

# Intelligenza artificiale: l'alba di una nuova rivoluzione industriale?

PADOVA, 25 NOVEMBRE 2024

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# What's next? (What are the main policy, economic, and market impacts...)

In terms of policy...

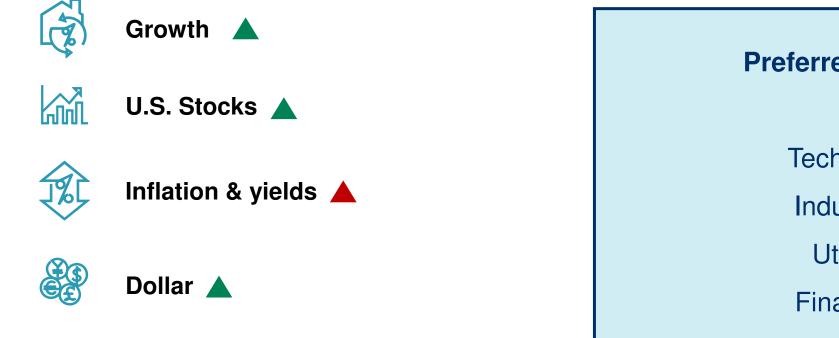
Some key topics	Republican stance
Taxes	Aim to extend 2017 tax cuts.
Immigration	Much stricter immigration measures, including an effort to deport asylum seekers to other countries.
Trade	Intend to increase tariffs on trading partners, especially China. Focus on developing domestic manufacturing.
Regulation	Aim to reduce regulation of financial services and multiple other industries.

Sources: Tax Foundation as of October 31, 2024, J.P. Morgan. Note: Key issues organized by which issue may be most material to markets.

## What do we like now?

Now that we have clarity about the election, several themes and sectors stand out:

## **Expected impacts:**



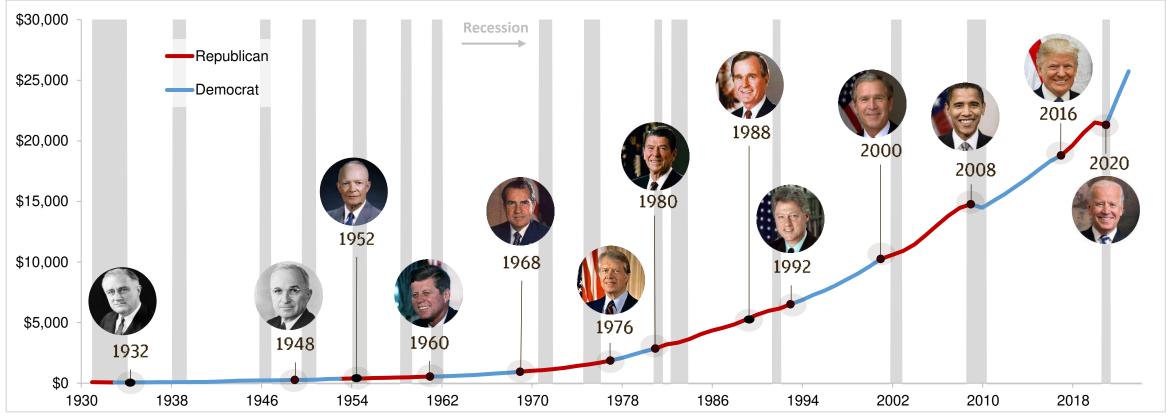


Oil

## GDP has grown under leaders of all types

... GDP has grown no matter who is in the White House

**REAL GROSS DOMESTIC PRODUCT HAS INCREASED OVER TIME NO MATTER WHICH PARTY WAS IN THE WHITE HOUSE** Real GDP, trillions (chained 2012 dollars)



Sources: Haver Analytics, White House History as of 12/12/2023. Democratic and Republican indicator is the party of the president in the White House at that time. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

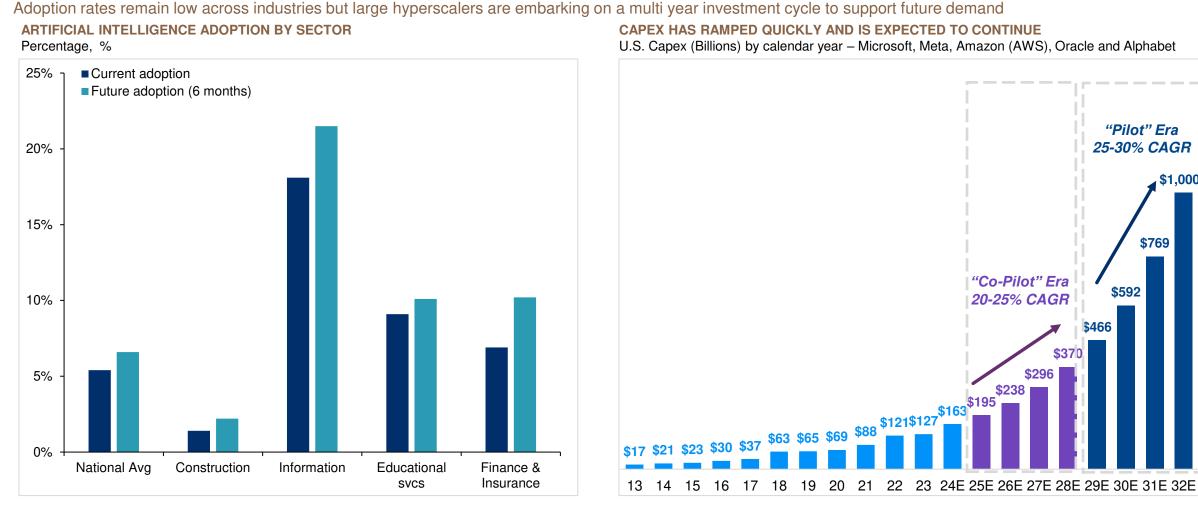


# AI, What's next?

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# Artificial Intelligence – AI's current impact is just beginning...



Source: US Census Bureau Business Trends and Outlook Survey. Data surveyed from December 3, 2023 to February 11, 2024. J.P. Morgan Asset Management; as of December 31, 2023. Market capitalization in \$billions. New names for each innovation wave are bolded. The companies/securities above are shown for illustrative purposes only. Their inclusion should not be interpreted as a recommendation to buy or sell. J.P. Morgan Asset Management may or may not hold positions on behalf of its clients in any or all of the aforementioned securities. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

# Artificial Intelligence - Leadership evolves during new waves of innovation

Top 10 tech companies by market capitalization

Mainframe		Personal comp	uter	Contract Internet		Mobility/Cloud		Artificial intel	ligence		
1980		1990		2000		2010		2020		2030	
Company	Mkt cap (\$bn)	Company	Mkt cap (\$bn)	Company	Mkt cap (\$bn)	Company	Mkt cap (\$bn)	Company	Mkt cap (\$bn)	Company	Mkt cap (\$bn)
IBM	38	IBM	54	Microsoft	604	Microsoft	269	Apple	2,232		
Eastman Kodak	8	Panasonic	33	Cisco Systems	355	Google	197	Microsoft	1,682		
Xerox	5	Toshiba	27	Intel	274	Apple	191	Amazon	1,634		
Hewlett- Packard	4	NEC	19	Lucent Technologies	238	IBM	171	Alphabet	1,185		
Emerson Electric	2	Fujitsu	19	Nokia	210	Cisco Systems	138	Facebook	778		<b>()</b>
Texas Instruments	2	Mitsubishi Electric	16	IBM	193	Oracle	123	Tencent	698		<b>(</b>
Motorola Solutions	2	Eastman Kodak	13	Oracle	158	Hewlett- Packard	122	Tesla	669		-
Nortel Networks	2	Sanyo Electric	13	Nortel Networks	139	Intel	113	Alibaba	649		
Intel	1	FUJIFILM Holdings	12	Sun Microsystems	135	Samsung	88	Samsung	501		
Harris	1	Hewlett- Packard	11	Dell	130	QUALCOMM	77	TSMC	489		

Source: Bloomberg, FactSet, J.P. Morgan Asset Management; as of December 31, 2020. Market capitalization in \$billions. New names for each innovation wave are bolded. The companies/securities above are shown for illustrative purposes only. Their inclusion should not be interpreted as a recommendation to buy or sell. J.P. Morgan Asset Management may or may not hold positions on behalf of its clients in any or all of the aforementioned securities. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

## Artificial Intelligence - AI stocks are far from tech bubble highs

#### AI STOCK PRICES ARE FAR FROM TECH BUBBLE HIGHS

Comparing today's price performance for the Nasdaq 100 and the AI Leaders to the Dot.com



**LOWER VALUATION AND HIGHER GROWTH EXPECTATIONS FOR TODAY'S AI LEADERS VS. 2000 TECH** Comparing earnings growth and P/E ratios for leading tech stocks in 2000 and 2025

Company	% Weight in S&P 500	2025 EPS Growth Expectations	2025 PE
Microsoft Corporation	6.3%	13%	28x
NVIDIA Corporation	6.9%	46%	35x
Amazon.com, Inc.	3.8%	21%	32x
Meta Platforms Inc	2.5%	12%	22x
Alphabet Inc.	3.8%	12%	19x
Market Cap Weighted	23%	24%	29x
Company	% Weight in S&P 500	2000 EPS Growth Expectations	2000 PE
Company Microsoft Corporation			2000 PE
	S&P 500	Expectations	2000 Pt
Microsoft Corporation	S&P 500 5.0%	Expectations 29%	65x
Microsoft Corporation Cisco Systems Inc	S&P 500 5.0% 4.3%	Expectations 29% 46%	65x 97x
Microsoft Corporation Cisco Systems Inc Intel Corporation	S&P 500 5.0% 4.3% 2.9%	<b>Expectations</b> 29% 46% 15%	65x 97x 31x

Source: Bloomberg Finance L.P. Data as of November 2024. (1) The Indxx Artificial Intelligence and Big Data Index, which holds 85 stocks that make hardware needed for AI or that use AI in their services, outperformed both the S&P 500 and the MSCI World by more than 30%. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All companies referenced are shown for illustrative purposes only, and are not intended as a recommendation or endorsement by J.P. Morgan in this context. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

## Panel

#### RELATORI



Stefano Zambotti Executive Director J.P. Morgan Private Bank



Andrea Galvagni Head of Italy Palantir Technologies

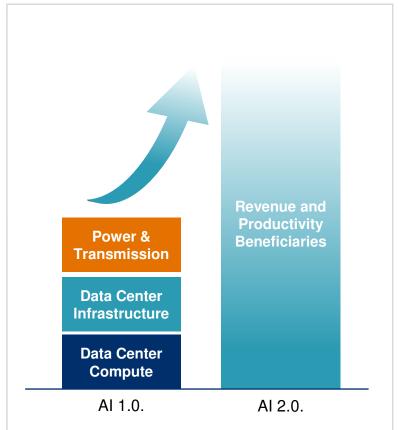


Nicola Grandis Founder & CEO ASC27

# Artificial Intelligence - Transitioning to AI 2.0

# WE BELIEVE MOST OF THE UNRECOGNIZED VALUE IN AI IS IN AREAS SUCH AS SOFTWARE AND APPLICATIONS.

Balanced Approach between AI 1.0. and AI 2.0.



#### AI COULD DRIVE REVENUES FOR SOME COMPANIES AND INCREASE EFFICIENCY FOR OTHERS Pre-Al vs. Post-Al

	Pre-Al	Post-Al
GPU/server	0	\$40k
Microsoft license/user	\$20	\$30
Energy consumption	100MW	1GW
Copper/1MW of DC capacity	20-40t	60-120t

...WHILE INCREASING PRODUCTIVITY AND MARGINS FOR OTHERS Illustrative software vendor value capture

Theoretical returns from Microsoft Office 360 Copilot implementation						
Productivity Uplift	Median Worker Annual Salary	Annual Value Add	Annual cost			
20%	\$60,000	\$12,000	\$360			

Source: (Left) J.P. Morgan Private Bank (Right) Microsoft Copilot for Microsoft 365 (<u>link</u>), GPU pricing from Amazon.com (<u>link</u>), Illustrative AI data center capacity based on GPU power requirements and other sources citing 1 GW datacenter facilities. Copper/ 1MW of DC capacity (<u>link</u>). Data as of April 2024. All companies referenced are shown for illustrative purposes only and are not intended as a recommendation or endorsement by J.P. Morgan in this context. By visiting a third-party site, you may be entering an unsecured website that may have a different privacy policy and security practices from J.P. Morgan is not responsible for, and does not control, endorse or guarantee, any aspect of any linked third-party site. J.P. Morgan accepts no direct or consequential losses arising from the use of such sites. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

# What does AI mean for the economy and labor market?

Just like disruptive innovations of the past, AI is likely to boost the productivity of the US economy. Jobs may be displaced during the rebalancing process, but growing pains should give way to new jobs and greater worker output.

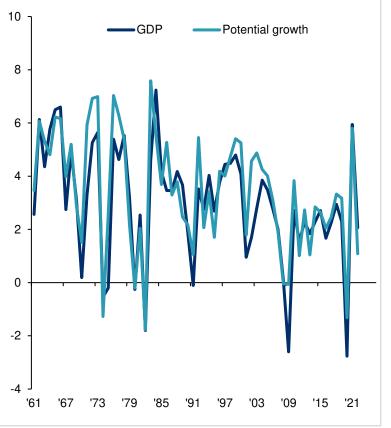
Estimates are wide-ranging, but many suggest company productivity improves by 2-4% when AI is adopted. Around 25% of companies are expected to embrace AI in a meaningful way and that could amount to an annual productivity boost to GDP of 0.5%.

Al will impact the labor market, much like the advent of prior technological innovations. To enhance profits, US corporations have often found more affordable labor abroad and/or automated processes.

As we look forward, "the race between automation and augmentation" is on. Goldman Sachs estimates that 25% of current work tasks could be automated by AI in the U.S. and Europe. They find that traditionally high skill, nonroutine jobs are highly susceptible to automation from AI (legal & financial operations).

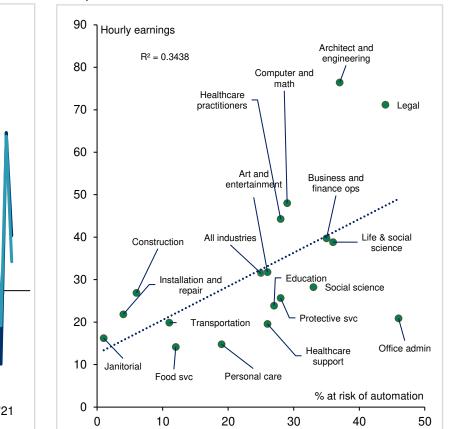
#### IS AI GOOD FOR THE ECONOMY?

Long run growth, a function of productivity and employment. Real GDP YoY vs. Productivity + Employment growth



#### HOW WILL AI IMPACT THE LABOR MARKET?

25% of current work tasks could be automated by AI in the US and Europe



Source: (LHS) Haver Analytics. Data as of April 10, 2023. (RHS) Bureau of Labor Statistics. Goldman Sachs, Data as of April 10, 2023. Outlooks and past performance are no guarantee of future results. It is not possible to invest directly in an index. Please refer to "Definition of Indices and Terms" for important information.

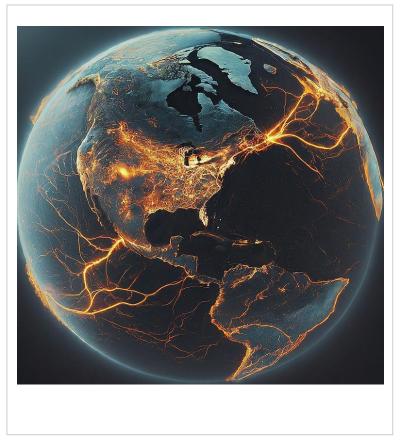
# Artificial Intelligence - AI is set to go global

**Go Global:** US Tech giants are at the forefront of Al development, but the benefits may extend far beyond these large players. Here's why Al is a game-changer across industries and borders:

- A Booming Ecosystem: Al thrives on data, and data centers are the powerhouses that store and process it. As Al adoption continues to grow, the demand for data center space and services surges. This benefits companies specializing in data center construction, maintenance, and colocation, creating a robust Al ecosystem.
- **Powering Up the Future**: The immense computing power needed for AI requires reliable and efficient energy. Utility providers are witnessing a surge in demand from data centers. This incentivizes investments in renewable and traditional energy sources and smarter grid management.
- Industry Revolution: AI isn't just for tech giants. From industries such as customer service, healthcare, finance, and logistics we see significant transformation opportunities through AI. Personalized marketing campaigns, streamlined logistics, and even legal research powered by AI – the applications are limitless.
- **Global Innovation Race**: AI transcends borders. Governments worldwide recognize its potential and are pouring resources into research and development. Who can develop the most advanced AI for healthcare, transportation, or even national security?

#### GO GLOBAL

Al generated Image. Glowing lines, symbolizing a global Al network, connect major cities across continents.



#### TOP RANKED AI NATIONS

Four factors determine the value creation and capture potential of countries in AI: Innovation, capital, rules and data.

Australia53.8South Korea51.0Spain51.0Switzerland49.9	
nited Kingdom 58.8 Data Rules Japan 57.0 Germany 56.4 France 55.0 Canada 54.9 Australia 53.9 South Korea 53.8 Sweden 51.5 Spain 51.0 Switzerland 49.9	United States
Australia53.8South Korea51.0Spain51.0Switzerland49.9	China
Japan 57.0   Germany 56.4   France 55.0   Canada 54.9   Australia 53.9   South Korea 53.8   Sweden 51.5   Spain 51.0   Switzerland 49.9	United Kingdom
France55.0Canada54.9Australia53.9South Korea53.8Sweden51.5Spain51.0Switzerland49.9	Japan
Canada54.9Australia53.9South Korea53.8Sweden51.5Spain51.0Switzerland49.9	Germany
Australia53.9South Korea53.8Sweden51.5Spain51.0Switzerland49.9	France
South Korea 53.8 Sweden 51.5 Spain 51.0 Switzerland 49.9	Canada
Sweden 51.5 Spain 51.0 Switzerland 49.9	Australia
Spain 51.0 Switzerland 49.9	South Korea
Switzerland 49.9	Sweden
	Spain
Ireland 49.0	Switzerland
	Ireland
India 46.7	India
Brazil 44.7	Brazil
Argentina 43.5	Argentina
Mexico 41.5	Mexico

Source: (Left) Gemini generate Image from Google (Right) Trufs University, Harvard Business Review, Data as of December 2023. All companies referenced are shown for illustrative purposes only, and are not intended as a recommendation or endorsement by J.P. Morgan in this context.

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