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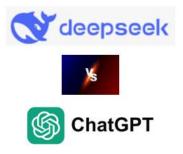
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§MAKING SENSE OF THIS WORLD

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R&R Weekly Column By Brunello Rosa



DeepSeek vs ChatGPT: The AI Race Between The US and China Rages On

Last week, markets were rocked by the news that DeepSeek, a recently emergent Chinese company, has achieved a significant breakthrough in the artificial intelligence domain. Now <u>the most downloaded app in Apple's App Store</u>, <u>surpassing ChatGPT</u>, DeepSeek claims to have developed an advanced neural network capable of outperforming existing models, including OpenAI's ChatGPT, in natural language processing tasks. <u>According to the company's announcement</u>, their AI system has achieved unparalleled accuracy in understanding and generating human-like text, making it a formidable competitor in the AI race between the US and China.

DeepSeek's innovative approach involves a novel architecture that enhances the AI's ability to learn from vast datasets while maintaining efficiency and reducing computational costs to a fraction of those experienced by other companies like OpenAI. This led to a collapse in tech-related stocks, and in particular in NVIDIA share prices, as Nvidia provides the expensive last-generation CPUs that are considered to be essential to performing the most sophisticated large language models (LLMs). On Monday, Jan. 27, 2025, the Nasdaq Composite dropped by 3.4% at market opening, with Nvidia declining by 17% and losing approximately \$600 billion in market capitalization.

OpenAI claimed <u>that DeepSeek has stolen its dataset and technology</u>, and that the company has probably exaggerated <u>the savings</u> <u>that achieved with its new architecture</u>. Additionally, customers found that DeepSeek may be subject to censorship, as the system prefers not to answer questions regarding the actions of the Chinese government, for example about the <u>Tiananmen Square protests</u> <u>in 1989</u>. DeepSeek responded to these criticisms by highlighting the ethical considerations embedded in their AI development process, ensuring that their technology adheres to strict guidelines to prevent misuse and promote transparency. As in most cases, the truth likely lies in the middle.

What really matters at this stage is that the AI battle between US and China, one of the key battlegrounds of Cold War 2, is in full swing, and, if anything, is intensifying. From the Chinese side, <u>Alibaba has also entered the game, with the release of its own AI model</u>, <u>Qwen 2.5</u>, which promises to push the boundaries of natural language processing, even those of DeepSeek, even further. Alibaba's new release boasts state-of-the-art performance metrics and aims to integrate seamlessly into various applications, potentially reshaping the competitive landscape of AI development and deployment worldwide.

On the other side of the pacific, Jen-Hsun Huang, Nvidia's CEO, was received by US President Trump, most likely for two reasons. First, to receive reassurances that the US government will continue backing the nascent AI industry in the US, protecting it from international competition and interference. Second, Trump probably reiterated to Huang that the US has imposed a ban on export of critical US technology, including chips, towards its geopolitical rivals, including China.

We can be sure that further developments will accompany these in the coming months and years, until eventually further breakthroughs in quantum computing will probably revolutionise the AI landscape once again.

Our Recent Publications

- Preview: BOE To Cut Rates In February, With Investors Looking For a "Less Gradual" Approach, by Brunello Rosa and Nato Balavadze, 31 January 2025
- <u>Review: ECB Cuts Rates Again, And Signals Further</u>
 <u>Easing Ahead</u>, by Brunello Rosa And Nato Balavadze, 30
 January 2025
- Review: Fed Stays Put In January and Signals It's "Not In <u>a Hurry" To Change Policy</u>, by Brunello Rosa And Nato Balavadze, 29 January 2025
- Gaza's Fraqile Ceasefire, by Giorgio Cafiero, 29 January 2025
- Preview: Fed To Pause in January, And Likely For An <u>Extended Period of Time</u>, by Nouriel Roubini, Brunello Rosa And Nato Balavadze, 28 January 2025
- Preview: ECB To Cut Rates in January, And Signal Further Cuts in Months Ahead, by Brunello Rosa and Nato Balavadze, 24 January 2025





Looking Ahead

The Week Ahead: US NFP to Decelerate; EZ Headline Inflation To Increase; PMIs To Rise In UK And EZ

In the US, January NFPs are seen rising by 170K (*p*: 256K), while the unemployment rate is expected to stay unchanged at 4.1%. In January, S&P Global Manufacturing PMI is seen increasing to 48.2 (*p*: 47), while Services PMI to edge down to 52.8 (*p*: 56.8). Composite PMI is likely to fall to 52.4 (*p*: 55.4).

In the EZ, in January, headline inflation is expected to rise to 2.5% y-o-y (*p*: 2.4%), whereas core inflation is likely to decrease to 2.6% y-o-y (*p*: 2.7%). In January, HCOB Manufacturing PMI is seen increasing to 46.1 (*p*: 45.1), while Services PMI is expected to decline marginally to 51.4 (*p*: 51.6). Composite PMI is likely to increase to 0.2 (*p*: 49.6). In December, retail sales are seen advancing by 0.2% m-o-m (*p*: 0.1%).

In the UK, in January, S&P Global Manufacturing and Services PMI is seen increasing to 48.2 (*p*: 47) and 51.2 (*p*: 50.4). Composite PMI is expected to edge up too to 50.9 (*p*: 50.4).

BOE TO Cut Rates. In the UK, in February, the BoE is expected to cut its Bank Rate by 25 bps t 4.50% (p: 4.75%).

The Quarter Ahead: Trump Imposes Tariffs On Mexico, Canada, And China; Trump And Russo-Ukraine War

Trump's Tariffs. Trump signed an order imposing 25% tariffs on imports from Mexico and Canada and a 10% duty on Chinese goods. Canadian energy resources face a lower 10% tariff to limit disruptions to gasoline and home heating oil prices. The U.S. conducts about \$1.6 trillion in annual trade with these countries. Canada will counter new tariffs with 25% duties on a range of U.S. imports. Beijing announced it would implement unspecified "countermeasures" in response to the tariff.

Russia-Ukraine War. The US urges Ukraine to hold elections by year-end if a truce with Russia is reached, says Trump's envoy Keith Kellogg. Trump says his administration has had serious talks with Russia on Ukraine and may take significant steps to end the war.

Last Week's Review

<u>Real Economy: ECB Cut Rates; Fed Held Rates, QoQ GDP Rose In US; Stalled in Italy, Contracted In Germany And in France</u> In the US, in Q4, GDP growth rate rose by 2.3% q-o-q (c: 2.6%; p: 3.1%).

In the EZ, in Q4, the economy recorded no growth q-o-q (c: 0.1%; p: 0.4%) and advanced by 0.9% y-o-y (c: 1.0%; p: 0.9%). In Q4, the GDP growth rate: *i*) contracted by 0.1% q-o-q (c: 0.0%; p: 0.4%) and advanced by 0.7% y-o-y (p: 1.2%) in France; *ii*) shrank by -0.2% q-o-q (c: -0.1%; p: 0.1%) and contracted by -0.2% y-o-y (c: 0.0%; p: -0.3%) in Germany; and *iii*) stalled q-o-q (c: 0.1%; p: 0.0%) and rose by 0.5% y-o-y (c: 0.6%; p: 0.4%) in Italy. In December, EZ unemployment rate rose to 6.3% (c: 6.3%; p: 6.2%). In January, economic sentiment fell to 93.3 (p: 93.7).

CBs were mixed. In the US, the Fed hold steady its target Fed funds range at 4.25% - 4.50%. In the EZ, the ECB cut its main policy rates by 25 bps, i.e: *i*) interest rate on the 'main refinancing operations' to 2.90%; *ii*) interest rate on the 'marginal lending facility' to 3.15%; and *iii*) 'deposit facility' to 2.75%.

Financial Markets: Stock Prices Rose, But US Stocks Fell; Yields Fell; Dollar And Oil Prices Declined, Whereas Gold Prices Increased Market Drivers: US stocks fell on earnings and AI competition worries, with tech stocks dragging the market amid concerns over a Chinese AI startup DeepSeek. Meanwhile, European stocks hit record highs, driven by strong earnings and an ECB rate cut. *Global Equities:* Increased *w-o-w* (MSCI ACWI, +2.1%, to 872.91). The US S&P 500 index declined (-1.0% w-o-w, to 6,040.53). In the EZ, share prices increased (Eurostoxx 50, +1.3% w-o-w, to 5,287.15). In EMs, equity edged up (MSCI EMs, +0.3%, to 1,093.37). Volatility rose to 17.36 (VIX S&P 500, 52w avg.: 15.6; 10y avg.: 18.8).

Fixed Income: w-o-w, the 10-year US Treasury yields fell (-8 bps to 4.54%). The 2-year US Treasury yields decreased (-6 bps to 4.21%). The German 10-year bund yields edged down (-8 bp to 2.46%).

FX: w-o-w, the US Dollar Index decreased (DXY, +0.9%, to 108.37; EUR/USD -1.2%, to 1.04). In EMs, currencies increased (MSCI EM Currency Index, -0.4% w-o-w, to 1,742.20).

Commodities: w-o-w, oil prices decreased (Brent, -6.3% to 75.67 USD/b). Gold prices increased w-o-w (+3.1% to 2,835.35 USD/Oz).



@RosaRoubini





Rosa&Roubini Associates

For more information, please call us on +44 (0)207 1010 718 or send us an email to info@rosa-roubini-associates.com

www.rosa-roubini-associates.com

118 Pall Mall, London SW1Y 5ED



Abbreviations, Acronyms and Definitions

Justice and Development Party, Turkey annualized Argentinian Peso Average Billion Bank of Canada Bank of Canada Bank of England Bank of Japan Barrels per day Basis points Balance sheet Consensus Current account Central bank Central Bank of Bahrain Central Bank of Kuwait Central Bank of Turkey Christian Democratic Union, Germany	M5S m-o-m mb Mb/d MENA MHP mn MPC NAFTA NATO OECD Opec p P2P PBoC PCE	Five Star Movement, Italy Month-on-month Million barrels Million barrels per day Middle East and North Africa Nationalist Movement Party, Turkey Million Monetary Policy Committee North-American Free Trade Agreement North Atlantic Treaty Organization Organization for Economic Cooperation and Development Organization of Petroleum Exporting Countries Previous Peer-to-peer People's Bank of China
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Central Bank of Kuwait Central Bank of Turkey Christian Democratic Union, Germany		
Central Bank of Turkey Christian Democratic Union, Germany	85	Personal Consumption Expenditures
Christian Democratic Union, Germany	PE	Price to earnings ratio
	PM	Prime minister
Chinese Yuan	PMI	Purchasing managers' index
Consumer Price Index	pps	Percentage points
Dow Jones Industrial Average Index	pw	Previous week
Dow Jones Emerging Markets Index	QCB	Qatar Central Bank
Day-on-day	QAR	Qatari Riyal
US Dollar Index	QE	Quantitative easing
European Commission	q-0-q	Quarter-on-guarter
European Central Bank	RE	Real estate
European Court of Justice	RBA	Reserve Bank of Australia
US Energy Information Agency	RRR	Reserve Requirement Ratio
Emerging Markets	RUB	Russian Rouble
		Sovereign Wealth Fund
		Trillion
		Turkish Lira
		United Arab Emirates
		United Kingdom
		United States
		United States Dollar
		USD per barrel
		US Treasury bills/bonds
5 5		Value added tax
		Chicago Board Options Exchange Volatility Index
		West Texas Intermediate
		World Trade Organisation
•		Week
,		Week-on-week
•		Year
		Year-on-year
	, ,	Year-to-date
	,	South African Rand
		2-year; 10-year
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	European Parliament Earnings per share European Union Euro Eurozone US Federal Reserve US Federal Open Market Committee US Federal Reserve Board Foreign exchange Fiscal Year Gulf Cooperation Council British pound Gross domestic product International Monetary Fund Indian Rupee Initial public offering Iranian Rial Japanese yen thousand Kingdom of Saudi Arabia	European ParliamentSWFEarnings per sharetnEuropean UnionTRYEuroUAEEurozoneUKUS Federal ReserveUSUS Federal Open Market CommitteeUSDUS Federal Reserve BoardUSD/bForeign exchangeUSTFiscal YearVATGulf Cooperation CouncilVIXBritish poundWTIGross domestic productWTOInternational Monetary FundwIndian RupeeyIntain Rialy-o-yJapanese yeny-t-dthousandZARKingdom of Saudi Arabia2y; 10y

Rosa & Roubini

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