

MANUFACTURING INFLECTION POINT

HOW TO SUCCESSFULLY NAVIGATE THE NEXT INDUSTRIAL TRANSFORMATION



WELCOME! INTRODUCTIONS



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AGENDA

8:00AM

Registration, breakfast, and networking

8:30AM

Industry insight: An industrial inflection point? What sectors are positioned for revolutionary growth in the next industrial transformation?

Howard S. Foote, Partner, UHY LLP

Thomas Alongi, National Manufacturing Partner, UHY LLP

8:45AM

Economic outlook: Will the election or geopolitical issues have a boom or bust impact on the U.S. economy?

Hugh Johnson, Chairman and Chief Economist, Hugh Johnson Economics

9:15AM

Rise of AI: Do you have an AI strategy to unlock your organization's potential? Will you innovate or be left behind?

Cory McNeley, Managing Director, UHY Consulting

9:45AM

Refreshment Break

10:00AM

Measuring the pulse of manufacturing across the country: Are manufacturers prepared to succeed?

Dr. Don P. Levy, Director, Siena College Research Institute

10:30AM

Panel discussion: How policy shift is creating opportunities and challenges for a strained manufacturing sector.

Heather C. Mulligan, President and CEO, The Business Council of New York State, Inc.

Thomas Alongi, National Manufacturing Partner, UHY LLP

THE NEXT INDUSTRIAL TRANSFORMATION

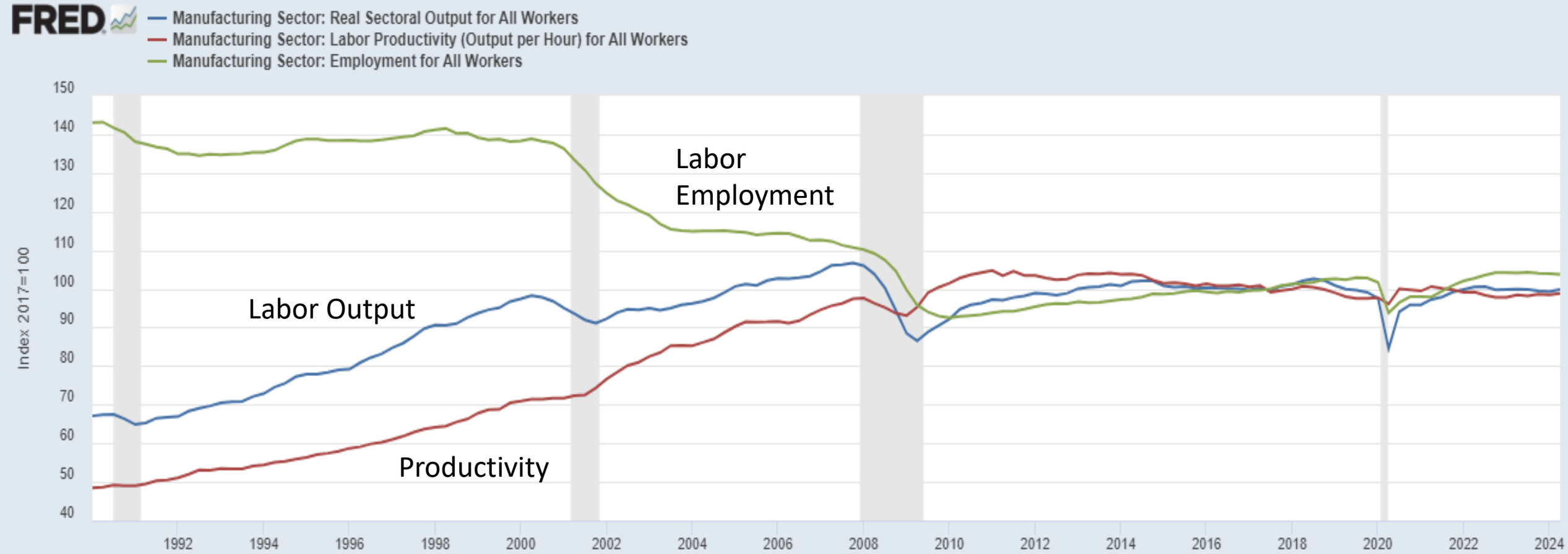


DISRUPTION

**It's not what you
think it is...**



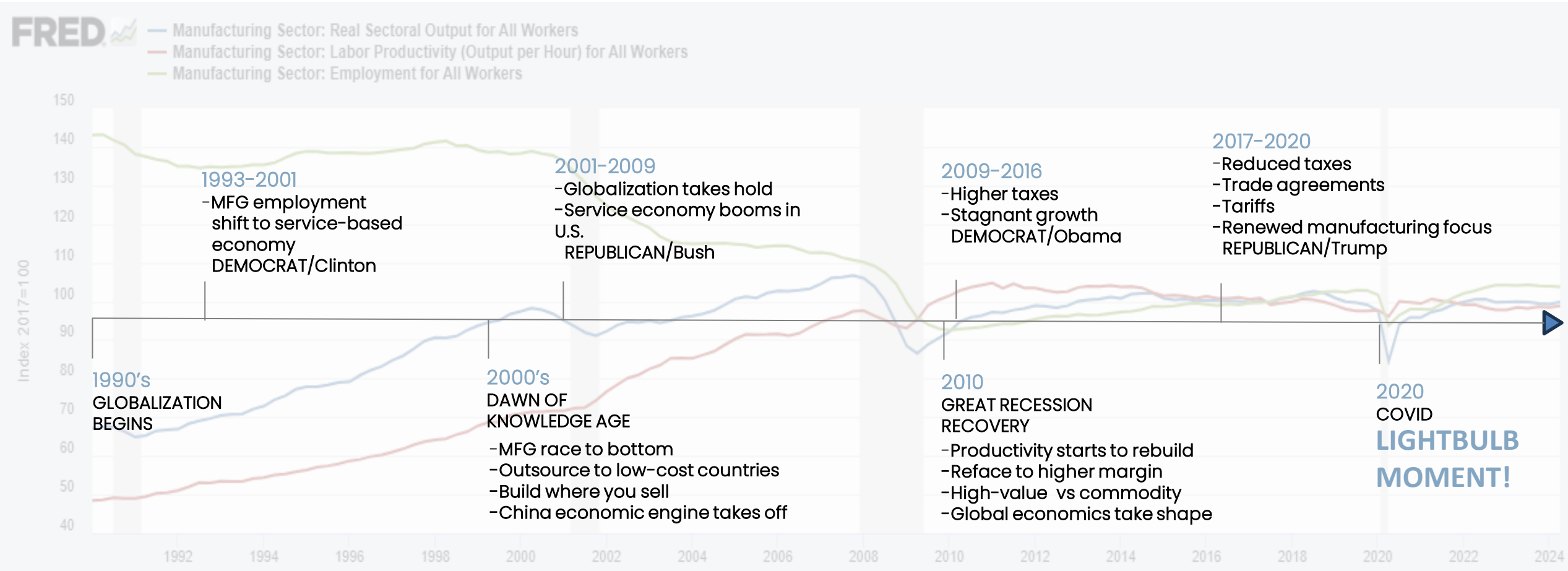
WHAT'S BEEN SHAPING U.S. MANUFACTURING



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org



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Source: U.S. Bureau of Labor Statistics

fred.stlouisfed.org

HOLLOWING OUT OF U.S. MANUFACTURING

“A robust and resilient supply chain must include a diverse and healthy ecosystem of suppliers. Therefore, we must rebuild our small and medium-sized business manufacturing base, which has borne the brunt of the hollowing out of U.S. manufacturing.”

Buffalo, Detroit, Pittsburgh

The UHY logo is located in the top right corner of the slide. It consists of the letters 'UHY' in a bold, white, sans-serif font, with a horizontal line underneath the 'Y'. The background of the slide is a photograph of an empty industrial factory floor with several yellow-painted metal support columns and a high ceiling with exposed pipes and lighting fixtures.

Source: 100-Day Review Under Executive Order 14017



GOVERNMENT RESPONSE

Executive Order 14017 Key Sectors of Focus:

- Semiconductors
- Advanced Batteries
- Critical Minerals & Materials
- Pharmaceuticals & related

Governments Response

- Chips Act \$40B
- IRA \$900B
- Infrastructure \$1.2T

Economic Impact

- Construction Boom
- Employment Scarcity
- Inflation
- Return on inflation TBD

Green Focus

- Energy
- Battery
- Chips

NEXT INDUSTRIAL TRANSFORMATION

DISRUPTION



GEOPOLITICAL
TURMOIL



CLIMATE CHANGE



LABOR FORCE



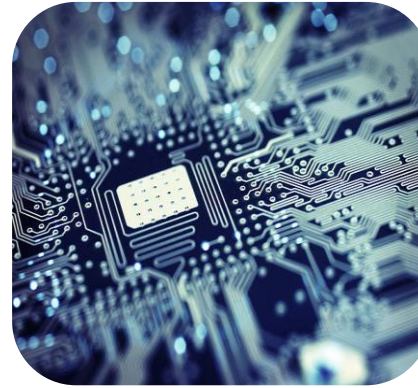
BLACK SWAN EVENT



GLOBALIZATION
AND/OR DECOUPLE



SUPPLY CHAIN BUILD
OUT



TECHNOLOGY
TAKEOVER



POLITICAL CHAOS

INFLECTION POINT

Can U.S. Manufacturers Meet The Demand?

Risks



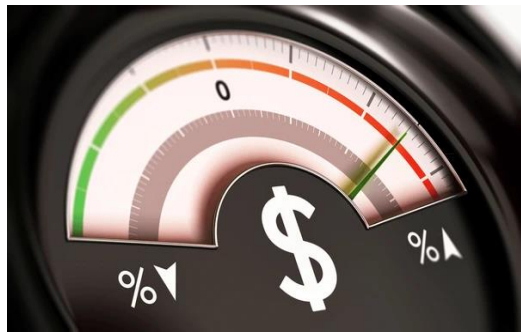
Capital to Scale



Skilled Management Teams



Skilled Labor



Price Pressure



Commodity Shortage

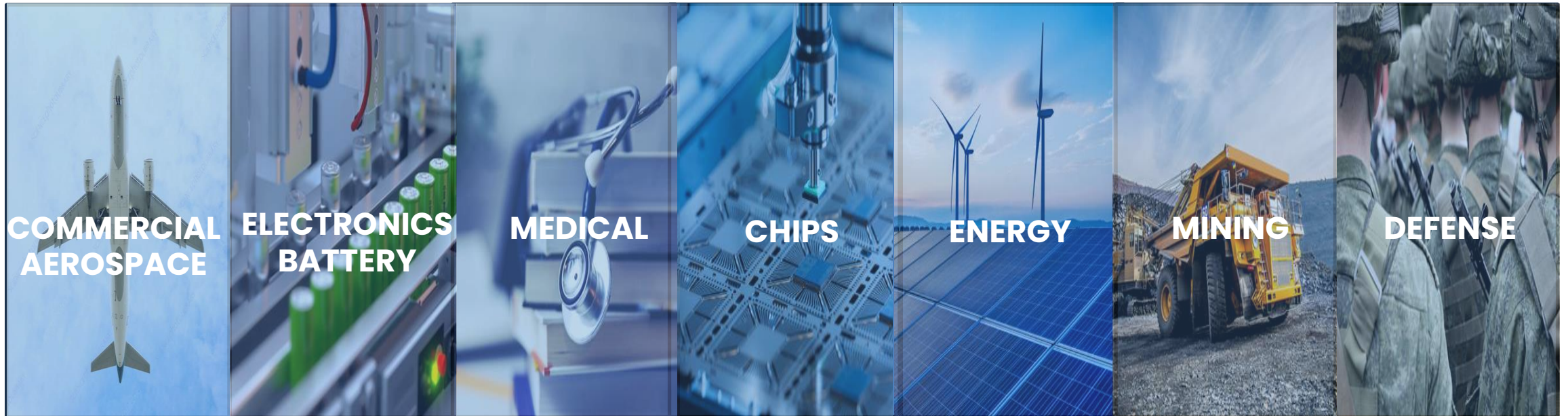


Technology Push Down

Disruption = Risk + Opportunity

INFLECTION POINT

Manufacturing Sectors



**COMMERCIAL
AEROSPACE**

**ELECTRONICS
BATTERY**

MEDICAL

CHIPS

ENERGY

MINING

DEFENSE

- Castings
- Machine parts
- Tooling
- Prototype

- Automation
- Equipment
- Stamping

- Pharmaceutical
- Medical devices
- National security products

- Equipment
- Automation
- AI/Software

- Stamping
- Automation
- Silicon wafers

- Equipment
- Logistics

- Equipment
- Fabrication
- Machining
- Everything!



INFLECTION POINT

Strategies to compete in the industrial transformation

1. Foster a culture of continuous cost improvement
2. Develop a strategy to position to new market/product opportunities
3. Build an operational strategy to be a leader in a HMLV environment
4. Reinvest! Reinvest! Develop a labor and tech strategy to build scale
5. Align with capital resources to grow: Recap/JV's, acquisitions/P.E./V.C.

Manufacturing Practice

UHY is one of the nation's largest professional services firms providing audit, tax, consulting and advisory services to clients primarily in the dynamic middle market.

TOP 10

Fastest growing firm

125%

5 year growth model

10,000+

Loyal middle market clients



WE KNOW MANUFACTURING

UHY combines the strength of business and financial expertise with a hands-on, 'shop floor' approach to solve your complex business issues

LARGEST

Client group in firm

3000+

Manufacturing clients

1000+

Global manufacturing clients

AEROSPACE
DEFENSE



AUTOMOTIVE



CONSUMER
PRODUCTS



INDUSTRIAL



OUR MISSION

Provide clients with a 360-degree view of their business while delivering **Next Level Service**



GROW

Setting your growth strategy identifying new markets, revenue streams, and opportunities



MANAGE

Managing your business with consistent processes and resources to deliver consistent results



TRANSFORM

Focusing on improving business functions – people, process, and technology



TRANSITION

Properly planning your exit to maximize value and create generational opportunity

WHERE ARE YOU ON YOUR JOURNEY?

GROW

- Strategic vision
- Acquisition targets
- Market data & analytics
- Quality of earnings
- Financial & commercial due diligence
- Purchase price allocation
- Operational & cyber diligence
- Capital raise advisory
- Organizational integration & design
- Financial & operational optimization
- Project management

Strategic Advisory

Buy Side Advisory

Consulting



MANAGE

- Audits, reviews and compilations
- Financial forecasting, projections, reporting
- Strategic tax planning
- Transfer pricing
- Tax credits & incentives
- Research & development
- Cost segregation
- Professional search & placement
- Internal controls
- Cybersecurity

- Maximize business value
- Exit strategy
- Sell side planning
- Transition planning
- Estate planning
- Tax planning
- Quality of earnings
- Business valuations
- Sell side execution
- ESOP
- Wealth management

Planning

Execution

Exit

- Supply chain strategies
- Financial close and reporting
- Process automation
- Operational improvements
- Change management
- Finance strategy
- Improve finance & operating costs
- Digital transformation
- Technology automation
- Software selection & implementation
- Resource solutions

TRANSITION

TRANSFORM

Thank You

Thomas Alongi

586-212-8236 talongi@uhy-us.com

Economic Outlook:

Will the election or geopolitical issues have a boom or bust impact on the U.S. economy?



Hugh Johnson

Chairman and Chief Economist

Hugh Johnson Economics

Economic outlook:

Will the election or geopolitical issues have a boom or bust impact on the U.S. economy?

A Touch of Perspective

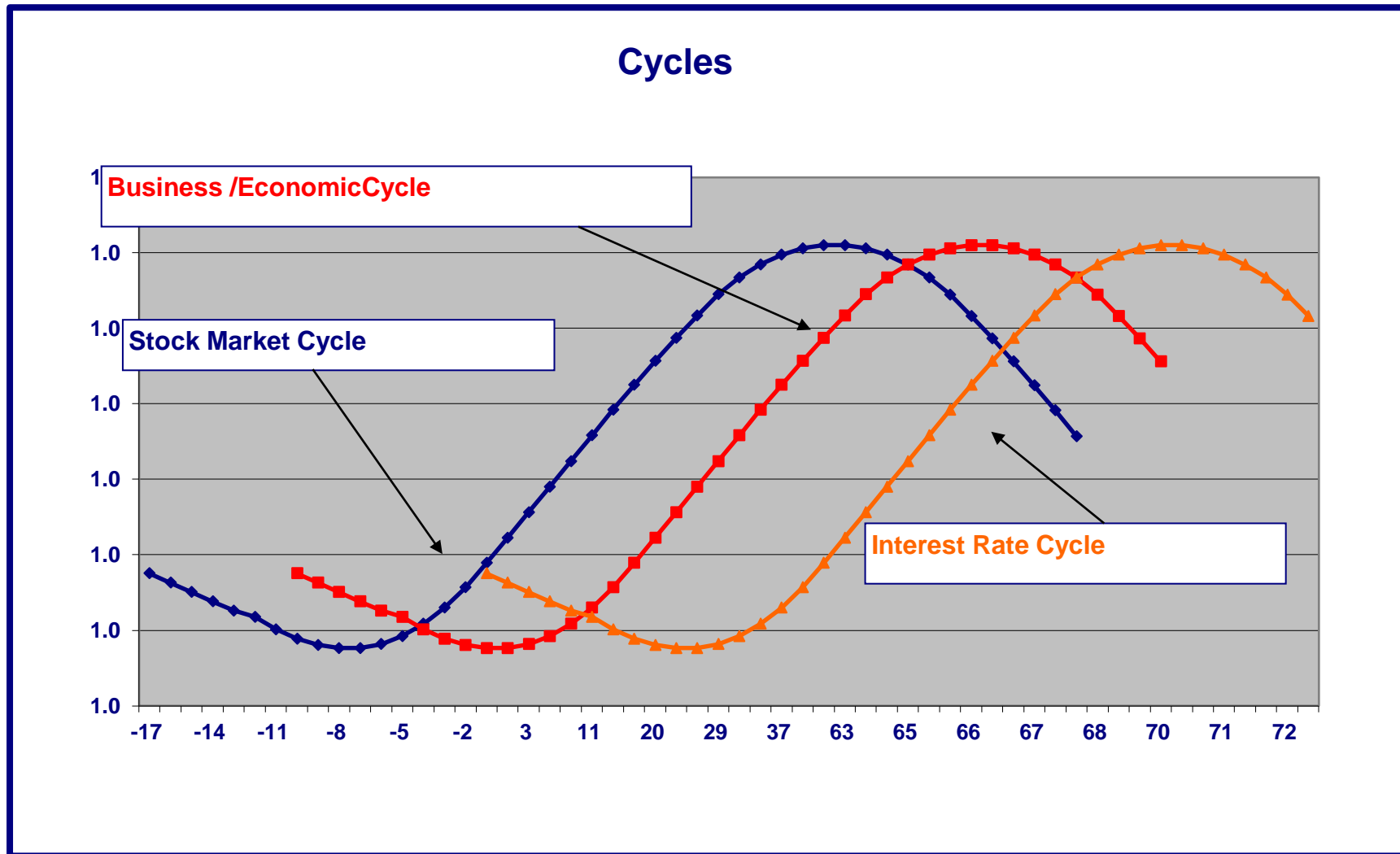
- **Since 1890: 25 Bull Markets and 24 Bear Markets**
 - **Bull Markets: +142.2% over 47.5 months**
 - **Bear Markets: -39.0% over 17.6 months**
 - **Since 1890: 26 Stock Market Corrections**
 - **Corrections: -18.8% over 4.7 months**
 - **Current Bull Market (#25): +161.7% over 55 Months.**
- [One Correction: January 2022 to October 2022
-22.4% over 9 Months]**

What will be the outcome? HJ Economics Methodology

- **Trends of the Financial Markets.**
- **Trends of Important Monetary and Economic Variables.**

(To Determine if the Performance of the Financial Market Variables is Rational.)

The Anatomy of a Cycle



Source: Hugh Johnson Economics

The Kindleberger-Fischer-Minsky Model

- **The Investment Stage**
- **The Stage of Speculation**
- **The Stage of Financial Distress**
- **The Stage of Revulsion**

From Rational to Irrational

“The circumstances that induce recurrent lapses into financial dementia have not changed in any truly operative fashion since the Tulip Mania of 1636-1637.”

Johns Kenneth Galbraith

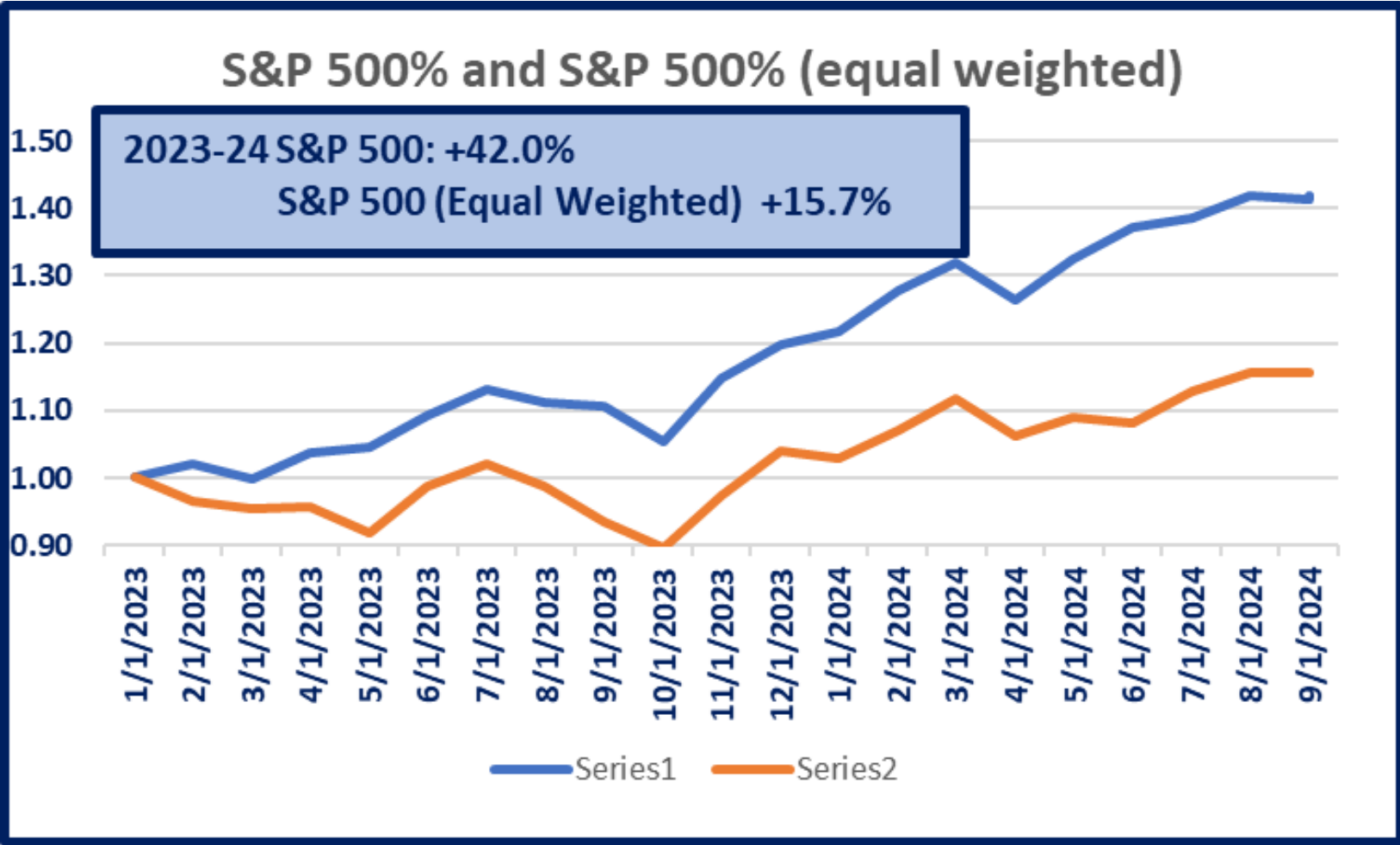
The Defining Characteristics of “The Emotional Extreme” at the Top

Overvaluation

Optimism. Exuberance. Euphoria.

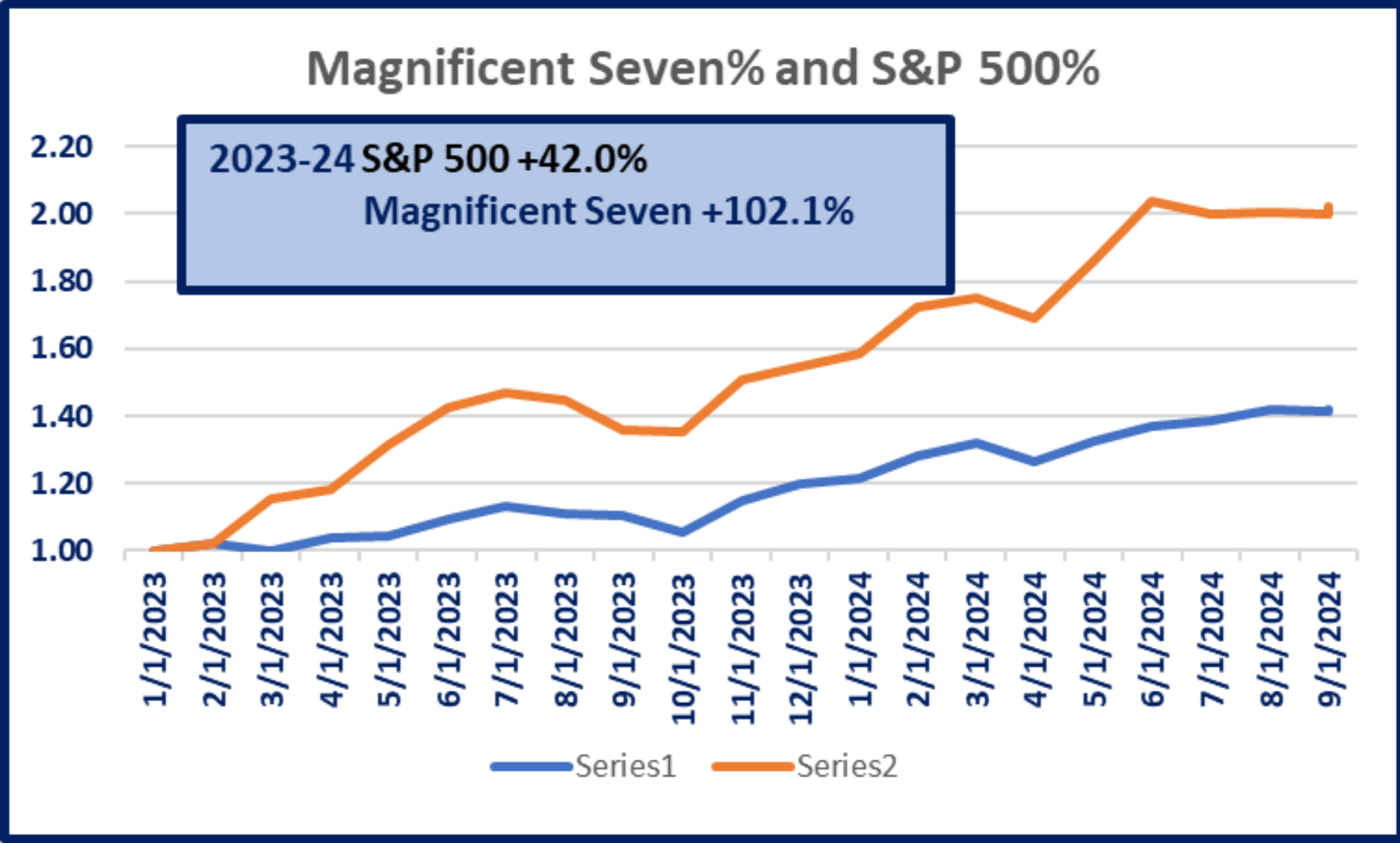
Leverage

Rational or Irrational?



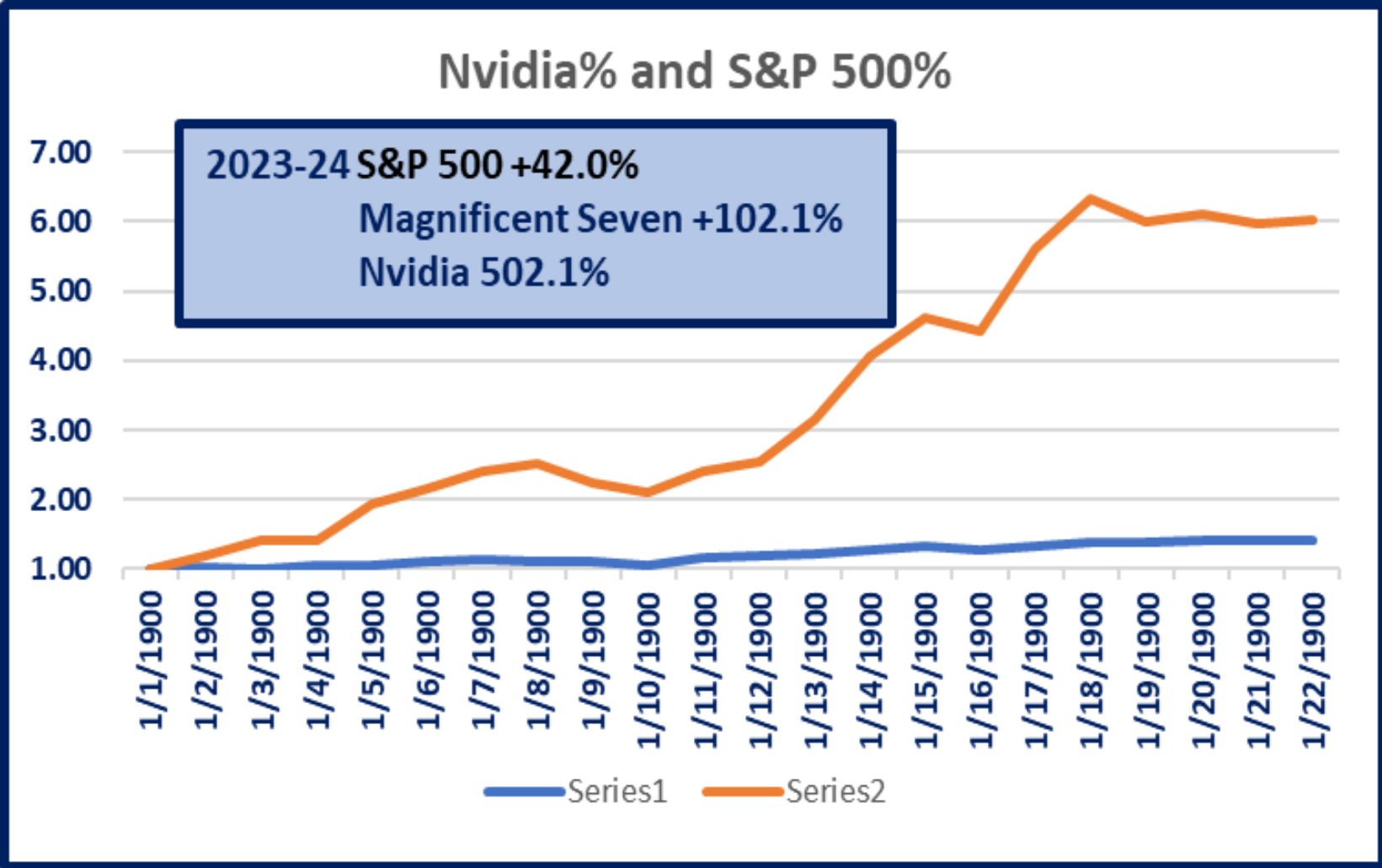
Source: Bloomberg News; Hugh Johnson Economics

Rational or Irrational?



Source: Bloomberg News; Hugh Johnson Economics

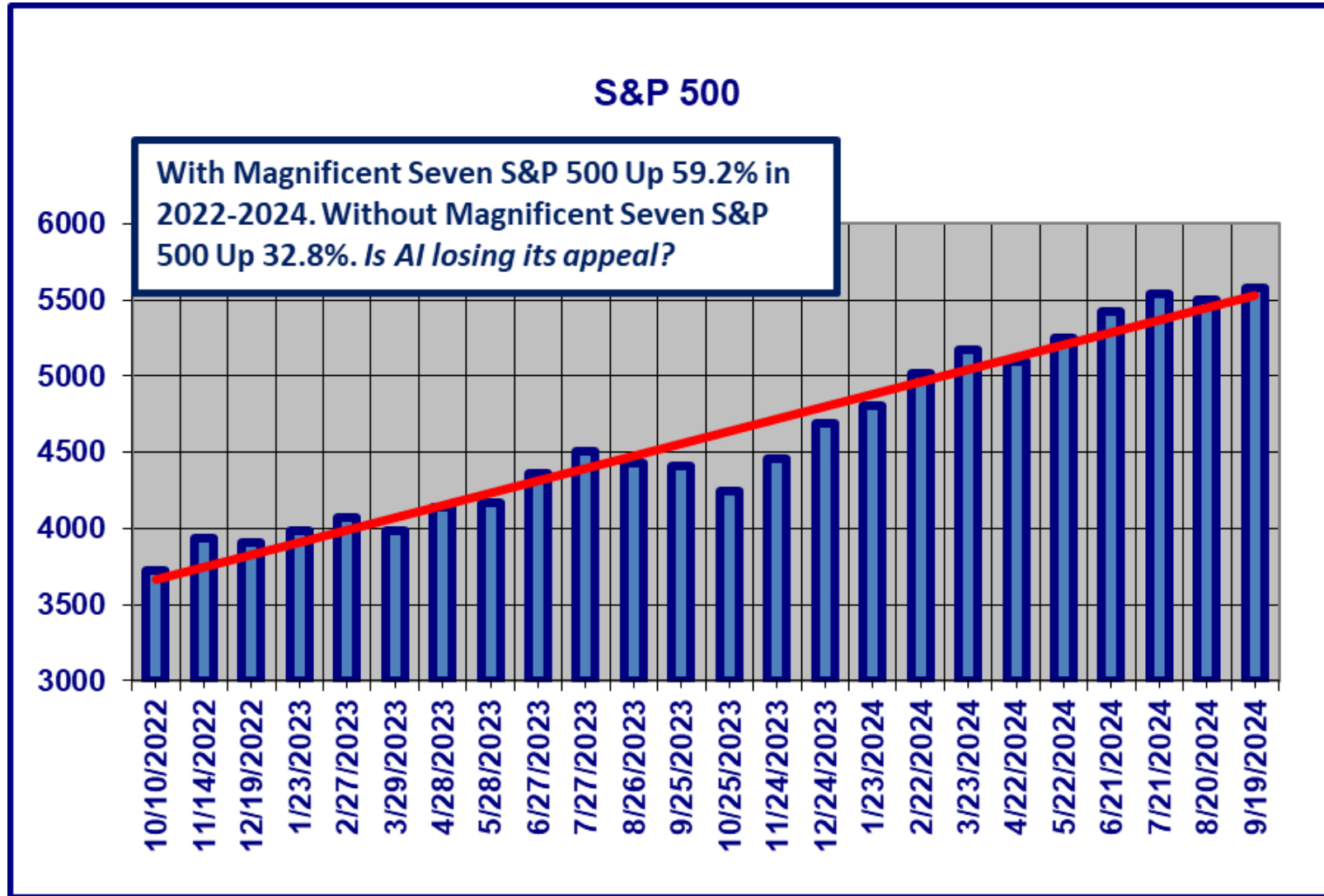
Rational or Irrational?



Source: Bloomberg News; Hugh Johnson Economics

Financial Market Trends

October 2022-September 2024: S&P 500 +59.2%



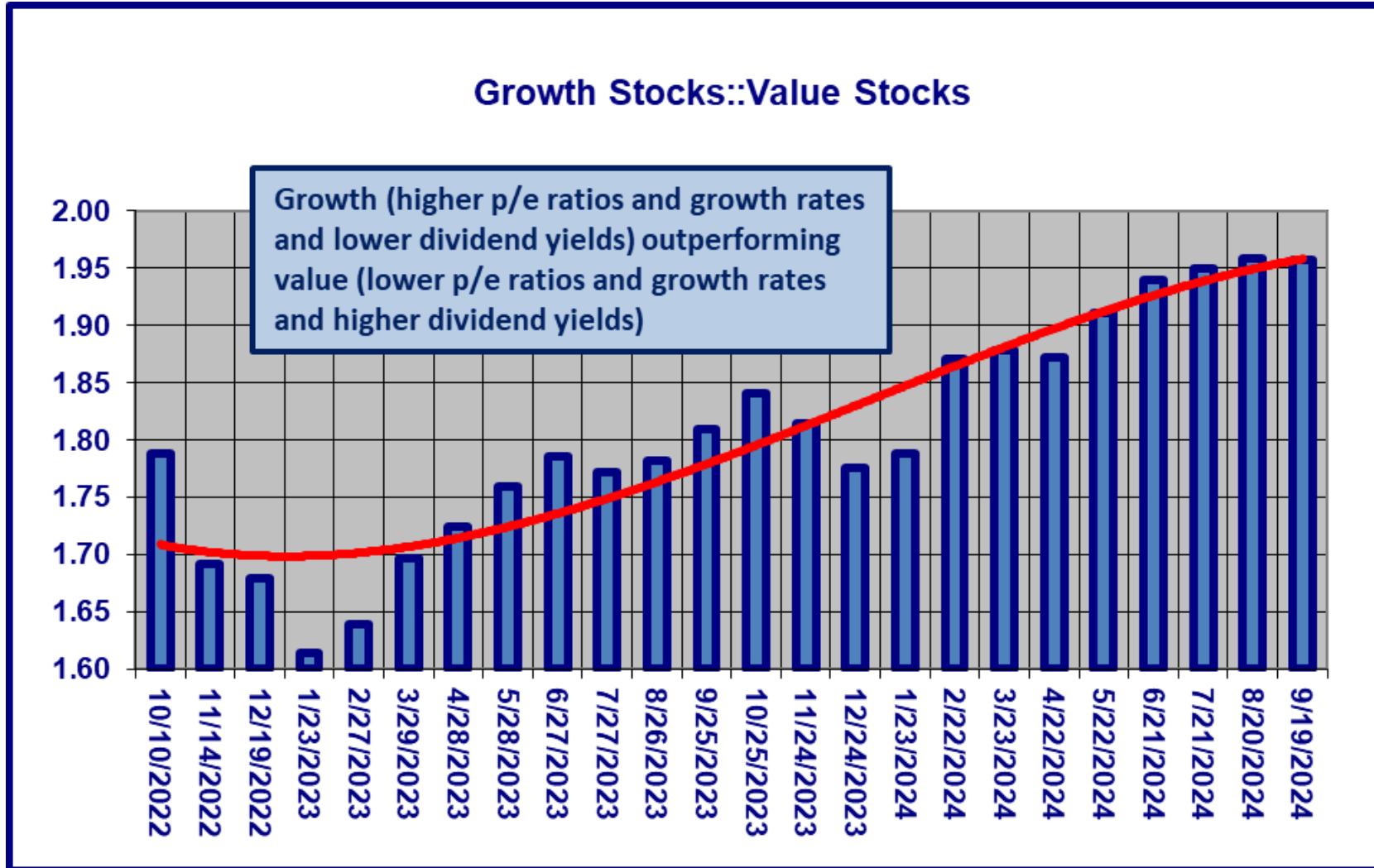
Source: Bloomberg News; Hugh Johnson Economics

October 2022-September 2024: Bull Market Sectors Outperforming Bear Market Sectors

October 2022-September 2024	%
Technology	111.6%
Communications Services	91.5%
S&P 500	59.2%
Industrial	56.9%
Consumer Discretionary	48.7%
Financials	46.8%
Basic Materials	37.9%
Real Estate	32.1%
Utilities	28.2%
Consumer Staples	26.1%
Healthcare	25.3%
Energy	9.6%

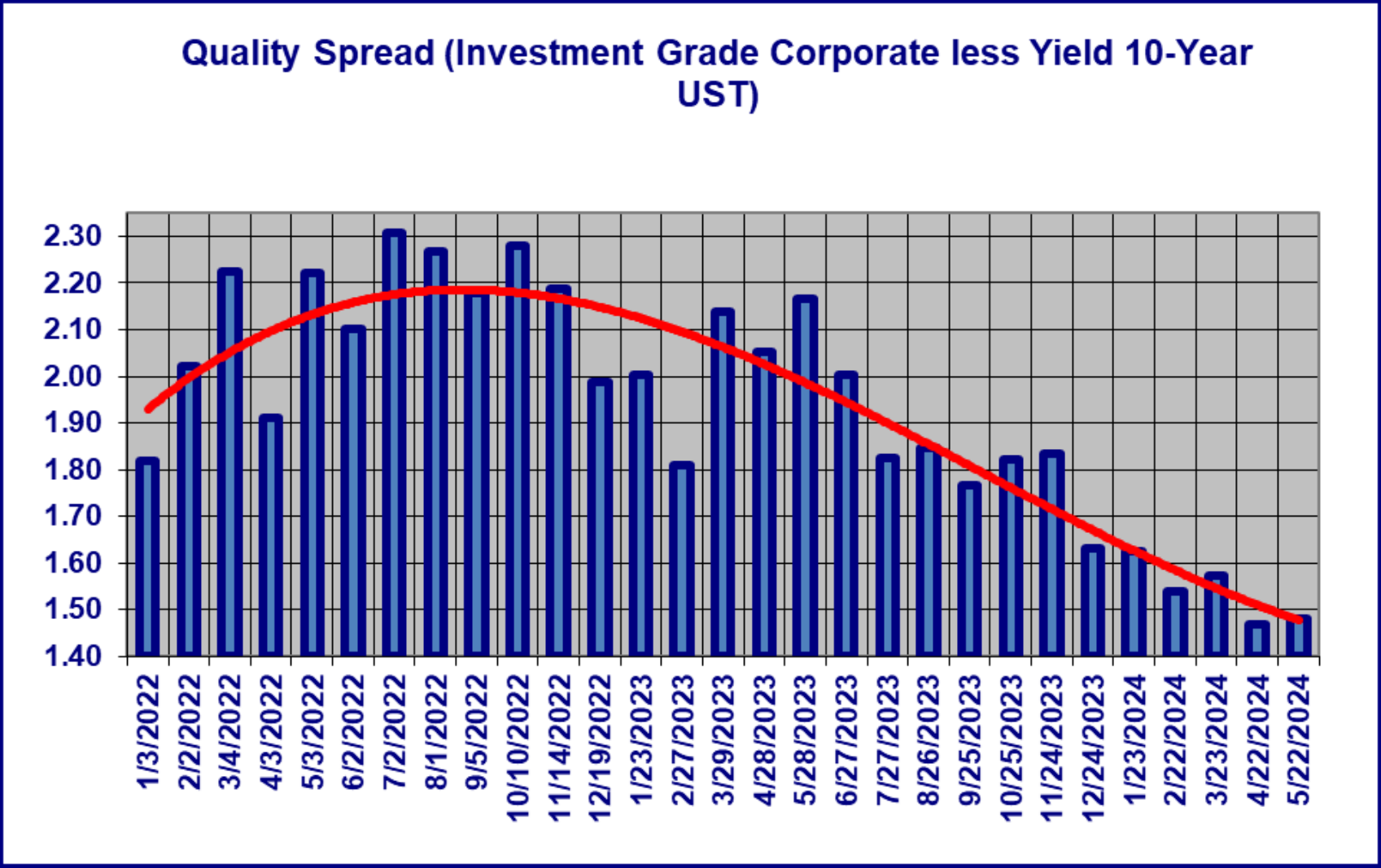
Source: Bloomberg News; Hugh Johnson Economics

Growth Outperforming Value



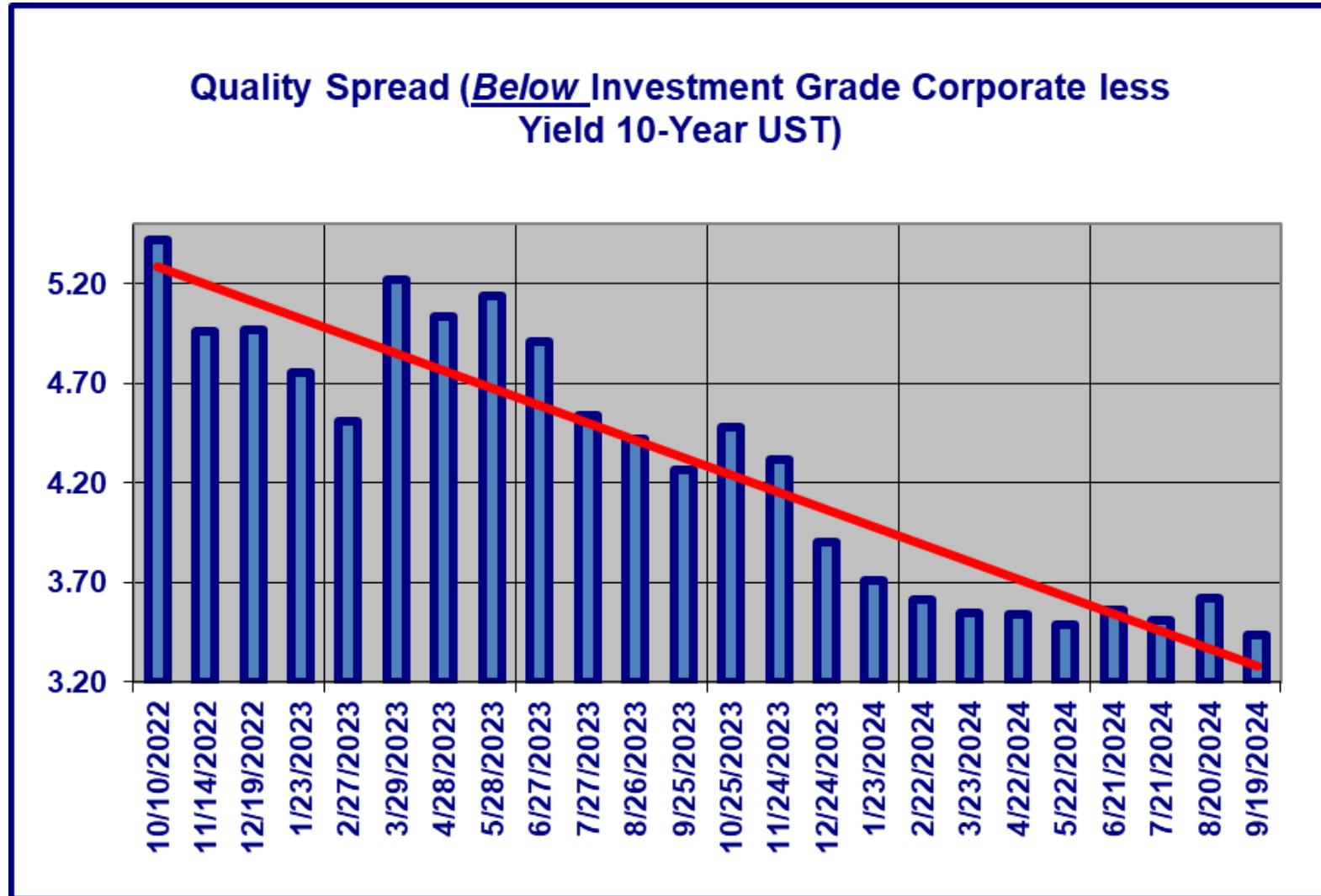
Source: Bloomberg News; Hugh Johnson Economics

Investment Grade Quality Spreads Narrowing



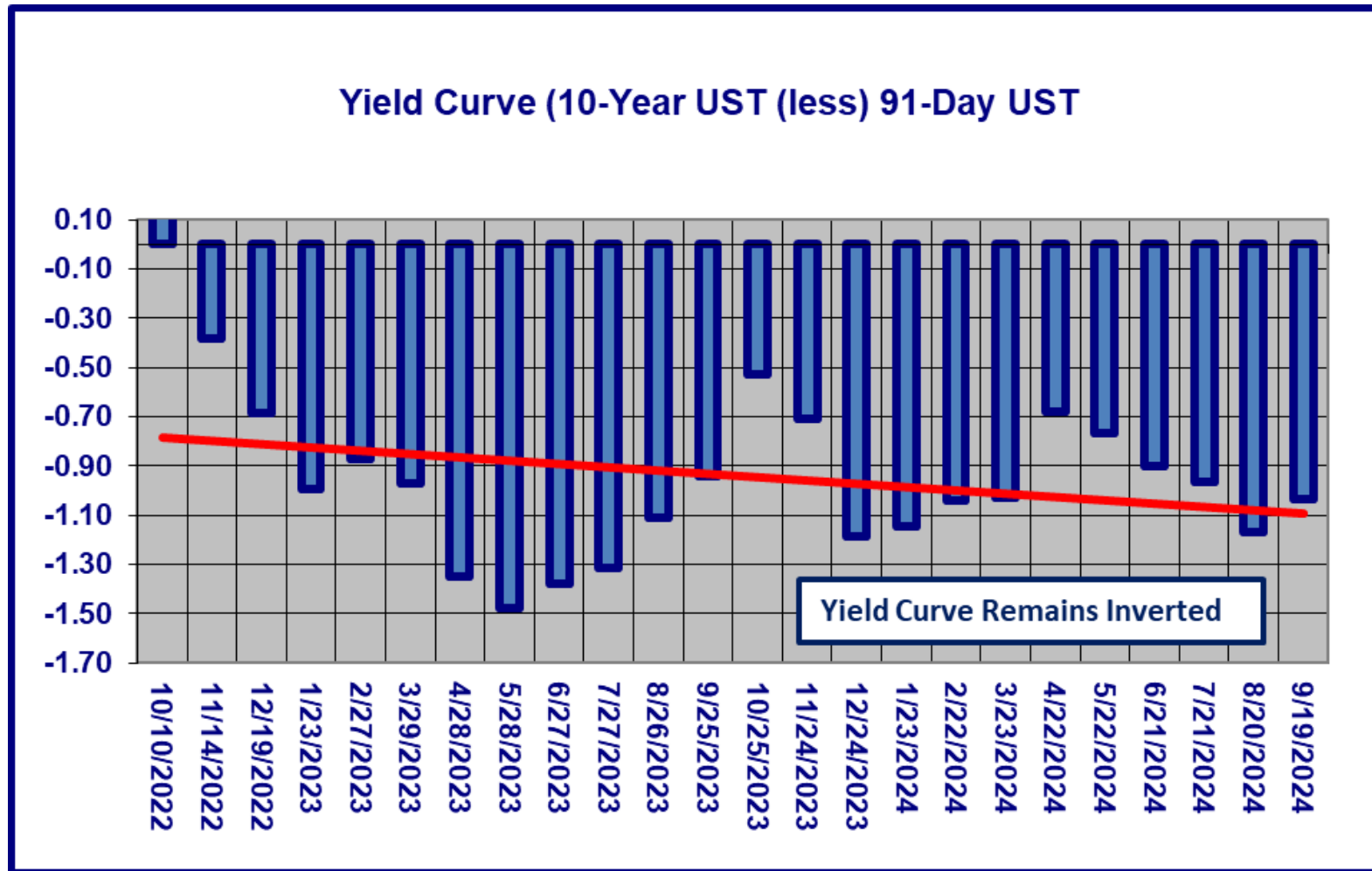
Source: Bloomberg News; Hugh Johnson Economics

Below Investment Grade Quality (“Junk”) Spreads Narrowing



Source: Bloomberg News; Hugh Johnson Economics

The Yield Curve Remains Inverted



Since 1960 the yield curve has inverted 10 times. 9 have been accompanied by a hard landing or recession.

The probability of a recession remains high

Month/Year	Probability of Recession
September-24	56.2%
October-24	46.1%
November-24	51.8%
December-24	62.9%
January-25	61.5%
February-25	58.3%
March-25	58.3%
April-25	50.0%
May-25	51.8%
June-25	55.8%
July-25	56.3%
August-25	61.8%

Source: Federal Reserve Bank of New York

Since 1960 the yield curve has inverted 10 times. 8 have been accompanied by a hard landing or recession. The probability is high and increasing.

Are the Financial Market Trends Rational?

Excessive: But What Choice Did We Have?

Monetary Policy

The Federal Reserve *increased* its holdings of financial assets by \$4.5 trillion. (2020-2021)

Fiscal Policy

The Federal Government *increased* its spending by \$2.1 trillion. (2020-2021)

Money Supply

M2 *increased* by \$6.2 trillion (2020-2021).

Consumer spending *increased* \$1.6 trillion. (2020-2021)

Consumer Price Index increased 1.2% (2020), 4.7% (2021) and 8.0% (2022).

Excessive: But What Choice Do We Have?

Monetary Policy

The Federal Reserve *reduced* its holdings of financial assets by \$2.1 trillion. (2022-2023)

Fiscal Policy

The Federal Government *reduced* spending by \$1.1 trillion. (2022-2023)

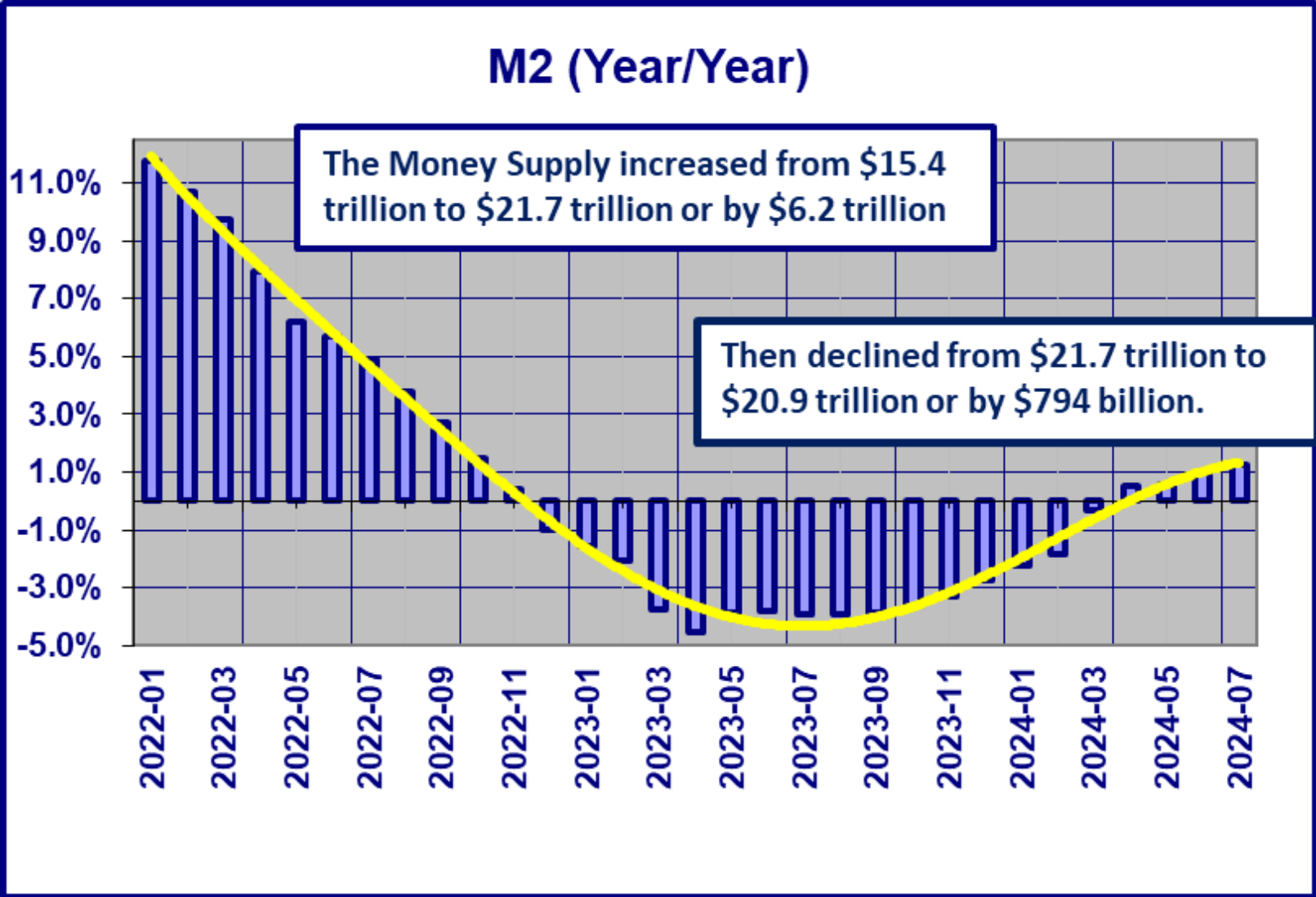
Money Supply

M2 *declined* by \$794.3 billion. (2022-2023)

Consumer spending *increased* \$2.6 trillion. (2022-2023)

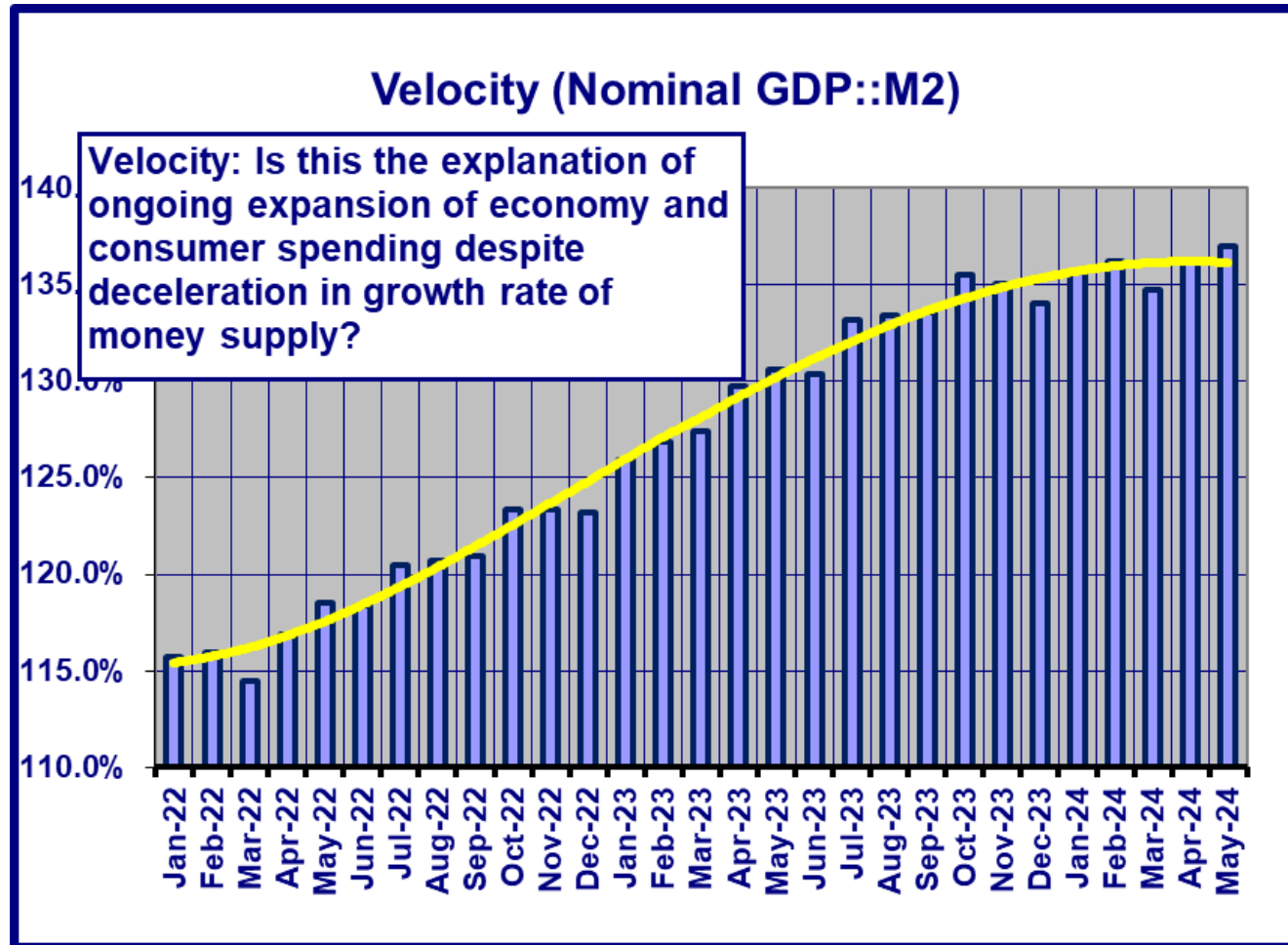
Consumer Price Index Increased +4.7% (2021), +8.0% (2022), and 4.3% (2023).

Money Supply



Source: Federal Reserve

Velocity



Source: Federal Reserve

Rising Inflation = Rising Velocity = Expanding Economy

Consumer Spending Explanation

Employment growth has slowed.

Growth rate of personal income and wages has slowed some.

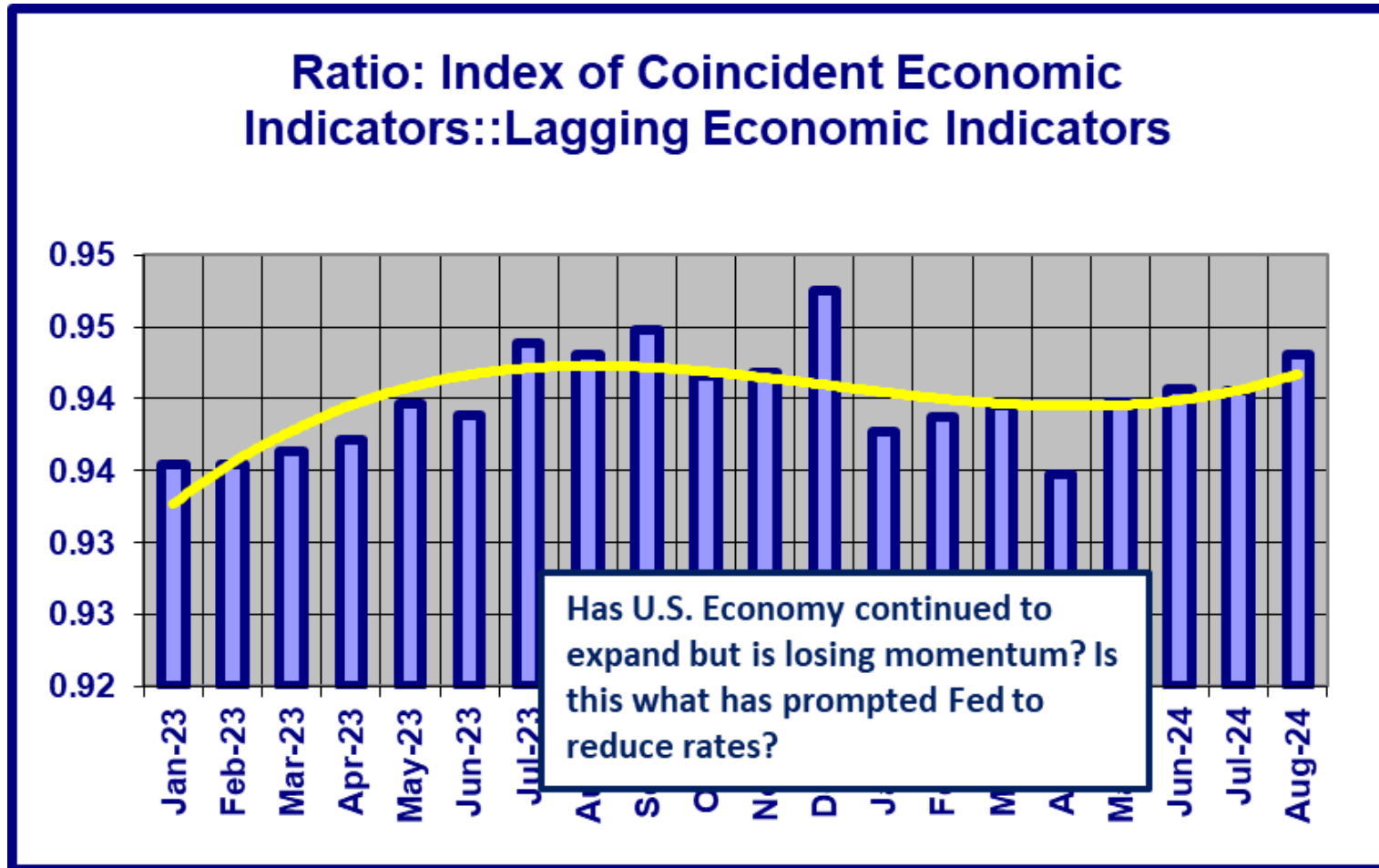
The Savings Rate has declined. from an annual rate of 4.8% to 2.9%

Consumer borrowing has increased.

Consumer debt delinquency rates remained unchanged

Auto and credit card debt remains elevated.

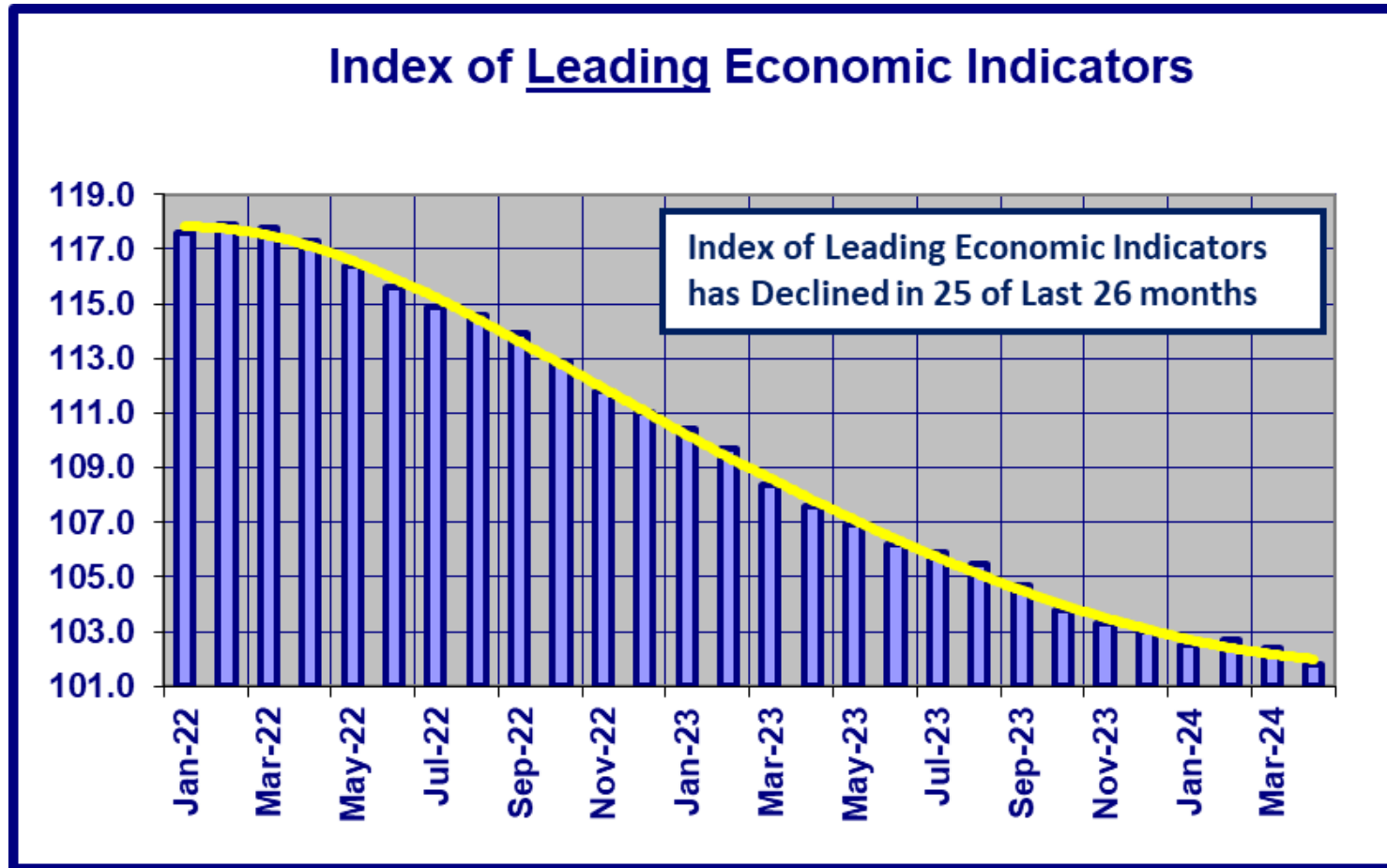
Ratio of Coincident :: Lagging Economic Indicators *Momentum?*



Source: Conference Board

The economy expanded 2.5% in July and 2.1% in August, and 3.0% in Q2.

Leading Economic Indicators: A Complete Puzzlement



Source: Conference Board

Leading Economic Indicators have declined for 20 of most recent 30 months.

**Outlook for economy, employment,
manufacturing, inflation, Federal
Reserve policy, longer-term interest
rates, stock prices**

Real Gross Domestic Product

September 2024 Forecast		
Quarter	Consensus-Real GDP	HJ Economics-Real GDP
2024-Q1	1.4%	1.4%
2024-Q2	3.0%	3.0%
2024-Q3	1.7%	1.8%
2024-Q4	1.5%	1.6%
2025-Q1	1.7%	1.7%
2025-Q2	1.9%	1.9%
2025-Q3	2.0%	2.0%
2025-Q4	2.0%	2.1%
2023	2.5%	2.5%
2024	2.5%	2.6%
2025	1.7%	1.8%
2026	2.0%	2.2%

Source: Bloomberg Economics; Hugh Johnson Economics

Employment

Average Monthly Increase in Employment

September 2024 Forecast		
Quarter	Consensus-NFP	HJ Economics-NFP
2024-Q1	243	243
2024-Q2	218	218
2024-Q3	137	128
2024-Q4	128	70
2025-Q1	110	77
2025-Q2	120	117
2025-Q3	123	157
2025-Q4	125	177
2023	245	245
2024	175	165
2025	125	132
2026	145	227

Source: Bloomberg Economics; HJ Economics

The Unemployment Rate

September 2024 Forecast		
Quarter	Consensus-Unemployment Rate	HJ Economics-Unemployment Rate
2024-Q1	3.8%	3.8%
2024-Q2	4.1%	4.1%
2024-Q3	4.3%	4.0%
2024-Q4	4.4%	4.2%
2025-Q1	4.4%	4.3%
2025-Q2	4.4%	4.3%
2025-Q3	4.3%	4.4%
2025-Q4	4.3%	4.4%
2023	3.7%	3.7%
2024	4.1%	4.0%
2025	4.3%	4.3%
2026	4.2%	4.5%
Source: Bloomberg Economics; HJ Economics		

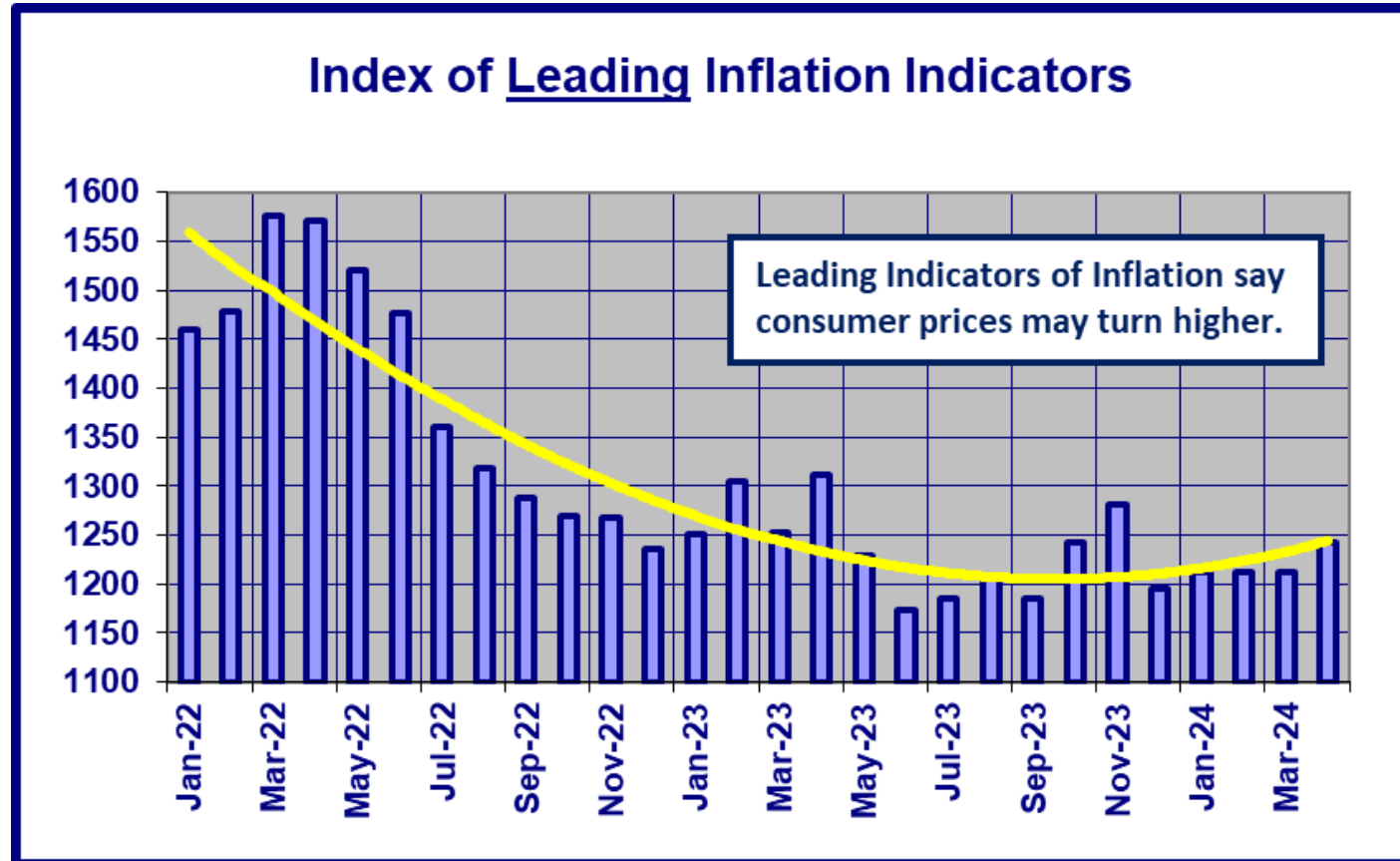
Real Gross Domestic Product and Employment- Manufacturing

September 2024 Forecast		
Quarter	HJ Economics-Manufacturing Real Gross Domestic Product	HJ Economics-Real GDP Manufacturing Employment
2024-Q1	-3.8%	-9.0
2024-Q2	5.0%	-6.0
2024-Q3	1.7%	25.8
2024-Q4	2.1%	22.7
2025-Q1	2.1%	26.1
2025-Q2	2.3%	30.0
2025-Q3	2.4%	33.5
2025-Q4	2.4%	35.5
2023	2.8%	106.0
2024	1.7%	17.3
2025	2.3%	102.7
2026	2.5%	150.0
Source: Bloomberg Economics; Hugh Johnson Economics		

Manufacturing (Auto, Computers, Research and Development)

September 2024 Forecast for Manufacturing Autos, Computers, Research and Development			
Quarter	Motor Vehicles	Computers	Research & Development
2024-Q1	-2.7%	-1.7%	6.1%
2024-Q2	25.6%	-23.1%	4.3%
2024-Q3	2.5%	4.5%	1.8%
2024-Q4	0.3%	4.5%	1.9%
2025-Q1	1.5%	4.5%	1.9%
2025-Q2	2.3%	4.5%	2.0%
2025-Q3	2.3%	4.5%	2.1%
2025-Q4	2.5%	4.5%	2.2%
2023	5.7%	10.1%	2.4%
2024	-0.7%	-5.7%	3.1%
2025	3.0%	2.5%	2.1%
2026	2.9%	4.5%	2.2%
Source: Bloomberg Economics; HJ Economics			

Leading Inflation Indicators



Source: HJA, Bureau of Labor Statistics; University of Michigan, Federal Reserve Bank of St. Louis, National Assoc of Purchasing Managers etc.

Inflation

Personal Consumption Price Index

September 2024 Forecast		
Quarter	Consensus-PCE Price Index	HJ Economics-PCE Price Index
2024-Q1	2.7%	2.7%
2024-Q2	2.5%	2.5%
2024-Q3	2.4%	2.3%
2024-Q4	2.4%	2.6%
2025-Q1	2.1%	2.2%
2025-Q2	2.0%	2.2%
2025-Q3	2.1%	2.3%
2025-Q4	2.1%	2.5%
2023	3.4%	3.4%
2024	2.5%	2.5%
2025	2.1%	2.3%
2026	2.1%	2.6%

Source: Bloomberg Economics, Hugh Johnson Economics

Federal Reserve Policy (federal funds rate: 4.875%)

September 2024 Forecast		
Quarter	Consensus Fed Funds Rate	HJ Economics Fed Funds Rate
2024-Q1	5.375	5.375
2024-Q2	5.375	5.375
2024-Q3	5.125	4.875
2024-Q4	4.625	4.375
2025-Q1	4.125	4.125
2025-Q2	3.875	3.875
2025-Q3	3.625	3.625
2025-Q4	3.375	3.375
2023	5.125	5.188
2024	4.813	5.000
2025	3.625	3.750
2026	3.188	3.500
Source: Bloomberg Economics, Hugh Johnson Economics		

Longer-Term Interest Rates (10-Year UST: 3.74%)

September 2024 Forecast		
Quarter	Consensus 10-Year	HJ Economics 10-Year
2024-Q1	4.20	4.20
2024-Q2	4.40	4.40
2024-Q3	3.95	3.74
2024-Q4	3.89	3.48
2025-Q1	3.80	3.56
2025-Q2	3.75	3.51
2025-Q3	3.73	3.35
2025-Q4	3.70	3.16
2023	3.90	3.94
2024	4.11	3.95
2025	3.75	3.39
2026	3.71	3.28

Source: Bloomberg Economics, Hugh Johnson Economics

Stock Prices (S&P 500: 5717.23)

Quarter	S&P 500 Operating Earnings	Y/Y%	10-Year UST	P/E	S&P 500 FCST
2024-Q1	\$226.42	3.0%	4.20	22	5012
2024-Q2	\$232.88	7.5%	4.40	23	5254
2024-Q3	\$235.91	7.8%	3.74	23	5331
2024-Q4	\$243.14	9.1%	3.48	22	5420
2025-Q1	\$251.47	11.1%	3.56	22	5416
2025-Q2	\$259.81	11.6%	3.51	21	5475
2025-Q3	\$270.12	14.5%	3.35	21	5590
2025-Q4	\$279.83	15.1%	3.16	20	5701
2026-Q1	\$288.60	14.8%	3.05	20	5864
2026-Q2	\$297.36	14.5%	3.10	21	6115
2026-Q3	\$306.13	13.3%	3.56	21	6365
2026-Q4	\$314.89	12.5%	3.41	21	6619
Sources: HJ Economics; Refinitiv Proprietary Research					

Population Puts Pressure On Productivity

Variable	1980-2019	2020-2023
Economy	2.7%	2.0%
Population	1.1%	0.8%
Participation Rate	65.3	62.1
Labor Force	1.1%	0.5%
Employment	1.3%	1.0%
Productivity	1.9%	1.5%
Source: Bureau of Labor Statistics		

Bureau of Economic Analysis, Census Bureau, Bureau of Labor Statistics

The Election

Harris win. (5.0+ in 10)

Republicans win 51-seat Senate majority. (5.0+ in 10)

Democrats win majority in House. (5.0+ in 10).

Risk to Harris Win.

- 1. September nonfarm payroll employment below 100,000.**
- 2. 5% decline in stock prices.**
- 3. September Consumer Price Index exceeds 2.5%. results. (3+ in 10).**
- 4. September core Consumer Price Index exceeds 3.2%.**
- 5. September economic retail sales and industrial production each decline.**
- 6. Social unrest, crisis at border, more global instability, Russian intervention.**

Economic Policy (Penn Wharton Budget Model)

Three Important Fiscal Issues

Trump Deficits: \$5.8 Trillion over 10 years *less* \$1.8 Trillion in growth incentives. (no tax on tips, overtime, social security.)

Harris Deficits: \$1.2 Trillion over 10 Years *plus* \$800 billion in growth disincentives. (child tax credit, corporate income tax increase from 21% to 28%, no tax on tips.)

Both will include extension of 2017 tax cuts \$2.5 Trillion over 10 years.

Trump Tariffs: 10% on all imports and 60% on Chinese imports.

Harris: None

Trump Federal Reserve Independence (unclear)

Harris Federal Reserve Independence (absolute)

Rise of AI:

**Do you have an AI strategy to unlock
your organization's potential?
Will you innovate or be left behind?**

Cory McNeley Managing Director, UHY Consulting



Agenda

I. Background

- Historical Context
- Speed of Adoption
- AI's Reach

II. Practical Examples

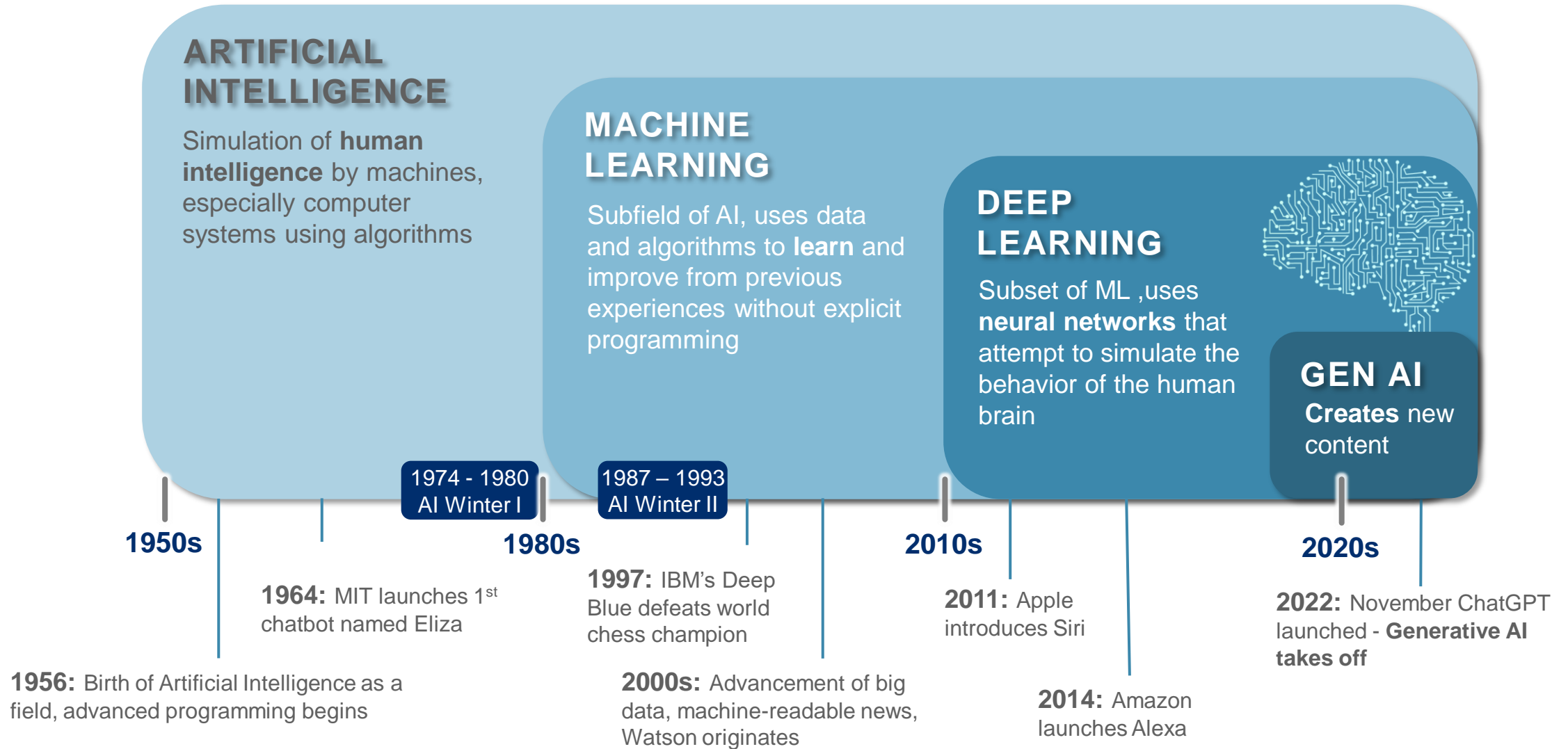
- Aerospace
- Quality Control
- Engineering
- Procurement

III. Data Considerations

IV. Conclusion



The Path of AI



Speed of Adoption: Launch → 1MM Users



ChatGPT Model	Year	Parameters
GPT	2018	117M
GPT-2	2019	1.5B
GPT-3	2020	175B
GPT-4	2023	>1.7T

The Chat-GPT4o model has an estimated 1.7 Trillion parameters in it's training data! By contrast the previous version utilized only 175B.

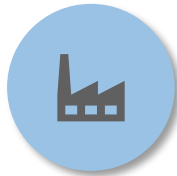
Reach of AI – Example Sectors



ENTERTAINMENT



PUBLIC AND PRIVATE
TRANSPORTATION



MANUFACTURING



HEALTHCARE



SERVICE
INDUSTRY



RETAIL AND
WHOLESALE



HOMES



ENERGY

- Early indications are that AI penetration will initially be felt most acutely in sectors such as Finance, Information Technology, and Professional Services such as Legal.
- However, sectors such as Healthcare, Energy, and **in particular Manufacturing**, where vast amounts of data are generated daily, **hold great promise** as AI models and applications improve rapidly and become more focused and honed.
- AI needs data and the data generated by **Manufacturing** and its' related processes provides a rich source to both train, inform, and validate AI models improving performance and the speed and quality of results.

How Aerospace Companies Are Deploying AI

AIRBUS

Airbus is using AI for computer vision to inspect and detect flaws (reduced inspection time and increased defect detection rates, improving overall manufacturing efficiency), anomaly detection, conversational assistance, and planning & decision-making

LOCKHEED MARTIN

Lockheed Martin is using AI technology across the enterprise including HR for talent matching, IT for help ticket resolution, operations for quality control measures, engineering for faster product testing, and production to optimize daily workflows.

BOEING

Boeing is leveraging AI for demand forecasting, supply chain optimization, anomaly detection, predictive analysis, and predictive maintenance. More recently they are using AI to sift through massive amounts of data and identify risks in its aircraft operations.

Quality Control Examples



Predictive Quality Control: AI can analyze data from manufacturing processes to predict and detect quality issues before they occur, such as identifying subtle correlations in production machinery data that are precursors to quality issues.



Visual Inspection Systems: AI-powered visual inspection systems can identify defects and quality issues with greater accuracy and speed than human inspectors reducing rework and customer complaints.



Real-time Monitoring: IoT devices combined with AI can monitor production lines and equipment performance in real-time, predicting failures and ensuring quality standards and providing proactive intervention in real-time.

Engineering Examples

 AUTODESK®
FUSION 360™

 SOLIDWORKS

 Ansys

DISCOVERY

 ALTAIR

HyperWorks™

 creo®

 MathWorks

Product Design Optimization: AI algorithms can be integrated into systems like CATIA, helping engineers optimize design of components, while minimizing material usage, weight, and reducing manufacturing costs while maintaining performance specifications.

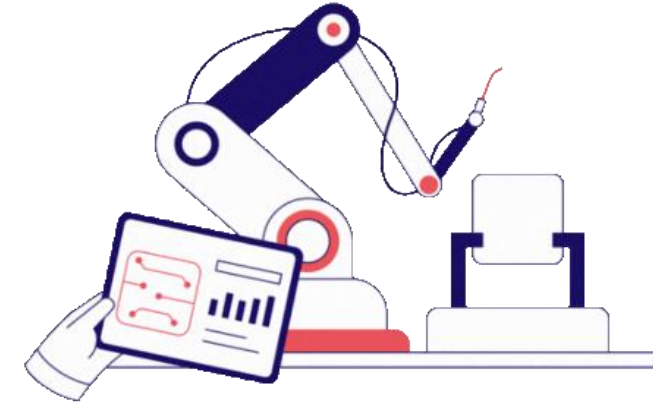
Simulation and Testing: AI can simulate and test various design scenarios, reducing the time and resources required for R&D and accelerating the product development cycle. AI can also recommend the most promising solution paths when confronted with a sea of possibilities and limited time.

Automation of Routine Tasks: AI can automate routine engineering tasks, such as drafting and calculations, allowing engineers to focus on more complex and innovative aspects of product development.

Procurement Examples



Supplier Selection and Risk Management: AI can analyze data on supplier performance, reliability, and risk factors, helping procurement teams make informed decisions and build resilient supply chains.



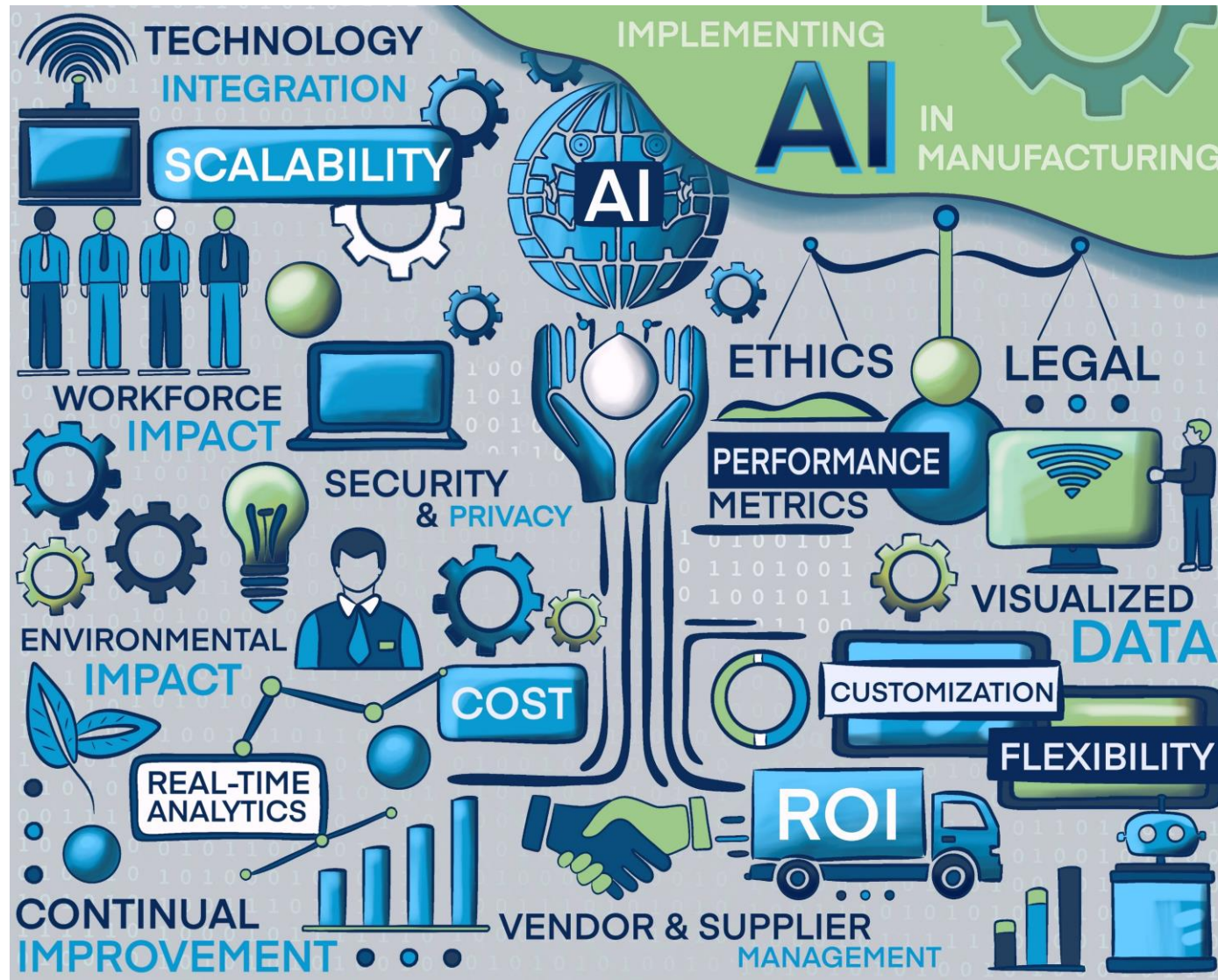
Demand Forecasting and Inventory Management: AI can develop highly complex and detailed forecasts to predict future product demand, allowing companies to optimize inventory levels and reduce storage costs.



Automated Negotiations: AI systems can automate aspects of the negotiation process with suppliers, using historical data, market conditions, and the organization's objectives to secure the best terms and quality from suppliers.



AI Considerations (*Data)



Conclusions

- The use and reach of AI will continue to grow and yield benefits to those who adopt and use the tools to their advantage
- Manufacturing is inherently well-positioned to take advantage of AI's benefits through the availability of data and processes inherent to the sector.
- Governance and monitoring processes will be needed to avoid erosion of worker skill sets, monitor AI for inherent bias, guard against overreliance in decision-making, stay ahead of security and intellectual property concerns, and manage business continuity risks
- AI is not one size fits all. Some uses will require the latest AI models, while others can apply earlier models with a narrower scope.
- How good does your AI need to be to yield the expected benefits to your organization?



A large, semi-transparent blue rectangular box is centered on the page, containing the text '15-minute break' in a bold, white, sans-serif font. The background of the entire slide is a low-angle photograph of modern glass skyscrapers against a clear blue sky.

15-minute break



Measuring the Pulse of Manufacturers Across the Country: Are Manufacturers Prepared to Succeed?

September 26th, 2024

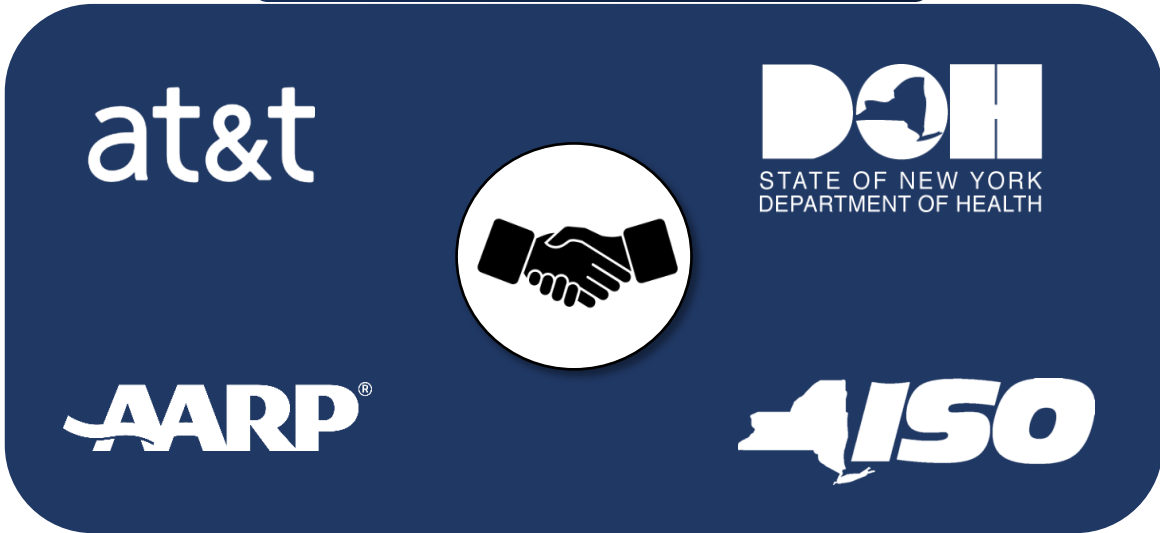
Siena College Research Institute

Presented by: Don Levy, Director of the Siena College Research Institute



What is SCRI?

Client



Logos for at&t, AARP, DOH (STATE OF NEW YORK DEPARTMENT OF HEALTH), and IISO. A central icon shows two hands shaking in a circle.

Political



Logos for The New York Times, Newsday, and a map of New York with a person at a podium. A central icon shows a classical building with columns in a circle. Below are icons for a donkey and an elephant.

Social and Cultural



Icons representing education (graduation cap), a person at a podium, a couple silhouette, a baseball, and a computer monitor.

Economic



Icons representing a CEO at a podium, a shopping cart, a stack of coins, a house with a dollar sign, and a line graph with a dollar sign.

#1 Rated Pollster in America



THE NEW YORK TIMES / SIENA COLLEGE POLL RANKED #1 FOR ACCURACY SECOND YEAR IN A ROW

RANK	POLLSTER	538 RATING	POLLScore	TRANSPARENCY SCORE	POLLS ANALYZED
1	The New York Times/Siena College	3.0 ★★ ★	-1.5	8.7	122



What are the best pollsters in America?



There are some familiar faces here. The New York Times/Siena College, for example, is the most accurate pollster in America. Due to its accuracy and transparency, it and ABC News/Washington Post are also the only two pollsters with a three-star rating

Nature of the Sample

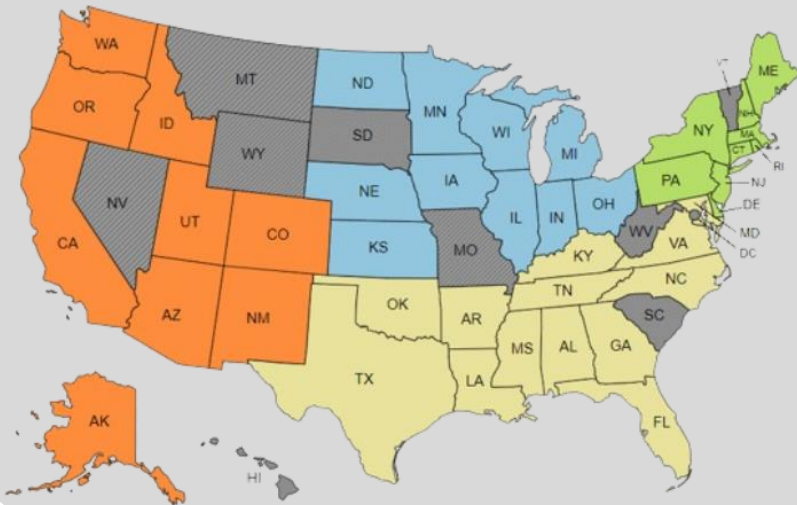


SCRI conducted the National Business Leader Survey from May 2024 – July 2024



SCRI partnered with the National Association of State Chambers, distributing the survey to members of their State Chambers located in four different regions across the country: Northeast, South, Midwest, and West. 389 respondents, 125 of which are in the Manufacturing industry.

41 of the 50 states participated in this survey with



22% of respondents in the Northeast

24% of Manufacturers in the Northeast

8% of respondents in the Midwest

24% of Manufacturers in the Midwest

58% of respondents in the South

43% of Manufacturers in the South

12% of respondents in the West

9% of Manufacturers in the West

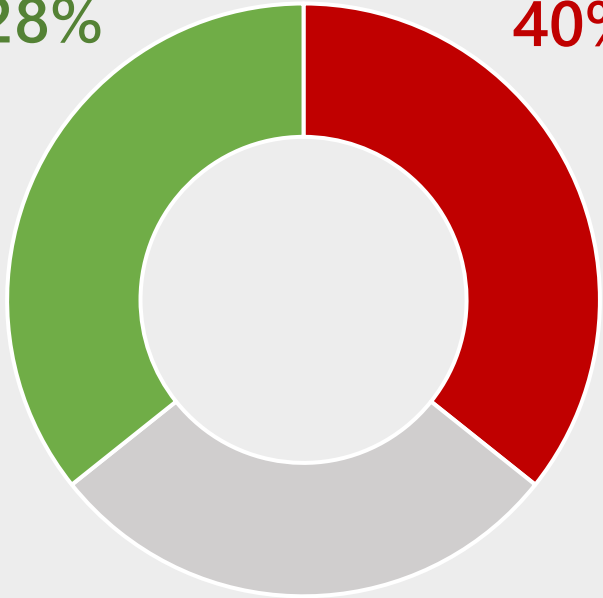
Business Leader Sentiment: Current Conditions

As you think about the **current business or economic conditions in your state** as compared to one year ago, would you say they are considerably better, a little better, about the same, a little worse, or considerably worse?

Total:

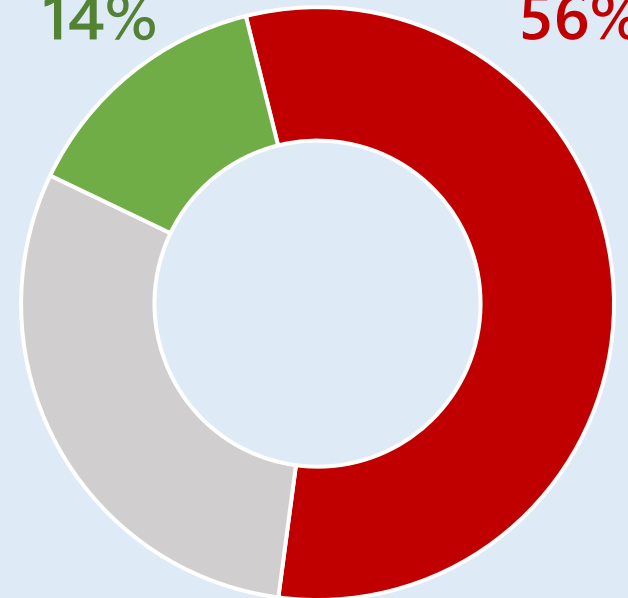
Manufacturing Industry:

Better 28% **Worse** 40%



32%
Same

Better 14% **Worse** 56%



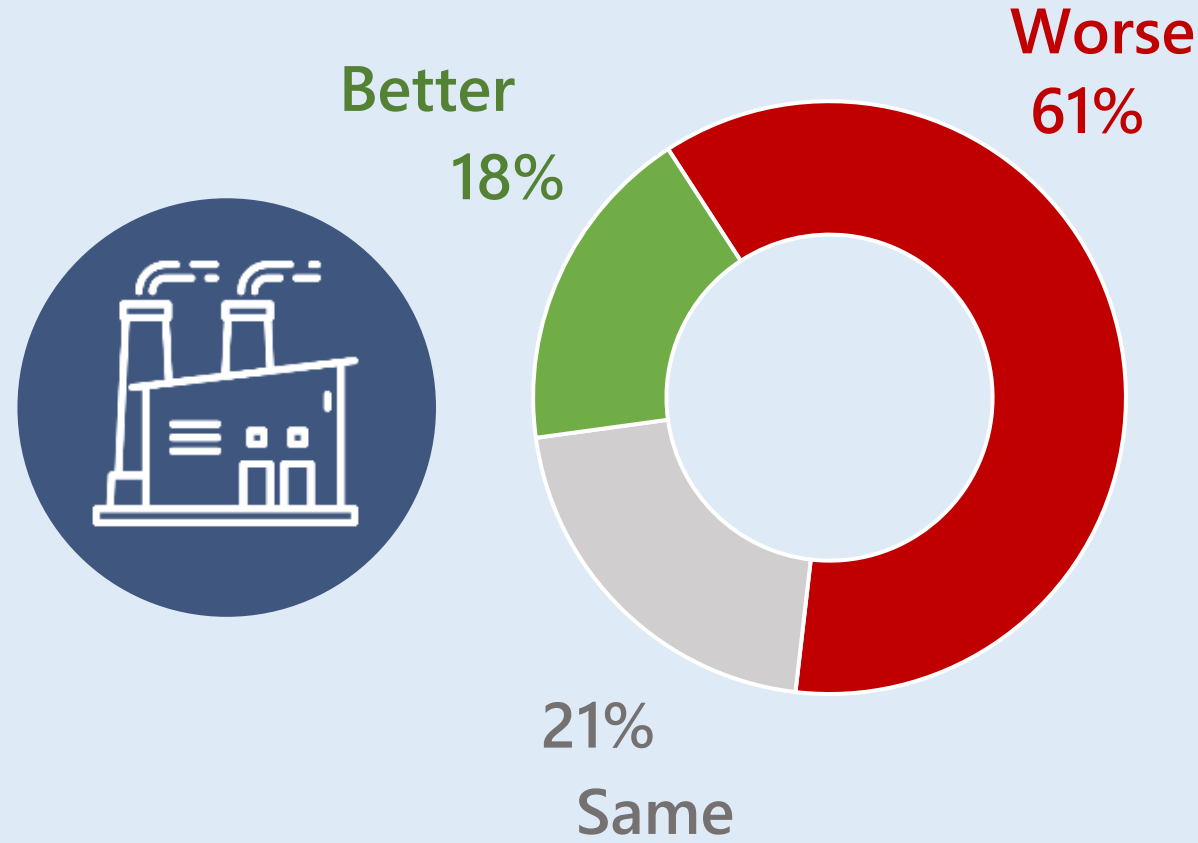
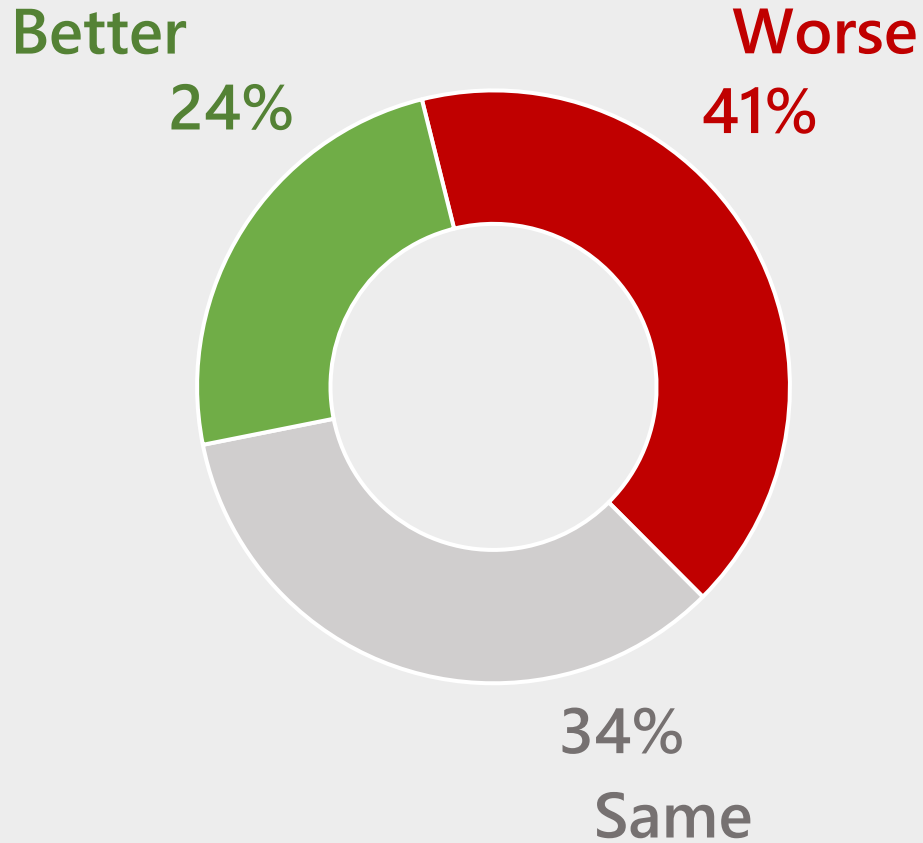
30%
Same

Business Leader Sentiment: Current Conditions

Now thinking specifically about **your industry**, how would you describe the **current business or economic conditions in your state** as compared with one year ago?

Total:

Manufacturing Industry:

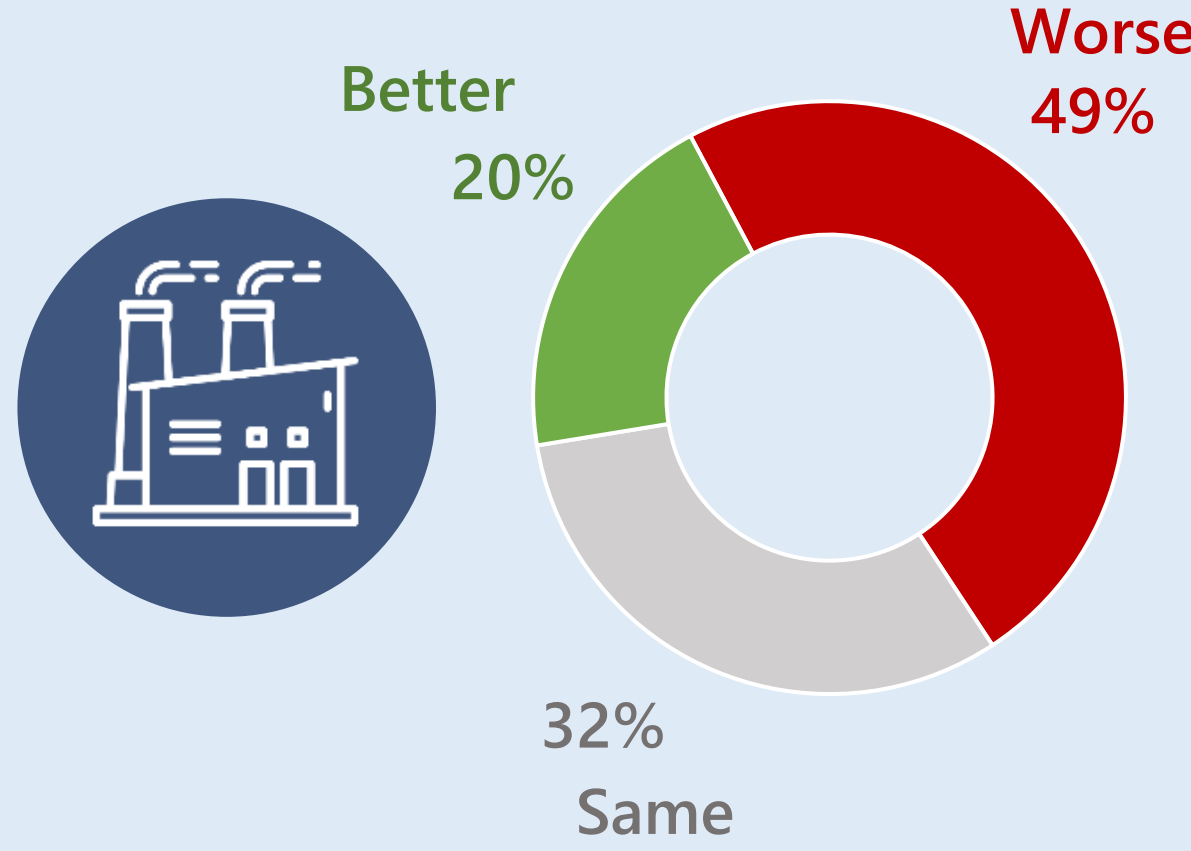
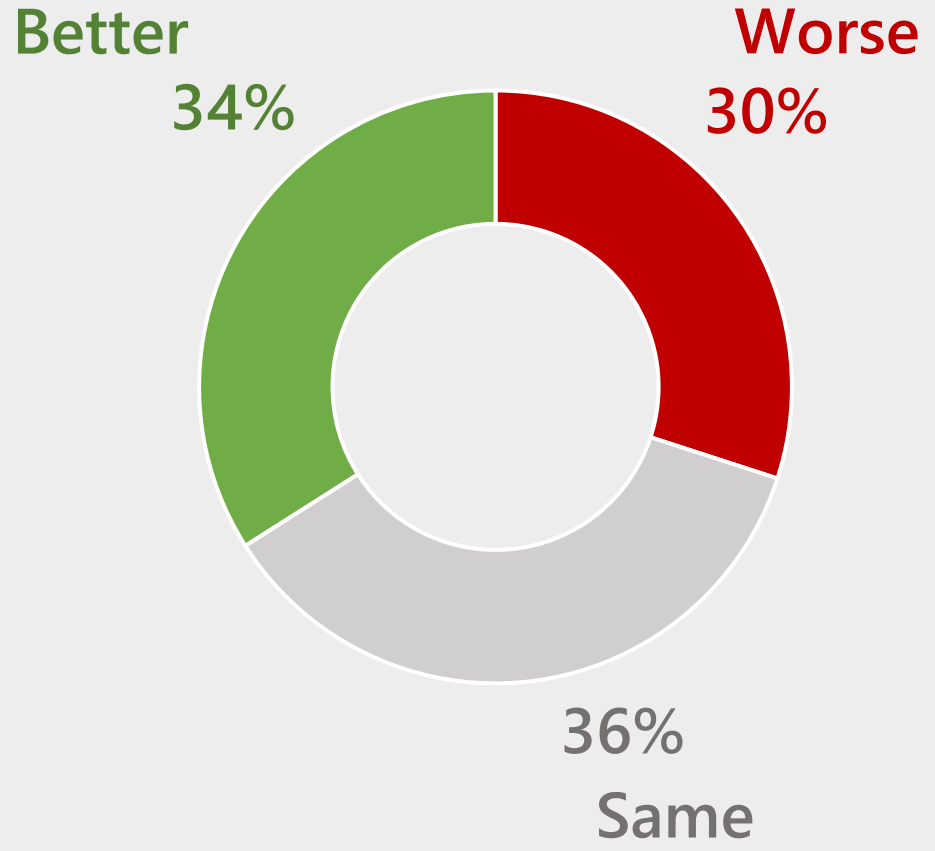


Business Leader Sentiment: Future Expectations

Looking forward from today through next year how would you describe your **expectations for the economy in your state?**

Total:

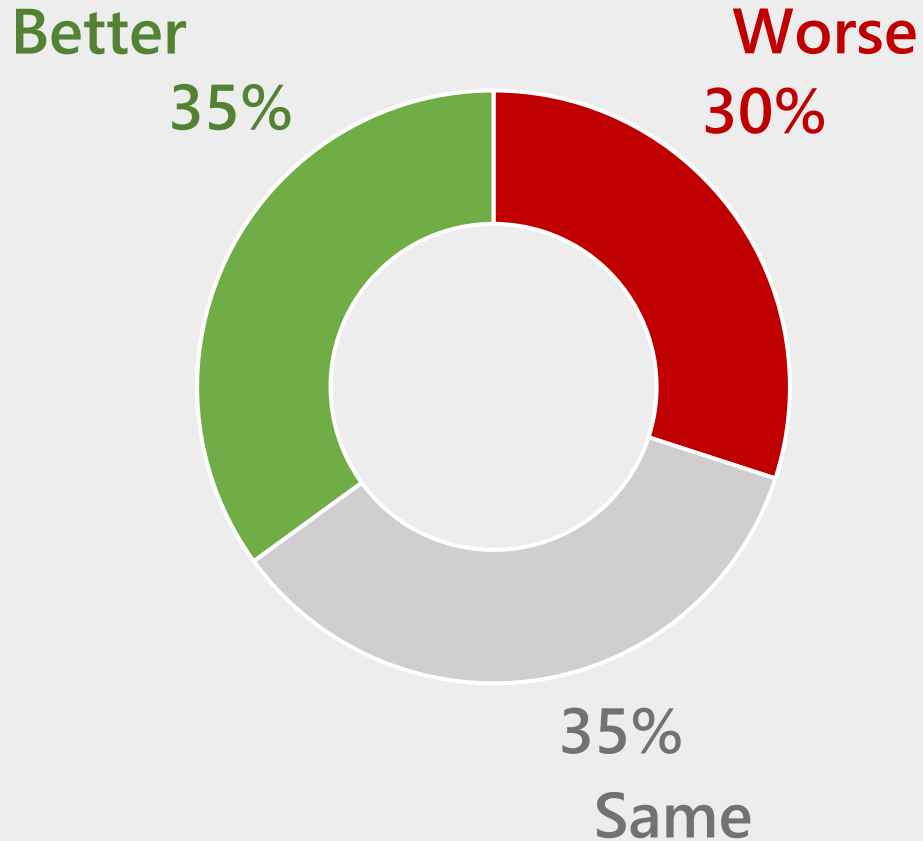
Manufacturing Industry:



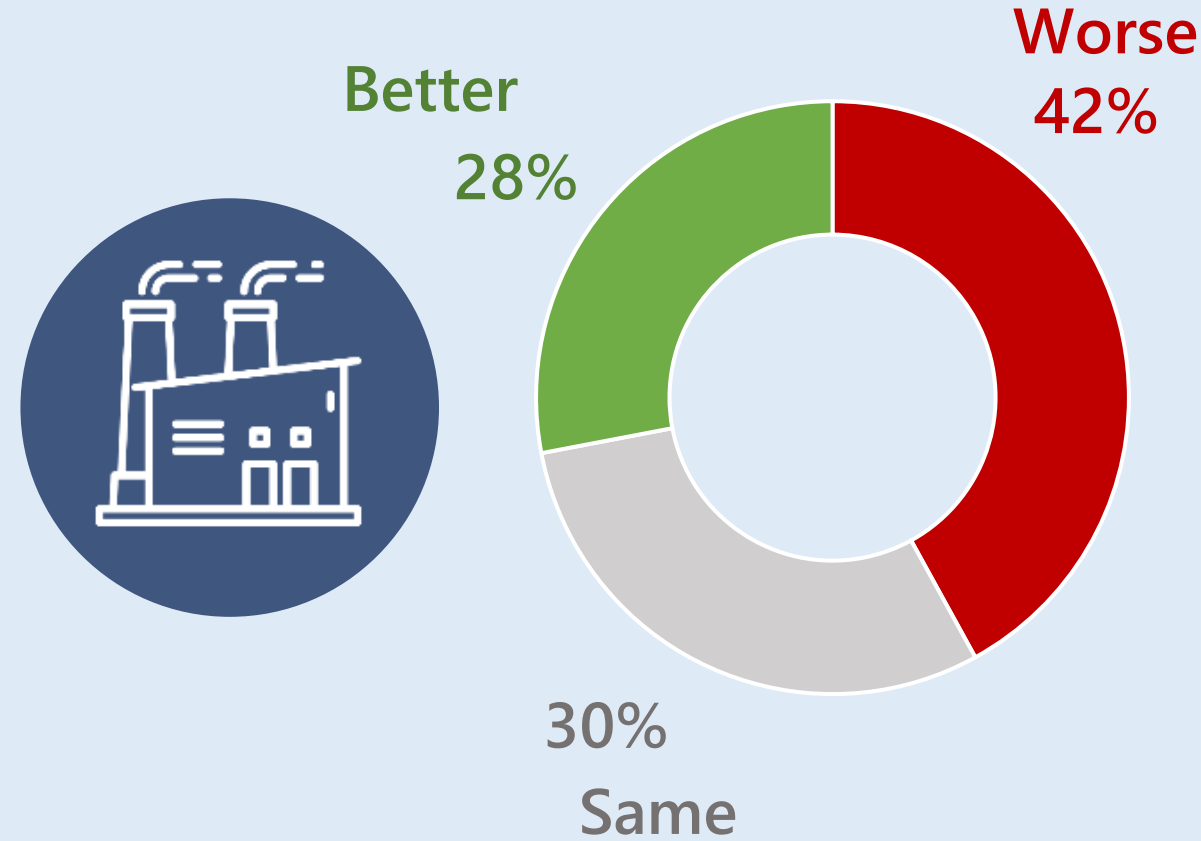
Business Leader Sentiment: Future Expectations

And looking forward from today through the next year, how would you describe your **expectations for your industry** here in your state?

Total:



Manufacturing Industry:



National Business Leader Sentiment 2024

Total Index: Overall – 94.8 (102.2) Current – 85.5 (99.7) Future – 104.2 (104.6)

Manufacturer's Index: Overall – 69.0 Current – 58.0 Future – 79.0

West Index:
 Overall – 89.7 (86.8)
 Current – 84.3 (84.2)
 Future – 95.1 (89.5)

Midwest Index:
 Overall – 87.9 (95.0)
 Current – 67.2 (94.1)
 Future – 108.6 (95.9)

Northeast Index:
 Overall – 64.7 (89.4)
 Current – 55.5 (87.2)
 Future – 73.9 (91.7)

South Index:
 Overall – 108.7 (111.4)
 Current – 100.4 (109.1)
 Future – 116.9 (113.8)

Long Island: (2023)
 Overall – 94.1
 Current – 84.2
 Future – 103.9

Upstate NY: (2023)
 Overall – 60.8
 Current – 55.9
 Future – 65.7



National Business Leader Sentiment 2024: By Industry

Engineering & Construction



Overall – 88.0
Current – 77.9
Future – 98.2

Financial



Overall – 93.4
Current – 73.1
Future – 113.7

Manufacturing



Overall – 68.7
Current – 58.2
Future – 79.3

Retail



Overall – 65.0
Current – 47.0
Future – 82.9

Leisure & Hospitality / Food & Beverage



Overall – 93.2
Current – 81.8
Future – 104.6

Professional & Business Services



Overall – 87.4
Current – 72.5
Future – 102.3

Wholesale, Distribution, Transportation & Utilities



Overall – 87.4
Current – 72.5
Future – 102.3

Education & Health Services

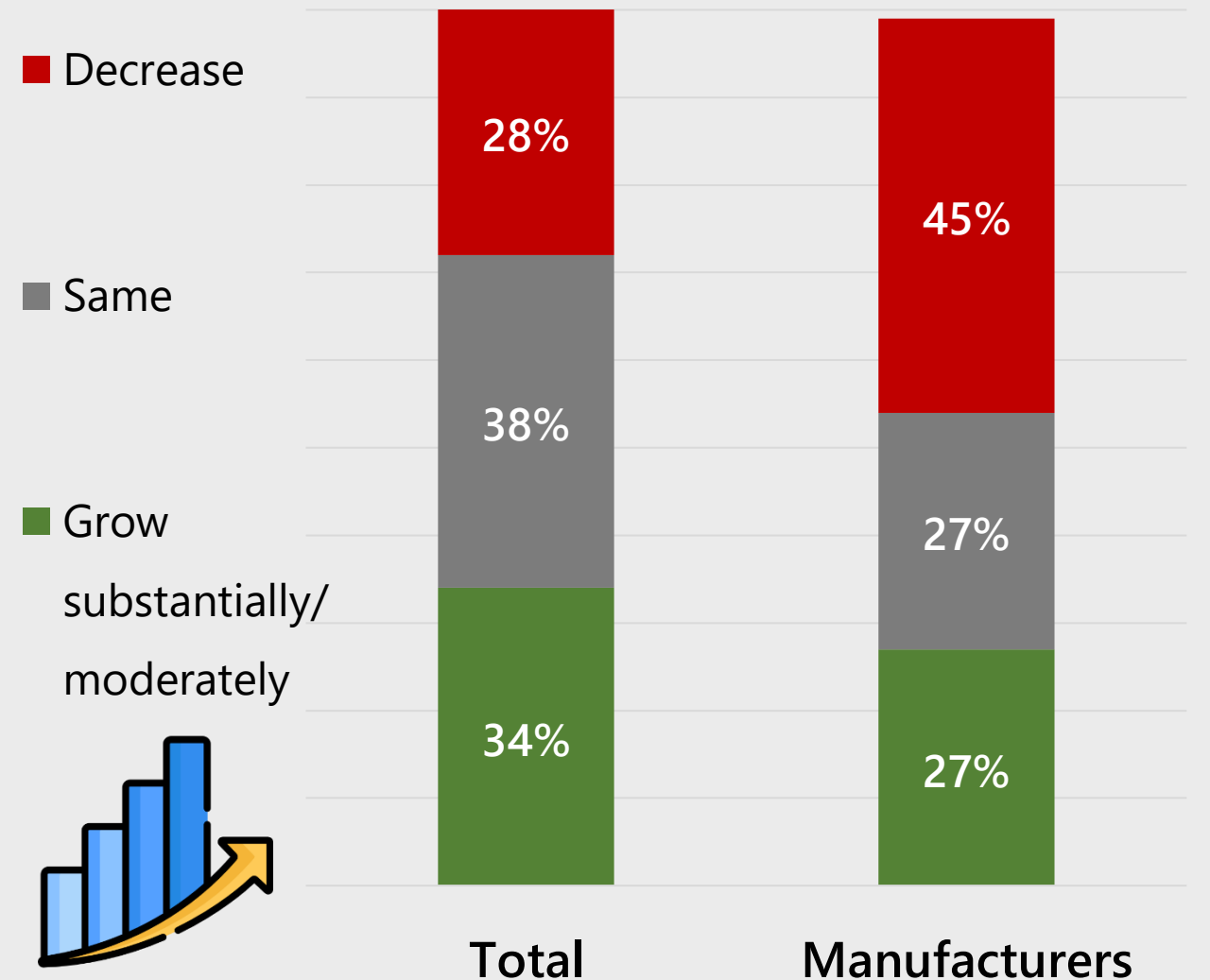
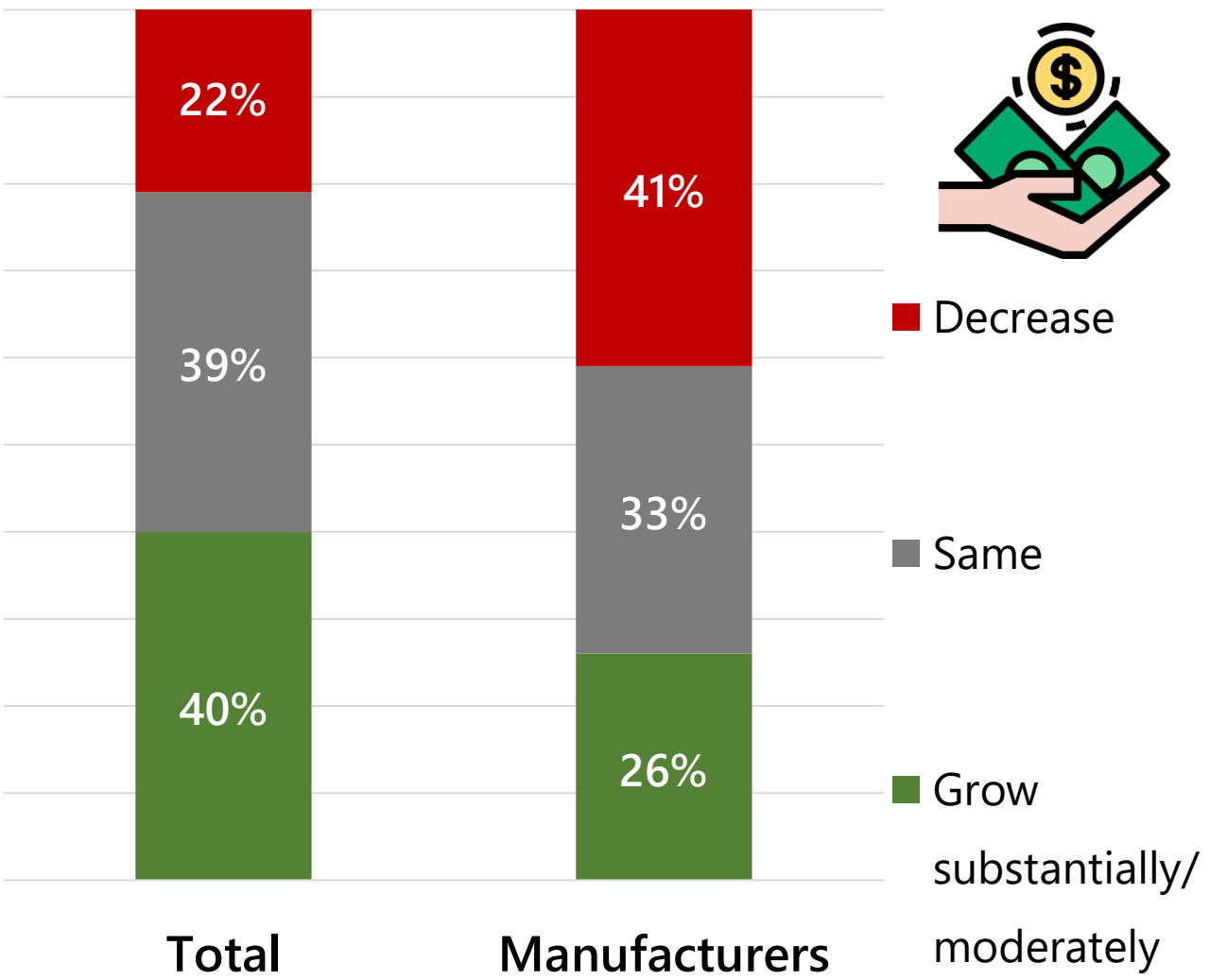


Overall – 92.7
Current – 95.2
Future – 90.2

Expectations for Revenue and Profit

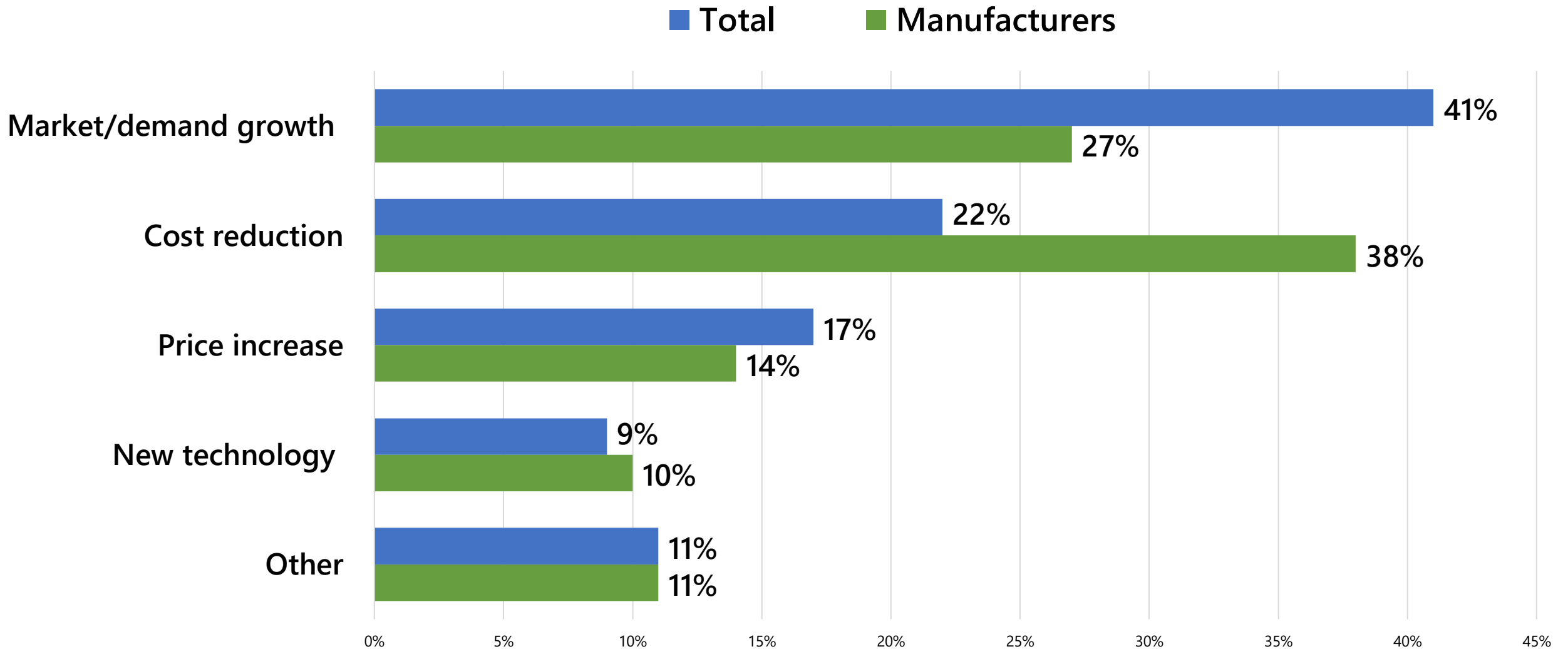
What are your expectations for revenue through the end of the next year? Do you believe your revenue will...

Please think quickly about profitability. Over the next year, do you expect your profits to...



Profitability Enhancement Strategies

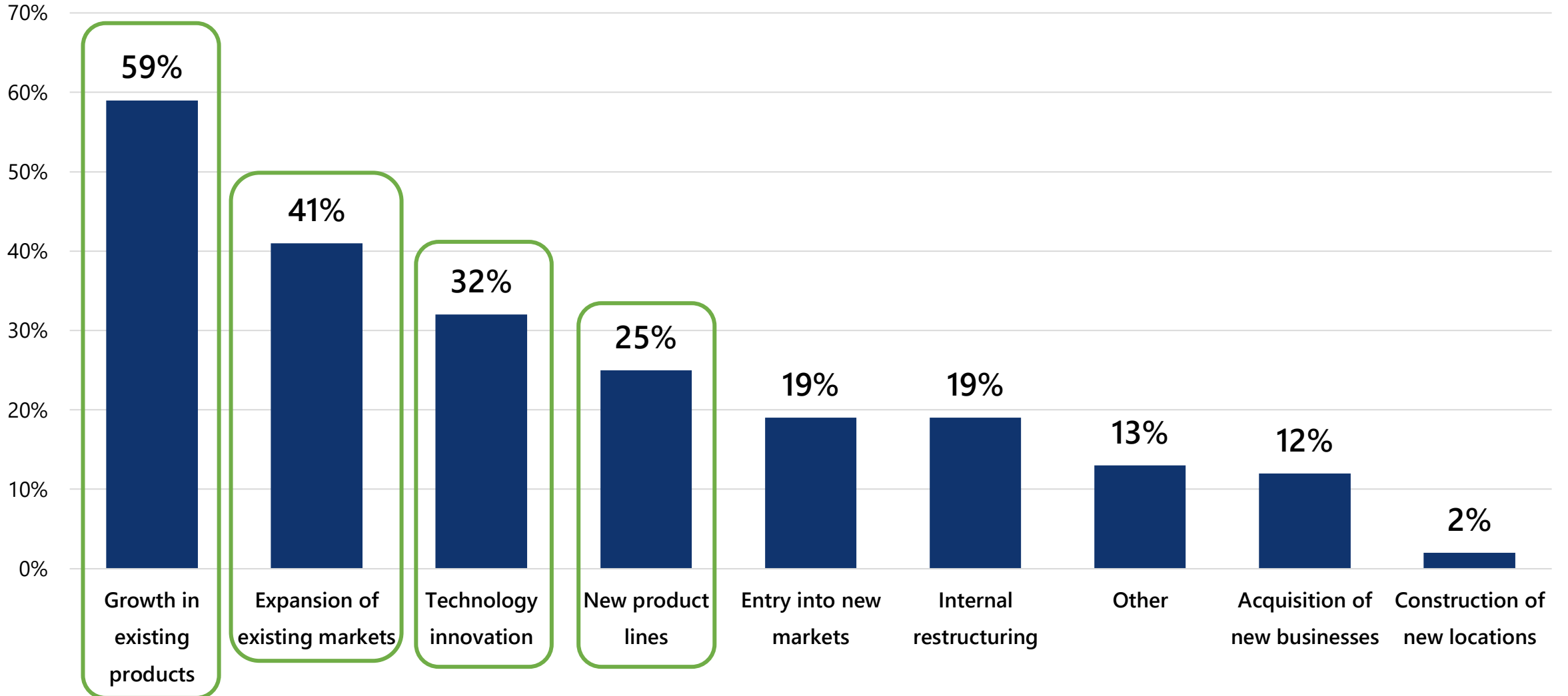
Businesses and the executives that direct them strive to enhance profitability in many ways. Through which of the following strategies do you plan to MOST enhance your company's profitability over the next year?
Please select ONE.



Areas of Concentration

Please indicate which of the following are major areas of concentration for your company now and through the next year.

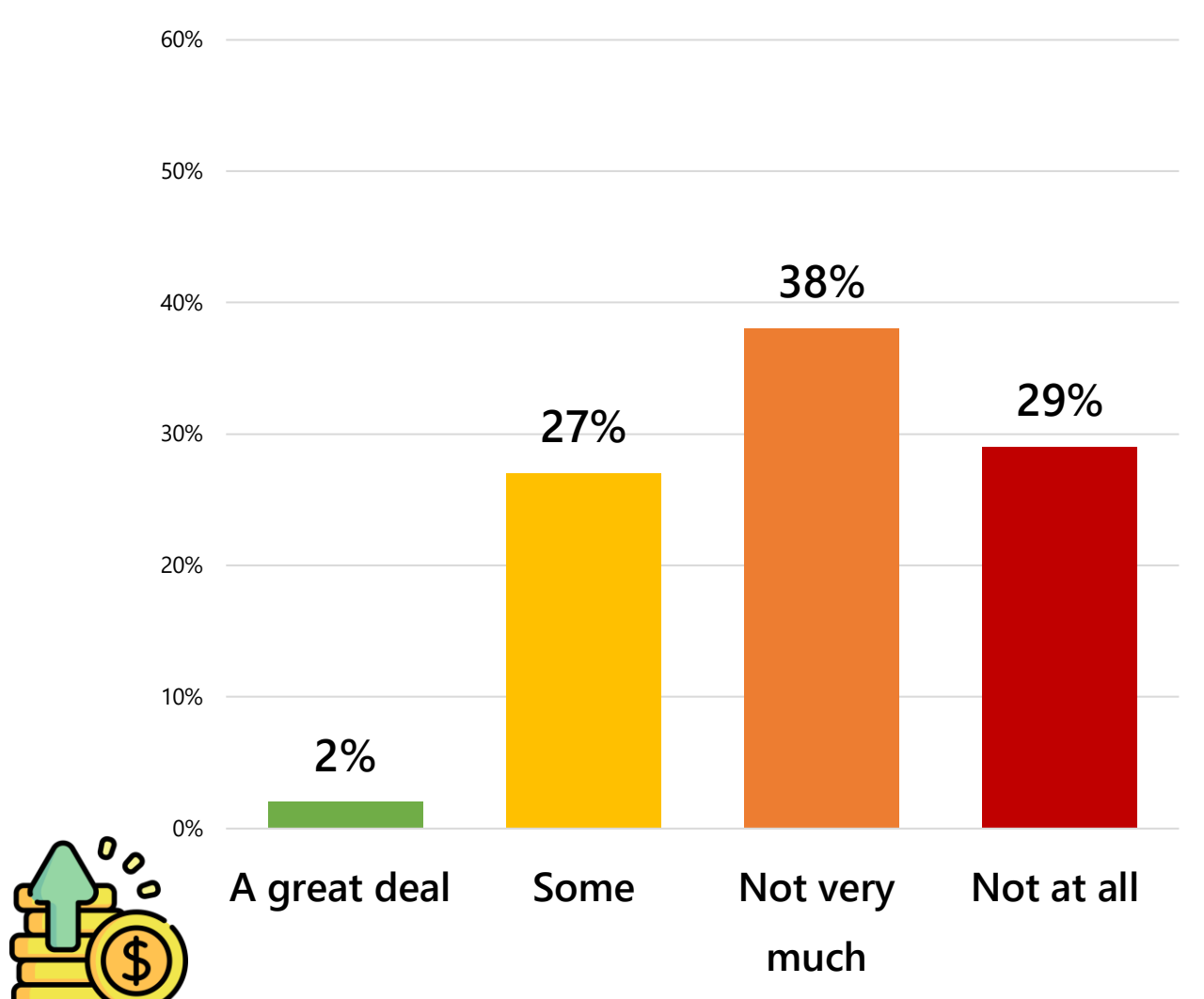
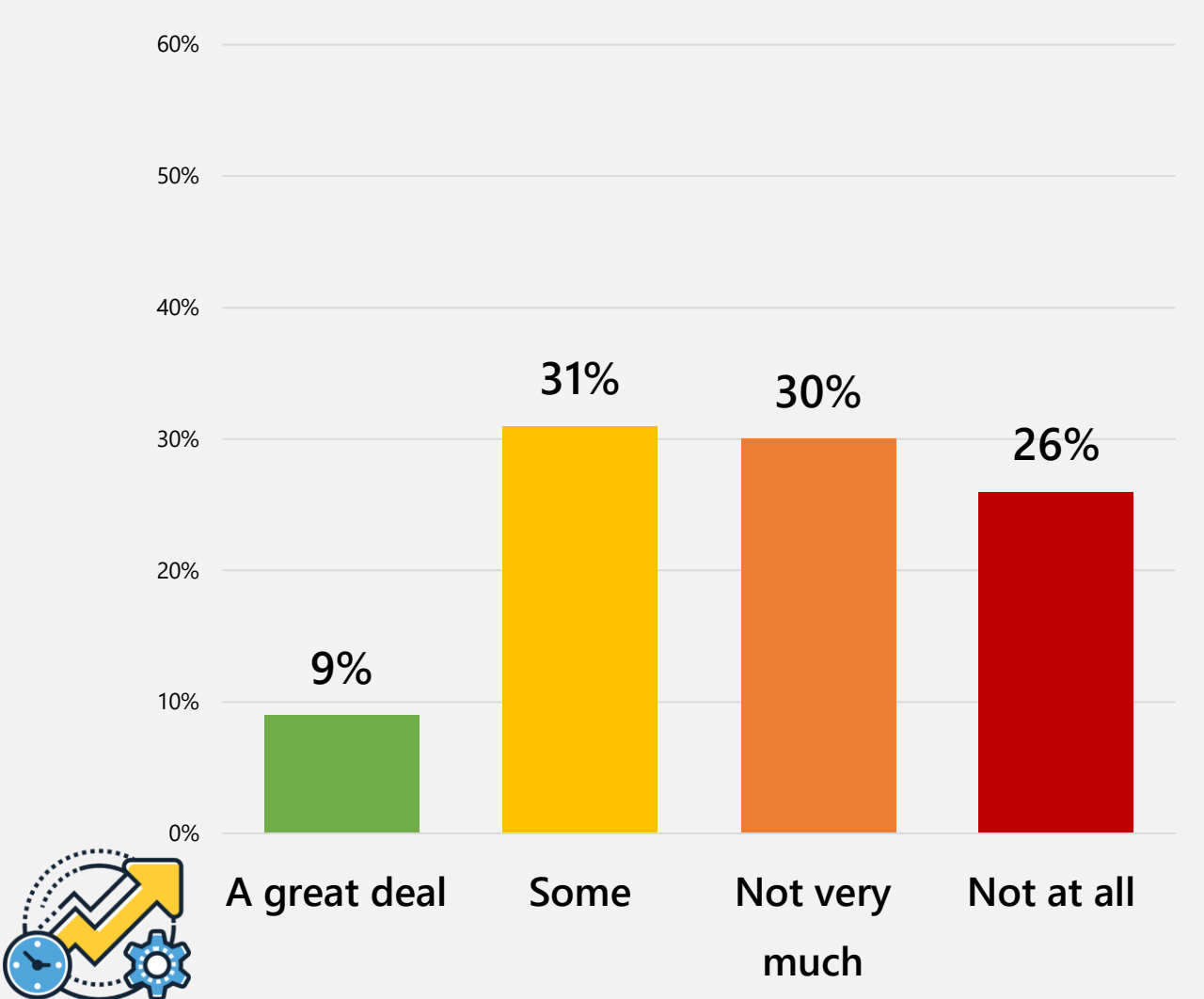
Please check ALL that apply.



Artificial Intelligence + Smart Factories Impact

To what degree do you think that in the coming years AI (artificial intelligence) and "Smart factories" will enhance your productivity?

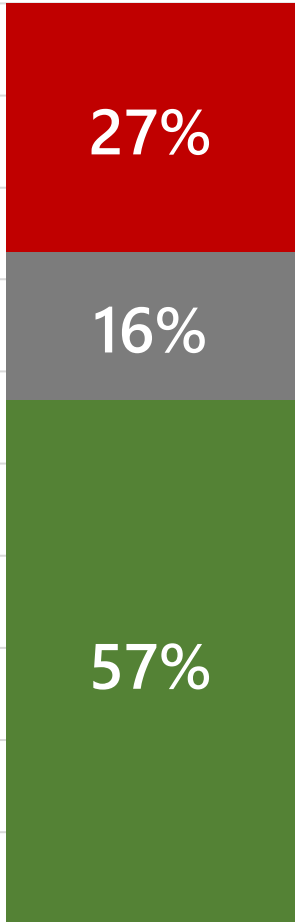
To what degree do you think that in the coming years AI (artificial intelligence) and "Smart factories" will enhance your profitability?



Expectations for Fixed Assets

Do you intend to invest over the next year in any fixed assets for your company designed to meet growing demand, reduce costs or enhance productivity?

Do you intend to invest over the next year in any fixed assets for your company designed to respond to climate change?

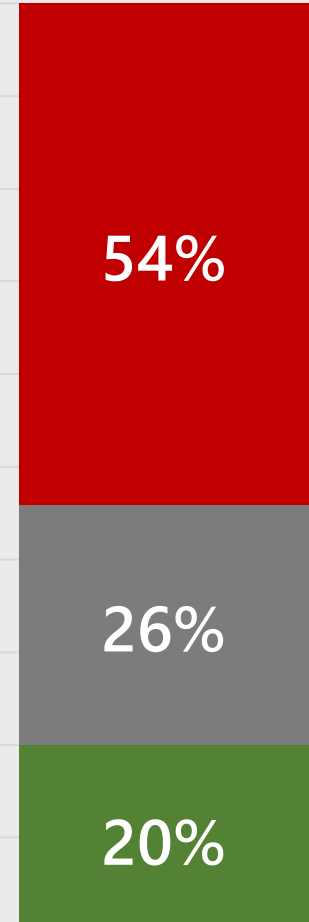
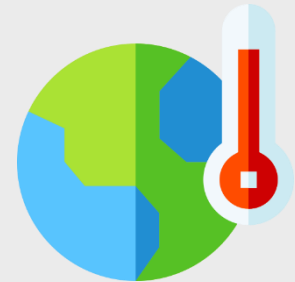


Manufacturers



- No
- Not sure
- Yes

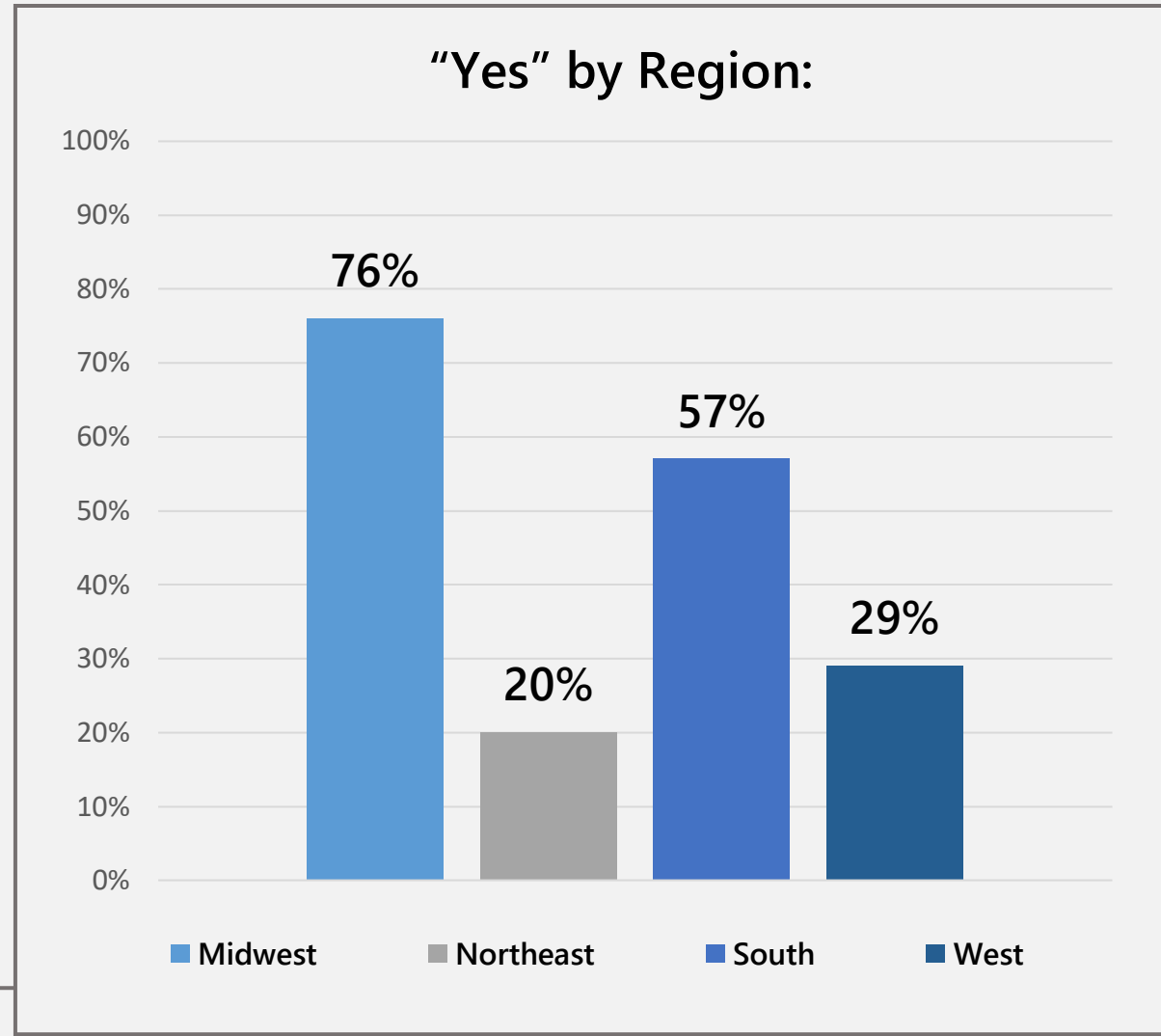
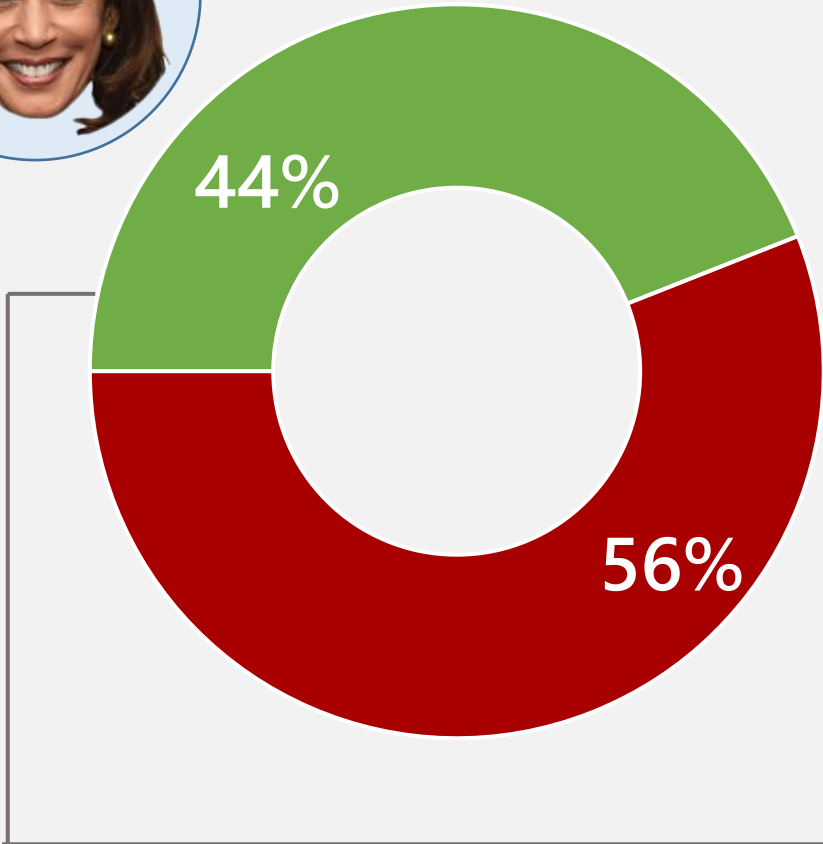
- No
- Not sure
- Yes



Manufacturers

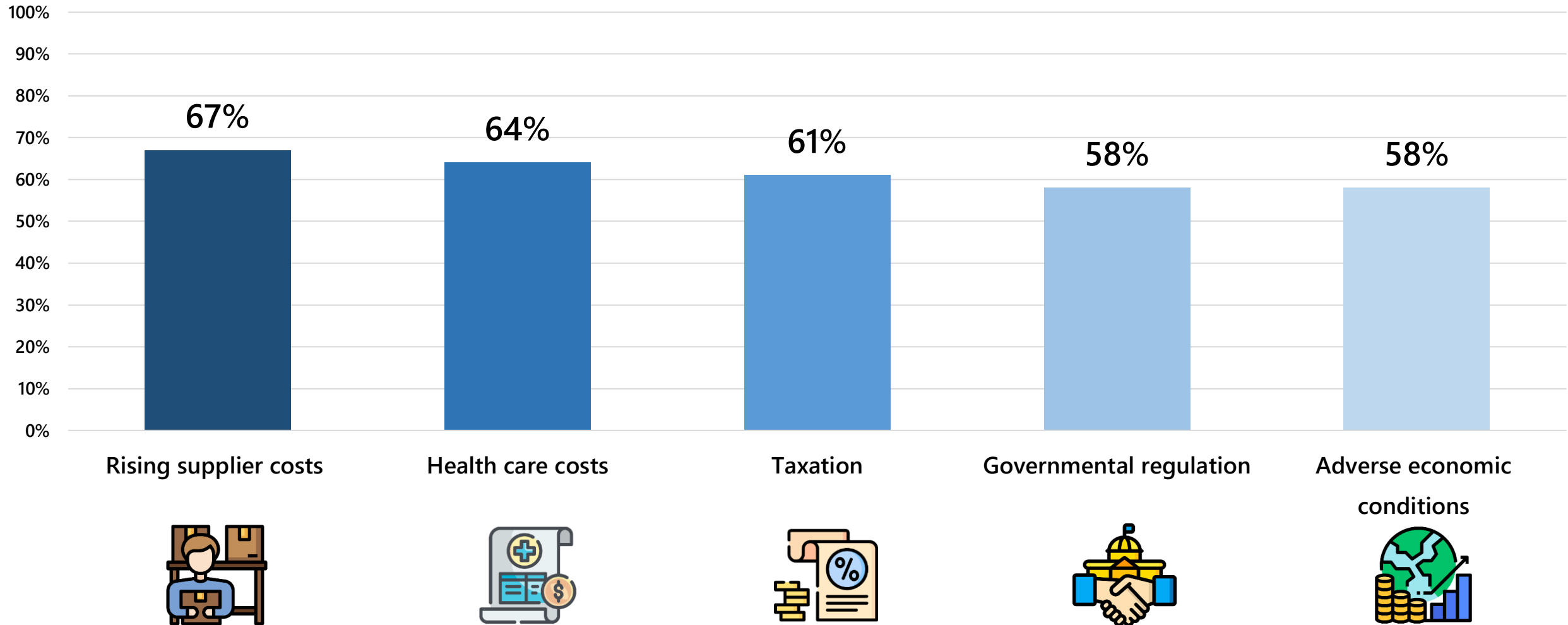
2024 Election Results

Are you waiting to see the results of the 2024 Election prior to making investment decisions or does the election outcome not have any effect on your investment decisions?



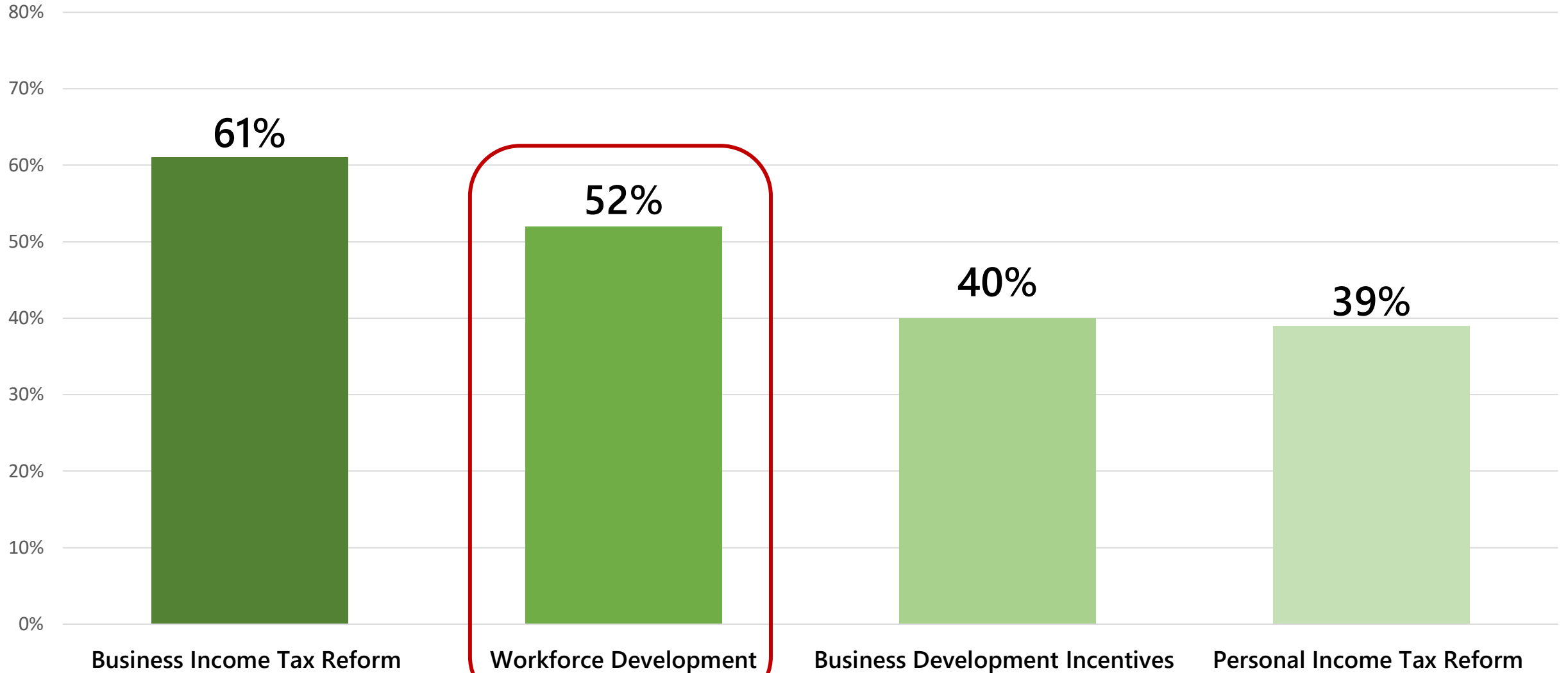
Concerning Challenges

And thinking about challenges that your company faces, which of the following are you concerned with?
Please check ALL that apply.



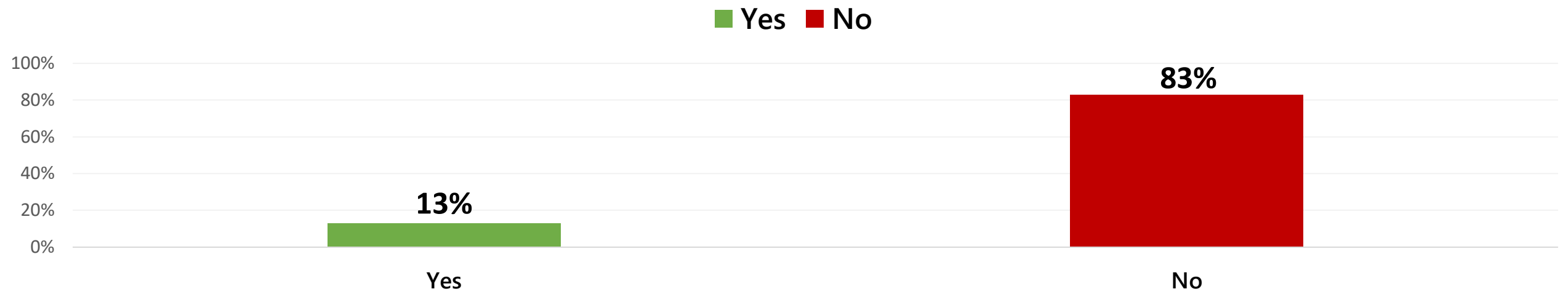
State Focus

Of the following, what would you like to see the Governor and Legislature of your state focus on?

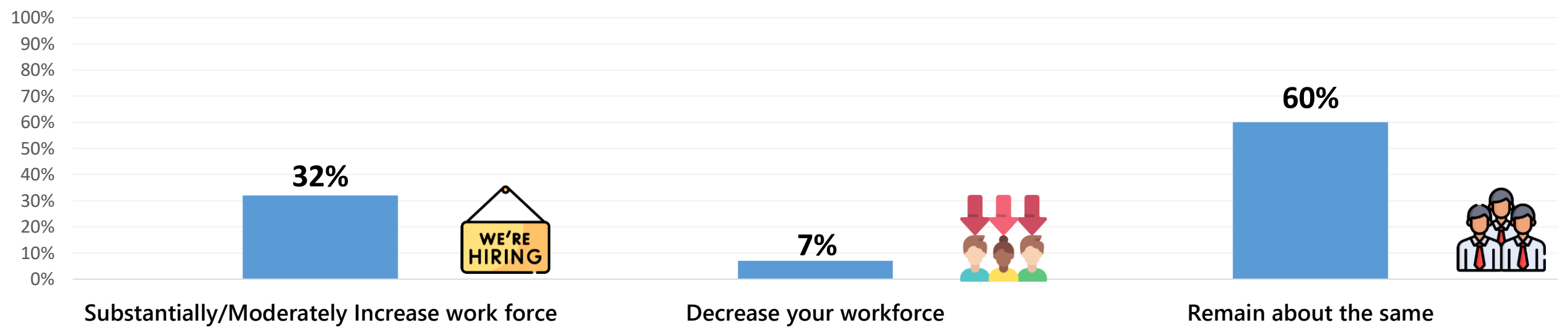


Future of Work for Manufacturers

Is there an ample supply of local workers that are appropriately trained for your employment needs?

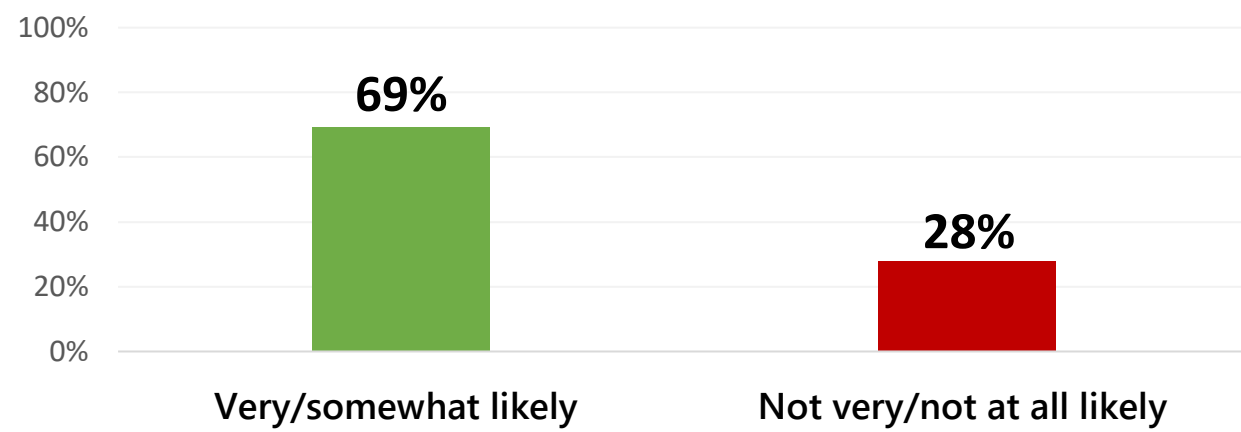


Now thinking about the people that work for your company, over the next year, do you plan to...?

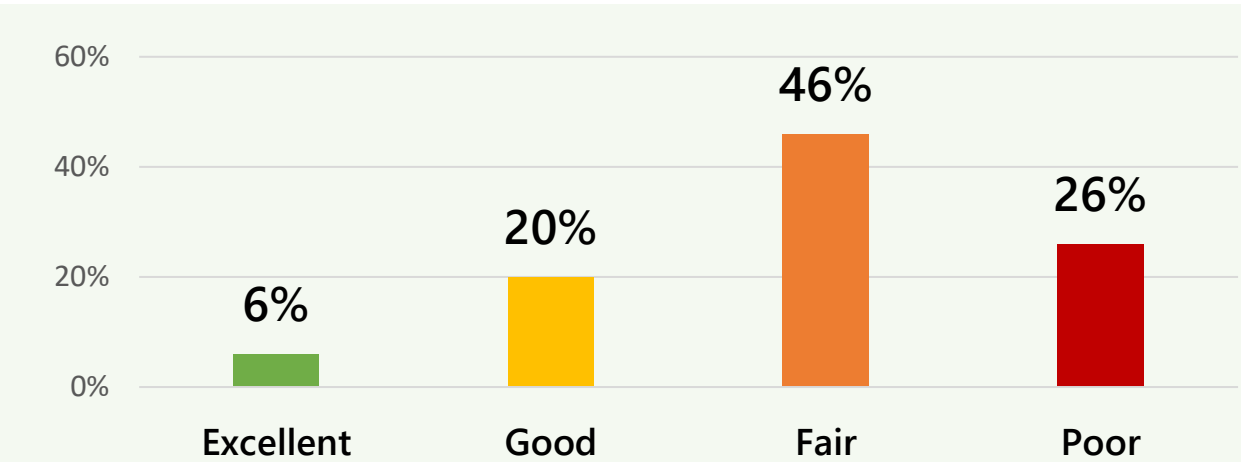


Workforce Development

How likely would you and your company be to actively participate in a workforce development partnership program?



How would you rate your state's overall efforts to promote workforce development?



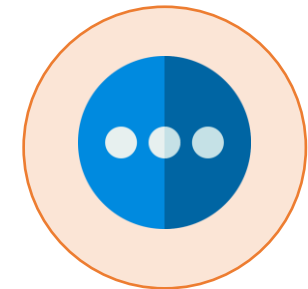
Who plays the biggest role in workforce development?



Your own company:
40%



Local community college/trade school:
25%



Other:
9%



Major employers:
7%



Business Groups:
6%



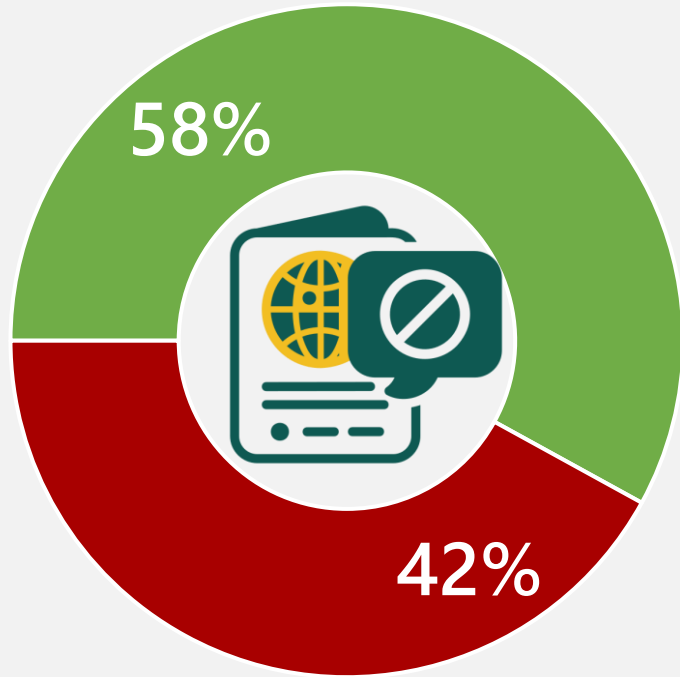
State government:
6%

Labor Supply

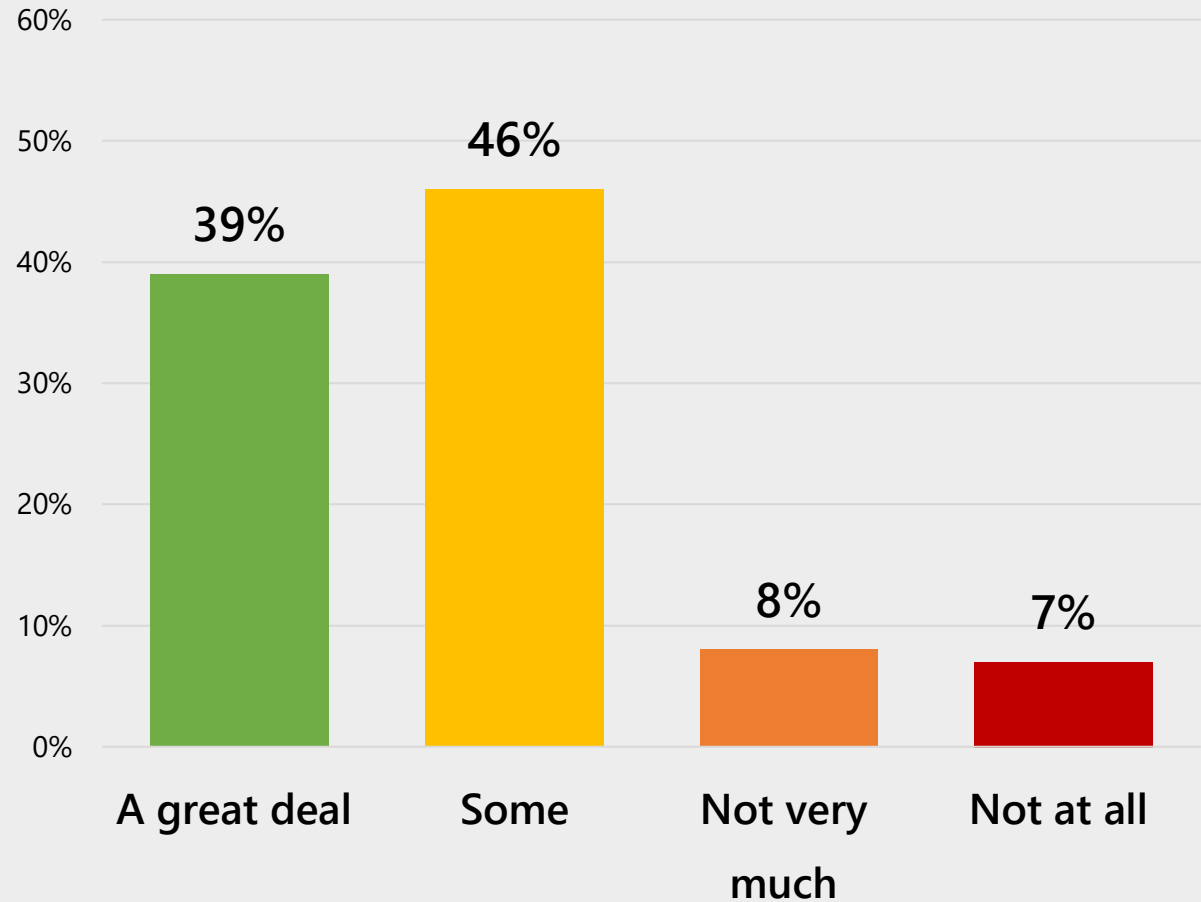
Do you think recent migrants to your state could supply businesses like yours with needed workers or not?

As you consider your company's success, to what degree has a lack of available skilled labor made it difficult for you to be successful?

Yes, migrants could supply needed workers



No, migrants could not supply needed workers



Assessment of Skill/Attribute

Based on the job applicants that you have seen over the last couple of years, how would you assess those job applicants on the following skills or attributes?

(Excellent / Good / Fair / Poor)

Technical skills



1% / 16% / 37% / 42%

Verbal skills



1% / 12% / 45% / 38%

Writing skills



1% / 6% / 21% / 60%

Initiative



1% / 8% / 32% / 56%

Work ethic



1% / 11% / 35% / 50%

Realistic about compensation



1% / 9% / 31% / 57%

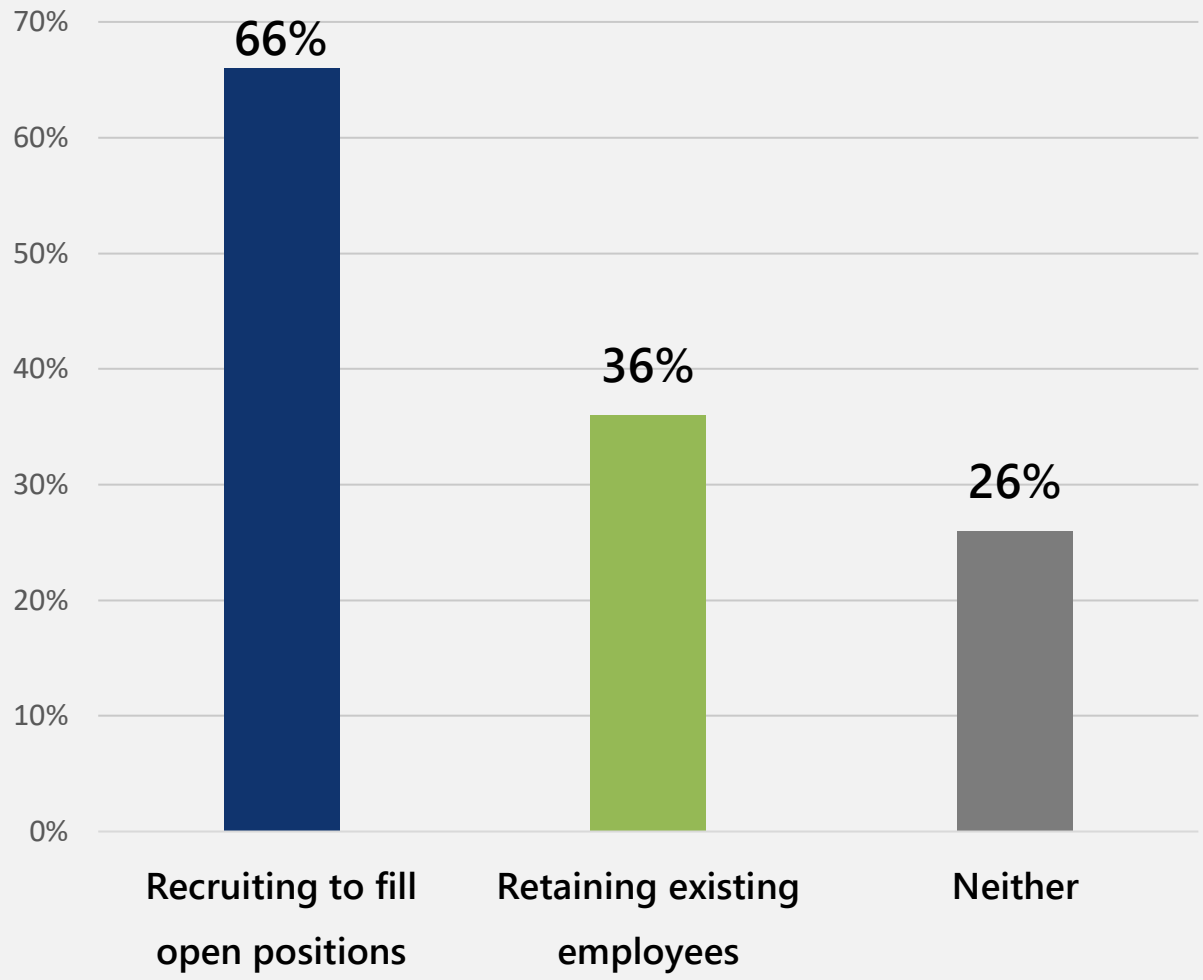
Professionalism



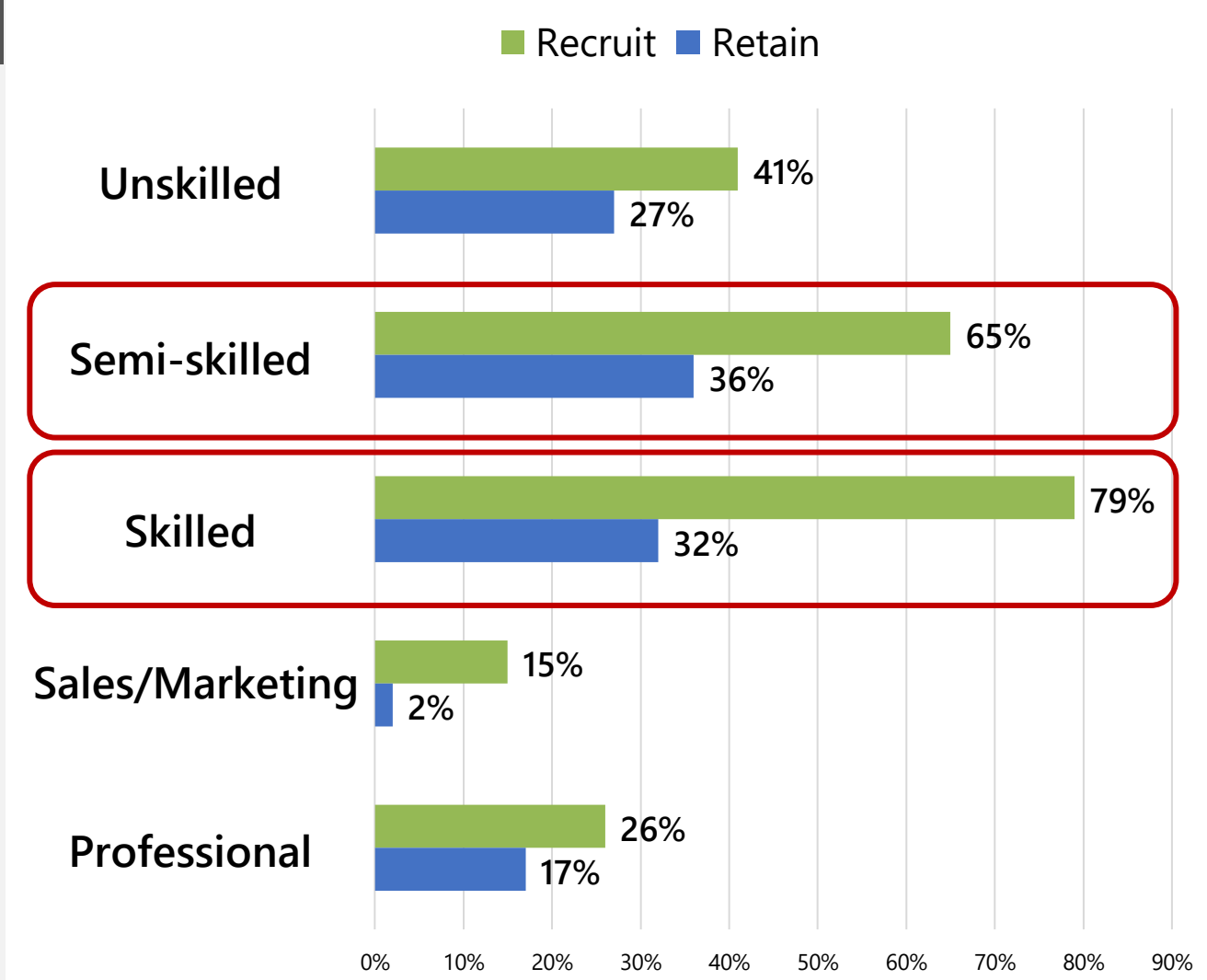
1% / 7% / 47% / 41%

Future of Work – Recruiting and Retaining

Please indicate with which, if any of the following you are currently having difficulty. Please select ALL that apply.



Please indicate which, if any, types of workers you are having difficulty recruiting and/or retaining. Please check ALL that apply.





85% say lack of available skilled labor has made it difficult to be successful



Challenges:

- Government regulation and taxation
- Supplier costs
- Workforce



“Our biggest competitive/expansion challenge is workforce. We are unable to find even remotely skilled machinists these days and are leaving money on the table due to lost work. We could probably double our revenue within a year if the workforce were available.”

Panel Discussion



Heather C. Mulligan
President & CEO
The Business Council of
New York State, Inc.



Thomas Alongi
CPA, CMA
Partner, UHY LLP



A large, white, sans-serif text 'Thank You' is centered within a semi-transparent blue rectangular box. The background of the entire image is a low-angle shot of modern glass skyscrapers against a clear blue sky.

Thank You