12.5
High School graduate (No college)	4.2%	-13.1
Less than High School diploma	6.0%	-15.3



Source: Bureau of Labor Statistics via FRED

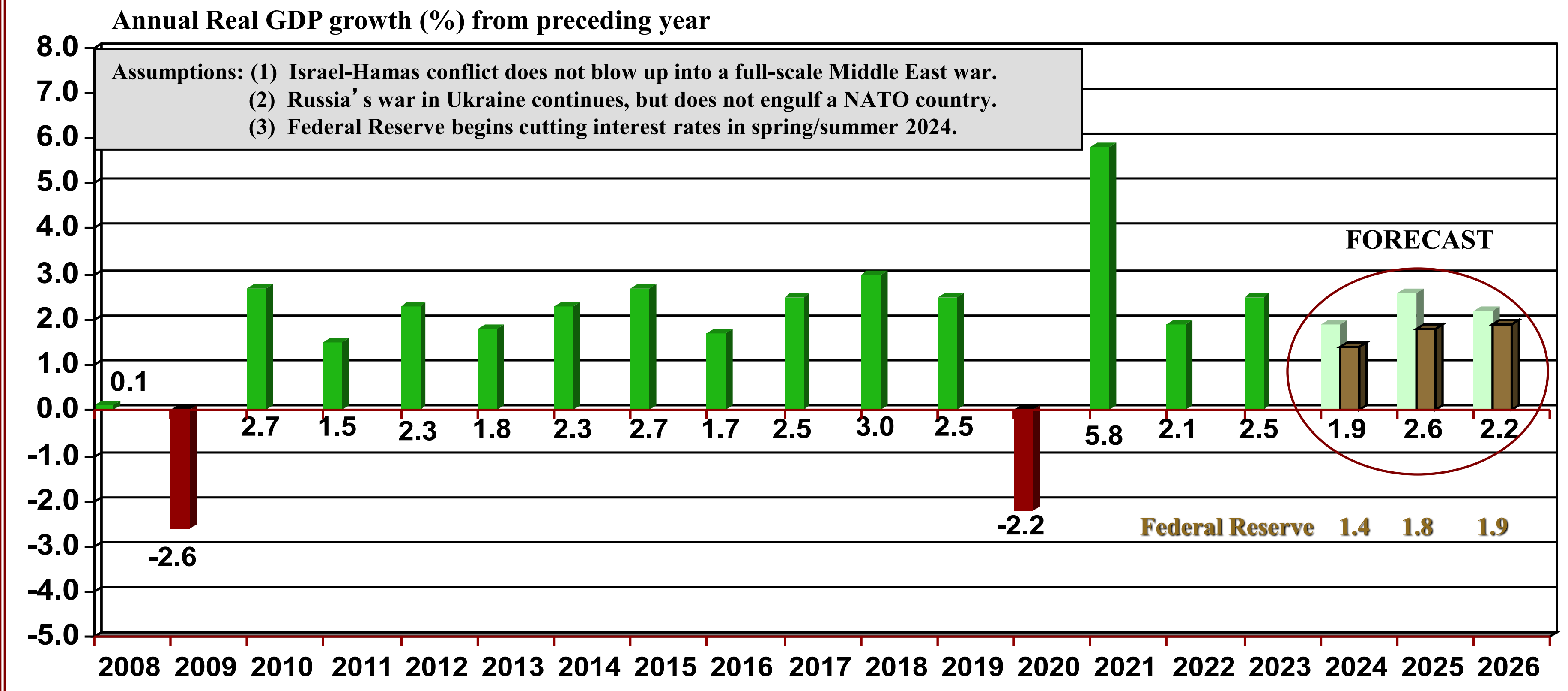
To offset labor scarcity and high employee costs, firms are ramping up investments in technology that raises the productivity of their current workforce and improves operating efficiencies.



Source: Census via FRED

Our baseline forecast: Real GDP growth 2024 - 2026

Risk of recession in 2024: 20%



Sources: Bureau of Economic Analysis (historical); The Economic Outlook Group (GDP forecasts), Federal Reserve's SEP

United States

Baseline Forecasts: 2024 - 2026

	I 2023	II 2023	III 2023	IV 2023	I 2024	II 2024	III 2024	IV 2024	I 2025	II 2025	III 2025	IV 2025	I 2026	II 2026	III 2026	IV 2026
Real Gross Domestic Product (GDP):																
%	2.2	2.1	4.9	3.3	1.7	1.9	2.2	2.9	2.0	2.7	3.0	2.6	1.4	2.8	2.2	2.5
Personal Consumption Expenditures:																
PCE %	3.8	0.8	3.1	2.8	1.9	2.5	2.7	2.6	1.7	2.8	3.1	2.9	1.7	3.3	2.5	2.3
Inflation, end of period, year-over-year:																
CPI %	5.0	3.1	3.7	3.4	3.2	2.8	2.7	2.7	2.5	2.7	2.8	2.8	2.4	2.1	2.1	2.3
Unemployment Rate (end of period):																
%	3.5	3.6	3.8	3.7	4.2	4.0	3.8	3.8	3.7	3.7	3.5	3.5	3.7	3.9	3.9	4.0
Non-farm Payrolls, monthly avg. thousand:																
	297	201	266	165	145	150	165	175	200	190	185	160	125	130	145	155
Treasury 10-yr Note Yield % (end of period):																
	3.47	3.82	4.57	3.86	3.75	3.65	3.75	3.90	3.90	3.95	4.10	4.10	3.92	3.75	3.55	3.30
Federal funds rate % (end of period):																
	4.88	5.13	5.38	5.38	5.38	5.13	4.63	4.38	3.88	3.63	3.38	3.38	3.13	2.88	2.88	2.88

GDP Growth - Global Economy - Year over Year

Country	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
US	2.6	1.6	2.2	1.8	2.3	2.7	1.7	2.5	3.0	2.5	-2.2	5.8	1.9	2.5	1.9	2.6	2.2
Eurozone	1.7	1.4	-0.9	-0.2	1.4	2.1	1.9	2.5	1.8	1.6	-6.2	5.7	3.5	0.6	0.9	1.5	1.6
United Kingdom	1.7	0.7	0.3	1.8	2.9	2.2	1.9	1.9	1.7	1.6	-10.4	8.7	4.3	0.3	-0.1	1.0	1.5
Japan	4.6	-0.4	1.6	1.5	-0.1	1.1	0.5	1.7	0.6	-0.4	-4.3	2.3	1.0	2.0	0.8	1.3	1.6
Canada	3.1	3.1	1.8	2.3	2.9	0.7	1.0	3.2	2.8	1.9	-5.1	5.0	3.4	1.3	1.1	1.8	2.1
India	8.4	8.6	6.7	4.9	7.4	8.0	8.1	7.2	6.4	4.0	-5.9	9.2	7.2	7.0	6.6	6.4	6.1
China	10.5	9.5	7.8	7.7	7.3	6.9	6.7	6.8	6.7	6.0	2.2	8.5	3.0	5.2	4.6	5.0	4.8
Brazil	7.5	2.7	0.9	2.3	0.1	-3.5	-3.5	1.2	1.2	1.4	-3.6	5.3	3.0	3.1	2.2	2.9	2.7
Mexico	5.2	4.0	3.9	1.4	2.3	2.7	2.7	2.4	2.2	-0.3	-8.8	6.1	3.9	3.2	2.8	2.6	2.8
Australia	2.8	2.6	3.6	2.4	2.6	2.5	2.4	2.4	2.7	1.8	-1.1	4.7	3.7	1.7	1.5	2.6	3.0
Russia	4.0	4.3	3.4	1.3	0.6	-2.8	-0.2	1.6	2.8	2.2	-2.7	5.6	-1.2	1.8	2.2	2.3	2.6
World	4.2	3.1	2.5	2.6	2.8	2.8	2.6	3.4	3.2	2.7	-3.0	6.2	3.1	2.6	2.0	2.8	2.9

2023 - 2026
Growth leaders
India
Indonesia
China
Brazil
Mexico

2023 - 2026
Modest Growth
US
Japan
Australia
Russia
Eurozone
Canada

2023 - 2026
In or Near Recession
United Kingdom
Argentina

Source: Historical GDP data from IMF and national data bases. Forecasts by The Economic Outlook Group;

China:	2023	2024	2025	2026
Real GDP growth %	5.2	4.6	5.0	4.8
Private consumption %	5.8	6.2	6.5	5.4
Industrial production %	4.6	4.9	4.6	4.5
Inflation (CPI) %	0.2	1.3	2.0	2.2

Economy is not on solid footing --- and won’t be for years.

Faces multiple economic and foreign policy headwinds.

--> **China’s municipal governments debt:** Has soared to $13 trillion --- and this is unsustainable.

--> **Property sector:** Property crisis not going away anytime soon. Will take 5 - 10 years before it can right itself. Real estate represents 30% of GDP; 70% of consumer savings are in real estate.

--> **Manufacturing** fails to show persistent recovery. Export demand remains weak.

--> **Unfavorable demographics.** Aging population. Total population shrunk by 2M in 2023. Youth unemployment (16 - 24 yrs) at 14.9%*

--> **Deflation** hovering over the economy. Hurts profitability and may lead to more closures of private enterprises.

--> **Multinational and investors seek to de-risk from China**: Shifting FDI to Latin America, India & North America.

--> **Consumers** still cautious. Preference is to spend on services.

Government support for the economy will be of limited help. (1) Central banks rate cuts; (2) Issue new special purpose bonds to support infrastructure spending; (3) Lowered housing down payments requirements and mortgage rates

US - China tensions are rising: Beijing faces technology distress due to Western export sanctions; major disputes with US over Taiwan, South China Sea, cyber attacks/espionage, Uyghurs genocide, intellectual property theft, aiding Russia’s war effort in Ukraine.

Sources: The Economic Outlook Group; National Bureau of Statistics of China; • Gov’t data on youth unemployment highly suspect.

Growth Forecasts (real GDP %)	2022	2023	2024	2025
Latin America & Carib.	4.0	2.3	1.7	3.0
Brazil	3.0	3.1	2.2	2.9
Mexico	3.9	3.2	2.8	2.6
Argentina	5.0	-2.1	-5.1	1.1

Mexico: Economy to grow in 2024 and 2025:

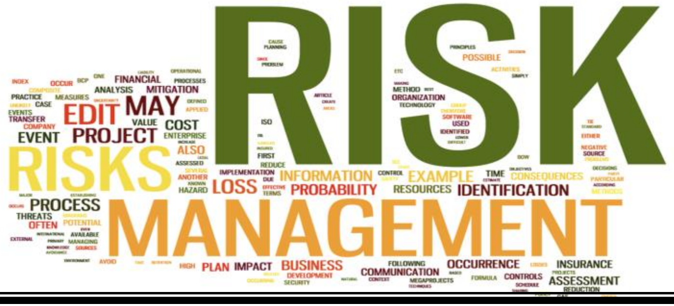
- Nearshoring boom: Proximity and preferential access to US market gives Mexico a comparative advantage.
- Economy benefits from manufacturing output + tourism and hospitality.
- Presidential elections in June 2024: All leading candidates endorse nearshoring (but place energy sector off limits).
- Mexico's CB has kept policy rate at record high 11.25%, even with inflation at 4.5%. Cuts seen in 2024.
- Lopez Obrador has policy differences with US over (1) climate change initiatives, (2) "Buy America" policies, (3) Mexico's reluctance to crush drug cartels, (4) government advocating a lithium cartel among LATAM nations.

Brazil: Economic growth to outpace global economy.

- Sources of strength: agriculture, services, consumption, and increased fiscal spending.
- Central bank's selic rate has been cut to 11.75%; lower rates expected 1H 2024 as inflation drops below 4%.
- Lula da Silva's new Budgetary Framework should introduce more discipline to government expenditures.

Argentina: The new Javier Milei administration seeks to turn around a chronically flawed economy.

- First comes the harsh medicine: Massive spending cuts and a sharp devaluation of the peso will slash domestic demand!
- The removal of price controls and plunging peso will cause inflation to spike toward 300%.
- Argentina to suffer a deep recession in 2024, but may finally see positive growth in 2025 as foreign capital returns.



WHAT (ELSE) COULD GO WRONG?

US RISKS:

- Federal Reserve keeps rates high for too long: Economy stumbles, CRE stress deepens, triggers larger banking crisis.
- 2024 Presidential campaign degenerates into political gang warfare. Leads to widespread social unrest and violence.
- US national debt: Will investor appetite for US treasuries fade? If so, that could push up rates and choke the economy.

FOREIGN RISKS;

- Conflicts in Ukraine and Middle East draws major nuclear powers into direct military confrontation. Putin's future?
- China's Xi Jinping is determined to subsume Taiwan. Is a new military crisis brewing along China's border with India?
- Cyber Warning!* 90%+ of cyber security experts warn of *"a catastrophic cyber event within the next two years!"*

Source: * Global Cyber Security Outlook Survey, World Economic Forum, January 18, 2023.

The Economic Outlook Group LLC

QUESTIONS OR COMMENTS?

bbaum@EconomicOutlookGroup.com

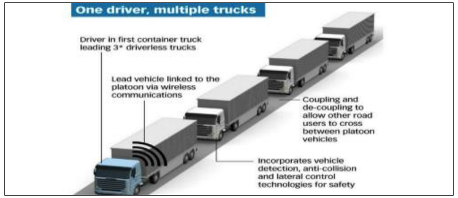
Bernard Baumohl
Chief Global Economist
The Economic Outlook Group, LLC
475 Wall Street, Princeton, NJ 08540
(609) 529-1300
www.EconomicOutlookGroup.com

Using the latest technology to solve the labor shortage

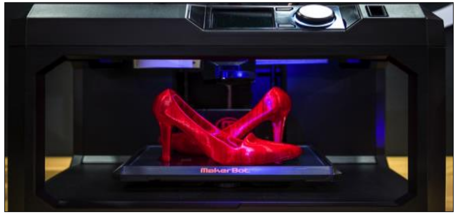
DIFFICULTY FINDING RESTAURANT WORKERS?
Some eateries use robots to deliver meals to tables and return used dishes & glasses back to the kitchen.

HOME CONSTRUCTION USING 3-D PRINTING TECHNOLOGY.
Takes about 7- 10 days to construct at a cost 30% to 50% cheaper than standard construction methods.

HOW CAN TRUCKING FIRMS SAVE ON FUEL, LABOR COSTS AND REDUCE EMISSIONS?
Wireless communications allows for "platooning," with one driver controlling multiple trucks or trailers



FEWER RETAIL WORKERS NEEDED.
Want some fancy shoes fast?
Purchase the proprietary codes and your 3-D printer at home will manufacture a custom pair.



Sources (top-to-bottom): RobotLAB Group; SQ4D; PSA Corporation (Singapore) and Germany; MakerBot,

Eurozone:	2022	2023	2024	2025
Real GDP growth %	3.5	0.8	1.3	1.7
Private consumption %	4.2	0.9	1.6	1.9
Industrial production %	1.3	-1.4	0.7	2.2
Inflation (CPI) %	8.4	5.3	2.7	2.0

Tough road ahead: Lethargic growth seen in 2024 and 2025

SOURCES OF WEAKNESS:

- Europe struggles to emerge from years of economic & geopolitical shocks.
- Germany slides into recession, which drags down rest of EZ region.
- Inflation in Eurozone suddenly jumped to 2.9% in December 2023 (from 2.3% in Nov.)
- Main economic woes: Sluggish demand. Little new investments. Dismal exports. Weak Chinese demand. Wars in Ukraine & Middle East
- Biggest EZ challenges: (1) Lock-up secure sources of natural gas and oil.

(2) Fear Ukraine war may expand and destabilizes Europe.

(3) Resolve trade disputes with US over steel and aluminum tariffs, and "America First" subsidies;

(4) Stop disruptions to trade flows along the Red Sea and Suez Canal.

SOURCES OF STRENGTH:

- ECB unlikely to raise benchmark interest rates further, currently at 4.0%.
- Eurozone unemployment still at record low 6.4%. Labor market remains tight.
- Spain, France and Italy avoid recessions as the weak euro boosts tourism and economic growth.

Sources: The Economic Outlook Group; Multiple foreign central banks

The Dashboard: 12 leading indicators point to modest growth in 2024

Consumer spending patterns:

- Purchases of services, adjusted for price changes (Census, BEA)
- Personal savings rate (BEA)
- Confidence levels; 3-month moving average (UofM)
- Existing home sales (NAR)

Employment data:

- Average weekly hours worked; manufacturing (BLS)
- New applications for unemployment benefits (BLS)
- Average hourly earnings, private sector (BLS)
- Job openings in the private sector (BLS)

Business:

- ISM Services – new orders (ISM)
- Business Inventories (Manuf, Wholesale, Retail)
- Retail Inventory to Sales Ratio (CB)

Capital Markets:

- Cost of capital to business (interest rates and equity values)

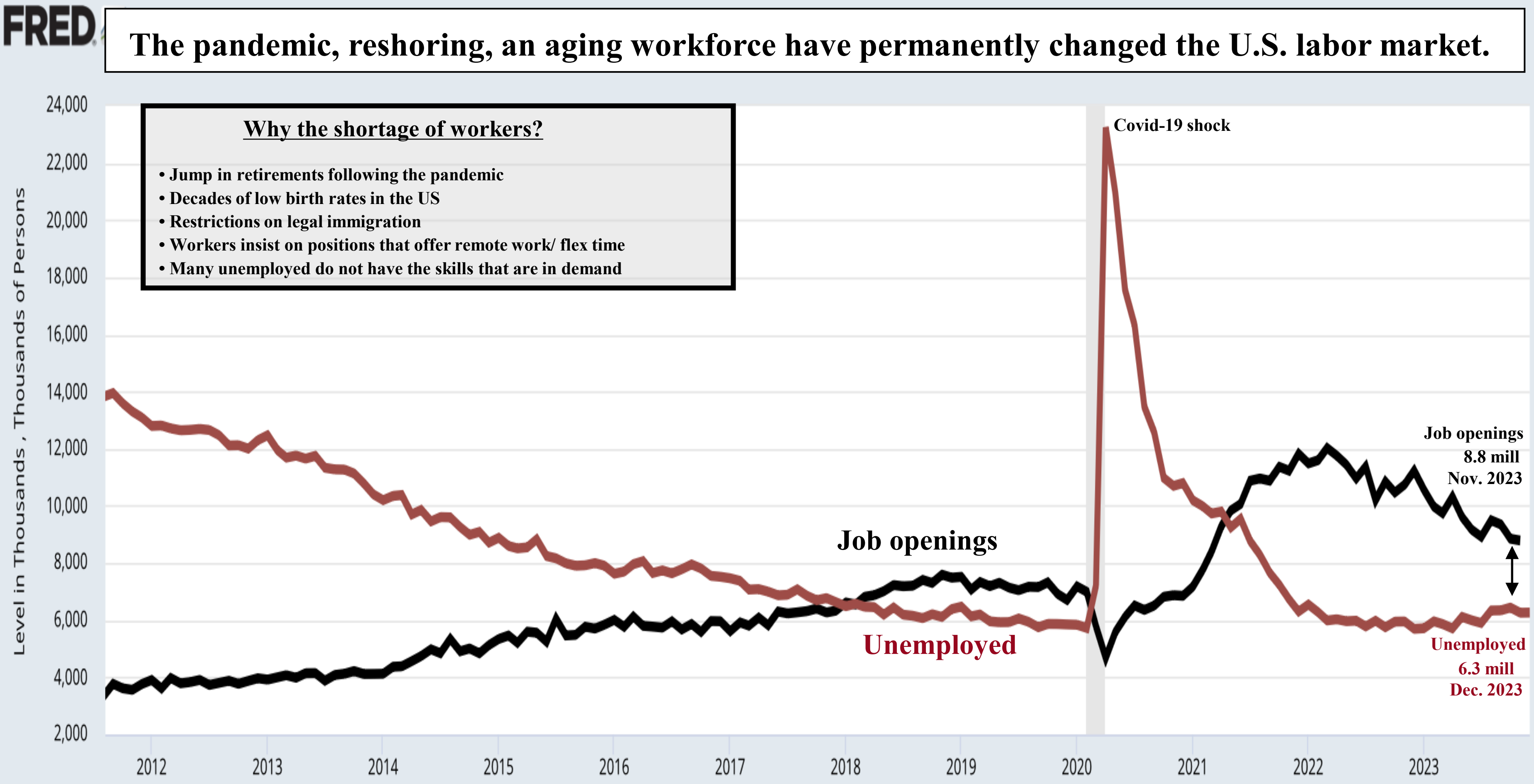
Depressing economic growth | In transition | Stimulating economic growth

Plus…sector specific coincident indicators

- **Retail sales: Food services and drinking places**
  census.gov/economic-indicators/#retail_sales
- **Hotel Performance (Occupancy, ADR and RevPar)**
  STR.com/data-insights/news/press-releases
- **TSA - Airport traveler traffic:**
  TSA.gov/travel/passenger-volumes

BEA-Bureau of Economic Analysis; CB- Census Bureau; UofM- U. of Michigan; NAR - National Assoc. of Realtors;
BLS-Bureau of Labor Statistics; ISM - Institute for Supply Management;

The pandemic, reshoring, an aging workforce have permanently changed the U.S. labor market.



Source: Bureau of Labor Statistics via FRED

US dollar to come under pressure in 2024 & 2025

1. Fed rate cuts likely to begin in 2024, reducing dollar's attractiveness.
2. US to issue $ trillions in new debt to finance government operations.
3. Uncertain outcome of US Presidential election & policy implications.
4. Perception that euro, yen, pound & emerging currencies have bottomed.
5. BRICS alliance seek alternate currency to dethrone primacy of US $.

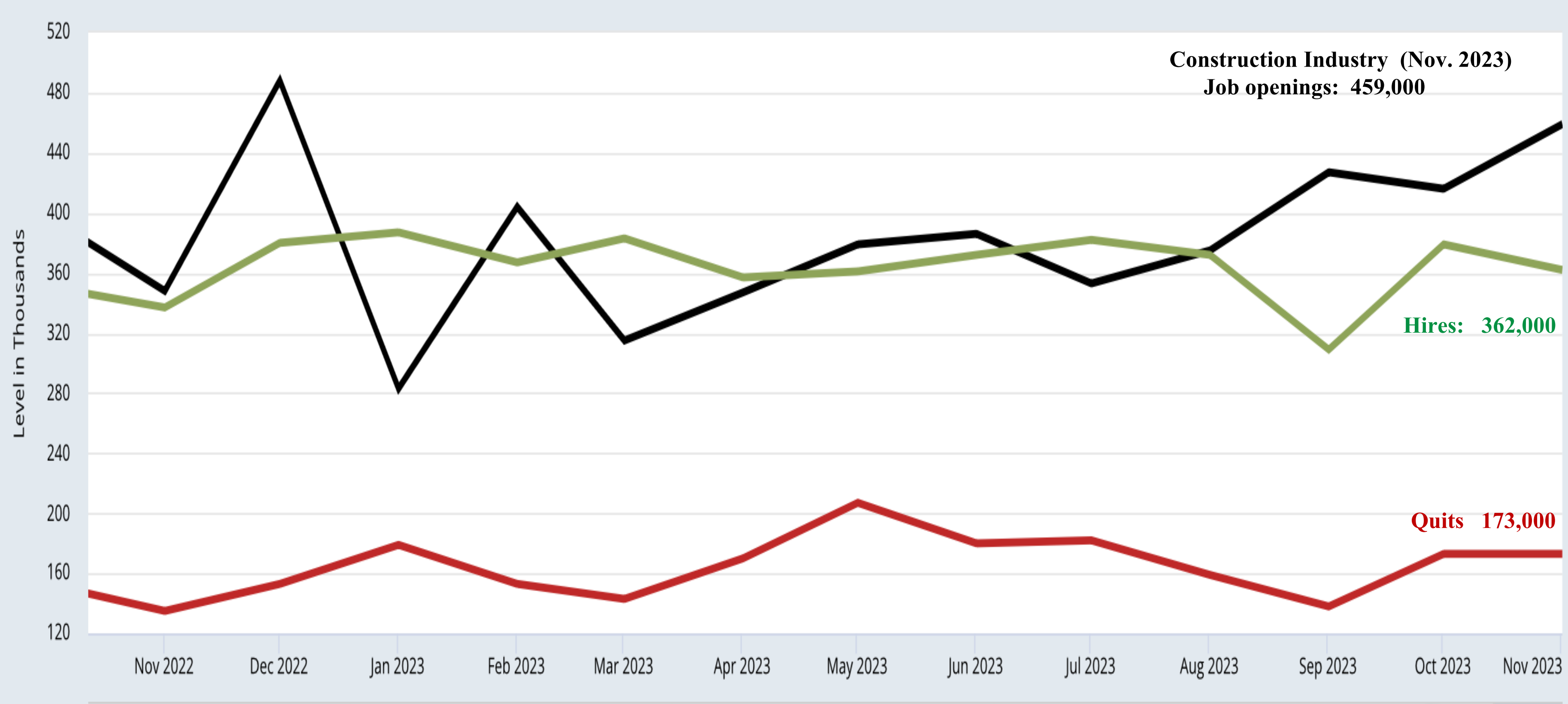
US Dollar strengthens   US Dollar weakens

(Per U.S. dollar, except as noted, year-end level)	2020	2021	2022	2023	2024	2025
Euro (in US dollars)	1.23	1.13	1.07	1.10	1.13	1.17
Japanese yen	104	115	133	141	132	125
UK pound (in US dollars)	1.36	1.35	1.20	1.27	1.27	1.30
Canadian dollar	1.27	1.27	1.35	1.32	1.30	1.26
Chinese yuan	6.5	6.4	6.9	7.11	7.0	6.7
Brazil's real	5.20	5.58	5.14	4.85	5.09	5.15
Mexican pesos	19.9	20.6	19.4	16.9	18.3	20.8

Source: The Economic Outlook Group (Forecasts)

CONSTRUCTION: Job openings in November jumped to the highest in 2023!

But retention has been difficult. ***Nearly 50% of all hires are to replace those who quit.***



Source: Bureau of Labor Statistics via FRED

NO BICYCLES!
NO ROLLERBLADES!
NO DOGS!
NO RECESSIONS!

RECESSION FACT-CHECK
Is the U.S. in recession or not?

FINANCIAL PRESS:

Recession: "Two consecutive quarters of negative growth."

Reality: While most recessions consist of 2 or more straight quarters of negative GDP, that's NOT always the case.

Examples:
- **2022: GDP was negative in 1Q & 2A, yet no recession call.**
- **2020: Economy was in recession for just 2 months.**
- **2008 - 2009: Some interim quarters had positive growth.**
- **2001: Recession did not include two consecutive quarters.**

NATIONAL BUREAU OF ECONOMIC RESEARCH

Its Business Cycle Dating Committee is the final arbiter of recession.

Evaluates three "Ds" when economic activity drops:

1. **Depth**
2. **Diffusion**
3. **Duration**

Key indicators the Committee tracks:

- **Real personal income *less* transfer payments**
- **Nonfarm payroll employment**
- **Real personal consumption expenditures**
- **Wholesale & retail sales adjusted for inflation**
- **Employment (based on household survey)**
- **Industrial production**

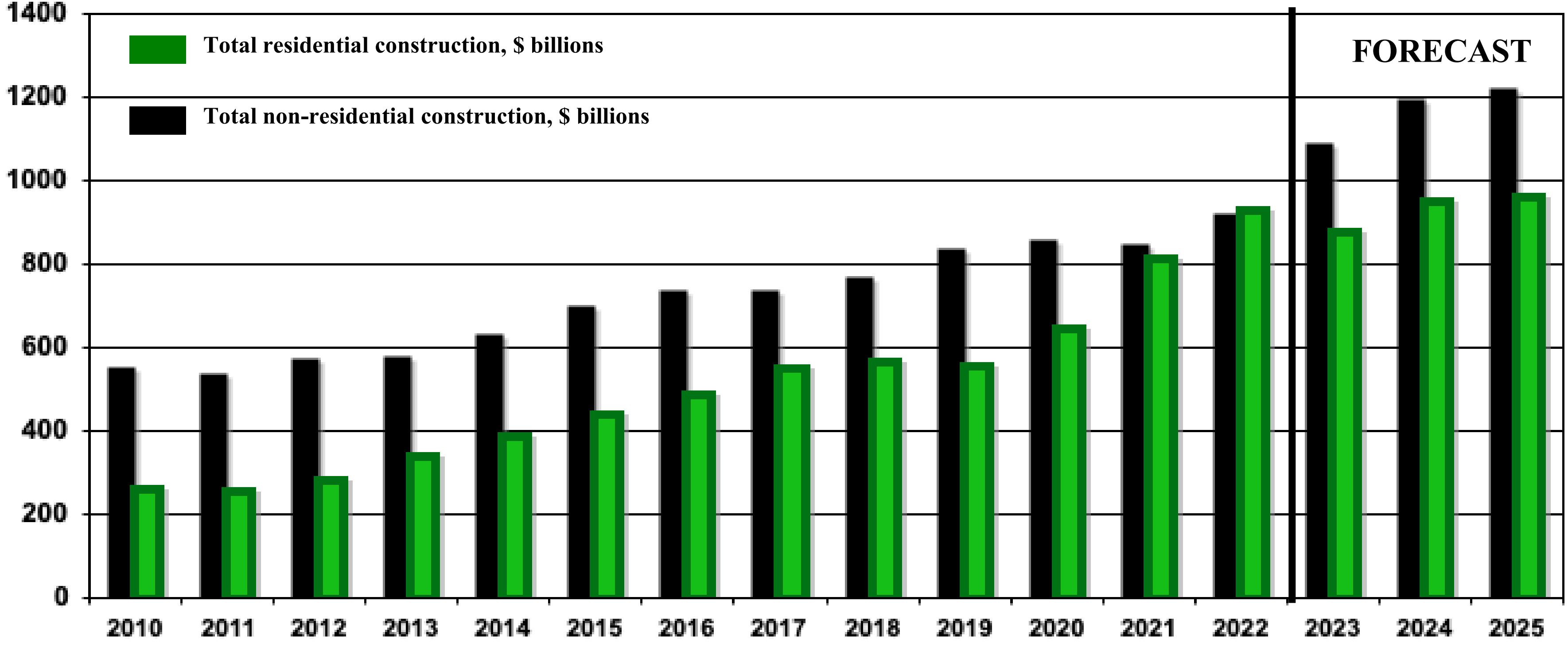
(There are no fixed rules on how each is weighted)

Construction Industry Regains Footing, But The Mix Of Projects Will Shift.

LEADERS: Manufacturing, Public Infrastructure, Education; Health Care

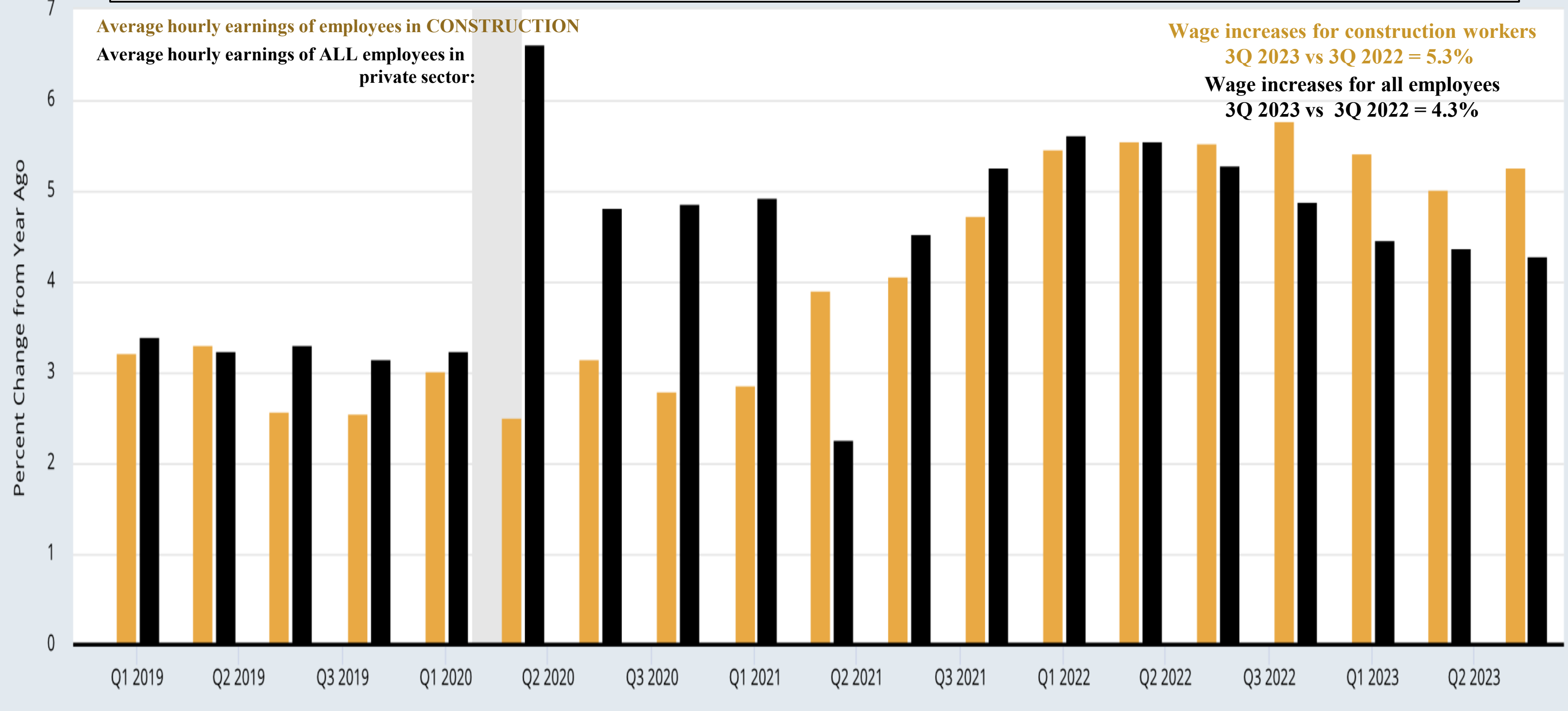
LAGGARDS = Office, Retail, Warehouses

Residential: Falling mortgage rates + lack of homes for sale will drive builders to ramp up starts.



Sources: Historical data from Census; forecasts – The Economic Outlook Group

The competition for workers in a tight labor market has pushed up wages for construction workers above the national average.



Source: Bureau of Labor Statistics via FRED

Top 20 states by $ volume in nonresidential construction starts

(Data from ConstructConnect)

	Jan-Jun 2023	% Change vs Jan-Jun 2022
1 Texas	$45,246,657,719	-7.9%
2 California	$22,861,474,861	-0.4%
3 New York	$16,766,055,717	8.6%
4 Florida	$14,947,286,542	-2.4%
5 Ohio	$12,604,260,858	71.5%
6 Indiana	$9,960,059,696	22.8%
7 Pennsylvania	$9,455,584,056	8.2%
8 North Carolina	$8,873,561,495	-15.1%
9 Georgia	$8,649,202,294	19.5%
10 Illinois	$7,859,884,582	-11.7%
11 Virginia	$7,399,982,187	35.8%
12 Michigan	$7,218,912,938	-1.9%
13 Alabama	$6,918,283,974	38.0%
14 Kansas	$6,841,432,531	208.2%
15 Massachusetts	$6,382,516,214	39.1%
16 Arizona	$5,710,243,485	55.1%
17 Maryland	$5,684,933,210	42.8%
18 Colorado	$4,794,087,059	25.7%
19 Washington	$4,690,694,405	-5.2%
20 Hawaii	$4,571,024,328	693.5%

Who gained & lost most construction jobs over the past year

(December 2023 vs. December 2022)

- 35 states saw construction jobs increase over past 12 months
- 14 states saw construction jobs decline over past 12 months.
- 1 states showed no net change in construction jobs

States that ADDED most construction jobs

Biggest Job gains:

- TX +32,800 (+4.2%)
- CA +25,900 (+2.8%)
- AZ +11,600 (+6.2%)

Biggest percentage increase

- SD +20.8% (5,200)
- AR +12.8% (7,600)
- KY +10.2%. (5,000)

States that LOST most construction jobs

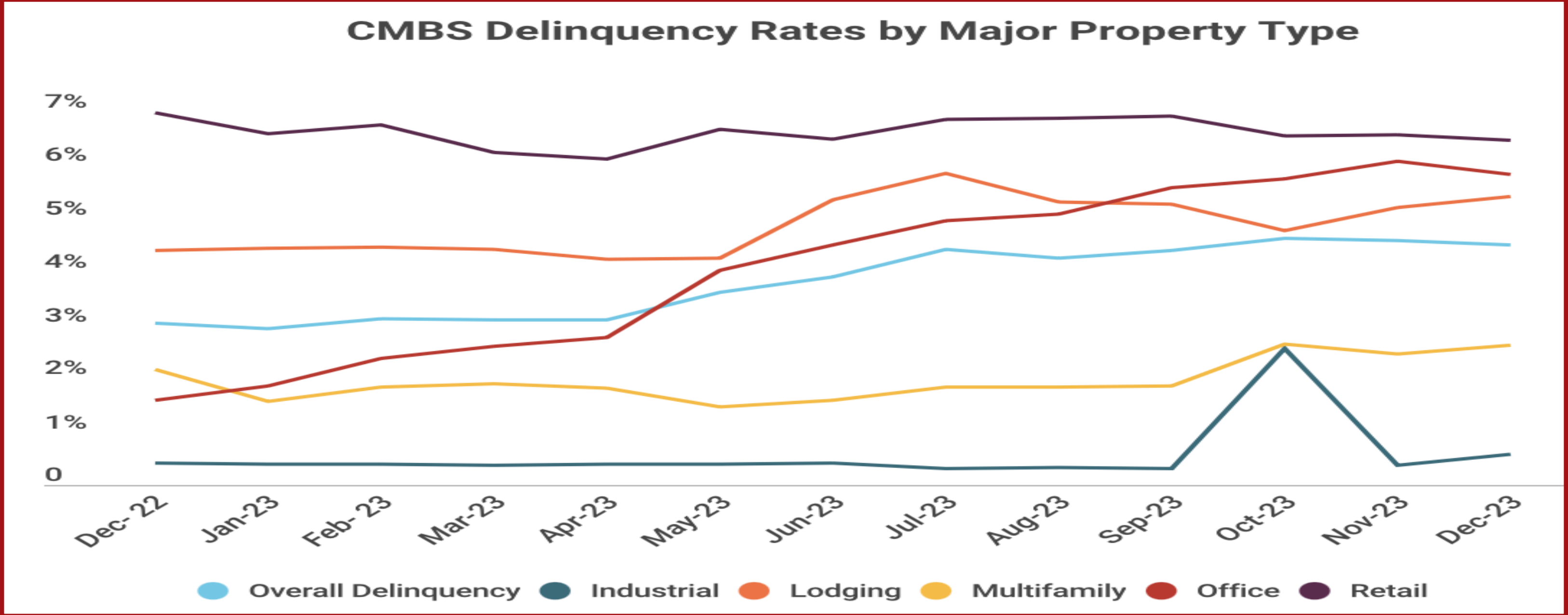
Biggest Job losses:

- NY - 15,600 (-3.9%)
- CO - 4,400 (-2.4%)
- NC -3,700 (-1.5%)

Biggest percentage loss

- NY -3.9% (-15,600)
- HI -3.6% (-1,400)
- ND -3.1% (-800)

Sources: Table - ConstructConnect; Construction employment : Associated General Contractors (AGC) & U.S. Bureau of Labor Statistics



	DEC-23	NOV-23	OCT-23	3 MO	6 MO	12 MO
Overall	4.51	4.58	4.63	4.39	3.90	3.04
Industrial	0.57	0.38	2.56	0.30	0.42	0.42
Lodging	5.40	5.21	4.76	5.27	5.35	4.40
Multifamily	2.62	2.46	2.64	1.85	1.59	2.17
Office	5.82	6.08	5.75	5.58	4.50	1.58
Retail	6.47	6.57	6.55	6.92	6.48	6.97

Source: Trepp CRE