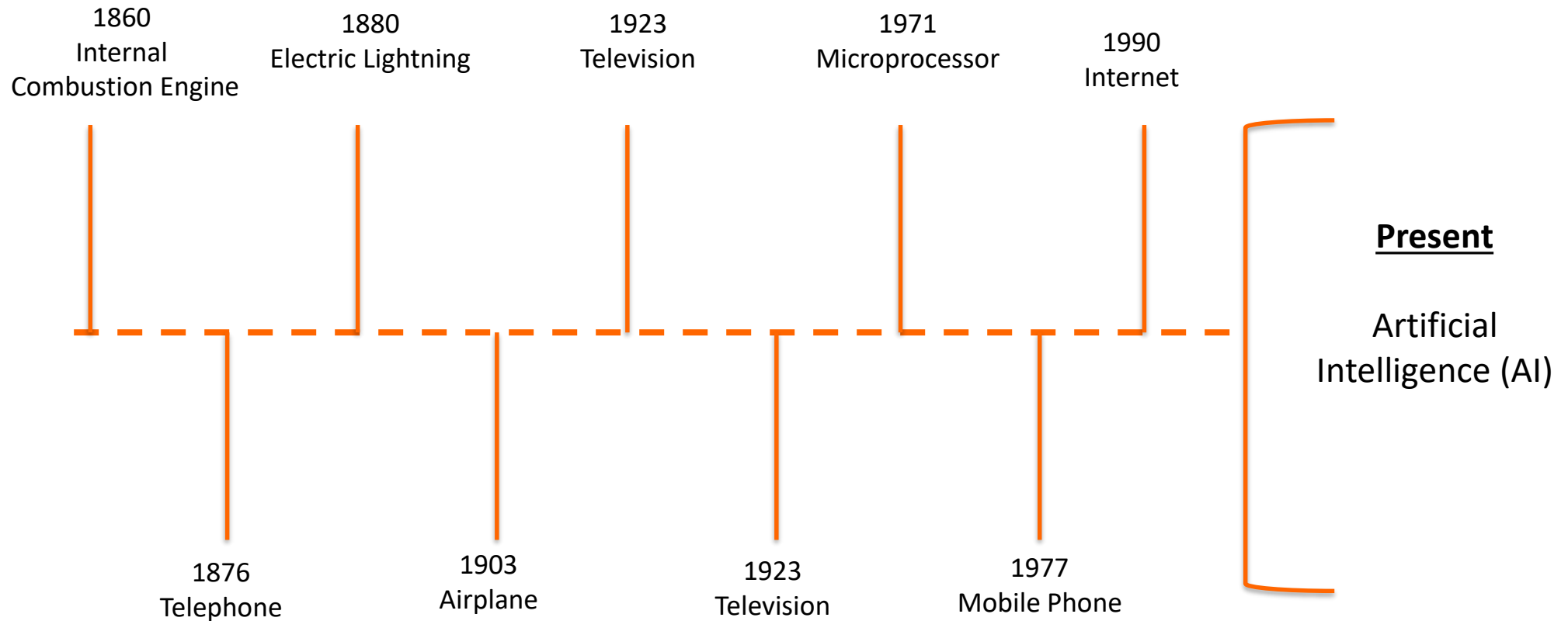# Mirae Asset Global X Artificial Intelligence & Technology ETF Fund of Fund

(An open-ended fund of fund scheme investing in Global X Artificial Intelligence & Technology ETF)

MIRAE ASSET
Mutual Fund

Artificial Intelligence (AI): Creating new economies

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Innovation across centuries have redefined businesses across sectors

1860
Internal
Combustion Engine

1880
Electric Lightning

1923
Television

1971
Microprocessor

1990
Internet

Present

Artificial
Intelligence (AI)

1876
Telephone

1903
Airplane

1923
Television

1977
Mobile Phone

Artificial Intelligence is one of the main driving force of the fourth Industrial revolution

Artificial Intelligence is driving innovation across multiple mega trends

E-Commerce

Internet Surfing

Algorithmic Trading

Gaming

Healthcare Innovation

Cybersecurity

Automotive Technology

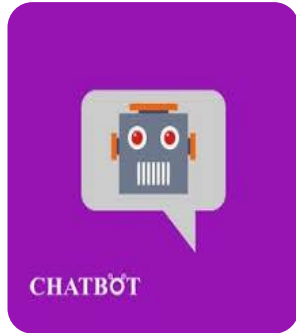Transportation & Logistics

Industrial Automation

Social Media

Artificial Intelligence are supporting megatrends that are long term structural shifts in nature in various business

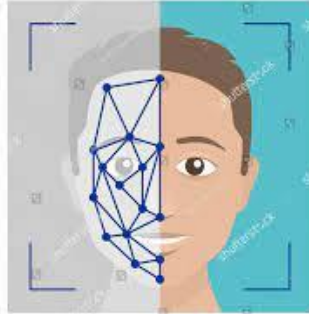# Artificial Intelligence creating or reshaping products and services

Smart Assistant

Chatbot

Facial Recognition

Speech Recognition

Navigation

Self Driving Cars

Augmented & Virtual Reality

Unmanned Drones

Home Automation

Malware Detection

Artificial Intelligence form part of our products and services more than ever before

Quantifying the impact of Artificial Intelligence

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Global Corporate Investment in AI has almost doubled in last two years

Global total corporate artificial intelligence (AI) investment (in US $ Billion)

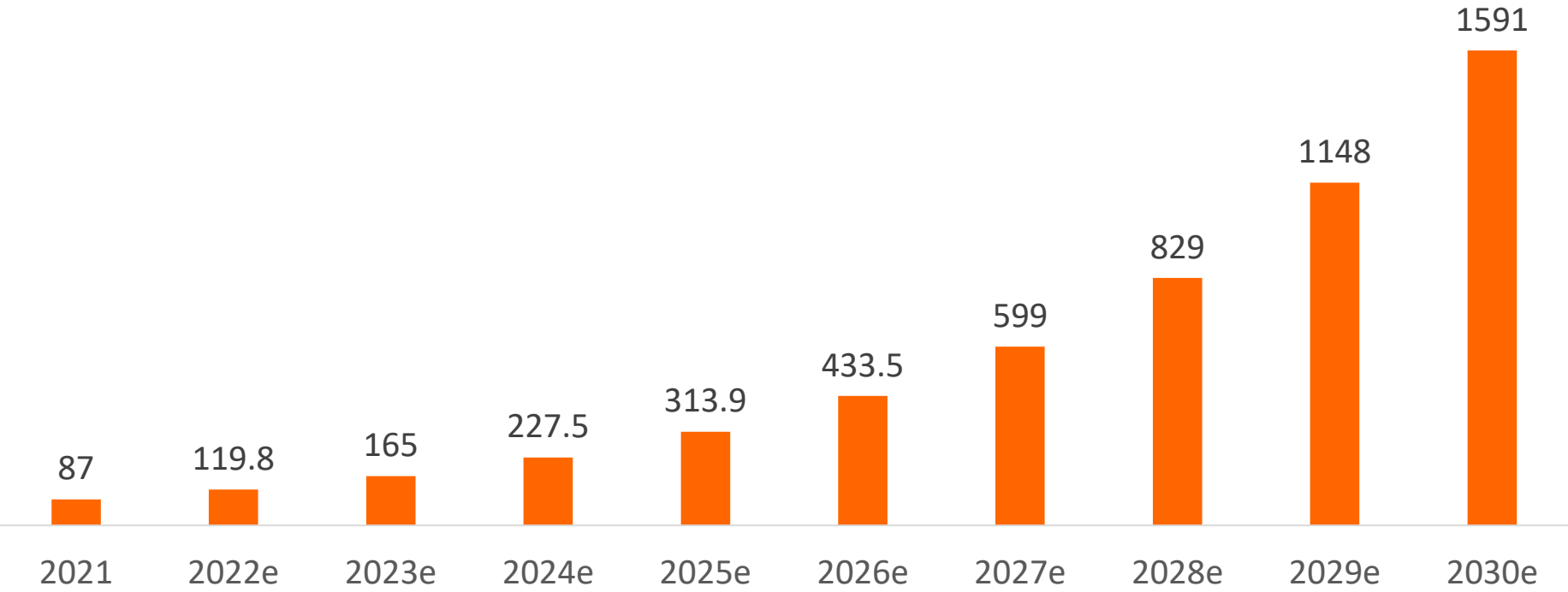| Year	Value
2015	12.8
2016	17.7
2017	44.1
2018	43.8
2019	48.9
2020	67.9
2021	93.5
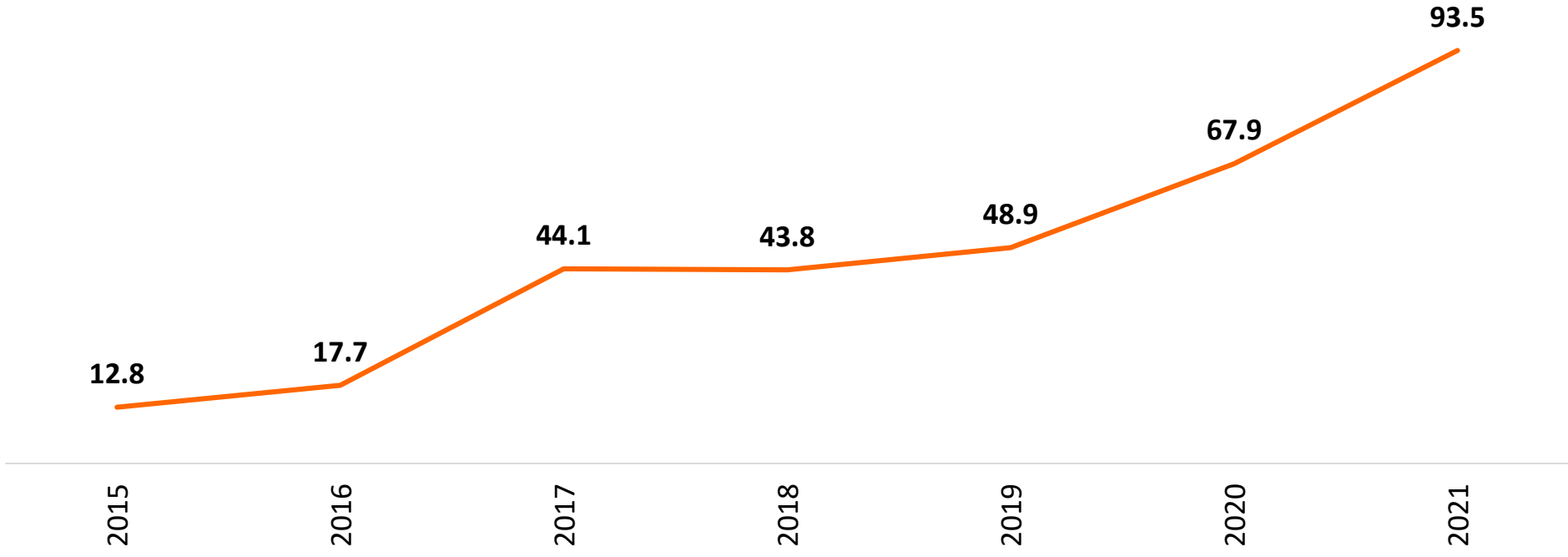
Global total corporate investment in Artificial Intelligence (AI) has increased from US $ 12.8 billion in 2015 to US $ 93.5 billion in 2021 at a CAGR of 39.4%

Global market size of Artificial Intelligence is expected to cross USD 1.5 Trillion

Market Size in US $ Billion

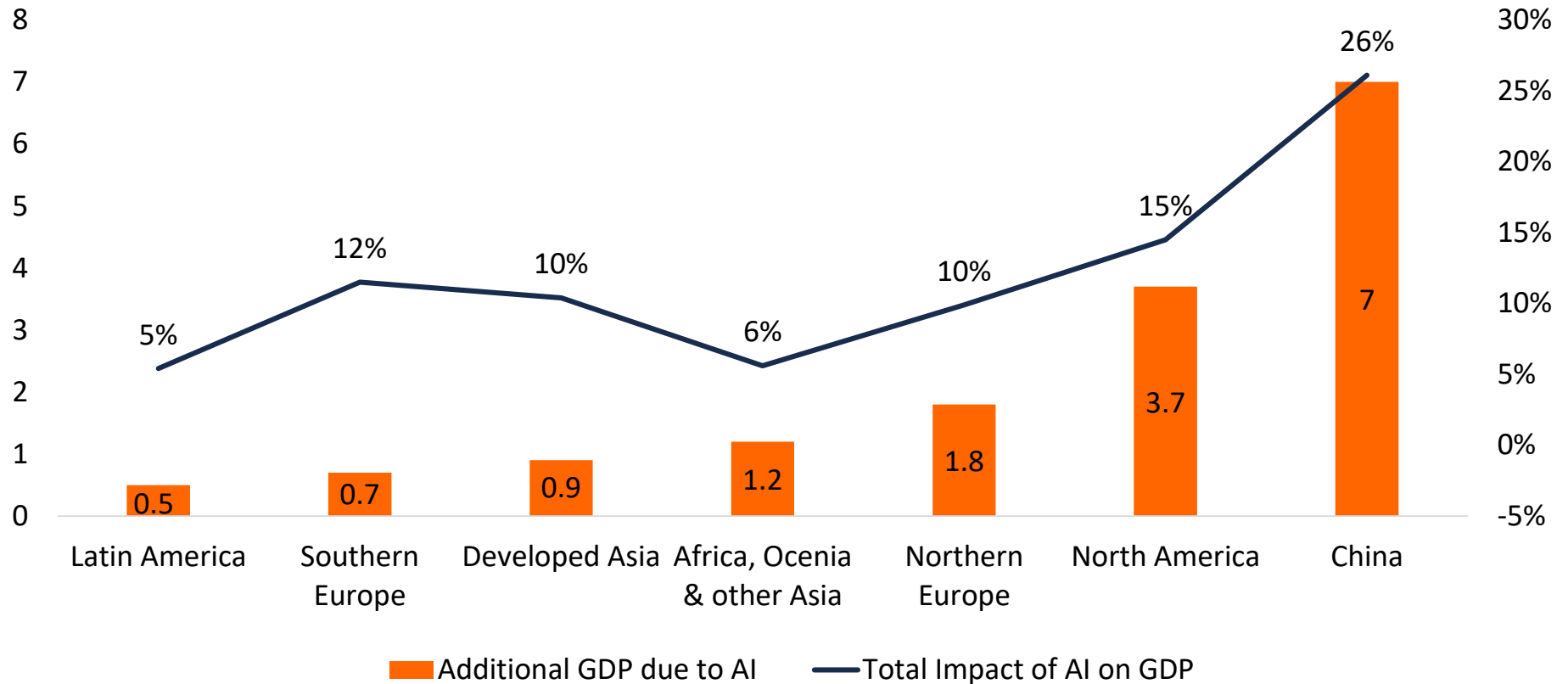| Year	Market Size
2021	87
2022e	119.8
2023e	165
2024e	227.5
2025e	313.9
2026e	433.5
2027e	599
2028e	829
2029e	1148
2030e	1591

Global market size of Artificial Intelligence (AI) is expected to grow at a CAGR of ~33% over next decade

Regions across the globe may expect GDP boost due to AI

Additional GDP by 2030 due to AI (in US $ Trillion)

Legend: ■ Additional GDP due to AI — Total Impact of AI on GDP

Chart data:
- Latin America: 0.5 (5%)
- Southern Europe: 0.7 (12%)
- Developed Asia: 0.9 (10%)
- Africa, Ocenia & other Asia: 1.2 (6%)
- Northern Europe: 1.8 (10%)
- North America: 3.7 (15%)
- China: 7 (26%)

AI could potentially contribute up to $15.7 trillion to the global economy in 2030 with $6.6 trillion due to increase in productivity and $9.1 trillion due to consumption

Source: PwC's Global Artificial Intelligence Study: Exploiting the AI Revolution What's the real value of AI for your business and how can you capitalize ?, Data as on Dec 2020

Sector-wise potential adoption of Artificial Intelligence

Artificial Intelligence (AI) Adoption Rate

	Healthcare	Automotive	Financial Services	Transportation and Logistics	Technology, Communications & Entertainment	Retail	Energy	Manufacturing
Near term (0-3 yr)	37%	35%	41%	41%	47%	54%	39%	14%
Mid term (3-7 yr)	23%	47%	59%	41%	36%	38%	44%	83%
Long term (7+ yr)	40%	18%	0%	17%	17%	8%	17%	3%

■ Near term (0-3 yr) ■ Mid term (3-7 yr) ■ Long term (7+ yr)
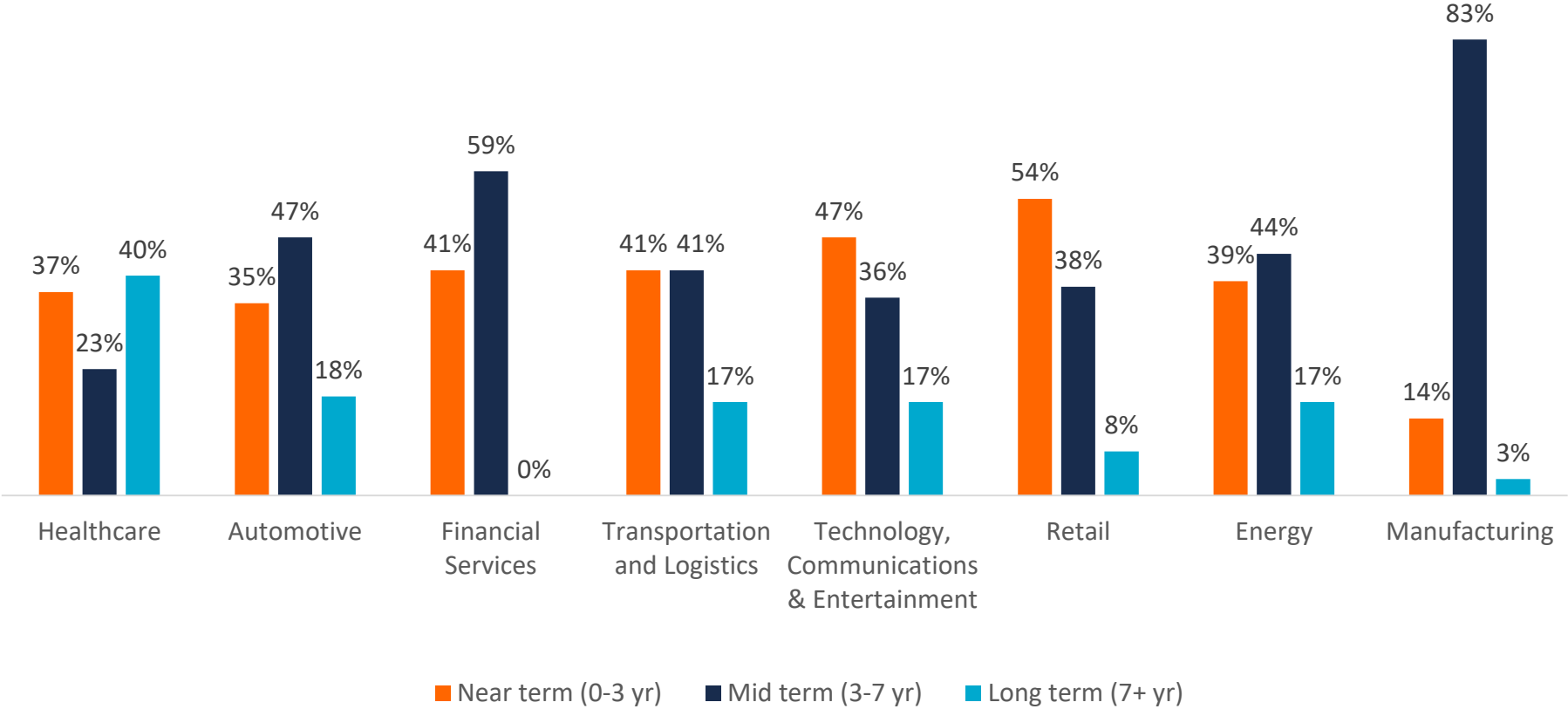
Large adoption of Artificial Intelligence (AI) potentially is expected to take place within next decade

The impact of AI on industry growth

Real GVA in 2035 (US $ Trillion)

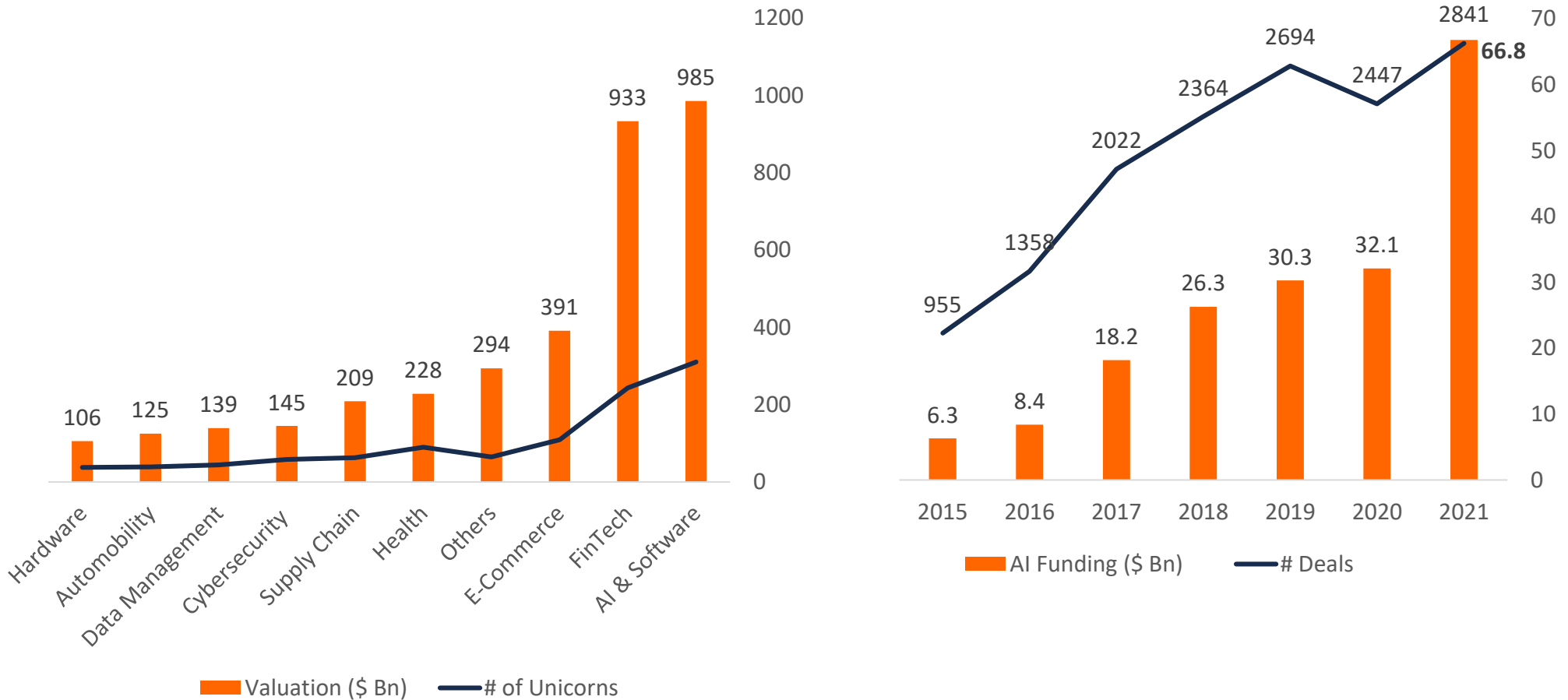| Industry	Additional AI Contribution	Baseline
Accommodation & Food Services	0.5	1.5
Healthcare	0.5	2.3
Transportation & Storage	0.7	2.1
Construction	0.5	2.8
Financial Services	1.2	3.4
Information & Communication	1.0	3.7
Public Services	0.9	4.0
Wholesale and Retail	2.2	6.2
Professional Services	1.9	7.5
Manufacturing	3.8	8.4
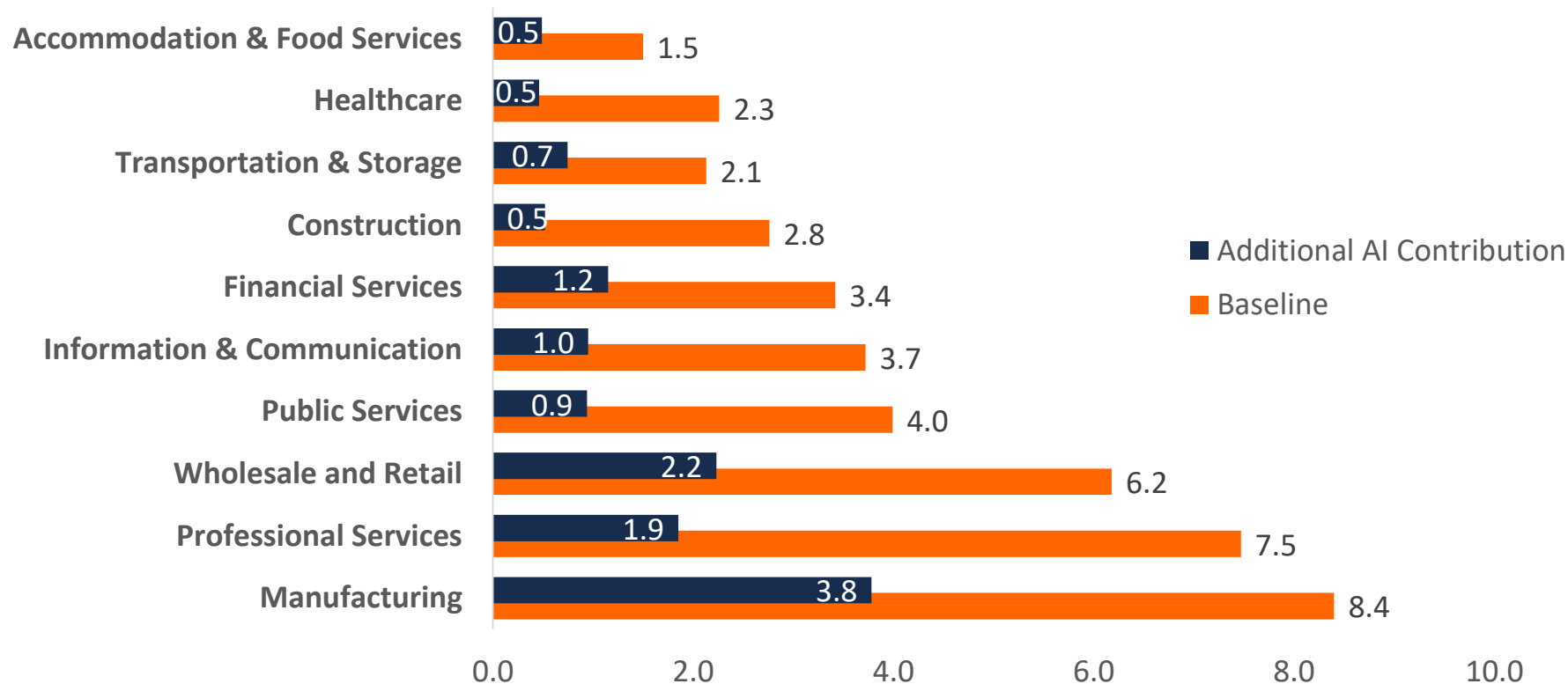
AI may substantially raise economic output for industries. For Manufacturing alone, AI may boost GVA by almost US$4 trillion in 2035

Artificial Intelligence (AI) & Internet Software dominating Unicorn space

Chart 1 (left): Valuation ($ Bn) and # of Unicorns by segment
- Hardware: 106
- Automobility: 125
- Data Management: 139
- Cybersecurity: 145
- Supply Chain: 209
- Health: 228
- Others: 294
- E-Commerce: 391
- FinTech: 933
- AI & Software: 985

Legend: Valuation ($ Bn) — # of Unicorns

Chart 2 (right): AI Funding ($ Bn) and # Deals
- 2015: 6.3 / 955
- 2016: 8.4 / 1358
- 2017: 18.2 / 2022
- 2018: 26.3 / 2364
- 2019: 30.3 / 2694
- 2020: 32.1 / 2447
- 2021: 66.8 / 2841

Legend: AI Funding ($ Bn) — # Deals

Highest valued segment and highest number of unicorn belongs to Artificial Intelligence (AI) & Internet Software Category. Total deals in 2021 alone was USD 66.8 Billion

Source: CBS Insight, Data as on June 30, 2021, Unicorn refers to private unlisted companies that has a market valuation of US $ 1 billion; State of AI 2021 Report :CB Insights

United States and Chinese companies leads the AI flock

Number of AI patents

Company	Number of AI patents
Tencent	9,614
Baidu	9,504
IBM	7,343
Samsung	6,885
Microsoft	5,821
Alphabet	4,068
Intel	3,892
Apple	1,305
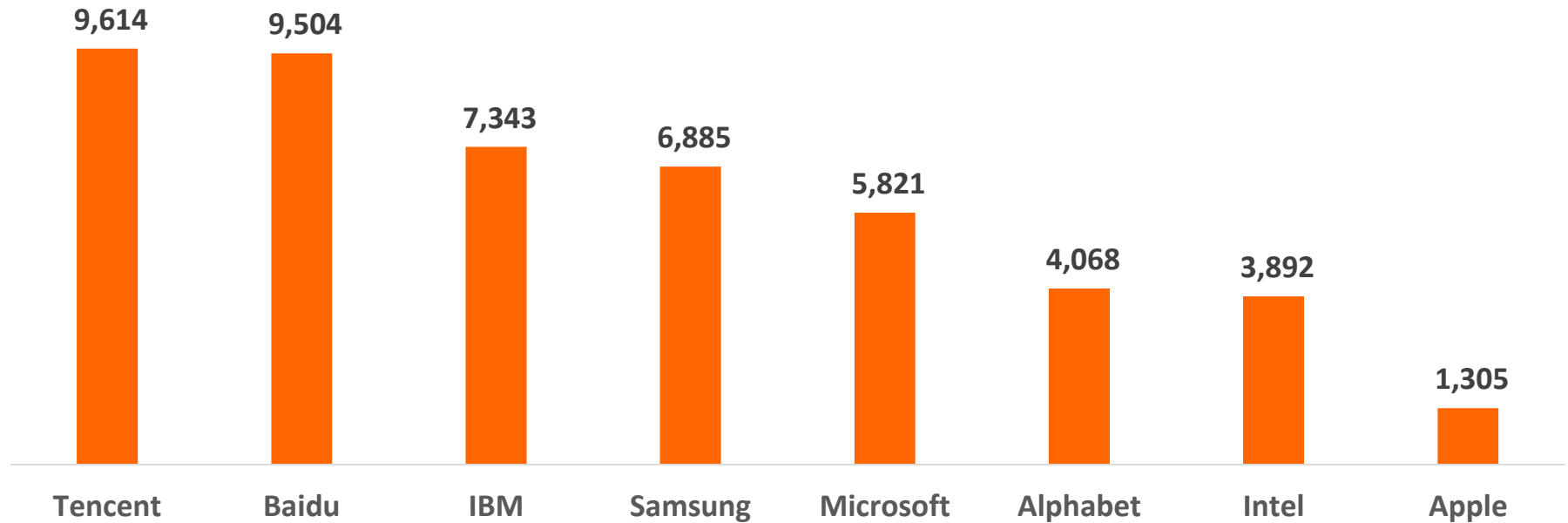
Out of Top 10 Holders of number of active Artificial Intelligence (AI) and Machine Learning Patents in 2021, 8 are part of the index portfolio*
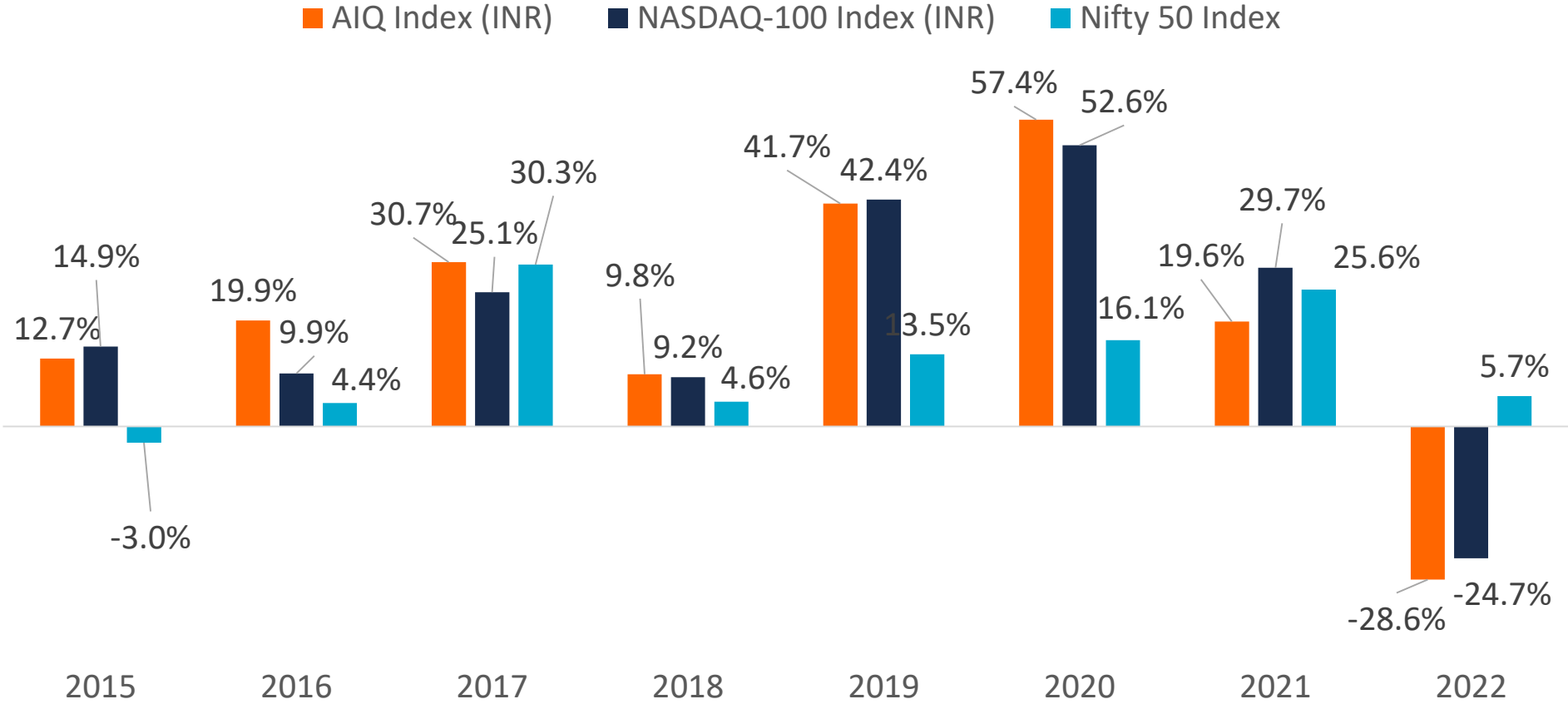
Source: Statista, Patent Insight, Data as on December 31, 2021. The companies mentioned form part of the Indxx Artficial Intelligence & Big Data Index, their respective portfolio and weights are shown in slide 23 and 24

Mirae Asset Global X Artificial Intelligence & Technology ETF Fund of Fund

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About the scheme : Mirae Asset Global X Artificial Intelligence & Technology ETF Fund of Fund

Mirae Asset Global X Artificial Intelligence & Technology ETF Fund of Fund will invest in Global X Artificial Intelligence & Technology ETF (Listed in US) which seeks to invest in companies that potentially stand to benefit from the further development and utilization of Artificial Intelligence (AI) technology. It tracks Indxx Artificial Intelligence & Big Data Index (TRI) (INR)

❑ The index is designed to track the performance of companies listed or incorporated in developed markets that are positioned to benefit from the development and utilization of Artificial Intelligence (AI) in their products and services

❑ The index also invests in companies that produce hardware used in AI applied for the analysis of Big Data.

❑ The index follows an annual reconstitution (January) and a semi-annual rebalancing schedule (January and July)

❑ Index categories the companies into two categories : - Category 1 : AI Developers and Category 2: AI Hardware

❑ The top 60 companies from Category 1 and the top 25 companies from Category 2 will form the final index.

❑ All securities are subject to a minimum weight of 0.3% and maximum weight for any security is of 3% in the index

Calendar Year Performance comparison

Legend: ■ AIQ Index (INR) ■ NASDAQ-100 Index (INR) ■ Nifty 50 Index

Year	AIQ Index (INR)	NASDAQ-100 Index (INR)	Nifty 50 Index
2015	12.7%	14.9%	-3.0%
2016	19.9%	9.9%	4.4%
2017	30.7%	25.1%	30.3%
2018	9.8%	9.2%	4.6%
2019	41.7%	42.4%	13.5%
2020	57.4%	52.6%	16.1%
2021	19.6%	29.7%	25.6%
2022	-28.6%	-24.7%	5.7%

AIQ Index has outperformed NASDAQ 100 Index absolute return basis in 4 out of 8 & Nifty 50 Index in 6 out of 8 calendar years

Periodic return and periodic volatility comparison

Periodic Performance	7 Yr.	5 Yr.	3 Yr.	1 Yr.	6 Month
INDXX ARTIFICIAL INTELLIGENCE & BIG DATA INDEX (INR)	18.5%	15.9%	10.4%	-28.6%	1.9%
NASDAQ-100 Index (INR)	18.0%	18.3%	14.3%	-24.7%	0.2%
S&P 500 Index (INR)	15.1%	15.2%	13.2%	-8.8%	7.3%
Nifty 50 Index (INR)	13.9%	12.8%	15.5%	5.7%	15.3%
INR/USD	3.2%	5.3%	5.1%	11.4%	4.9%

Periodic Volatility	7 Yr.	5 Yr.	3 Yr.	1 Yr.	6 Month
INDXX ARTIFICIAL INTELLIGENCE & BIG DATA INDEX (INR)	22.8%	25.4%	28.3%	31.7%	28.2%
NASDAQ-100 Index (INR)	23.8%	26.8%	30.4%	33.1%	31.0%
S&P 500 Index (INR)	19.6%	22.2%	25.7%	24.7%	24.0%
Nifty 50 Index (INR)	17.9%	19.7%	23.2%	17.8%	13.5%

The volatility of AIQ Index is marginally lower than that of NASDAQ-100 Index

Source: Bloomberg data as on December 30, 2022; Exchange rate of FBIL are used for conversion of index value from USD to INR. Past performance may or may not sustain in future. The index return are in Total Return Variant. The data shown above pertains to the index and does not in manner indicate performance of any scheme of the index. Risk is nothing but computed as annualized standard deviation of daily return observation for specific investment horizon for all the indices using their INR total return variant. Since Inception is computed from 31st Jan 2014

Relative valuation and reasonable earning potential

Particular	3 Year Bloomberg EPS Estimate (CAGR)*	Best P/E Ratio	3 Yr. Average Best P/E Ratio	Premium/ (Discount)
INDXX ARTIFICIAL INTELLIGENCE & BIG DATA INDEX	16.0%	21.2x	27.0x	-21.4%
NASDAQ-100 Index	12.5%	21.8x	27.1x	-19.7%
S&P 500 Index	7.5%	17.4x	21.2x	-18.2%
NYSE FANG+ Index	18.0%	24.9x	32.0x	-22.3%
Nifty 50 Index	12.2%	21.2x	21.9x	-3.1%

The Mirae Asset Global X Artificial Intelligence & Technology ETF Fund of Fund may offers a better opportunity to take exposure in global big tech at lower valuations currently

Source: Bloomberg data as on December 30, 2022; *Above/Below past 3 years average (Red and green color denotes the said security is expensive or cheap relative to its historical valuation respectively).. Past performance may or may not sustain in future. The data shown above pertains to the index and does not in manner indicate performance of any scheme of the Fund. PE stands for Price to Earning Ratio, EPS is Earning Per Share, Best P/E is 12 month forward price to earning ratio.

*Bloomberg EPS estimate is Conesus estimate which may or may not come true and should not be constructed as expectation of earning in any manner.

Exposure to various sub-industries catering to Artificial Intelligence (AI) segment

GICS Industry Group	Global X Artificial Intelligence & Technology ETF (in %)	NASDAQ-100 ETF (in %)	S&P 500 ETF (in %)
Software & Services	34.21	21.26	12.78
Media & Entertainment	15.00	14.44	6.06
Semiconductors	13.61	14.95	5.08
Technology Hardware	13.59	13.55	7.80
Retailing	9.16	8.39	5.46
Capital Goods	6.57	1.89	5.94
Commercial & Professional	4.08	1.23	0.87
Automobiles & Components	1.57	3.01	1.42
Transportation	1.55	0.88	1.71
Health Care Equipment	0.33	1.72	6.49
Diversified Financials	0.16	-	5.36
Pharmaceuticals, Biotechnology	0.16	5.55	9.28

Broad based exposure across different industries with tilt towards software and services

Endeavors to provide exposure to AI companies across the globe

Country	Global X Artificial Intelligence & Technology ETF (in %)	NASDAQ-100 ETF (in %)	S&P 500 ETF (in %)
UNITED STATES	63.11	97.28	100
CHINA	11.11	0.60	-
GERMANY	5.02	-	-
SOUTH KOREA	4.59	-	-
IRELAND	4.20	-	-
CANADA	3.04	0.36	-
NETHERLANDS	2.20	0.82	-
JAPAN	1.76	-	-
TAIWAN	1.46	-	-
SWITZERLAND	1.26	-	-
BRITAIN	0.63	0.38	-
SWEDEN	0.57	-	-
ISRAEL	0.40	-	-
BRAZIL	0.34	-	-
ITALY	0.33	-	-

Geographically diversified exposure to the relevant companies as compared to US dominated exposure of NASDAQ-100 and S&P 500 Index

Why you may consider investing in this fund ?

- Endeavours to provide exposure to the entire ecosystem of companies involved in development and utilization of Artificial Intelligence (AI) in their products and services and companies which enable such development through hardware and services

- With 79 constituents currently, the index provides diversified exposure to global big tech companies. The top 3 geographical exposure are United States (63.1%), China (11.1%) and South Korea (4.6%).

- The single stock exposure is capped at 3% which lowers the risk compared to top heavy portfolio like NASDAQ 100.

- The index has generated 18.5% return in last 7 years, outperforming NASDAQ 100 in 4 out of 8 calendar years with lower risk.

- Thematic investments may seek to provide exposure to upcoming segments with high potential but are also associated with higher risk/Volatility.

THANK YOU

Portfolio of the Global X Artificial Intelligence & Technology ETF (Top 50 Holdings ; Part I/II)

Name	Weight	Country	GICS Sector
ACCENTURE PLC-CL A	3.20	IRELAND	Information Technology
ACER INC	0.36	TAIWAN	Information Technology
ADOBE INC	2.84	UNITED STATES	Information Technology
ADVANTECH CO LTD	0.33	TAIWAN	Information Technology
ALCHIP TECHNOLOGIES LTD	0.38	TAIWAN	Information Technology
ALIBABA GROUP HOLDING-SP ADR	2.90	CHINA	Consumer Discretionary
ALPHABET INC-CL A	2.67	UNITED STATES	Communication Services
AMAZON.COM INC	2.33	UNITED STATES	Consumer Discretionary
AMBARELLA INC	0.36	UNITED STATES	Information Technology
AMPLIFON SPA	0.33	ITALY	Health Care
APPLE INC	2.89	UNITED STATES	Information Technology
AVEVA GROUP PLC	0.47	BRITAIN	Information Technology
BAIDU INC - SPON ADR	1.01	CHINA	Communication Services
BOOZ ALLEN HAMILTON HOLDINGS	0.44	UNITED STATES	Industrials
C3.AI INC-A	0.18	UNITED STATES	Information Technology
CADENCE DESIGN SYS INC	1.41	UNITED STATES	Information Technology
CANAAN INC	0.16	CHINA	Information Technology
CCC INTELLIGENT SOLUTIONS HO	0.30	UNITED STATES	Information Technology
CISCO SYSTEMS INC	3.69	UNITED STATES	Information Technology
DATADOG INC - CLASS A	0.66	UNITED STATES	Information Technology
DXC TECHNOLOGY CO	0.29	UNITED STATES	Information Technology
EBAY INC	0.74	UNITED STATES	Consumer Discretionary
ERICSSON (LM) TEL-SP ADR	0.57	SWEDEN	Information Technology
EXPERIAN PLC	0.99	IRELAND	Industrials
EXSCIENTIA PLC	0.16	BRITAIN	Health Care

Portfolio of the Global X Artificial Intelligence & Technology ETF (Top 50 Holdings ; Part II/II)

Name	Weight	Country	GICS Sector
FANUC CORP	0.97	JAPAN	Industrials
GENPACT LTD	0.35	UNITED STATES	Information Technology
GLOBAL UNICHIP CORP	0.39	TAIWAN	Information Technology
HEWLETT PACKARD ENTERPRISE	0.66	UNITED STATES	Information Technology
HUBBELL INC	0.42	UNITED STATES	Industrials
INFINEON TECHNOLOGIES AG	1.26	GERMANY	Information Technology
INFORMATICA INC - CLASS A	0.27	UNITED STATES	Information Technology
INTEL CORP	2.25	UNITED STATES	Information Technology
INTL BUSINESS MACHINES CORP	3.83	UNITED STATES	Information Technology
MEITUAN-CLASS B	3.19	CHINA	Consumer Discretionary
META PLATFORMS INC-CLASS A	2.27	UNITED STATES	Communication Services
MICROSOFT CORP	3.13	UNITED STATES	Information Technology
NEC CORP	0.31	JAPAN	Information Technology
NETFLIX INC	4.55	UNITED STATES	Communication Services
NVIDIA CORP	2.80	UNITED STATES	Information Technology
NXP SEMICONDUCTORS NV	1.32	NETHERLANDS	Information Technology
OKTA INC	0.33	UNITED STATES	Information Technology
ORACLE CORP	3.79	UNITED STATES	Information Technology
PEGASYSTEMS INC	0.23	UNITED STATES	Information Technology
QUALCOMM INC	2.44	UNITED STATES	Information Technology
ROCKWELL AUTOMATION INC	0.96	UNITED STATES	Industrials
SALESFORCE INC	2.47	UNITED STATES	Information Technology
SAMSUNG ELECTRONICS CO LTD	3.21	SOUTH KOREA	Information Technology
SEAGATE TECHNOLOGY HOLDINGS	0.36	UNITED STATES	Information Technology
SERVICENOW INC	2.48	UNITED STATES	Information Technology

Disclaimers

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Mutual fund investments are subject to market risks, read all scheme related documents carefully.

For further information about other schemes (product labelling and performance of the fund) please visit the website of the AMC:

www.miraeassetmf.co.in

Please consult your financial advisor before investing

PRODUCT LABELLING

Mirae Asset Global X Artifical Intelligence & Technology ETF Fund of Fund is suitable for investors who are seeking*

- To generate long-term capital appreciation/ income
- Investments in Global X Artificial Intelligence & Technology ETF

*Investors should consult their financial advisors if they are not clear about the suitability of the product.

Scheme Riskometer

Investors understand that their principal will be at Very High Risk

Scheme Benchmark: Indxx Artifical Intelligence & Big Data Index (TRI) (INR)
Benchmark Riskometer

The Benchmark is at Very High Risk