By: Anirban Basu

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Sage Policy Group, Inc.

On Behalf Of

The FEMSA / FAMA Annual Fall Conference

September 21st, 2022

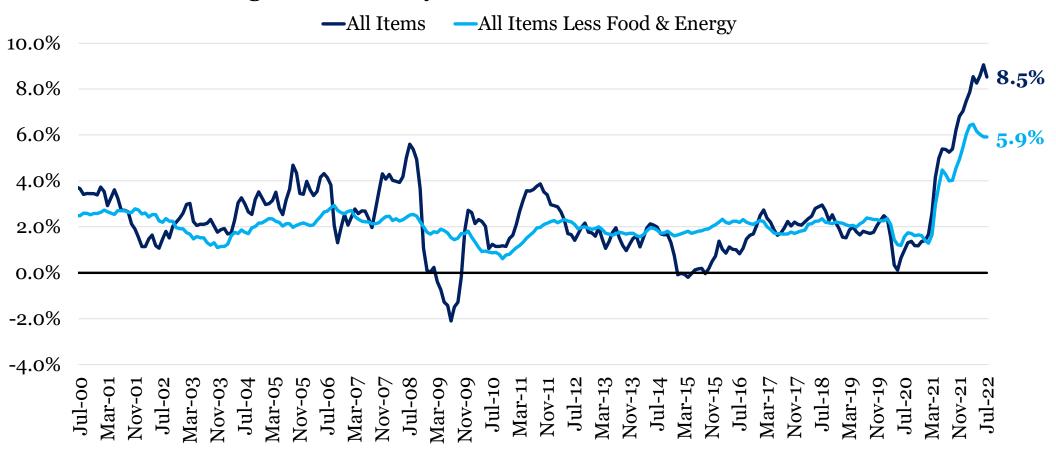


2021 – Specter of Inflation



U.S. Consumer Price Index

12-Month % Change, 2000 – July 2022





Source: U.S. Bureau of Labor Statistics

A Statement is Not Enough

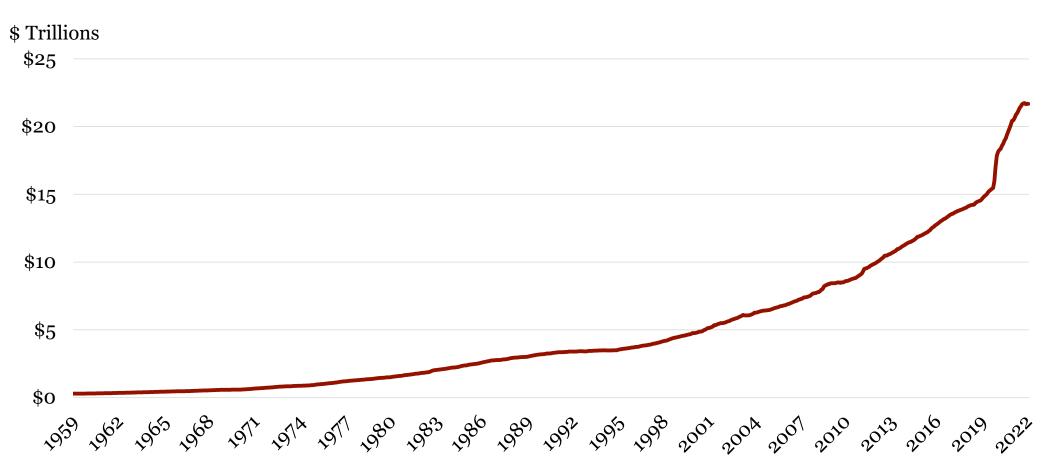
- "...Inflation has risen, largely reflecting transitory factors..." (FOMC Statement, June 2021)
- "...Inflation has risen, largely reflecting transitory factors..." (FOMC Statement, July 2021)
- "...Inflation is elevated, largely reflecting transitory factors..." (FOMC Statement, September 2021)
- "...Inflation is elevated, largely reflecting factors that are expected to be transitory..." (FOMC Statement, November 2021)

"Supply and demand imbalances related to the pandemic and the reopening of the economy have continued to contribute to elevated levels of inflation." (FOMC Statement, December 2021)

"...These problems have been larger and longer lasting than anticipated, exacerbated by waves of the virus. As a result, overall inflation is running well above our 2 percent longer-run goal and will likely continue to do so well into next year." (FOMC Chair Jerome Powell, December 2021)



U.S. Money Supply, 1959 – June 2022

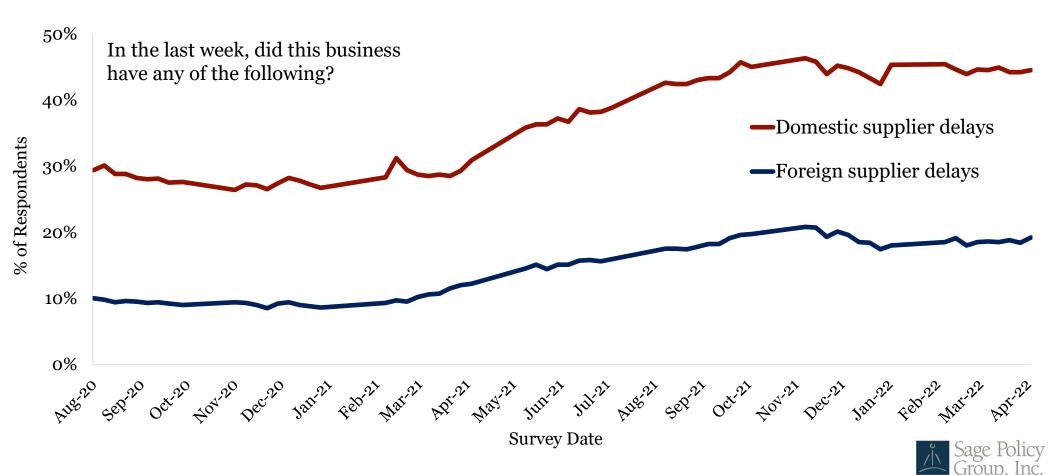


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Source: Federal Reserve

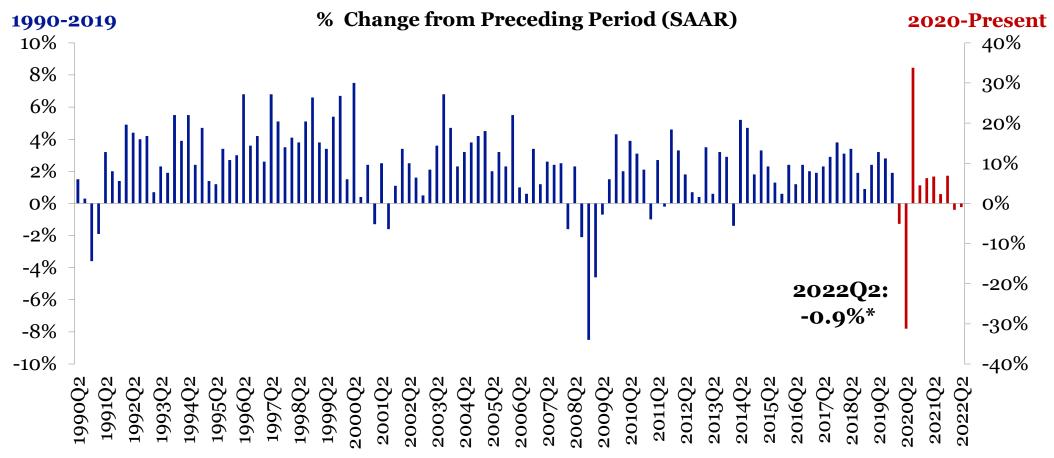
U.S. Supply Chain Disruptions & Supplier Delays

Census Bureau Small Business Pulse (SBP) Survey



Source: U.S. Census Bureau, Small Business Pulse (SBP) survey

U.S. GDP - For Your Eyes Only

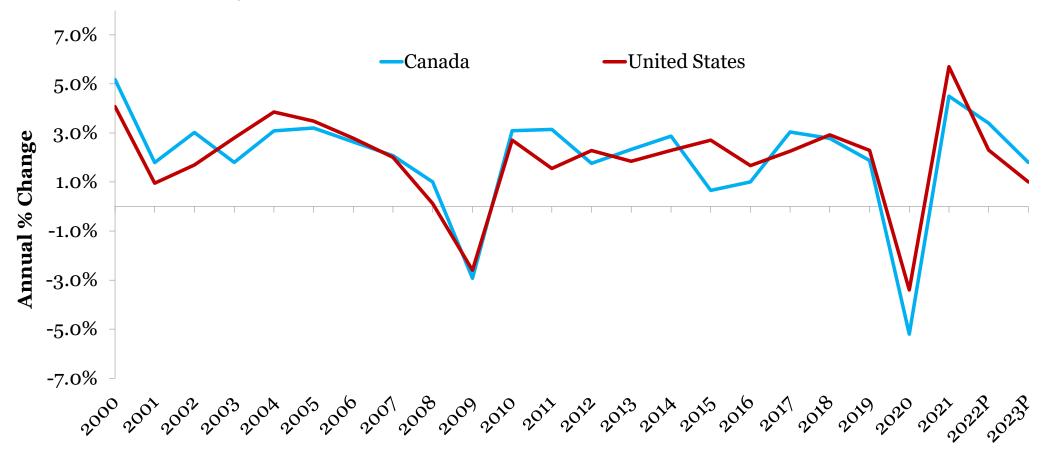




Source: U.S. Bureau of Economic Analysis *2022Q2: 1st (advance) estimate

GDP Growth, United States & Canada

2000 – 2023 Projected





Source: International Monetary Fund, July 2022 World Economic Outlook Update

The Employer Who Loved Me



Work Another Day

U.S. Job Openings, 2015 – June 2022

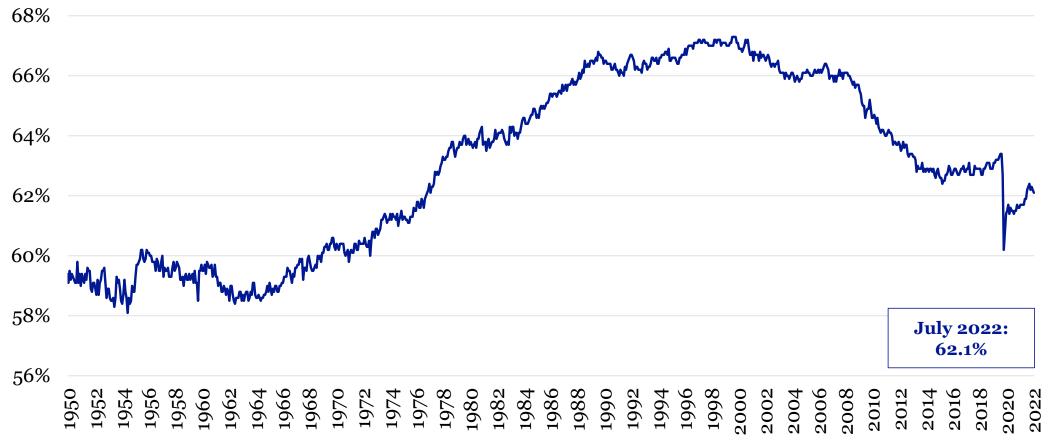


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Source: U.S. Bureau of Labor Statistics

Skyfall

U.S. Labor Force Participation Rate, 1950 – July 2022





A View to a Remote Worker

GoodHire's survey of 3,500 Americans found that:

- 68% of Americans would choose remote work options over in-office work;
- 45% would either quit their job or begin searching for a new one if their employer required them to return to their office full-time;
- 74% of Americans believe that companies not offering remote working arrangements will lose major talent in the workforce.

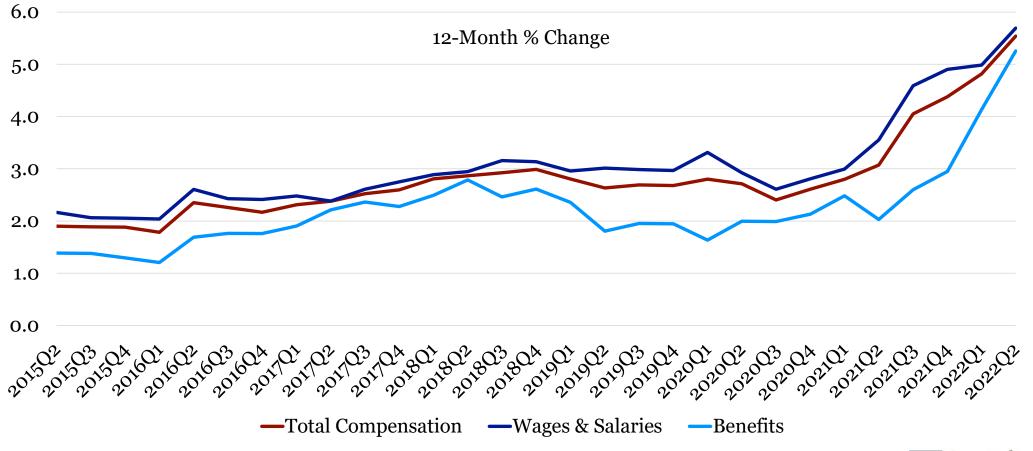
Ipsos' survey of more than 12,000 people across 29 countries found that two-thirds of working adults surveyed say that:

- They are more productive with a flexible work schedule (65%);
- They want flexibility in the amount of time they go into the office (64%);
- When COVID restrictions are no longer in effect, employers should be more flexible in terms of requiring employees to go to an office (66%).



License to be Paid

Employment Cost Index, Private Sector Workers, 2015 – 2022





Source: U.S. Bureau of Labor Statistics

Net Change in U.S. Jobs

May 2020 – July 2022





Source: U.S. Bureau of Labor Statistics

Employment Growth, 25 Largest Metros

February 2020 v. July 2022 Percent Change

Rank	MSA	%	Rank	MSA	%
	Dallas-Fort Worth-Arlington, TX	7.5%		Portland-Vancouver-Hillsboro, OR-WA	0.5%
	Atlanta-Sandy Springs-Roswell, GA	4.0%		Boston-Cambridge-Nashua, MA-NH	0.4%
	Riverside-San Bernardino-Ontario, CA	4.0%		Minneapolis-St. Paul-Bloomington, MN-WI	0.4%
	Charlotte-Concord-Gastonia, NC-SC	3.9%		Philadelphia-Camden-Wilm., PA-NJ-DE-MD	0.3%
•	Tampa-St. Petersburg-Clearwater, FL	3.3%		Orlando-Kissimmee-Sanford, FL	-0.1%
5				,	
	Denver-Aurora-Lakewood, CO	2.9%		Detroit-Warren-Dearborn, MI	-0.3%
7	San Antonio-New Braunfels, TX	2.8%	20	San Diego-Carlsbad, CA	-0.4%
8	Houston-The Woodlands-Sugar Land, TX	2.3%	21	New York-Newark-Jersey City, NY-NJ-PA	-1.0%
9	Phoenix-Mesa-Scottsdale, AZ	1.7%		Washington-Arlington-Alexandria, DC-VA-MD-WV	-1.1%
10	Chicago-Naperville-Elgin, IL-IN-WI	1.3%	22		
11	Seattle-Tacoma-Bellevue, WA	0.8%	23	St. Louis, MO-IL	-1.2%
12	Miami-Fort Lauderdale-West Palm Beach, FL	0.7%	24	San Francisco-Oakland-Hayward, CA	-1.7%
13	Baltimore-Columbia-Towson, MD	0.5%	25	Los Angeles-Long Beach-Anaheim, CA	-2.4%

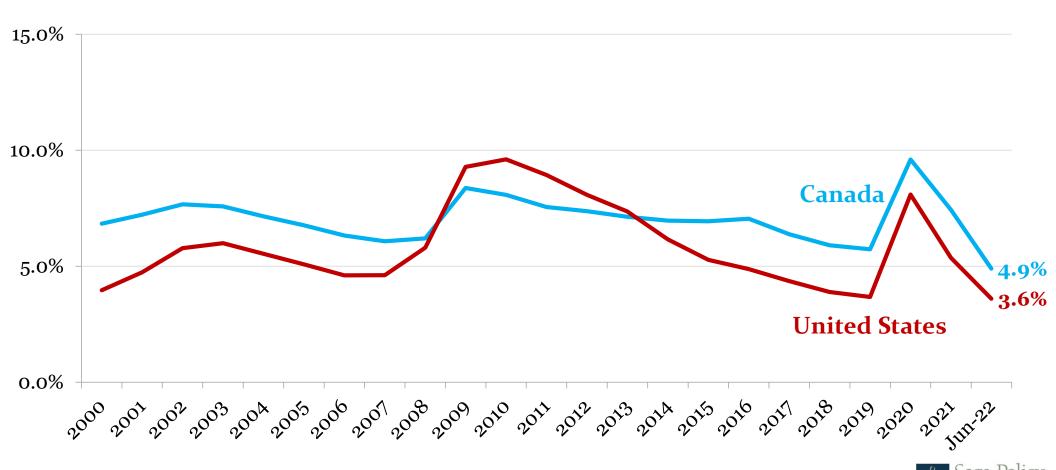
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics (CES) Survey. Note: data are not seasonally adjusted.





Unemployment Rate, United States & Canada

2000 – June 2022



 $Source: International\ Monetary\ Fund,\ U.S\ Bureau\ of\ Labor\ Statistics;\ Statistics\ Canada$

Unemployment Rate by Canadian Province/Territory

June 2022

Province/Territory	Unemployment Rate
Manitoba	3.8%
Saskatchewan	3.9%
Quebec	4.3%
British Columbia	4.6%
Prince Edward Island	4.9%
Alberta	4.9%
Ontario	5.1%
New Brunswick	6.1%
Nova Scotia	7.0%
Newfoundland and Labrador	9.9%
Canada	4.9%

Source: Statistics Canada Note: data are seasonally adjusted



Unemployment Rates, 25 Largest Metros

June 2022

Rank	MSA	%	Rank	MSA	%
1	Minneapolis-St. Paul-Bloomington, MN-WI	2.2	4.4	Washington-Arlington-Alexandria,	
2	Miami-Fort Lauderdale-West Palm Beach, FL	2.6	14	DC-VA-MD-WV	3.7
2	San Francisco-Oakland-Hayward, CA	2.6	15	Charlotte-Concord-Gastonia, NC-SC	3.8
4	St. Louis, MO-IL	2.8	15	Dallas-Fort Worth-Arlington, TX	3.8
5	Tampa-St. Petersburg-Clearwater, FL	2.9	17	Riverside-San Bernardino-Ontario, CA	4.0
6	Atlanta-Sandy Springs-Roswell, GA	3.2	17	San Antonio-New Braunfels, TX	4.0
6	Boston-Cambridge-Nashua, MA-NH	3.2	19	New York-Newark-Jersey City, NY-NJ-PA	4.4
6	Denver-Aurora-Lakewood, CO	3.2	19	Philadelphia-Camden-Wilm., PA-NJ-DE-MD	4.4
6	Orlando-Kissimmee-Sanford, FL	3.2	21	Baltimore-Columbia-Towson, MD	4.6
6	San Diego-Carlsbad, CA	3.2	21	Detroit-Warren-Dearborn, MI	4.6
11	Seattle-Tacoma-Bellevue, WA	3.3	21	Los Angeles-Long Beach-Anaheim, CA	4.6
12	Phoenix-Mesa-Scottsdale, AZ	3.4	24	Chicago-Naperville-Elgin, IL-IN-WI	4.8
13	Portland-Vancouver-Hillsboro, OR-WA	3.6	24	Houston-The Woodlands-Sugar Land, TX	4.8

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics (CES) Survey. Note: data are not seasonally adjusted. U.S. Unemployment Rate June: 3.6% | July: 3.5%



NFPA's 2021 Fire Service Needs Assessment Shows Ongoing Need for Training, Resources, & Staff

According to the National Fire Protection Association (NFPA) Fire Service Needs Assessment Survey (2021):

- The expansion of fire department roles and responsibilities shows no sign of stopping.
- Across all response types, from structural firefighting to active shooter situations, there are fire department personnel responsible for responding to incidents for which they have not been formally trained or certified.
- Most fire departments (87%) are responsible for wildland and wildland-urban interface (WUI) firefighting.
 - 78% of the departments that perform wildland and WUI firefighting operations have unmet training needs
- Staffing levels across job roles and functions have remained flat since 2015 and weekday staffing among volunteer fire departments remains a challenge.

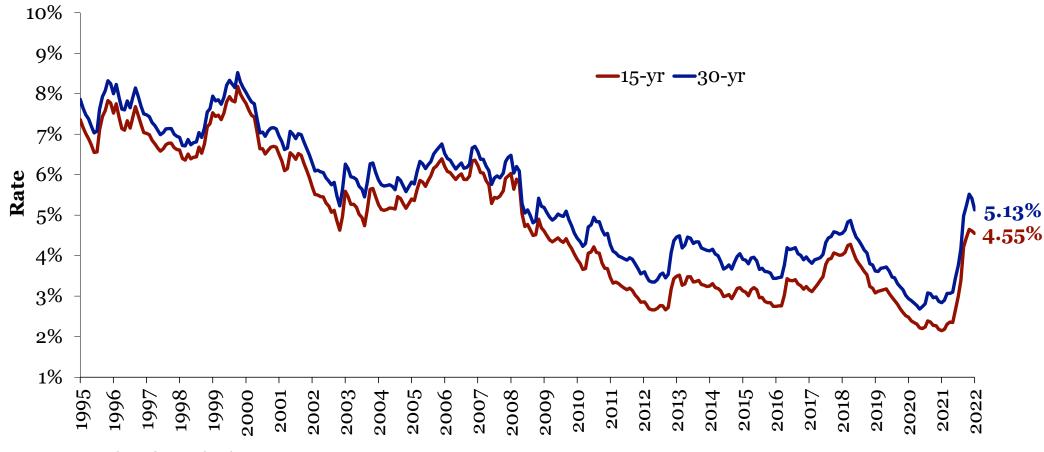
Source: NFPA, Fifth Needs Assessment of the U.S. Fire Service

Quantum of Construction



License to Borrow (at Low Rates)

15-Year & 30-Year Fixed Mortgage Rates, 1995 – August 2022*



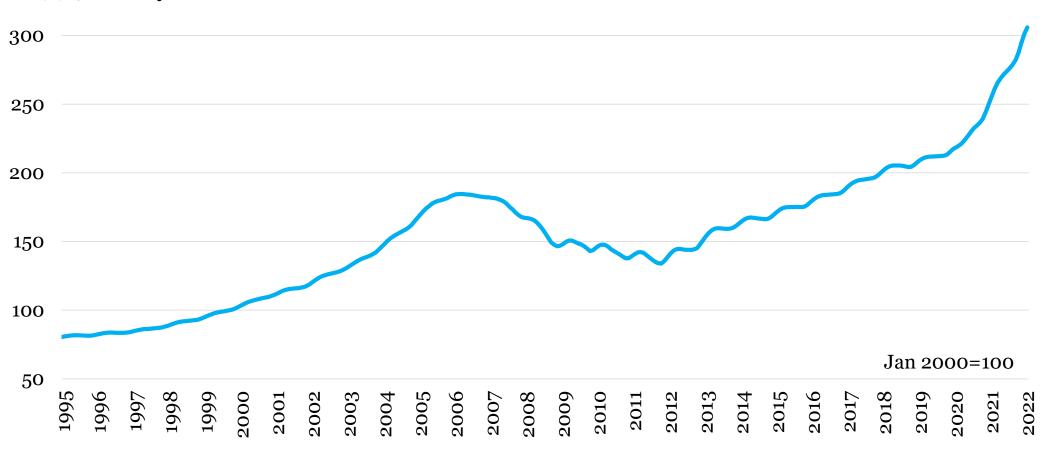
*Week ending 8/18/2022

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Source: Freddie Mac

S&P Case-Shiller U.S. National Home Price Index

1995 – May 2022

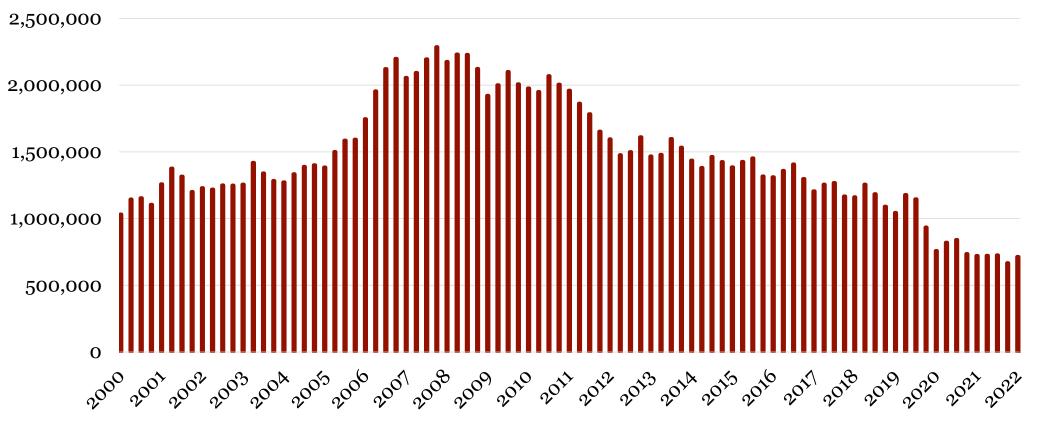




Source: Standard & Poor's

Inventory of Unsold Homes: Vacant Housing Units for Sale* 2000 – 2022Q2

Vacant Housing Units for Sale



*Units for sale only, excludes units both for rent and sale

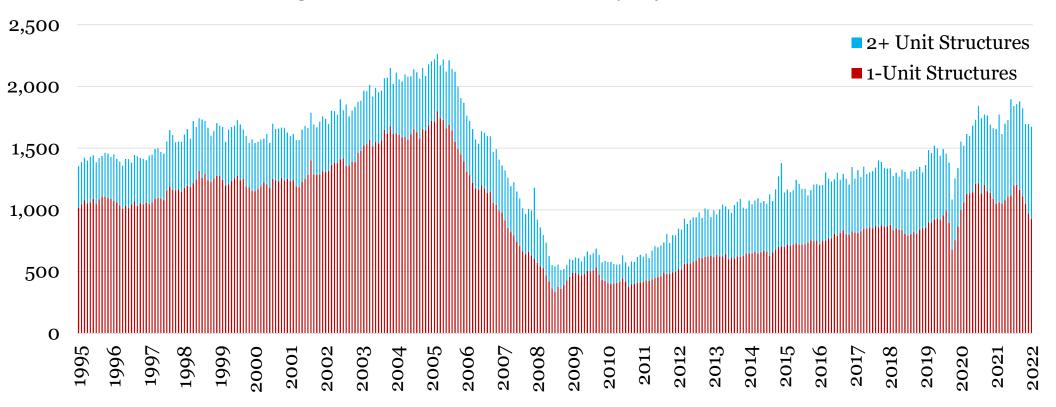


Source: U.S. Census Bureau

U.S. Residential Building Permits

1995 – July 2022

Building Permits (000's of Units), Seasonally Adjusted Annual Rate

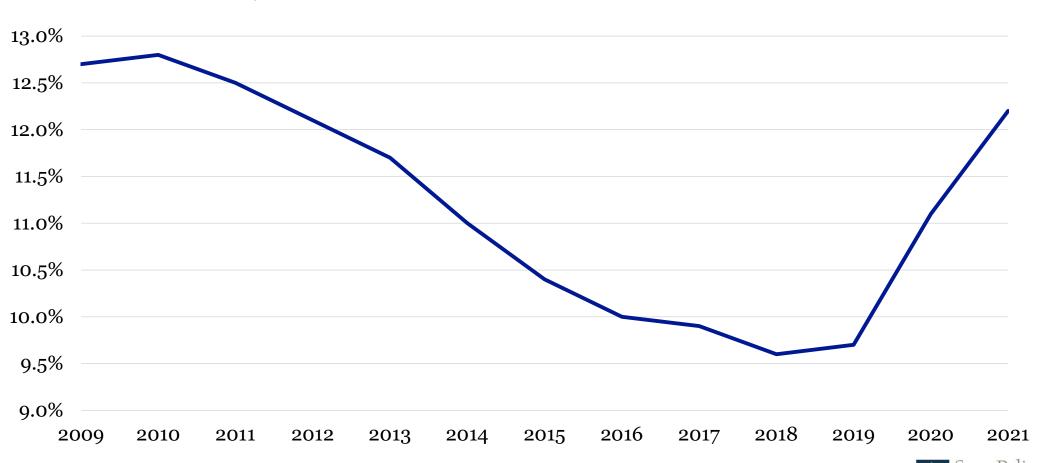




Source: U.S. Census Bureau

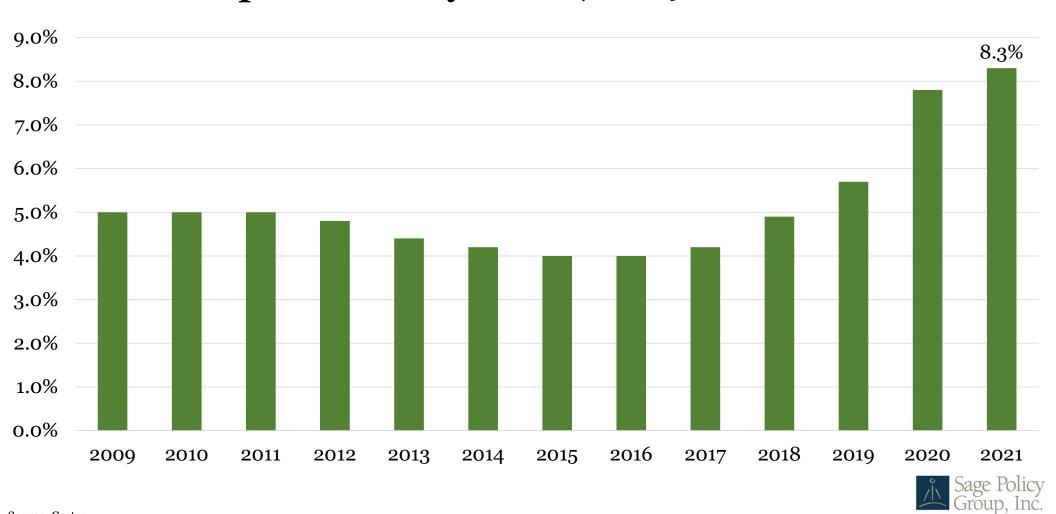
Occupancy is Not Enough

U.S. Office Vacancy, 2009 – 2021



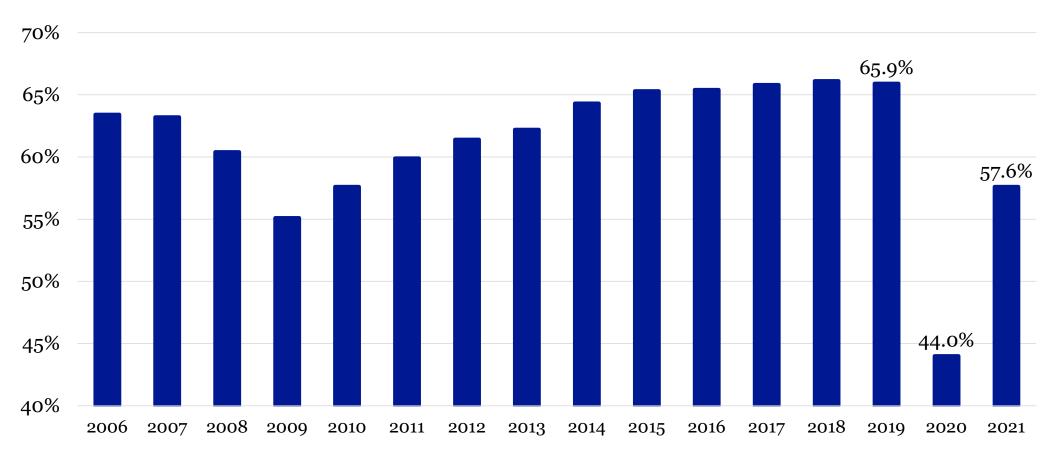
Source: Costar

U.S. Retail Space Vacancy: Malls, 2009 - 2021



Source: Costar

U.S. Hotel Occupancy, 2006 – 2021

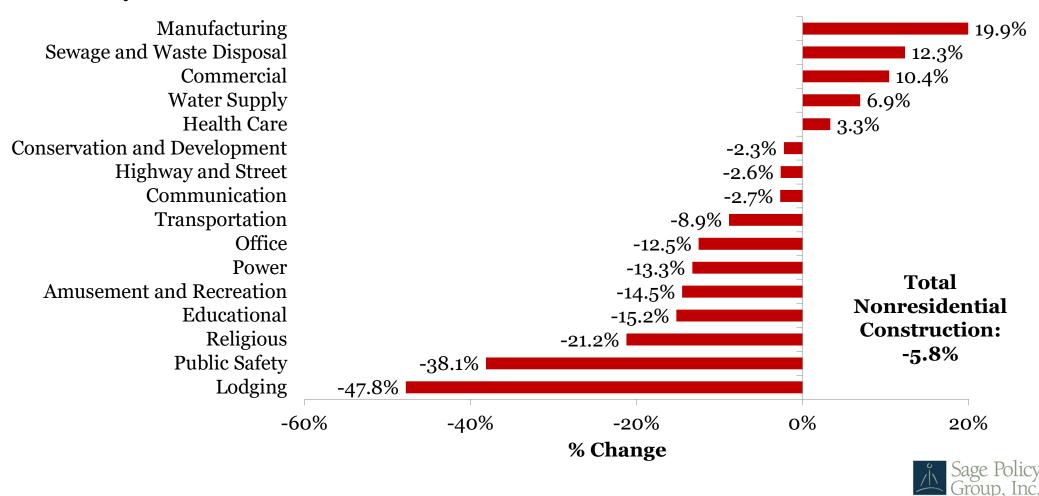




Source: Costar

Nonresidential Construction Spending by Subsector

February 2020 v. June 2022



Source: U.S. Census Bureau

U.S. GDP: Nonresidential Fixed Investment in Structures

2003 – 2022Q2*

\$ Billions of chained 2012 dollars, seasonally adjusted annual rate





Source: U.S. Bureau of Economic Analysis *2022Q2: 1st (advance) estimate

Canada Building Construction Investment

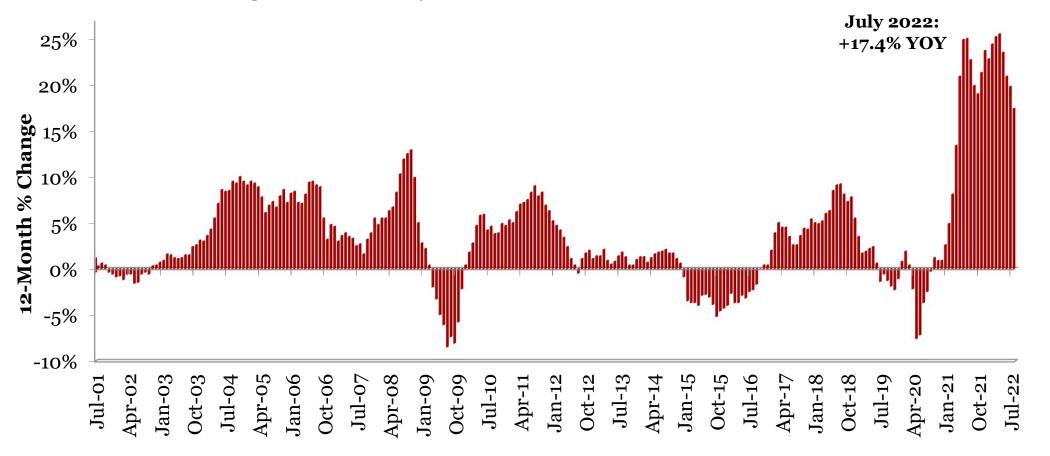
2010 - May 2022



Source: Statistics Canada, Table 34-10-0175-01 Investment in Building Construction

Inputs to Construction PPI

12-Month % Change, 2001 – July 2022

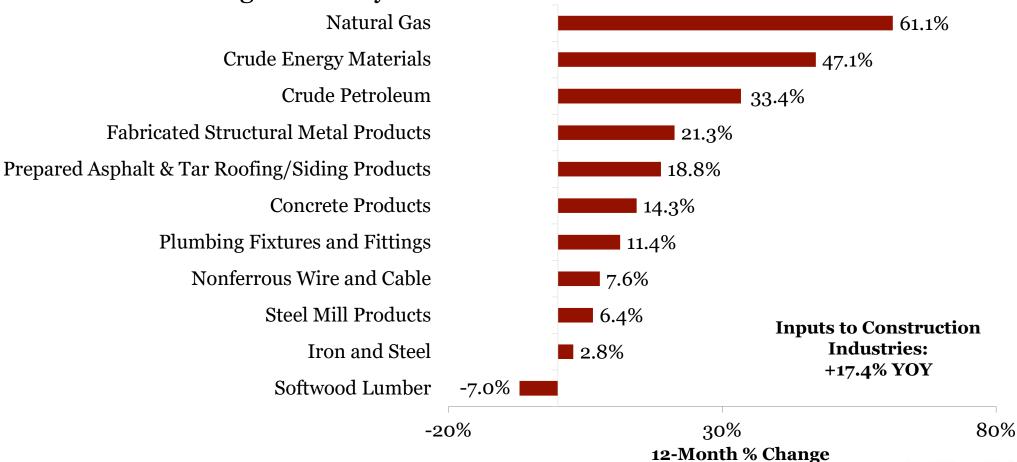




 $Source: U.S.\ Bureau\ of\ Labor\ Statistics.\ Note:\ Data\ are\ not\ seasonally\ adjusted$

Construction Materials PPI

12-Month % Change as of July 2022



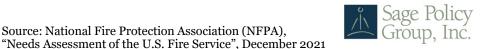
Source: U.S. Bureau of Labor Statistics. Note: Data are not seasonally adjusted

Fire Apparatus Continues to Age

- According to the National Fire Protection Association (NFPA), vehicle age remains a challenge for fire departments in the U.S...
- As of 2021:
 - Almost 50% of engines/pumpers in service are 15 or more years old (up from 43% in 2015*);
 - 41% of ladders/aerials in service are 15+ years old;
 - 58% of tankers/tenders in service are 15+ years old;
 - 26% of ambulances in service are 15+ years old.

- Only 38% of fire departments plan and budget for apparatus replacement on a regular schedule;
- 31% of departments plan for replacement, but have no budget;
- 31% have no plan or budget;
- Larger departments are much more likely to have a plan and a budget, while 45% of the smallest departments have no plan or budget.



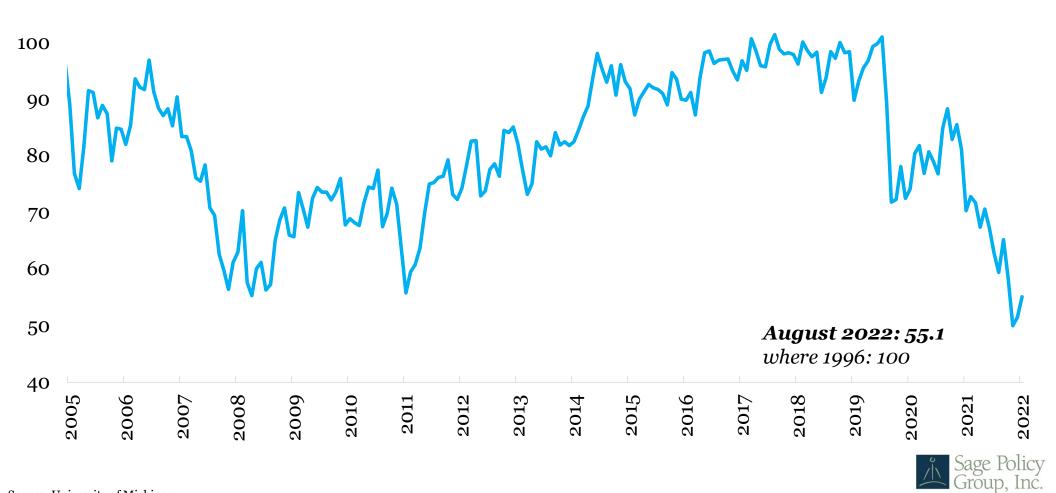


My Name is Ban, Anirban



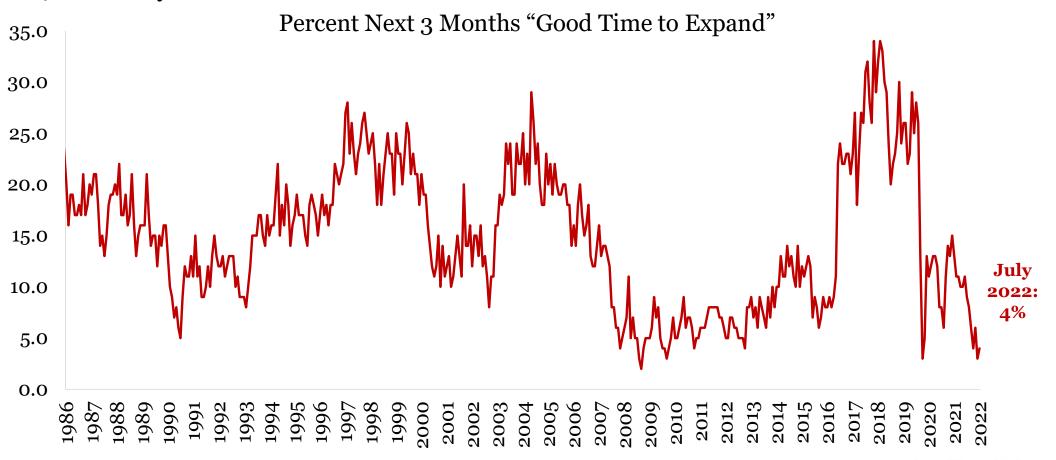
University of Michigan Index of Consumer Sentiment

2005 – August 2022



 $Source: University \ of \ Michigan$

NFIB Index of Small Business Optimism: Good Time to Expand 1986 – July 2022

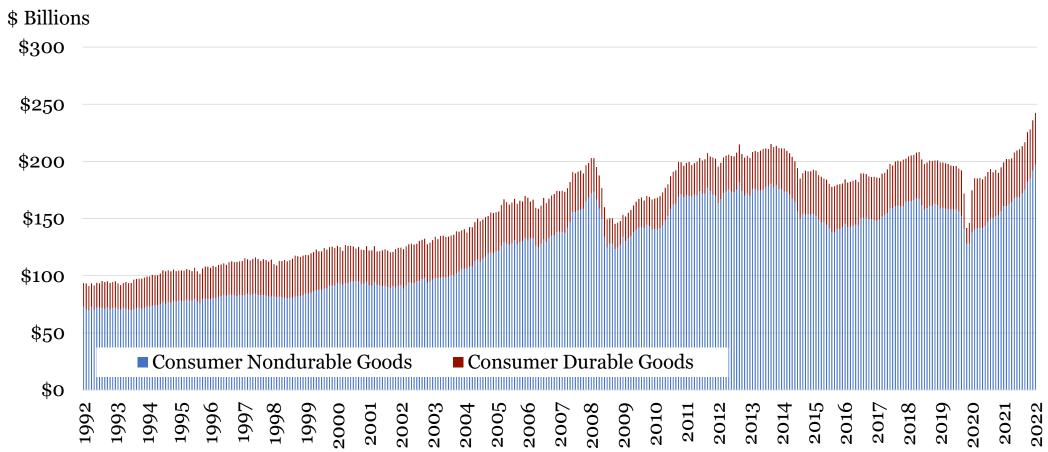




Source: National Federation of Independent Business (NFIB)

U.S. Manufacturers' New Orders: Consumer Goods

1992 – June 2022

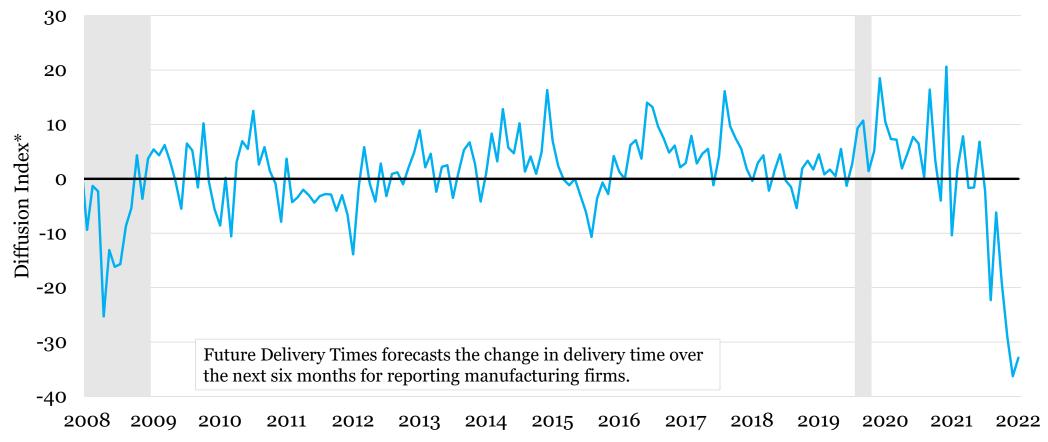


Source: U.S. Census Bureau. Note: Due to the nature of nondurable goods, the reporting figure for both their Shipments and New Orders will be identical.



Philly Fed Manufacturing Business Outlook Survey

Future Delivery Times, 2008 – July 2022



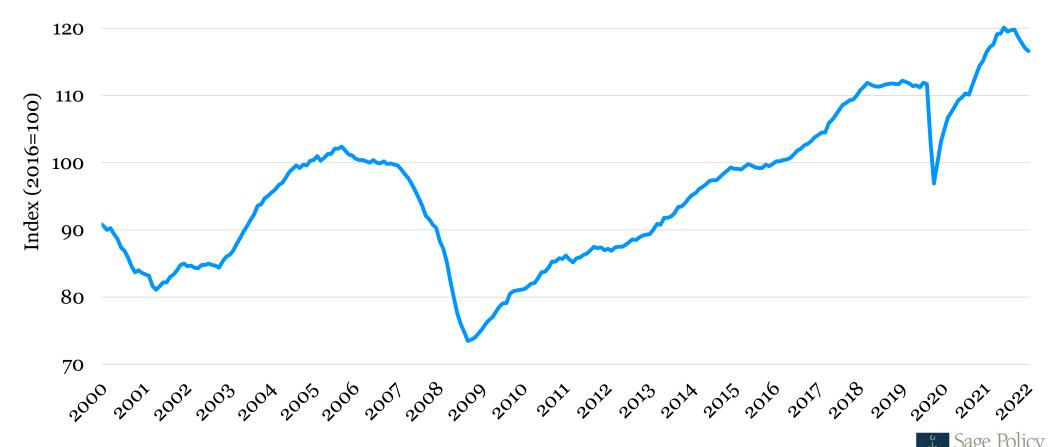
Source: Federal Reserve Bank of Philadelphia *The diffusion index is calculated by taking the percent reporting increases and subtracting the percentage reporting decreases.

U.S. recessions



Conference Board: U.S. Leading Economic Index

2000 – July 2022



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You Only Forecast Twice



- This will be a year of growth, but 2023 could be very different.
- The economy will remain unbalanced, with supply struggling to keep up with demand Ukraine/Russia and Omicron/China/Europe hampering recovery.
- Along with rising wages amidst the Great Resignation, that translates into higher than average economywide inflation in 2022 (stagflation anyone?).
- Yes, I'm an economist, so I am forecasting interest rates to increase.

 Sage Policy

Speaking of "For Your Eyes Only"

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