

Macro-Bite of USA

Analysis and Interpretation of Macroeconomic data up
to Q3 2025



Outline

Consumer

Sentiment, Employment, Housing, Spending & Inflation

Investments

Sector vs Geography

Exports & Imports

Goods vs Services

Government Fiscal & Monetary

Debt & Bonds, Money Supply & Velocity, Spending, Gold & Dollar

USA Economic Summary

GDP, Population, Consumption behaviors

Executive Summary

Consumer

- ∞ Consumer sentiment is maintaining historical lows, while spending at high rates from inflation
- ∞ Improvement won't come from simple Political or Social trend – Economics has to improve
 - ∞ Full-time job is a major barrier in income
 - ∞ Still very biased for White & Men (>25% rate of higher income class for all else same)
 - ∞ Housing doubled in unaffordability over past 7 years
 - ∞ Stock was squeezed from Institutional buyers, Price pinched up - all buyers already in

Investments

- ∞ Europe primary investments partner, Canada oversized investor in US
- ∞ Little direct business/investments with Middle East & Africa despite global importance in development

Exports & Imports

- ∞ Goods net negative for GDP, Services net positive driven by Intellectual Property licensing and Travel
 - ∞ Changes in IP law from AI could see dramatic loss

Government Fiscal & Monetary

- ∞ GDP growth driven more by Monetary policy, shift in trend downward post 2008 with return from post-COVID policies
- ∞ Consumption driven by shrinking group of high earners, recent inflation depleted savings and pushed consumer debt

GDP By Definition

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{X} - \text{M})$$

Consumer Spending Investment Gov. Spending Exports Minus Imports

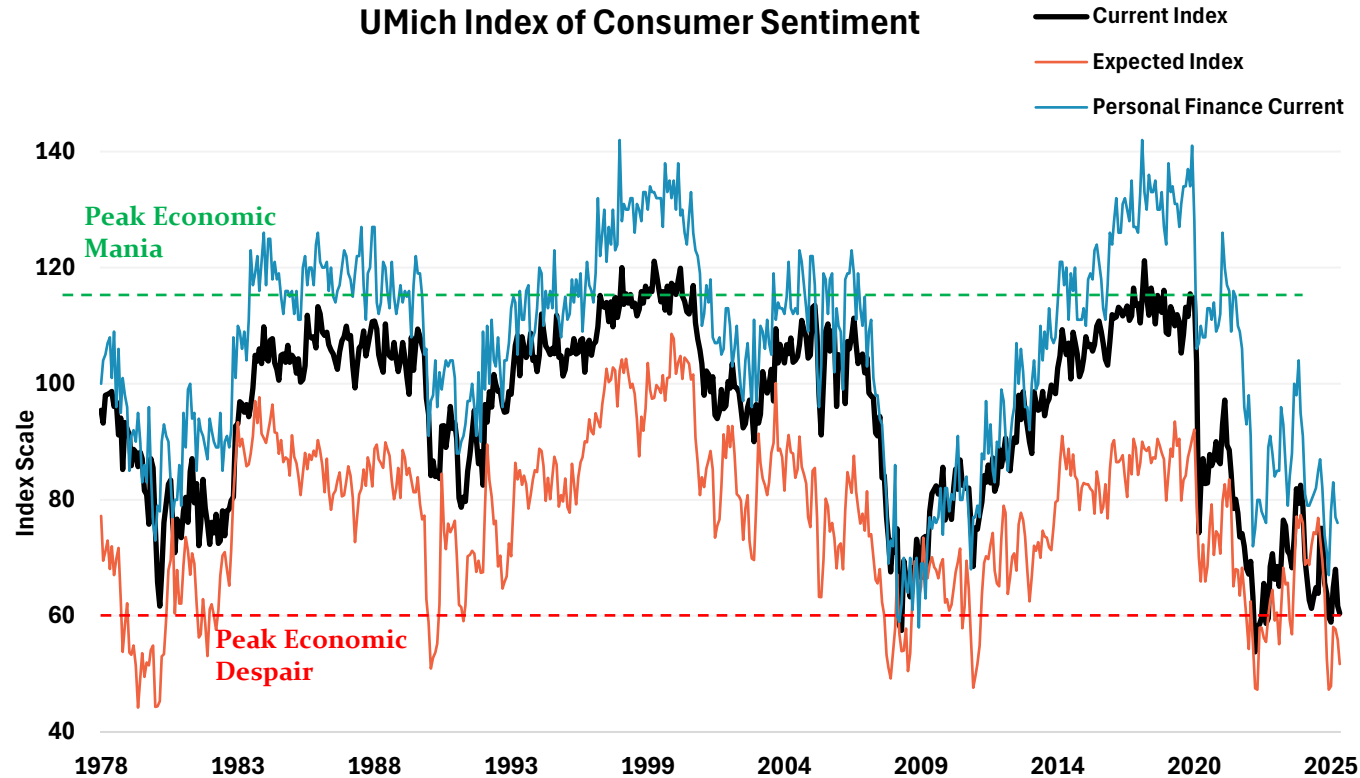
This analysis focuses on a macroeconomic lens on the USA, through the definition of GDP.

The economic strength of a system is equal to the Consumer plus Government spending, Investment into the system, and the net result of *external* trade.

Consumer Overview

- ∞ **Index of Consumer Sentiment**
- ∞ **Employment Breakdown**
- ∞ **Housing**
- ∞ **Spending, Credit & Savings**

Consumer Sentiment



A Absolute data values

- ∞ US is hovering around “Peak Economic Despair”, worst consumer sentiment period on record
- ∞ Sentiment worsening, fears over Personal Financial future most foreshadowing economic pain¹
- ∞ Consumers typically negative about general economy, positive about own financial future
- ∞ Consumers believe they’ll outperform general economy after crisis, otherwise tie own financial future to current economy²

1

Consumer Sentiment & Personal Finance Normalized for expected changes reveals General Negativity, Personal Positivity

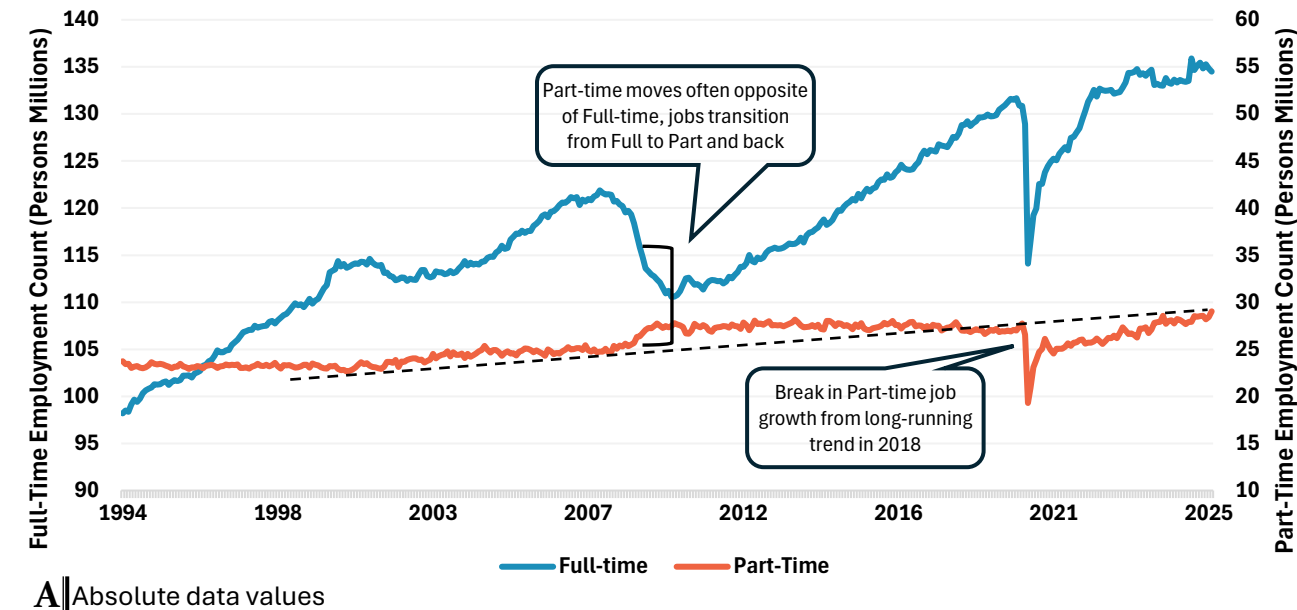
2

Consumer Sentiment Normalized to Initial Reading finds Consumers’ expectations have tied to current post-2008 crisis; lacks leading effect

Employment

- ∞ Employment stalled now falling
 - ∞ Began prior to AI, partially hidden by change in definitions
- ∞ Annual Total Hours worked by all US employees increased from 200 to 260 Billion hours same timeframe, equivalent Growth to Employment
 - ∞ “Cure” for underemployment is working slower

Full & Part Time Employment shows 38% growth in 30 years, <2% in 5



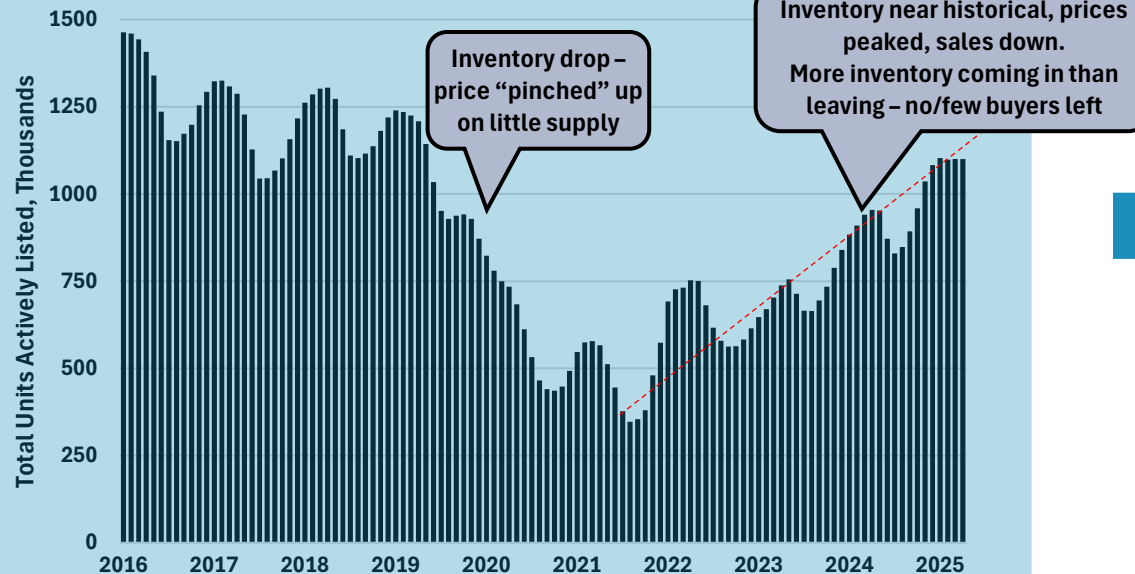
- 1 Monthly Change in Employment Levels shows (1) Significant flexibility of Part-time labor pool, (2) COVID was more destructive, permanently, to Part-timers, (3) Significant shed of Part-timers in late 2024 on par with 2002 & 2010 Bust periods - months earl

- 2 Monthly Change in Multiple Job Holders shows those with Multiple-Part time jobs are gaining employment the most, stressing lack of full-time mobility

Housing

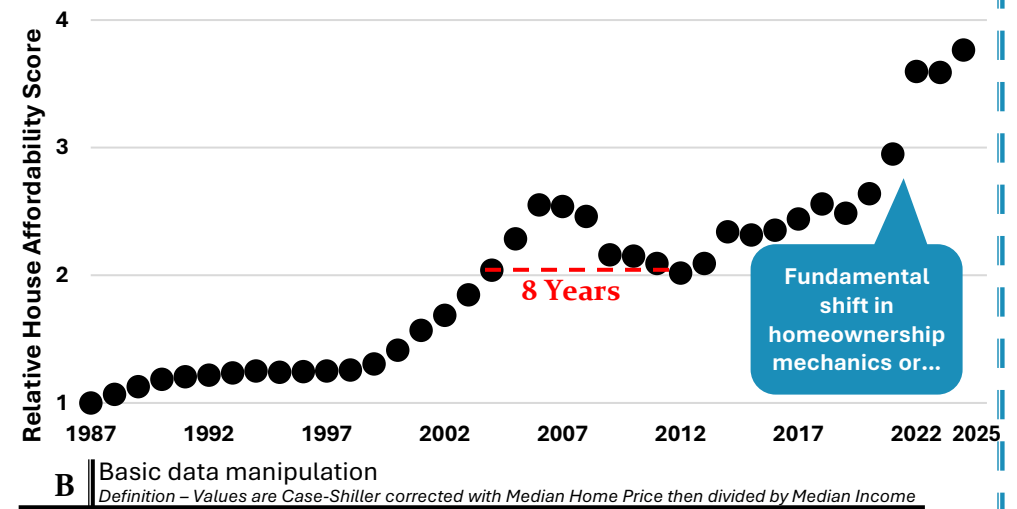
- ∞ Fiscal & Monetary policy post-COVID weaponized Institutional ownership of Housing for trickle-down fiscal stability of municipalities, and inflation of GDP and US collateral asset markets
- ∞ Ownership affordability has dropped over past 7 years, twice as expensive as 2012
- ∞ **Institutional Ownership >11% of Total US Housing Stock**

Active Listings Housing Inventory shows extreme supply-issues post-COVID, returning to norm



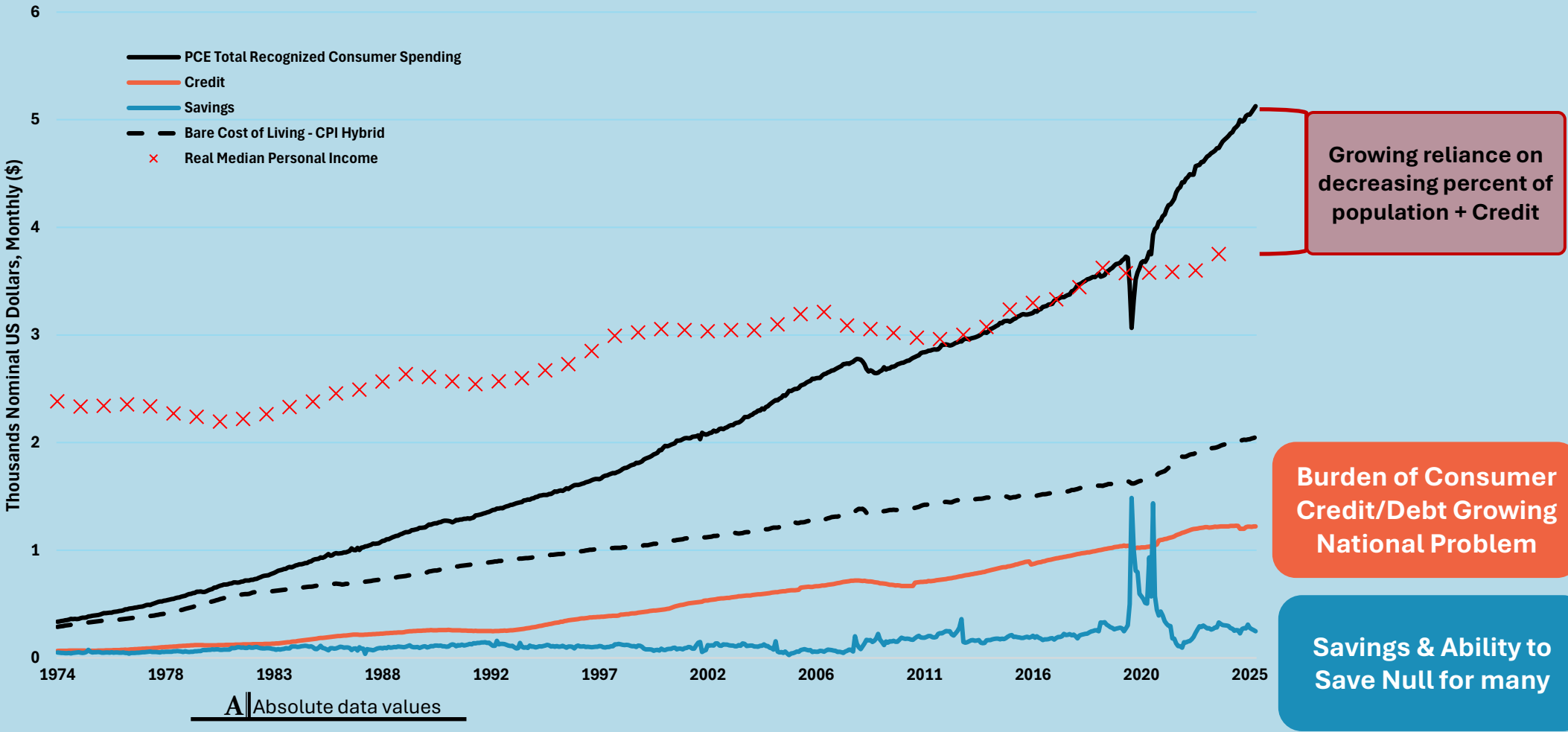
A Absolute data values

Housing Affordability, Normalized Price to Median Income, shows doubling of REAL cost to own since 2012



Spending, Savings & Credit

Monthly Consumer Spending, Credit, Savings and Income show growing weight of Credit in maintaining above necessities



*Bare Cost of Living – CPI Hybrid: Internally calculated bare minimum cost of living in Oct. 2025, historically driven by Consumer Price Index
Monthly bill: Housing - \$1200, Communications - \$60, Groceries- \$300, Transportation - \$200, Healthcare - \$300

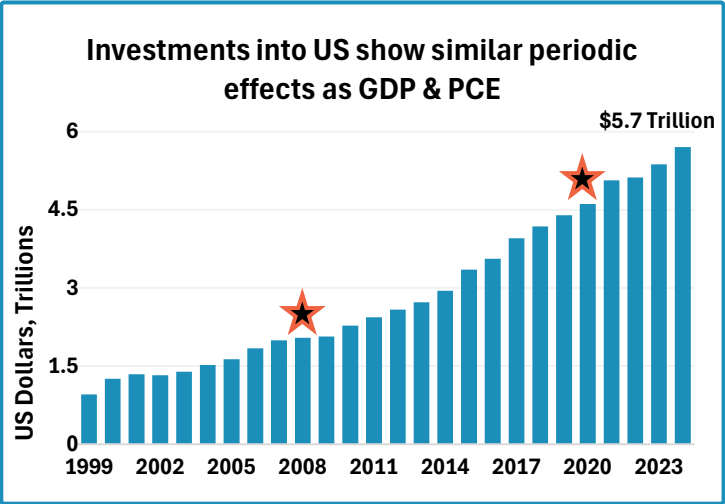
Investments

- ∞ By Sector
- ∞ By Geography

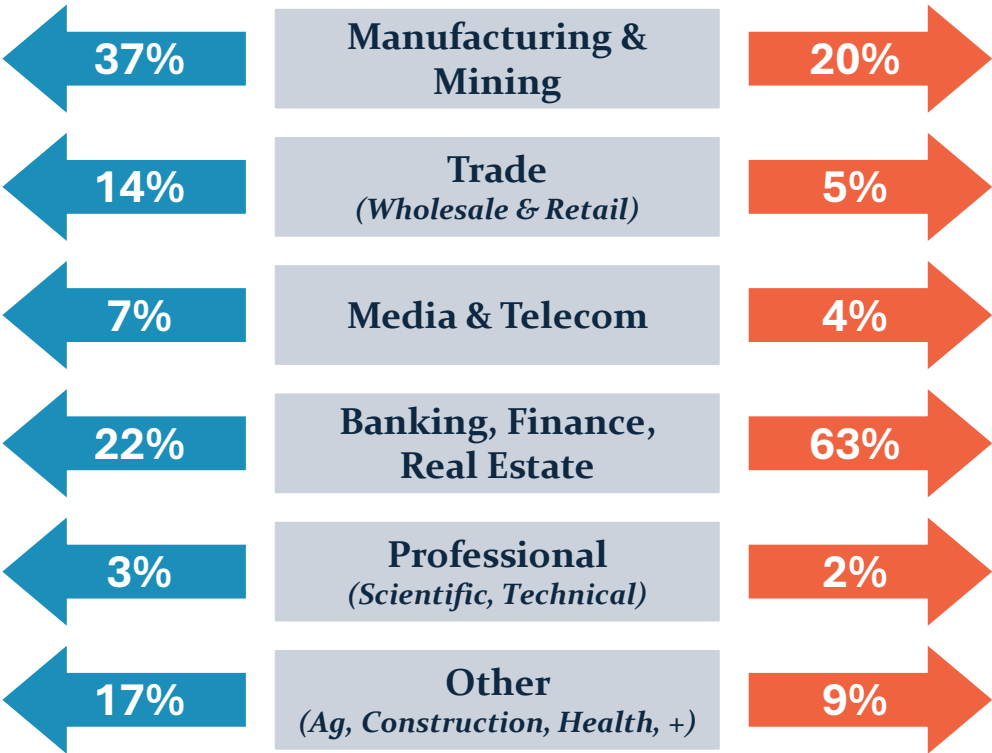
Investments by Sector

- ∞ High US stock prices often result in negative balance due to duplicate listings (US public market prices often inflated vs domestic market)
- ∞ Dollar devaluation versus foreign currencies often results in positive balance due to rise in value of US investments in foreign-backed assets

Foreign Investments into US

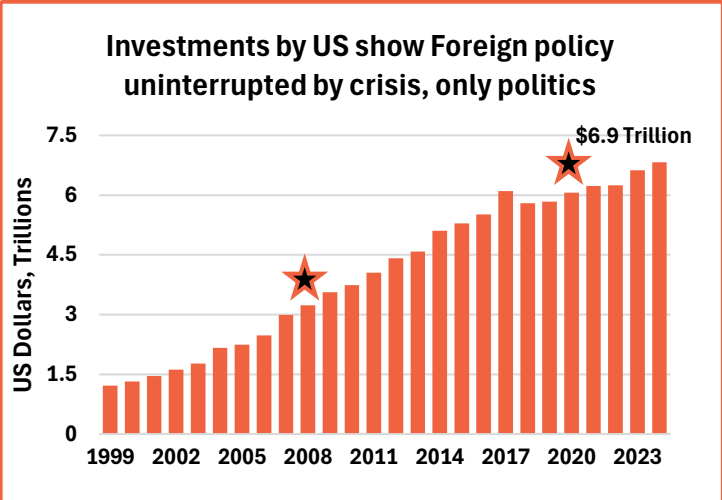


A Absolute data values



B Basic data manipulation
Definition – All Values Average of Yearly sector makeup 1999-2024

US Investments into Foreign



A Absolute data values

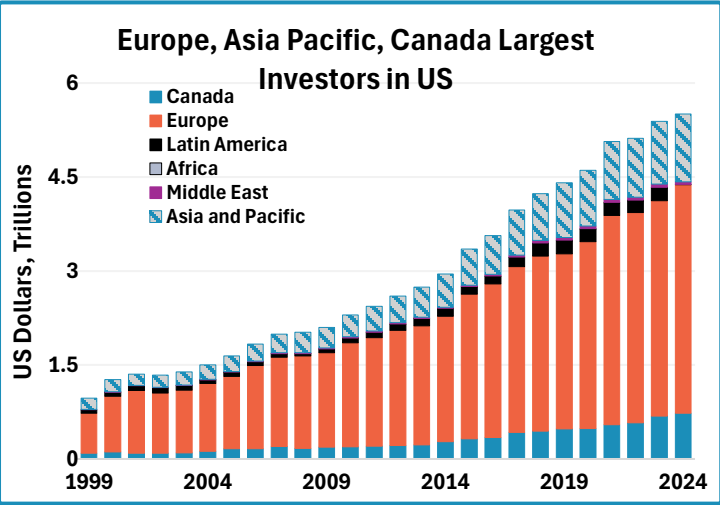
2024 Net:
-\$1.2
Trillion

*Rounding may cause sums above 100%

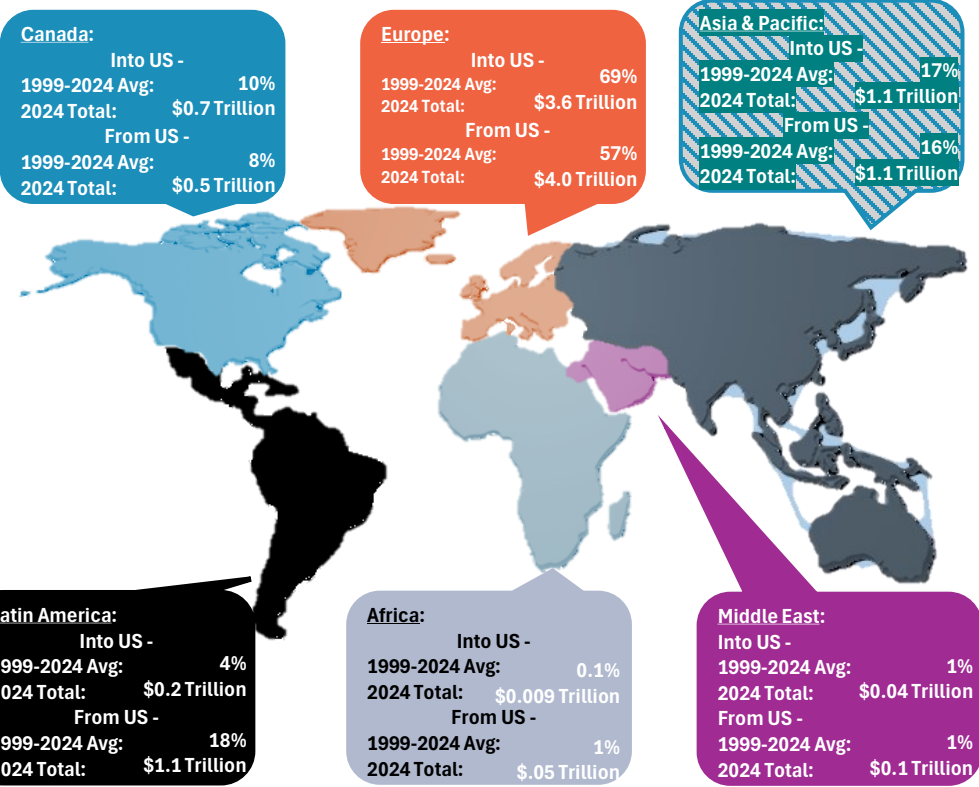
Investments by Geography

- ∞ Latin America outsized benefits in investments, Asia Pacific neutral, Canada net positive for US
- ∞ Small direct business/investments with Africa & Middle East despite global importance

Foreign Investments into US

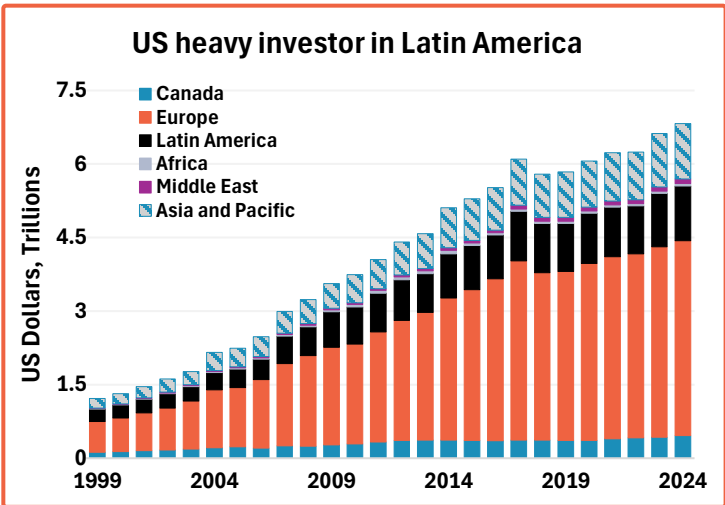


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Exports & Imports

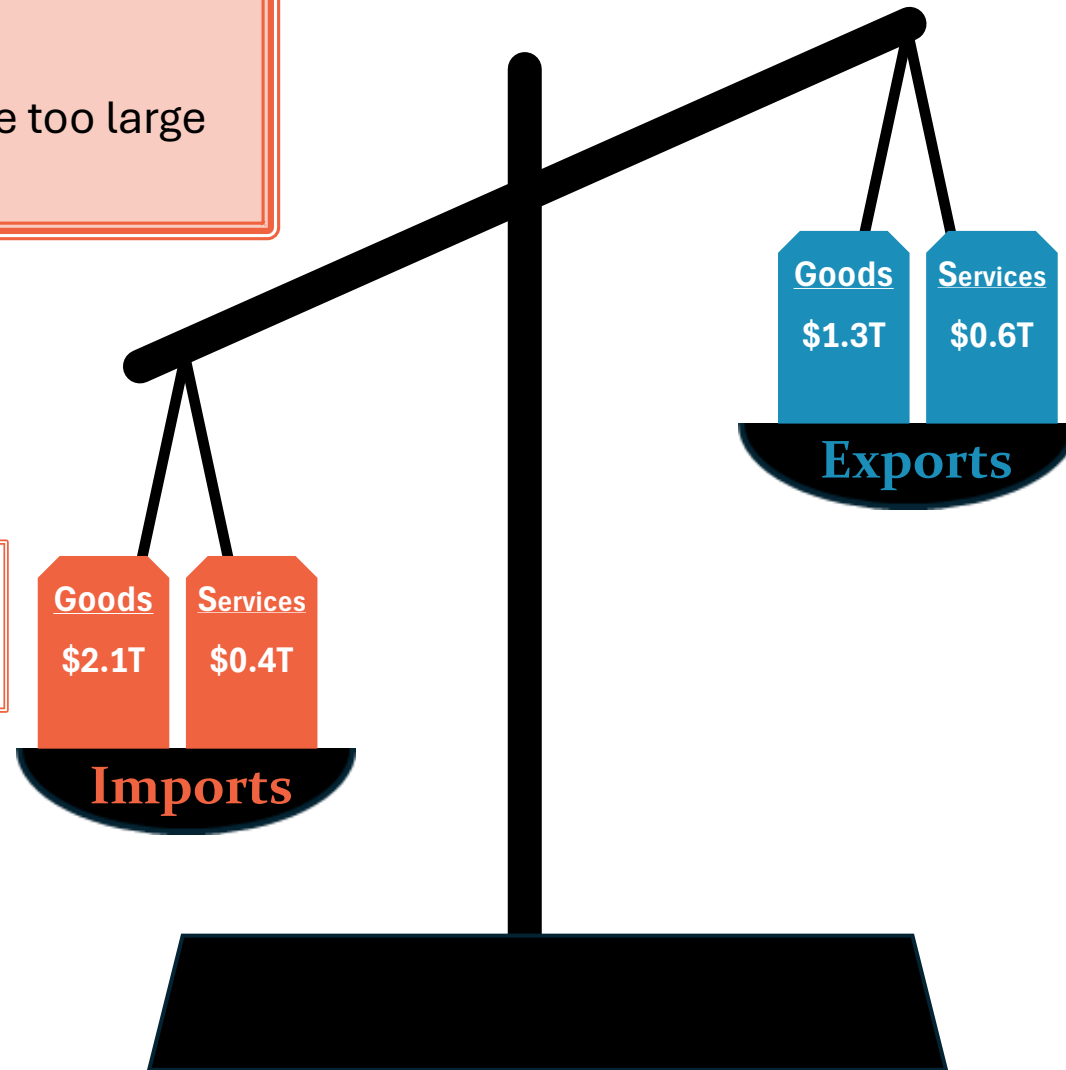
∞ **Goods**

∞ **Services**

Exports vs Imports

- ∞ US economy is Import-reliant
- ∞ Services net positive, but Goods imbalance too large

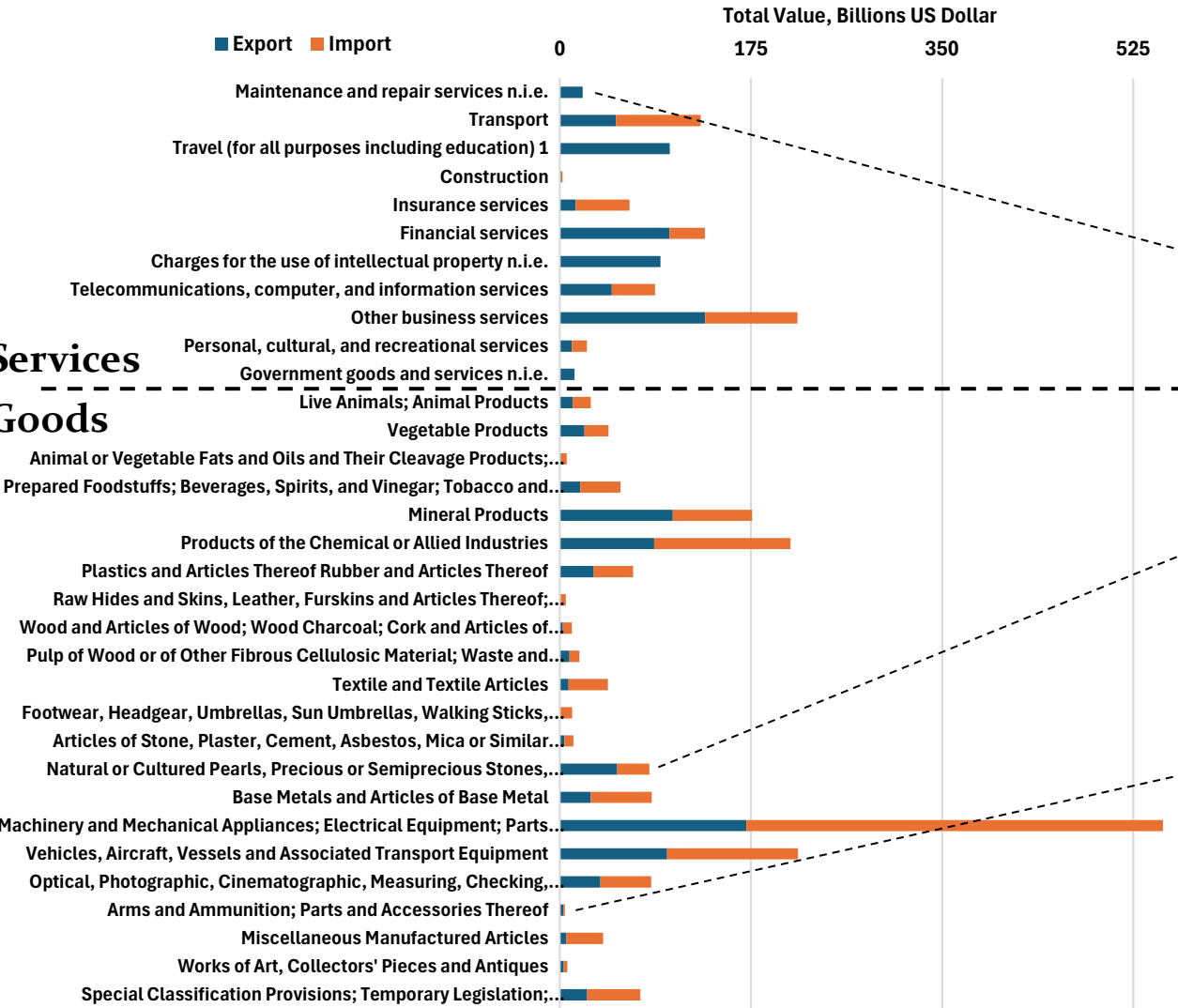
+36%
Imports Weighted



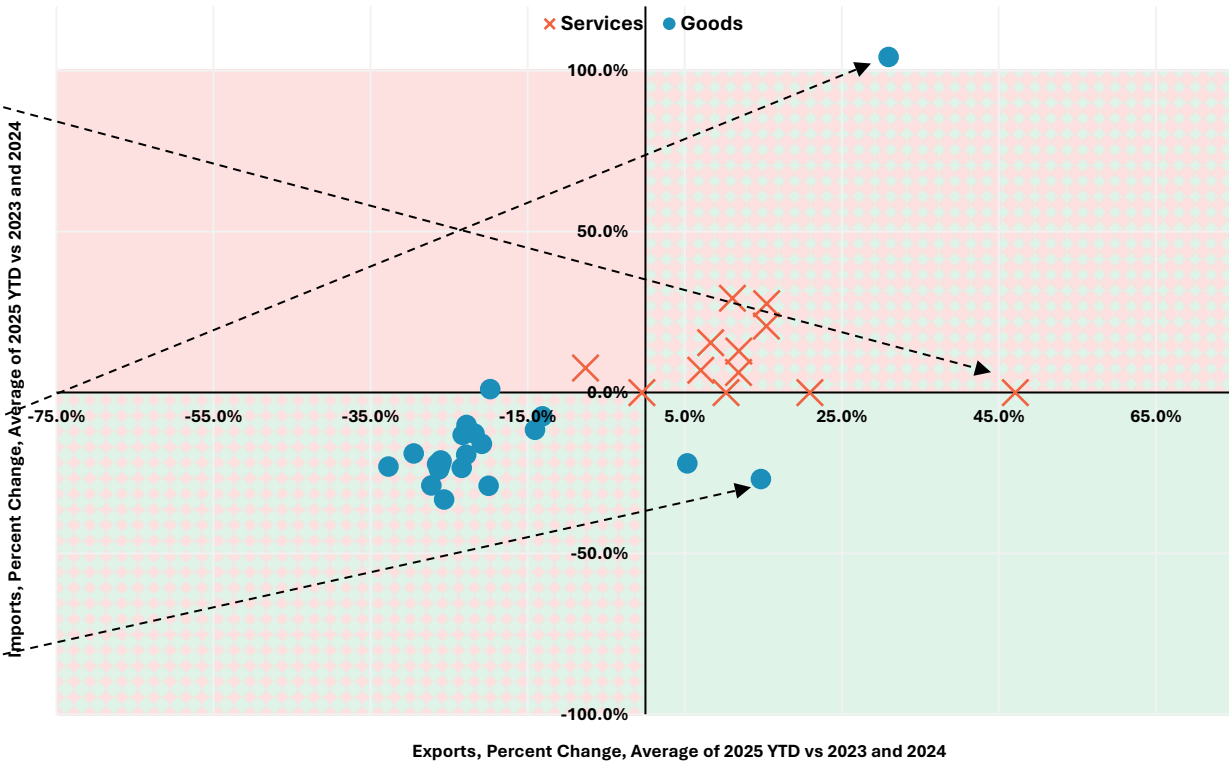
Exports vs Imports

∞ Goods a heavy drag on US economy, Services mostly positive change in balance

Imports & Exports by Classification Section shows High-Tech US reliant on Imports for High-Tech



Imports & Exports of Services & Goods Year to Date 2025 vs 2023 & 2024 show large Goods slowdown, smaller rise in Services



B Basic data manipulation
Definition – 2025 YTD percent difference vs 2023/2024 average of same period

A Absolute data values

Export vs Import of Goods

Export & Import of Goods shows significant slowdown Q1-Q3 vs 2023 and 2024, same period

Legend		
Value YTD	Exports	Imports
Avg Difference 2023/24 vs YTD	Exports	Imports

ALL Goods

\$2.1T | \$1.3B
-18% | -13%

Food

\$12B \$17B -23% -10%	\$1B \$5B +5% -22%
Animal Products	Fats & Oils
\$23B \$22B -23% -13%	\$19B \$37B -22% -13%
Vegetable Products	Prepared Foodstuffs

Special

\$53B \$30B +31% +104%	\$4B \$3B -26% -21%
Precious Metals & Stones	Works of Art, Antiques
\$25B \$49B -14% -12%	
Special Classification Provisions	

Manufacturing

\$103B \$73B -26% -33%	\$86B \$125B -20% +1%	\$12B \$17B -30% -19%	\$4B \$8B -26% -23%
Mineral Products	Chemical & Allied Products	Wood products	Stone, Plaster, Cement, Glass+
\$31B \$36B -23% -19%	\$10B \$51B -33% -23%	\$28B \$56B -26% -21%	\$6B \$34B -27% -29%
Plastics & Rubbers	Leather & Textiles	Base Metals	Misc. Manufactured

Adv. Manufacturing

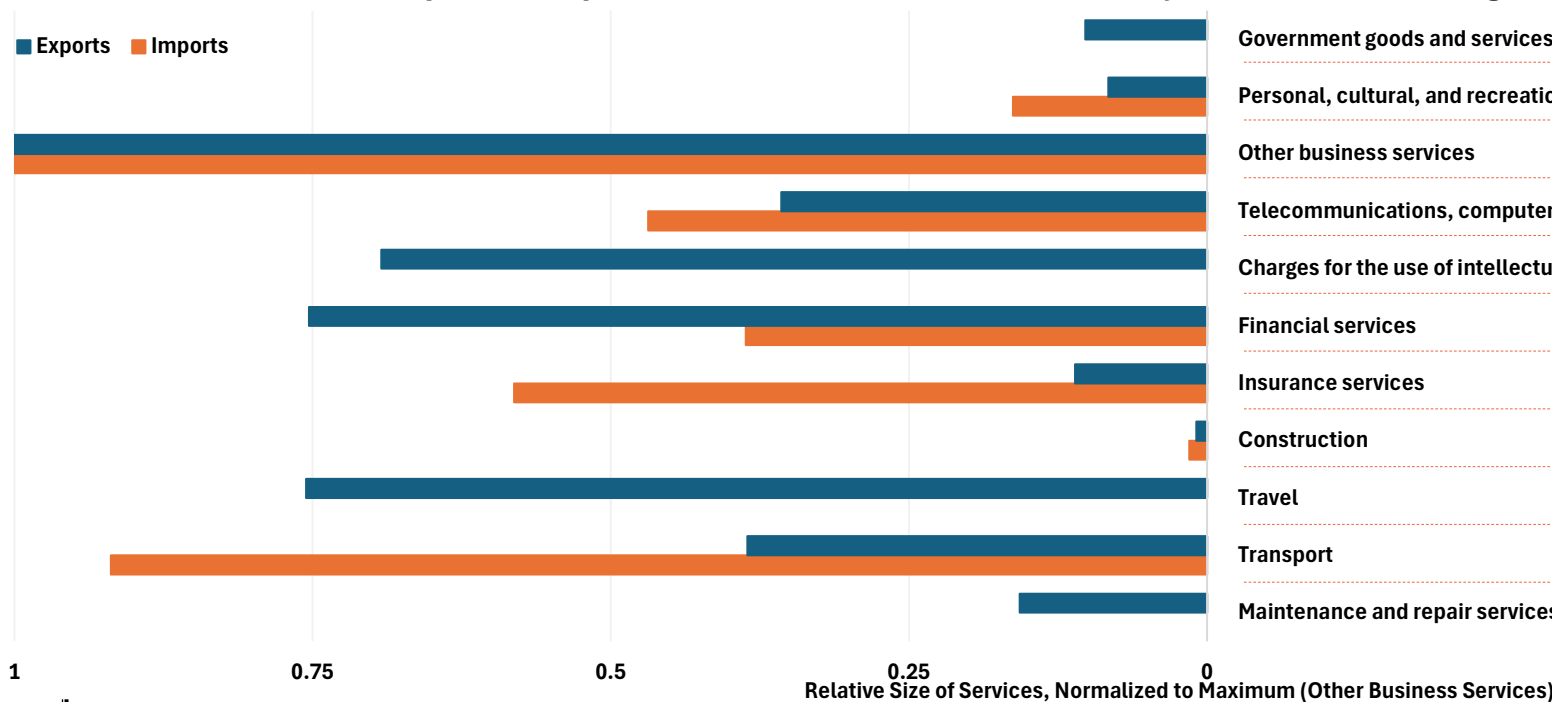
\$171B \$382B -13% -7%	\$98B \$120B -20% -29%
Machinery & Mechanical eq.	Vehicles, Aircraft, Vessels
\$37B \$47B -21% -16%	\$3B \$1B +15% -27%
Advanced Medical, Surgical, Optical+	Arms & Ammo

A Absolute data values

- ∞ All Exports & Imports down show general slowing of US economy, and global reliance or utilization of US goods
- ∞ Only Fats & Oils + Arms & Ammo categories improved, both very small

Export vs Import of Services

Relative Exports & Imports of Services shows Travel & IP major US National Strengths



B Basic data manipulation
Definition – All Values Normalized to Export/Import Maximum Category (Other Business Services for both)

	Exports		Imports	
	Q1+Q2\$ (Billions)	Avg Diff. vs 2023/24	Q1+Q2\$ (Billions)	Avg Diff. vs 2023/24
Government goods and services	14	-1%	—	—
Personal, cultural, and recreational services	11	-8%	14	+8%
Other business services	133	+8%	85	+16%
Telecommunications, computer, and information services	48	+15%	40	+21%
Charges for the use of intellectual property	93	+21%	—	—
Financial services	100	+12%	33	+6%
Insurance services	15	+16%	49	+28%
Construction	1	+11%	1	+29%
Travel	101	+10%	—	—
Transport	51	+7%	78	+7%
Maintenance and repair services	21	+47%	—	—

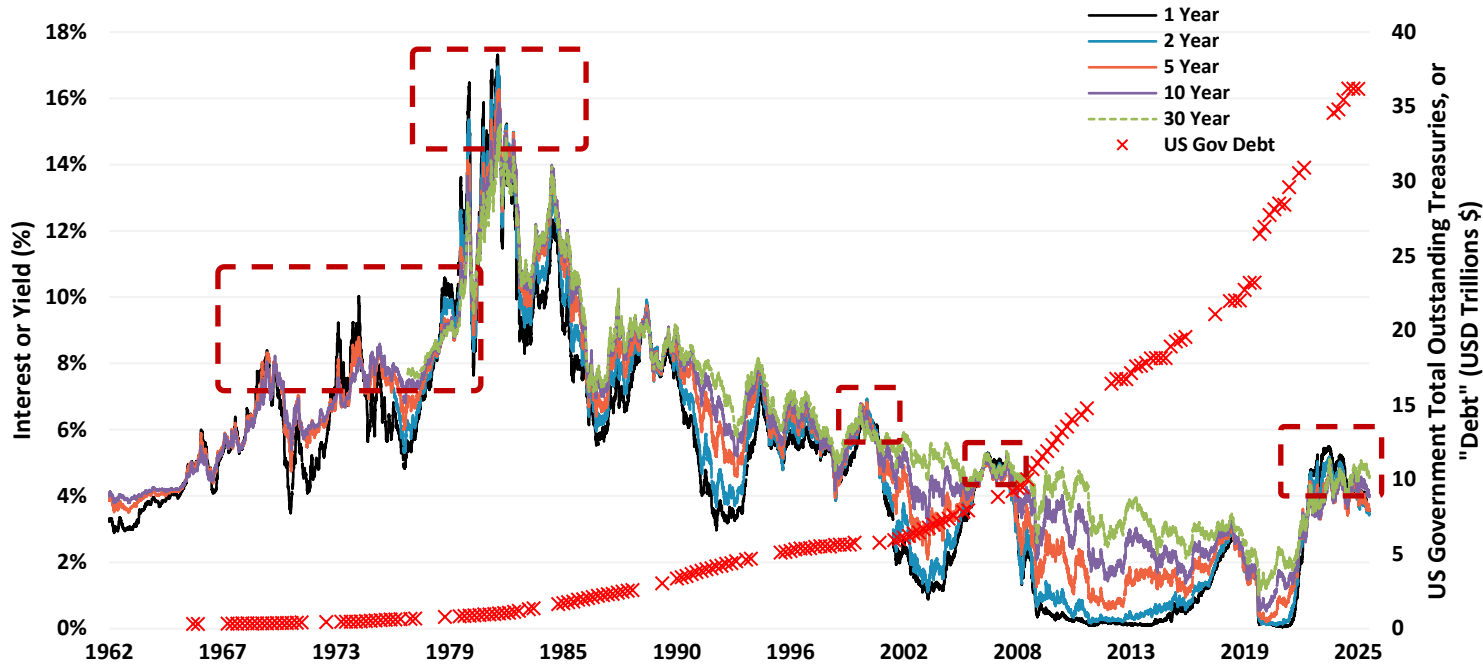
- ∞ Overall, Services are a boon for GDP, with + \$300 Billion in 2023 and 2024
- ∞ AI and Intellectual Property law revamp could see significant harm to IP Exports
- ∞ International Travel has seen decline in headcount, growth inflation-backed

Government Fiscal & Monetary

- ∞ **Debt & Bonds**
- ∞ **Money Supply & Velocity**
- ∞ **Gold & Dollar Index**
- ∞ **Spending**

US Treasury Securities, or Gov Debt & Yield

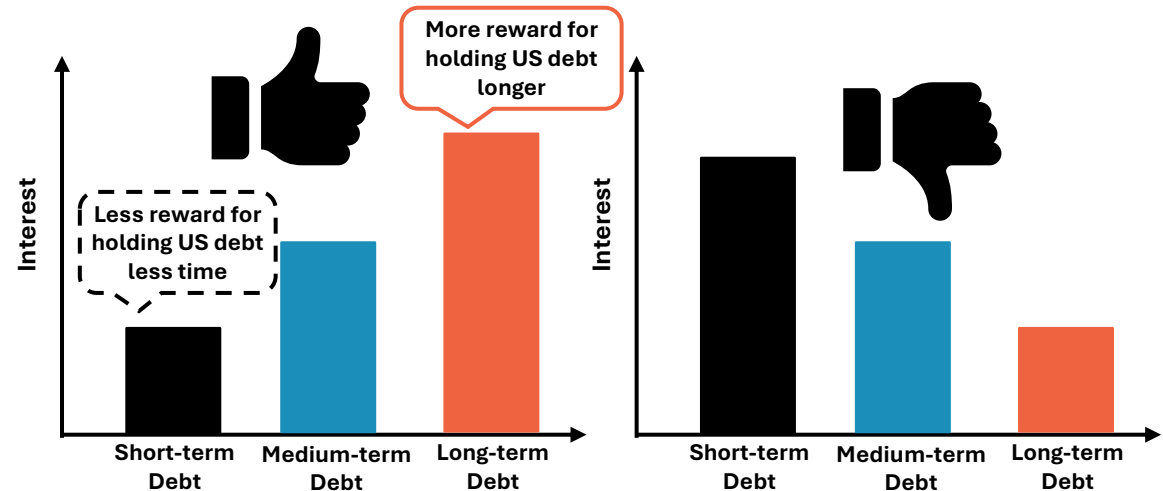
US Treasury Securities, the Bond Curve, Government debt expenses - many names for many purposes



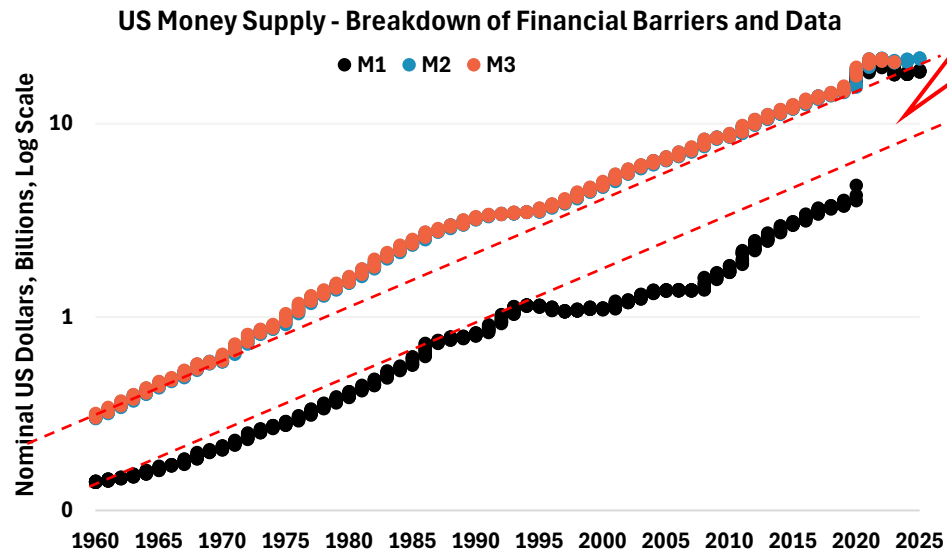
A Absolute data values

- ∞ Bond Curve/Spread destabilized in 2016, has not stabilized for >1yr period since.
 - ∞ Latest inversion, or financing struggle, started in 2023
- ∞ Debt has ballooned since 2008/GFC crisis

- ∞ Treasury Yields are a band of Highest Bid and Lowest Ask
- ∞ Generalized: Short-term debt requires lowest effort on investor, should get lowest reward
- ∞ Inversion typically happens in financing crises; Gov spends more money to bid investments
 - ∞ Either lack of Government credibility or investor collateral



Money Supply

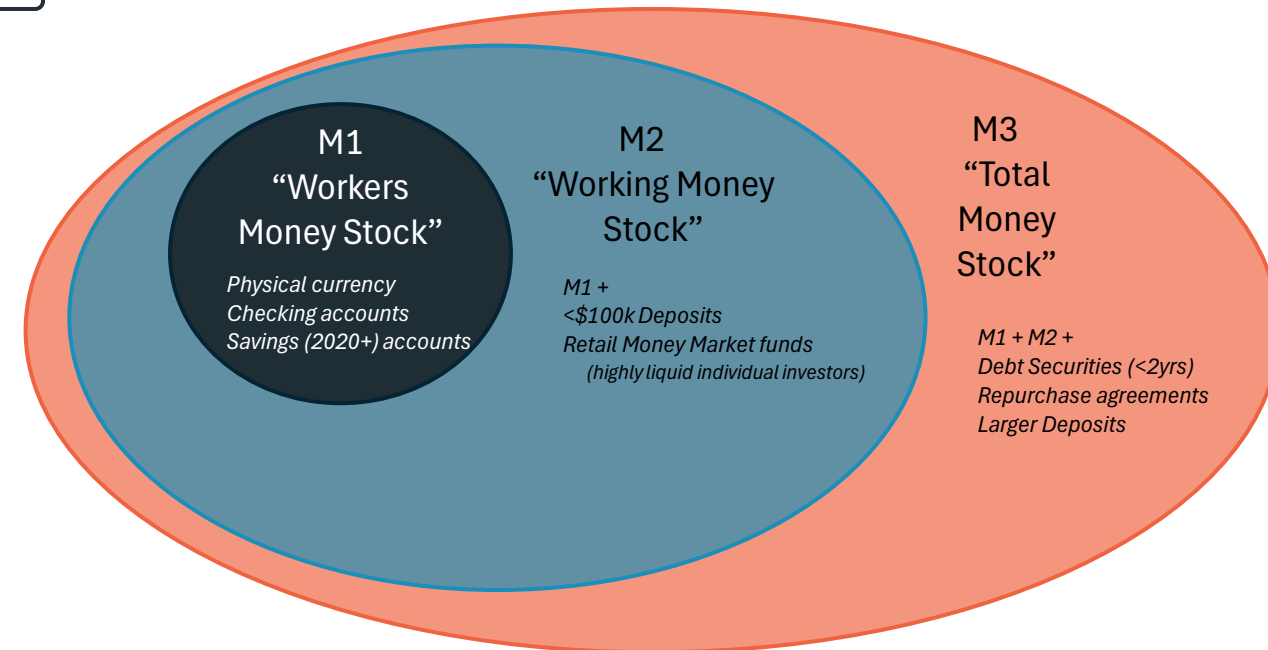


60 years of monetary supply mechanics destroyed with COVID stimulus + “modern” financial architecture

A Absolute data values

- ∞ Money Stocks maintained separate channels at alternate rates of growth due to difference in functions – all destroyed from COVID relief with erosion of monetary supply barriers in consumer vs investment stocks
- ∞ Only time in history Money Stock has decreased was leading up to and during Great Depression

- ∞ Monetary Stock, critical for evaluation of rate of economic activity. Definitions were changed in 2020 with the release of US relief checks. M3 has been since discontinued by the Federal Reserve, with less frequent and transparent releases of M1 and M2 data, as well as removal of monetary velocity.
 - ∞ M1 is the most liquid pool of currency, used for day-to-day life, reflects active consumer economy.
 - ∞ M2 includes larger funds that remain liquid for use, accounts used for smaller and liquid businesses often get included.
 - ∞ M3 is all available currency within the system that could be reasonably used or liquidated within 2 years time.

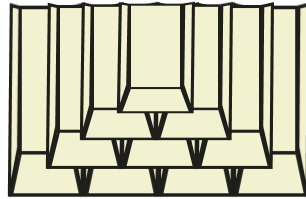


Gold & Dollar Index

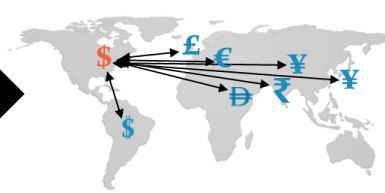
Olde World



Old World



Current World



New(?) World

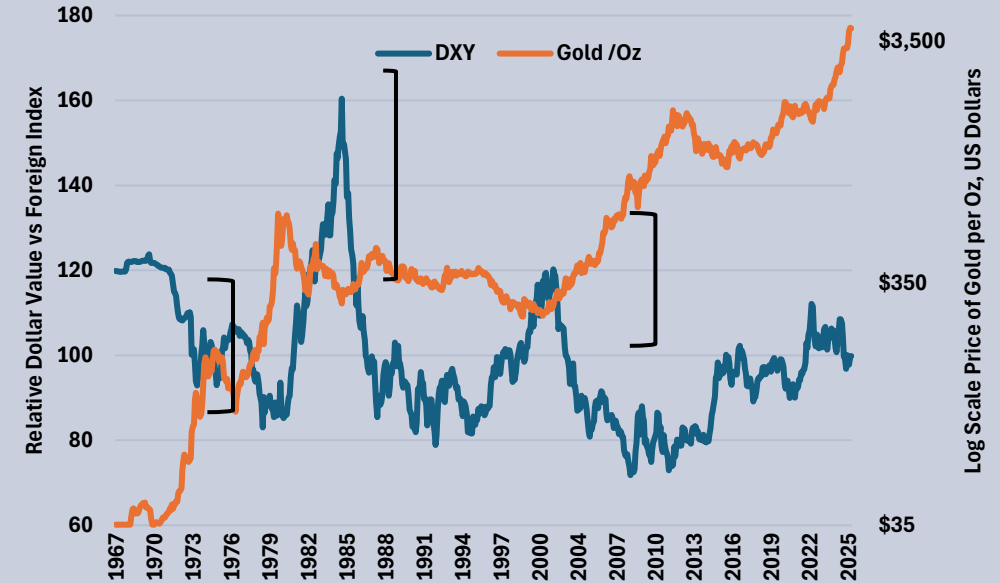


Gold still used as National Bank reserves, formal role in financial orthodoxy; promoted largely as "backup" financial system but largely exists as inflationary asset.

Growing international, private, and public pushes for alternative asset-backed currencies displacing US Dollar. Decreasing sustainability of Bretton Woods.

- ∞ Dollar on the decline in strength *(making it easier for other countries to get Dollars)*
 - ∞ Basis for monetary policy to devalue US Dollar is logic more countries will do business with US as Dollar's are cheaper/easier to get/borrow
- ∞ Dollar Broad Index (DXY) a ratio between US Dollar and broad group of foreign currencies
 - ∞ High DXY = Strong Dollar
 - ∞ As majority of international bonds/debt written in US Dollar, as \$ increases it causes global inflation and financing strains as cost to borrow and buy \$'s to repay debts increases
- ∞ Gold largely behaves inverse of Dollar strength

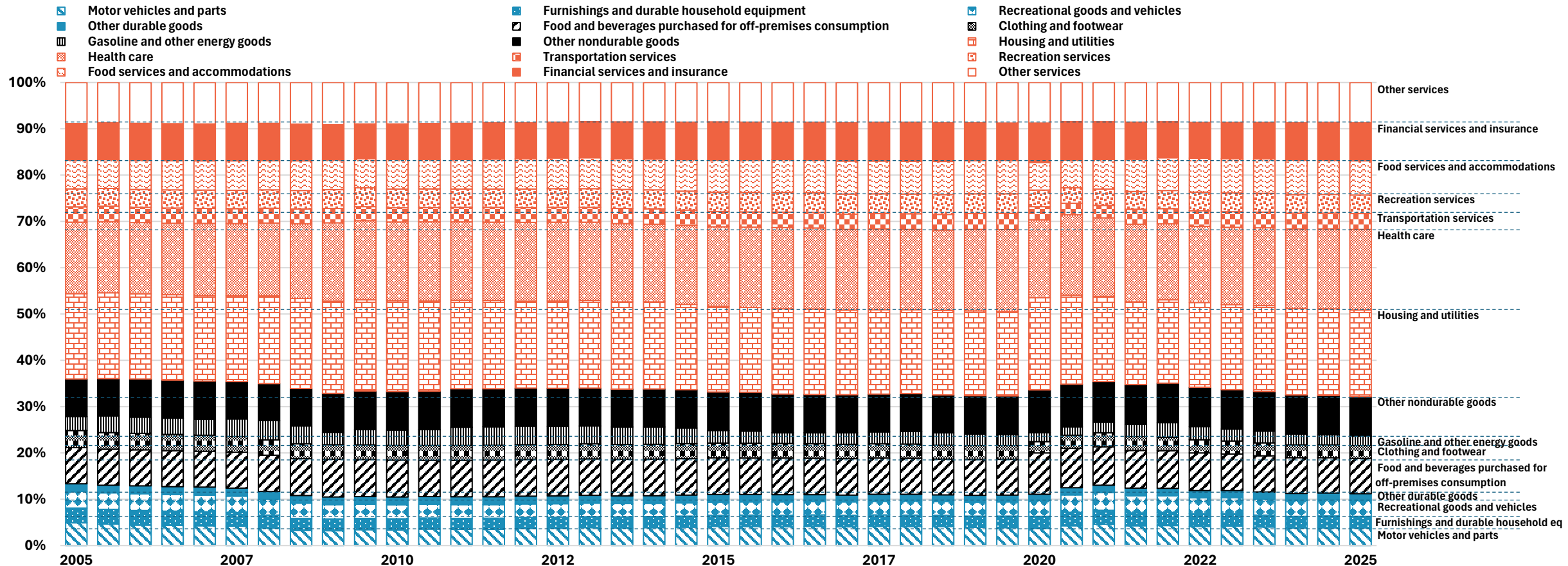
Dollar seeing Lower Highs and Lower Lows recently; Gold never higher and growing problem for lower and middle incomes



Spending

- ∞ Consumer Spending largely static over past 20 years by Category
- ∞ Healthcare & Eating Out Inflation most extreme in category expansion

Consumer Spending by type as a ratio shows Eating Out & Healthcare Inflation bit into Food & Durable Goods purchases over past 20 years

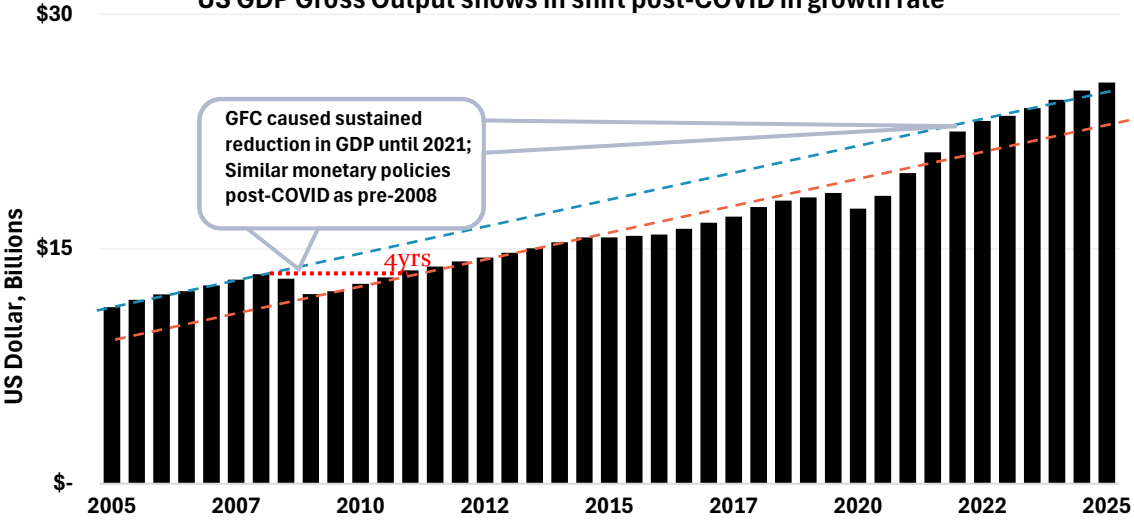


USA Economic Overview

- ∞ GDP By Makeup
- ∞ GDP By Equation
- ∞ Consumer Spending
- ∞ Population & Household Income

GDP By Makeup

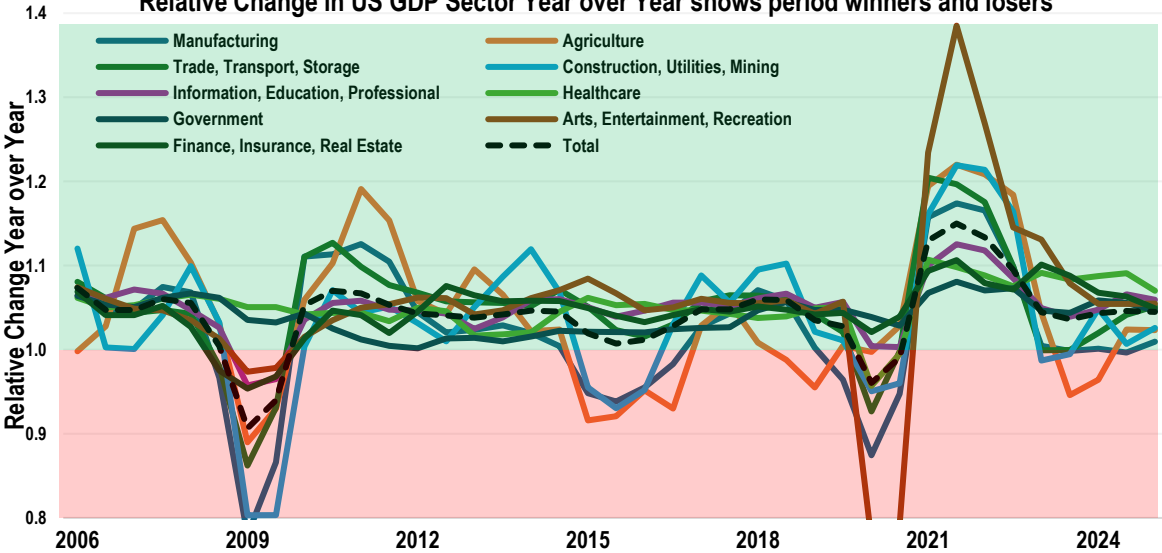
US GDP Gross Output shows in shift post-COVID in growth rate



A Absolute data values

- ∞ GDP experiencing increase in growth rate since COVID – now above pre-GFC trend
- ∞ 3 Year recovery post-2008, 1.5 Year post-COVID; mechanics of crisis different but recovery resulted in return to faster rate of pre-08
- ∞ Agriculture & Manufacturing prominently running negative in GDP growth since 2012

Relative Change in US GDP Sector Year over Year shows period winners and losers



B Basic data manipulation
Definition – All Values Normalized to Previous Year

US GDP Sector Makeup Average 2005-2024

Finance, Insurance, Real Estate	18.7%
Manufacturing	18.1%
Information, Education, Professional	17.0%
Trade, Transport, Storage	14.5%
Government	11.5%
Construction, Utilities, Mining	8.0%
Healthcare	6.7%
Arts, Entertainment, Recreation	4.0%
Agriculture	1.4%

B Basic data manipulation
Definition – All Values Average of Yearly Weighting 2005-2024

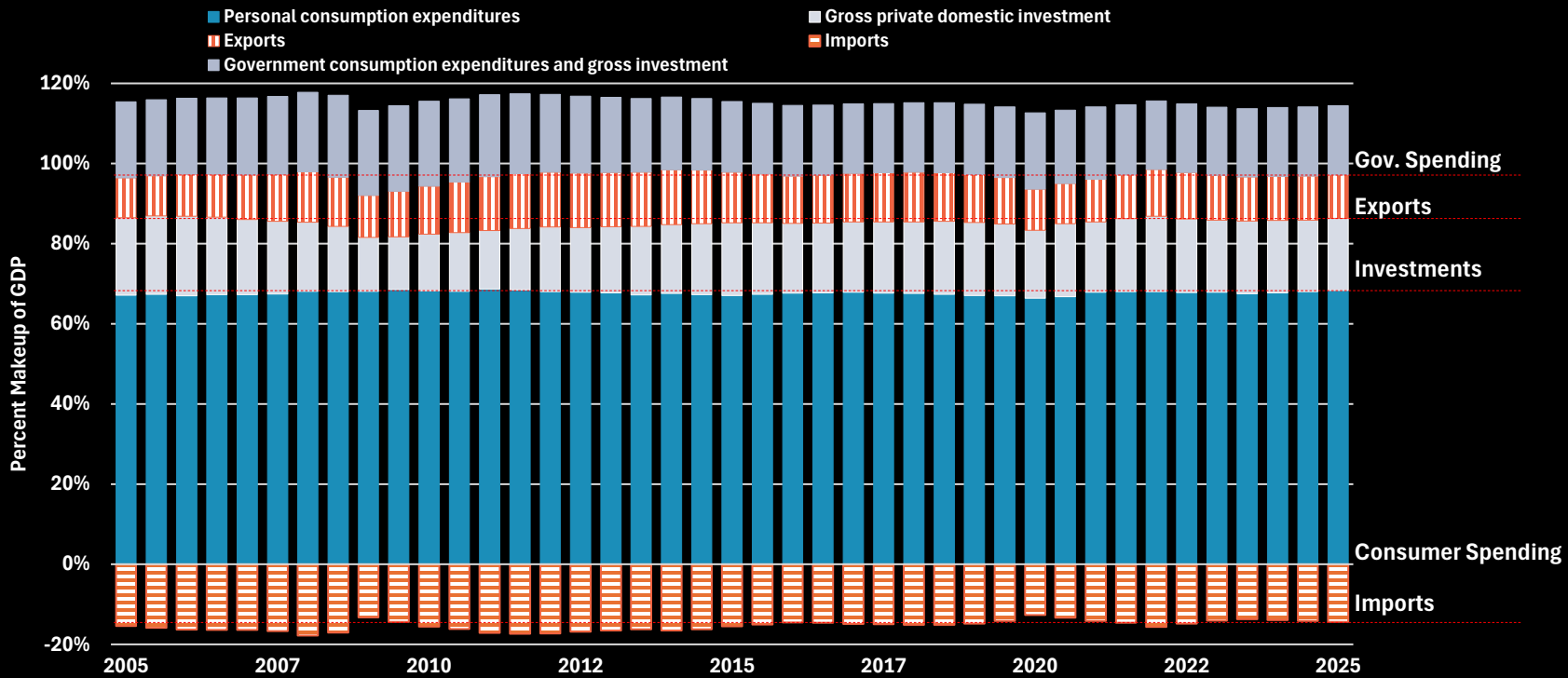
GDP By Equation

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{X} - \text{M})$$

Consumer Spending Investment Gov. Spending Exports Minus Imports

The economic strength of a system is equal to the Consumer plus Government spending, Investment into the system, and the net result of *external* trade.

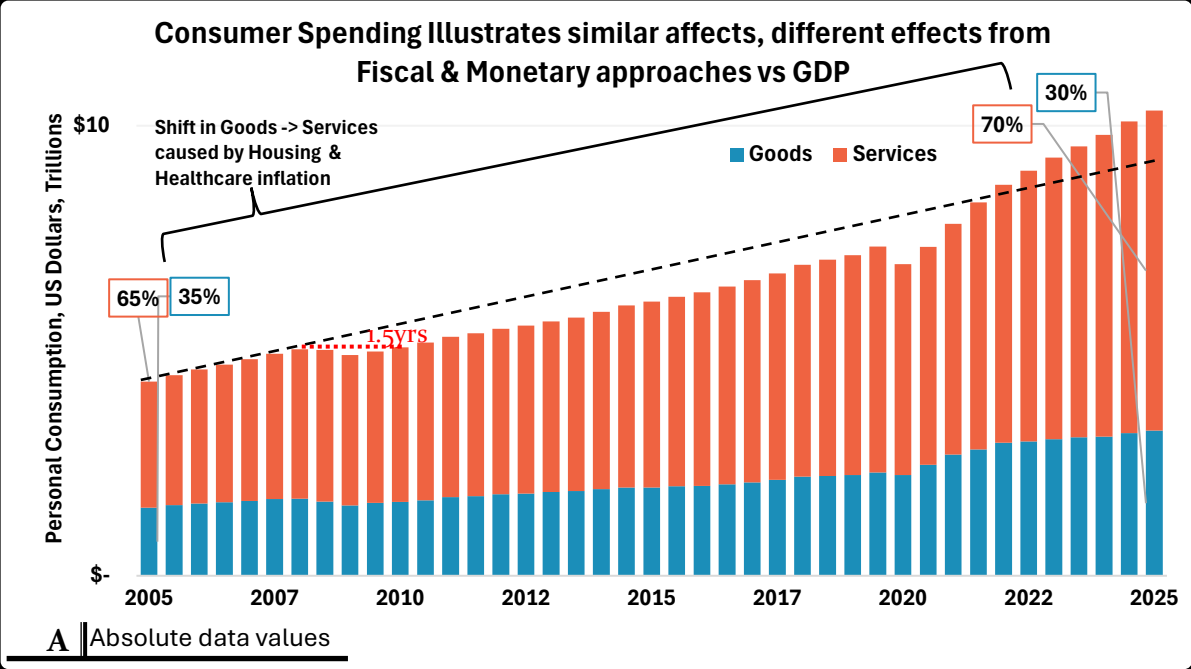
General Makeup of GDP largely unchanged in 20 years, Consumer Spending +1.15%, Imports consistent -15%



B

Basic data manipulation
Definition - All Values Percent of Sum, Imports Negative GDP

Consumer Spending



- ∞ Spending on Services increased 5% by makeup over past 20 years
 - ∞ Driven largely by Housing & Healthcare Spending/Inflation
 - ∞ Inflation vs Spending as no real growth in home ownership or housing, purely monetary increase hence inflation
- ∞ Consumer Spending shows similar periodic mechanics as GDP, stronger direct inflationary effects

Durable Goods – 11%

Motor vehicles and parts	4%
Furnishings and durable household eq.	2.5%
Recreational goods and vehicles	3%
Other durable goods	1.5%

Non-Durable Goods – 22%

Food and beverages purchased for off-premises consumption	8%
Clothing and footwear	3%
Gasoline and other energy goods	3%
Other nondurable goods	8%

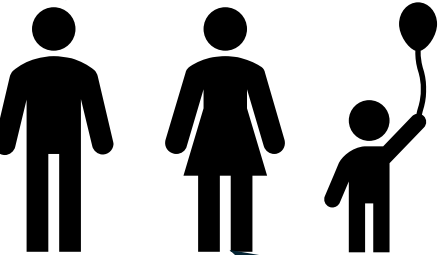
Services– 67%

Housing and utilities	18%
Health care	16%
Transportation services	3%
Recreation services	4%
Food services and accommodations	7%
Financial services and insurance	8%
Other services	8%

B Basic data manipulation
Definition – All Values Average of Yearly Weighting 2005-2024

Population & Household Incomes

White	126,726,746
Black or African American	22,416,192
American Indian and Alaska Native	2,403,327
Asian	10,982,216
Native Hawaiian and Other Pacific Islander	476,477
Two or More Races	5,332,924
Total	168,337,882

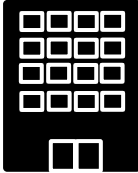






White	127,554,852
Black or African American	24,192,654
American Indian and Alaska Native	2,339,971
Asian	11,842,792
Native Hawaiian and Other Pacific Islander	463,235
Two or More Races	5,379,602
Total	171,773,106

168M Males
172M Females

135M Households

Income Threshold
White Alone
Anyone White
Anyone Black
Anyone Asian
Anyone Hispanic
Male Only
Female Only
Married (no kids)
Family

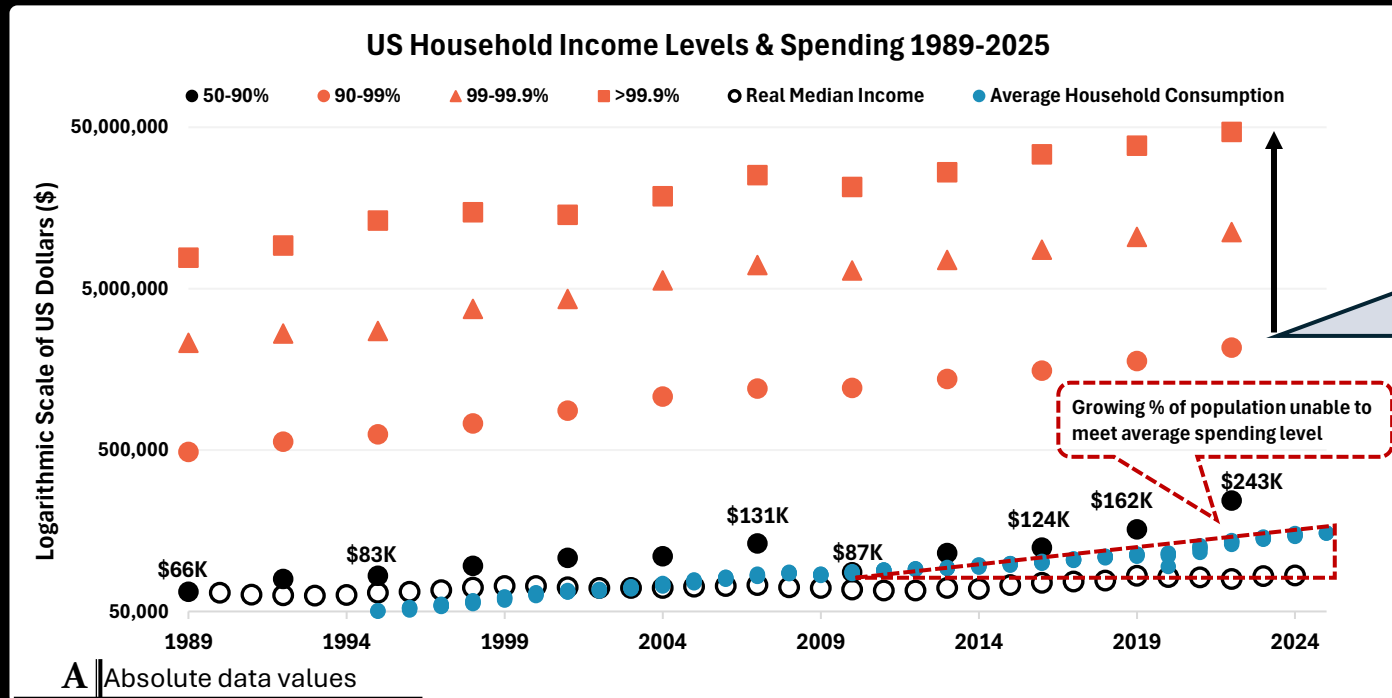
						
	Total Households (Millions)	Lower Bottom 20%	Lower Middle 21-40%	Middle 41-60%	Upper-Middle 61-80%	Upper 81+%
Income Threshold	134.8	<\$34,510	\$34,509-65,109	\$65,100-105,499	\$105,500-175,699	>\$175,700
White Alone	84.7	17%	19%	20%	22%	22%
Anyone White	105.7	18%	20%	20%	21%	21%
Anyone Black	19.7	31%	25%	19%	14%	11%
Anyone Asian	9.1	14%	13%	18%	21%	35%
Anyone Hispanic	21.1	23%	24%	22%	18%	13%
Male Only	7.4	15%	23%	25%	21%	16%
Female Only	15.72	27%	27%	23%	16%	7%
Married (no kids)	62.9	7%	14%	19%	27%	33%
Family	86.0	11%	17%	20%	24%	27%

US Census Data tracks ethnicity by income quintiles, highlighting classic data points:

- ∞ Dual-Income No Kids are income quintile winners, Families still favorable distribution
- ∞ White-ethnicity only Households fare economically better than Black & Hispanics,
- ∞ Male only Households greatly exceed Female only Households in Income

Population & Household Incomes

- ∞ US Income levels stress “Sink or Swim” economy
 - ∞ Households at 90+% ballooned income over last 35 years, 50-90% most growth post COVID
- ∞ Average Household Consumption shows more than bottom 50% of Households going without



At 90+% Income groups, Income growth becomes logarithmic. Extreme imbalance in wage growth ACROSS the economy.

Macro-Bite of USA

Contact Advisory@Greytheorem.com

See more at Greytheorem.com



Appendix

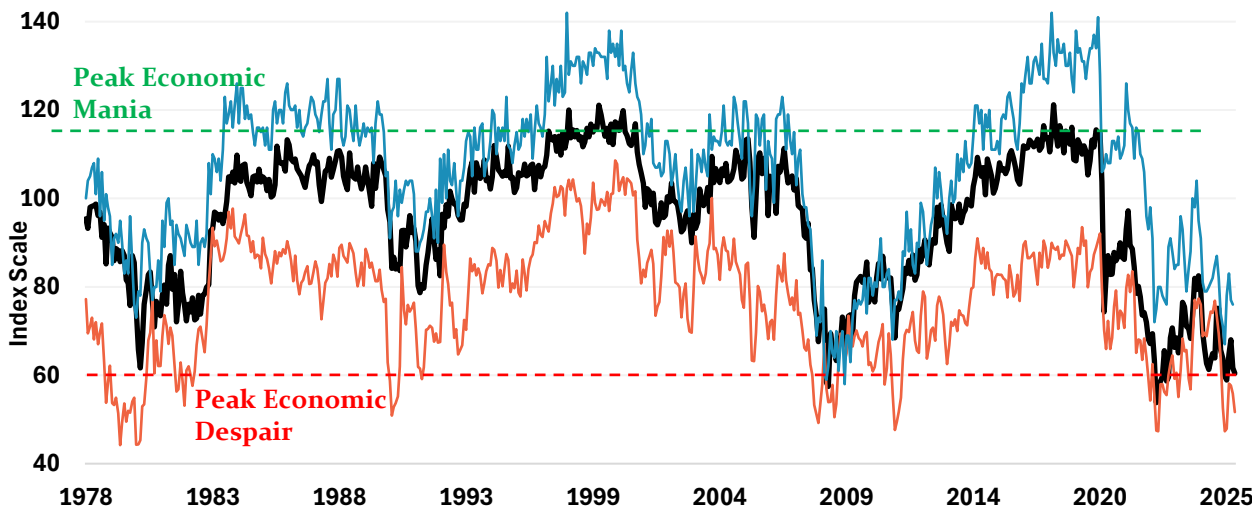
Data Sources

<div><div>USA Economic Overview</div><div><div>All GDP Data From U.S. Bureau of Economic Analysis</div><div>All Population Data from U.S. Census Bureau</div><div>All Consumption Data from U.S. Bureau of Economic Analysis</div></div></div>			
<div><div>Government Fiscal & Monetary</div><div><div><div>Debt & Bonds:</div><div>DGS1, DGS2, DGS5, DGS10, DGS30, GFDEBTN</div></div><div><div>Money Supply:</div><div>M1SL, M2SL, MABMM301USQ189S</div></div><div><div>Spending:</div><div>All Spending Data from U.S. Bureau of Economic Analysis</div></div><div><div>Gold & Dollar:</div><div>DXY and Gold from TVC</div></div></div></div>			
<div><div>Consumer</div><div><div><div>Sentiment:</div><div>DGS1, DGS2, DGS5, DGS10, DGS30, GFDEBTN</div></div><div><div>Employment:</div><div>B4701C0A222NBEA, LNU020 -26628/ 26625, LNS -12500000/ 12600000</div></div><div><div>Housing:</div><div>WFRBL-N40302/N40301/ N09303/ N09304/ 99T999308/ TP1310/ B50300</div></div><div><div>Spending & Inflation:</div><div>PCE, PMSAVE, TOTALSL, CPIAUCSL, POPTHM, MEPAINUSA672N, MEDCPIM158SFRBCLE</div></div></div></div>			
<div><div>Exports & Imports</div><div><div>All Exports & Imports Data From U.S. Bureau of Economic Analysis</div></div></div>			
<div><div>Investments</div><div><div>All Investments Data From U.S. Bureau of Economic Analysis</div></div></div>			

Appendix - Consumer Sentiment

UMich Index of Consumer Sentiment

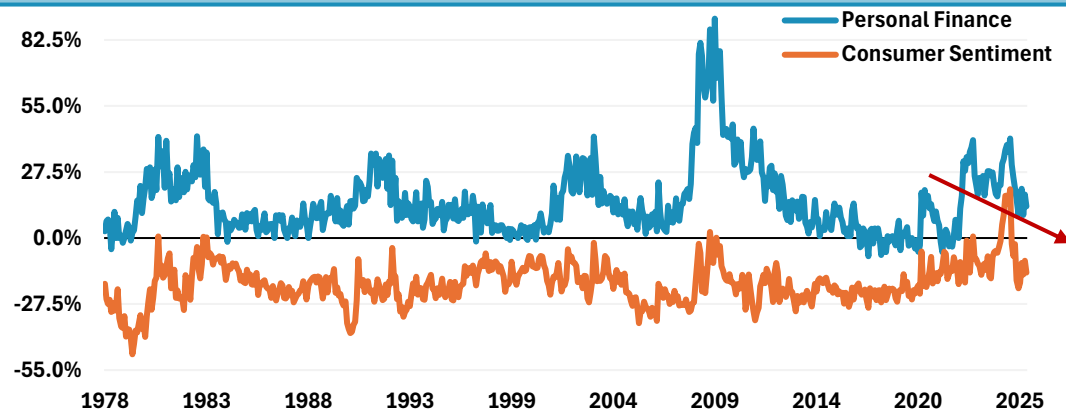
— Current Index
— Expected Index
— Personal Finance Current



A Absolute data values

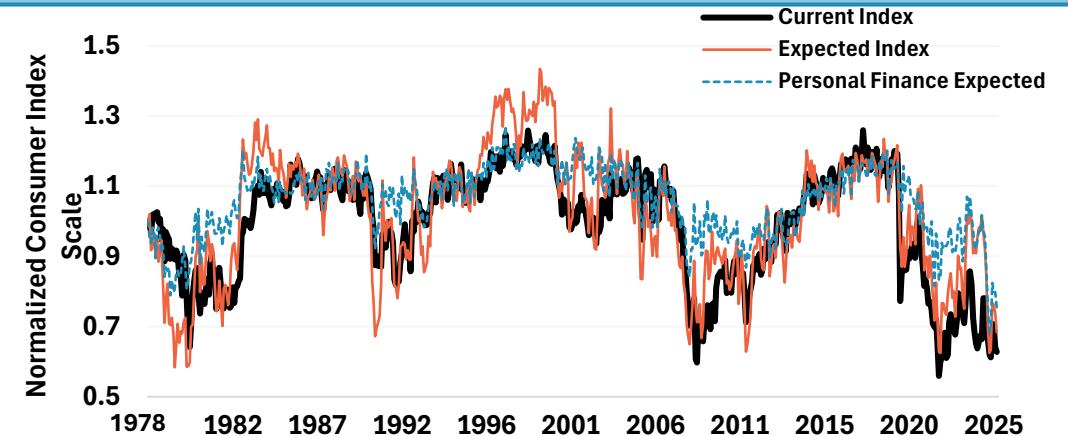
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- ∞ Sentiment worsening, fears over Personal Financial future most foreshadowing economic pain¹
- ∞ Consumers typically negative about general economy, positive about own financial future
- ∞ Consumers believe they’ll outperform general economy after crisis, otherwise tie own financial future to current economy²

1 Consumer Sentiment & Personal Finance Normalized for expected changes reveals General Negativity, Personal Positivity



B Basic data manipulation
Definition – $(\text{Expected Value} - \text{Current Value}) / \text{Current Value}$ for Percent-based directionality

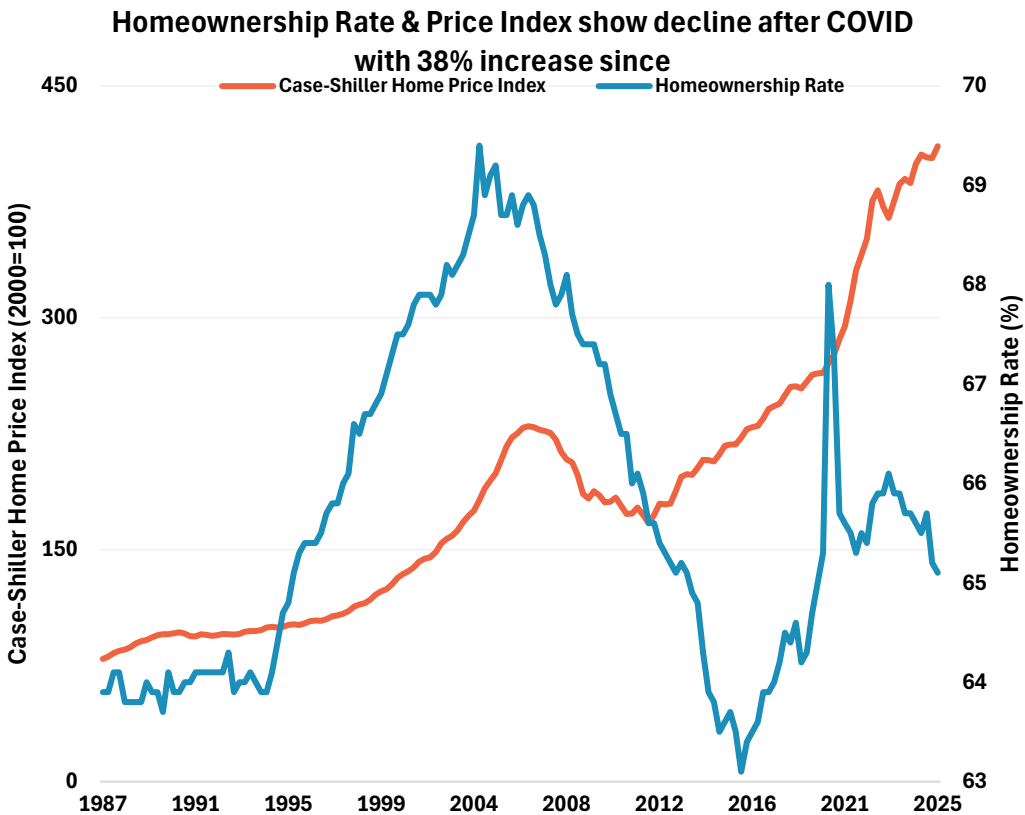
2 Consumer Sentiment Normalized to Initial Reading finds Consumers' expectations have tied to current post-2008 crisis; lacks leading effect



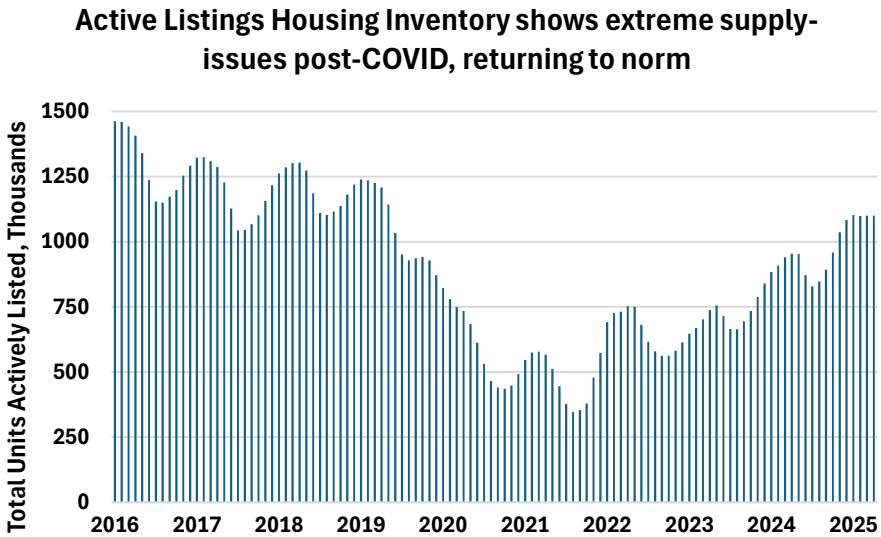
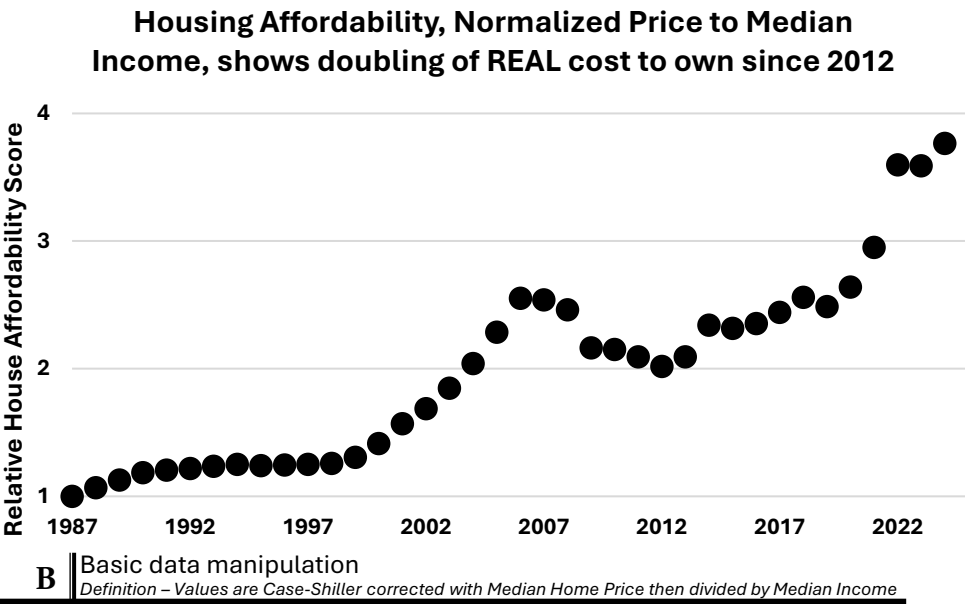
B Basic data manipulation
Definition – Each series normalized to own initial read in 1978

Appendix - Housing

- ∞ Fiscal & Monetary policy post-COVID weaponized Institutional ownership of Housing for trickle-down fiscal stability of municipalities, and inflation of GDP and US collateral asset markets
- ∞ Ownership affordability has dropped over past 7 years, twice as expensive as 2012
- ∞ Institutional Ownership ~11% of Total US Housing Stock



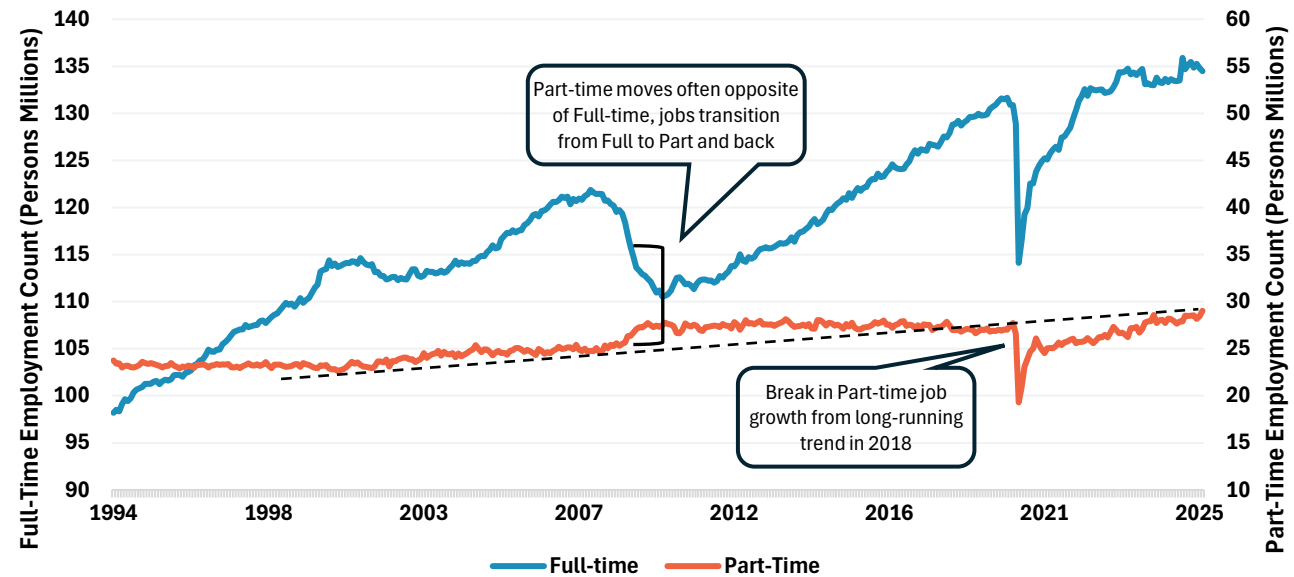
A Absolute data values



A Absolute data values

Appendix - Employment

Full & Part Time Employment shows 38% growth in 30 years, <2% in 5

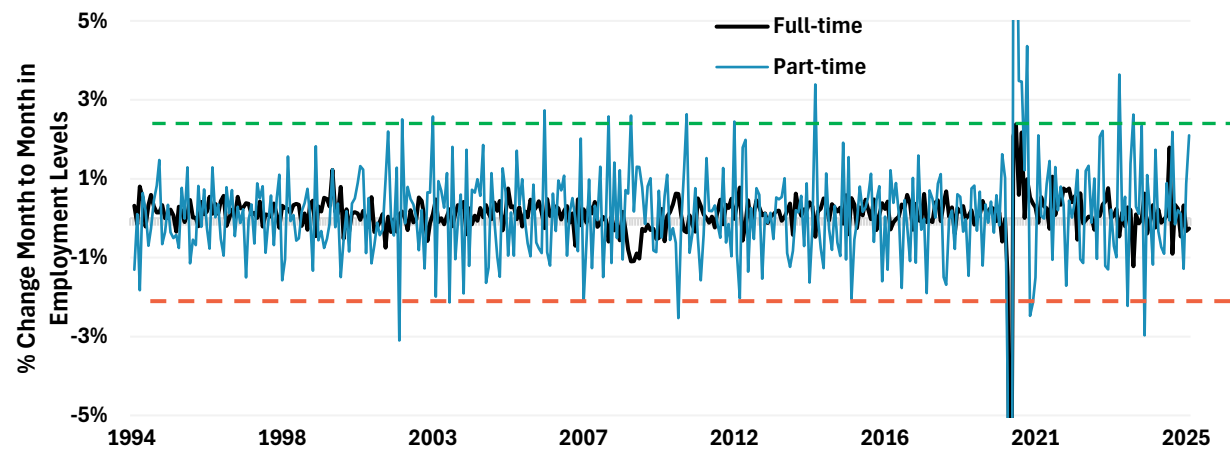


A Absolute data values

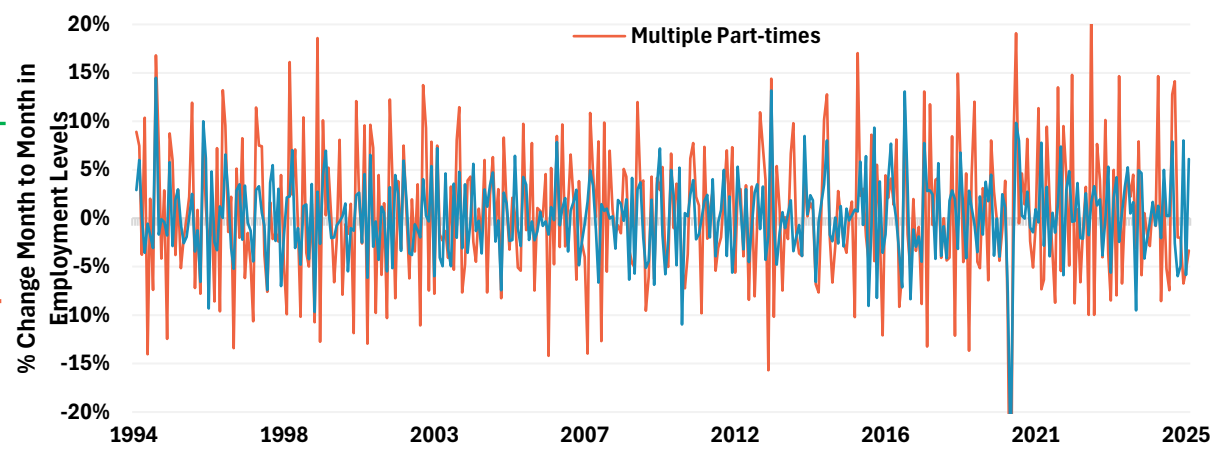
- ∞ US
- ∞ Annual Total Hours worked by all US employees increased from 200 to 260 Billion hours same timeframe, equivalent Growth to Employment
- ∞ “Cure” for underemployment is working slower

1 Monthly Change in Employment Levels shows (1) Significant flexibility of Part-time labor pool, (2) COVID was more destructive, permanently, to Part-timers, (3) Significant shed of Part-timers in late 2024 on par with 2002 & 2010 Bust periods - months earl

2 Monthly Change in Multiple Job Holders shows those with Multiple-Part time jobs are gaining employment the most, stressing lack of full-time mobility



B Basic data manipulation
Definition – Percent Change in 1 term forward



B Basic data manipulation
Definition – Percent Change in 1 term forward

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