TI Observer

February 2024
Vol. 41

by Taihe Institute

Pivot:

Economic Recovery and Innovation

Contents

Resilience, Restructure, and Recovery: China and Global Outlook 2024

Warwick Powell

- Senior Fellow of Taihe Institute

Introduction

China's economy continues to demonstrate resilience amidst concerns about global headwinds and specific domestic sector slumps. Domestic and international economic circuits are flowing as structural reforms continue to forge a new composition of social capital. Post-pandemic cyclical recovery gathers pace on the back of sustained income growth, household consumption expenditure, and investment growth in several catalytic target areas. Western mainstream tropes of an impending "Chinese economic collapse" flitter from one "China Crisis Trope" to another. By addressing these tropes, within a framework anchored by the idea of "dual circulation," an alternative understanding of China's evolving economic structure and trajectory reveals itself. It's an understanding that speaks of resilience, restructuring, and recovery.

Dual Circulation

In 2020, the concept of "dual circulation" was officially introduced into the economic policy vocabulary. For many Western observers, this concept presaged what they saw as an impending retreat to economic autarky. This interpretation is conceptually and empirically misleading.

Conceptually, the suggestion that dual circulation implied a closing up of China, in effect, turning against four decades of "reform and opening-up," was premised on a careless reading and interpretation of the original concept. The then Vice Premier of China Liu He published a lengthy article on the concept in the *People's Daily* on November 25, 2020.[1] He began his essay by reiterating the proposal approved at the fifth plenary session of the 19th Central Committee of the Communist Party of China that China must "accelerate the creation of a new pattern of development that focuses on domestic economic flows and features positive interplay between domestic and international flows." What is being separated in this formulation are the ideas of large-scale domestic circulation and (as part of the same list) the idea of the mutual impact of domestic and international circulations on the establishment of new development patterns.

Liu then reflected on the changing domestic and international conditions to which the idea of "dual circulation" is responding. Rather than marking a break from "reform and opening-up," this idea reinforces the importance of the interaction between the economic circuits of the Chinese domestic economy, as well as the economic value flows that take place externally in the creation of new development pattern. Trade and investment flows are the embodiment of these interactions. For Liu, due to the "weakening of the kinetic energy of the major global economic circuits" after the 2008 Global Financial Crisis (GFC), there has been a need to adjust and intensify the nature of global interactions while, at the same time, boosting the relative role of domestic consumption as a mainstay of economic circulation.

These conceptual developments matter because they frame actions and priorities in the real economy. The GFC embodied the high watermark of Western financialized economic development. Until then, China's rapidly expanding interactions with the global order came largely by way of trade and investment flows with the mature economies of the collective West. The GFC necessitated a diversification of global exposure. By 2013, this diversification was embodied in what has become known as the Belt and Road Initiative (BRI), which has underpinned an intensification of China's trade and investment relations with developing (non-Western) nations.

1 Liu He, "Accelerate the Creation of a New Pattern of Development that Focuses on Domestic Economic Flows and Features Positive Interplay Between Domestic and International Flows," *People's Daily*, November 25, 2020.

China Crisis Tropes, Evidence, and Interpretation

Trade Collapse Trope

Around August 2023, there was a flurry of mainstream commentary on the back of July 2023 trade data (compared to July 2022 data) showing a dramatic year-on-year fall in exports to the United States. The data was used to claim success for America's "decoupling" mantra. Despite this, as Aristotle reportedly said, "One swallow does not a summer make, nor one fine day; similarly one day or brief time of happiness does not make a person entirely happy."

The year-on-year data is misleading when put into context. For starters, the actual value of July 2023 exports (280.8 billion USD) was not that much below June (283.4 billion USD).[2] In part, this can be attributed to a big fall in the year-on-year price achieved for China's exports, e.g., lower chip prices, lower oil prices, and a stronger USD. The other point is that China's July 2022 exports experienced an unusual peak. This is clear when we consider July export data for the last five years, which is:

- 2019: 221.8 billion USD
- 2020: 236.8 billion USD
- 2021: 282.3 billion USD
- 2022: 332.3 billion USD
- 2023: 280.8 billion USD

This shows the July 2022 situation to be an unusual spike. This being the case, a month-on-month comparison with July 2022 as the denominator is likely to distort the commentary, and did. Chinese exports (and trade generally) have continued to recover, though constrained by global economic conditions that have placed general downward pressure on trade overall. The major change is an evolution in the structure of trading patterns, whereby the relative importance of transatlantic markets to Chinese exporters has progressively diminished. Today, Chinese firms export more to customers in the Global South (including the BRI) than to the US, Europe, and Japan combined. The ASEAN

2 "Cargo Import and Export Monthly Statistics," Ministry of Commerce, People's Republic of China, accessed February 22, 2024, http://data.mofcom.gov.cn/hwmy/imexmonth.shtml.

economies are now China's most significant trading partners combined, overtaking the EU recently.

Over Capacity Trope

The evidence of export dependency matters because it goes to the heart of one of the recent tropes concerning the post-pandemic Chinese economy. The "trade collapse trope" was rapidly abandoned. It was, ironically, replaced with the "over capacity trope," which claims that (a) the Chinese domestic economy is weak and therefore (b) Chinese over-capacity must find export markets to compensate.

The most visible hallmark of Chinese economic development in the past three decades has been the rapid expansion of its manufacturing sector. In 1995, China's manufacturing value added comprised no more than 5% of the world's total manufacturing value added. By 2020, China's gross manufactured output had reached 35% of the world's total, and the net value added made up about 29% of the world's total. In terms of exports, China's manufacturing sector accounted for 3% of total world manufactured exports in 1995. By 2020, this had risen to 20%. The standard narrative is that China's growth was premised on low-cost manufactured exports. This is partly the case but has been superseded by the passage of time. China's exports to production ratio shows that in 1995 it was 11%; it then peaked at 18% in 2004 and had by 2020 receded to 13%.[3] While production volume and value grew, it is clear from the exports-to-production ratio evidence that much of this output was absorbed by a growing Chinese domestic market.

A case in point is new energy vehicles (NEVs). Production capacity and output have grown significantly in the past 24 months. At the same time, exports have also become prominent, catalyzing the at-times shrill claims of Chinese NEVs threatening the motor vehicle industries of the EU and US. Output has doubtless grown significantly; however, around 80% of this is sold directly into the Chinese domestic market. Chinese-made NEVs claim about 8% of market share in the EU (having increased from 3% a couple of years ago), with expectations that this may grow to as much as 15% by 2025.[4] As for the North American market, imports of Chinese-made autos (not just NEVs) have always been small and presently occupy less than 3% of market share. Korean, Canadian, and

3 Richard Baldwin, "China Is the World's Sole Manufacturing Superpower: A Line Sketch of the Rise," *CEPR*, January 17, 2024, https://cepr.org/voxeu/columns/china-worlds-sole-manufacturing-superpower-line-sketch-rise.

4 Brenda Goh, "What Is Driving Chinese EV Exports and Their Price Competitiveness?," *Reuters*, September 15, 2023, https://www.reuters.com/business/autos-transportation/what-is-driving-chinese-ev-exports-their-price-competitiveness-2023-09-14/.

Mexican auto exports have, however, grown over the past two decades. Where Chinese auto exports have grown strongly is the Russian market, though this is expected to taper off in the future.

Much of China's growing productive capacity in manufacturing has fulfilled the needs of an expanding domestic consumption base. The exports-to-manufacture ratio shows the longer-term pattern for manufacturing generally, which is being replayed in the new arena of NEVs.

Weak Demand and Deflation Trope

If one were to rely on Bloomberg or the *Financial Times* for news on China, one would be forgiven for thinking that household consumption demand had collapsed. Bloomberg headlined a New Year's Eve story with the claim that China's economy was experiencing a "dead cat bounce."[5] The *Financial Times* has been running stories about deflation for some time now, implying that falling wholesale and consumer prices were evidence of economic malaise. Much of this hand-wringing is misplaced.

Household consumption expenditure has not collapsed in China. On the contrary, the evidence points to strong per capita consumption expenditure growth on the back of rising real incomes. Household incomes in China have risen strongly for many years. During the last nine years, per capita disposable income roughly doubled. From 2000 to 2020, disposable income per capita increased by around 700%.[6] The International Labour Organization (ILO) has recently concluded that China is one of a handful of countries that has experienced real household income growth on the back of productivity growth.[7] Chinese official statistics show that in 2023, the nationwide per capita consumption expenditure increased by 9.2% over the previous year, and the real increase was 9% after deducting price factors. Urban and rural household consumption expenditure growth was more or less the same.[8] Observed deflation therefore cannot be attributed to a slump in aggregate demand.

In a 2015 paper, researchers at the Bank for International Settlements (BIS) explored the historical evidence of the relationship between

5 John Authers, "China Markets: Year of the Dragon or the Dead Cat Bounce?," *Bloomberg*, February 7, 2024, https://www.bloomberg.com/opinion/articles/2024-02-07/china-markets-year-of-the-dragon-or-the-dead-cat-bounce.

6 "Per Capita Disposable Income of Households in China 1990-2023," Statista, last modified January 18, 2024, https://www.statista.com/statistics/278698/annual-per-capita-income-of-households-in-china/.

7 International Labour Organization, *World Employment and Social Outlook - Trends 2024*, January 10, 2024, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_908142.pdf.

8 "Households' Income and Consumption Expenditure in 2023," National Bureau of Statistics of China, last modified January 18, 2024, https://www.stats.gov.cn/english/PressRelease/202402/t20240201_1947120.html.

deflation and output growth.[9] Reviewing a sample of up to 38 economies over 140 years, the researchers conclude that "this link is weak." They note that there is an "almost reflexive association of deflation with economic weakness," which is "rooted in the view that deflation signals an aggregate demand shortfall, which simultaneously pushes down prices, incomes, and output." They go on to observe that "deflation may also result from increased supply." Examples include improvements in productivity, greater competition in the goods market, and cheaper and more abundant inputs.

Two examples illustrate this point explicitly:

First, in January 2024, China's NEV CPI for transportation facilities experienced a year-on-year decrease of 5.6% while NEV sales grew by 78.8%. On the mainstream interpretation, these two observations would be incongruous. However, it is well known that Chinese NEV manufacturers are increasingly sophisticated, automated, and driving productivity growth; simultaneously, the domestic NEV market is incredibly competitive.[10]

Second, pig prices. Pig prices matter in terms of national accounting because they impact the inflation/deflation data significantly. Bloomberg recently claimed that "pork demand has been sluggish for months in China, but its continued weakness... sends a powerful message about consumption and oversupply, as wage declines hit households and weigh on consumer prices."[11] The Bloomberg narrative has all the key ingredients of the mainstream presumptions about deflation and its "cause and effect" transmission mechanisms, but household incomes have not declined. Still, the most striking error of the Bloomberg narrative is that market data on pig production and pork demand show that both have been rising since the pandemic. There's actually an ongoing shortage that's filled by imports.[12] The real driver of depressed prices is not "sluggish" demand; it's near record levels of supply. Put plainly, pig producers reacted strongly to high prices in Q3 and Q4 2022 (described at the time by Nikkei as a "porkflation crisis") and there is an oversupply.[13] Pork production in 2023 increased by 1.9%, 4.6%, 4.8%, and 7.3% for each quarter to reach levels not seen since 2014.[14]

9 Claudio Borio et al., "The Costs of Deflations: A Historical Perspective," *BIS Quarterly Review*, March 2015, https://www.bis.org/publ/qtrpdf/r_qt1503e.htm.

10 Fusheng Liu, "Big Battle Ahead as China's NEV Market Goes up a Gear," *China Daily*, January 8, 2024, https://www.chinadaily.com.cn/a/202401/08/WS659b34a5a3105f21a507af8a.html#:~:text=He%20said%20the%20intense%20competition,slice%20of%20the%20burgeoning%20market.

11 Hallie Gu and Alfred Cang, "China Economy: Weak Pork Demand for Lunar New Year Highlights Deflation Woes," *Bloomberg*, February 3, 2024, https://www.bloomberg.com/news/articles/2024-02-03/china-economy-weak-pork-demand-for-lunar-new-year-highlights-deflation-woes.

12 Zhejiang Dadi Futures, "Pig Farming Handbook (Part 2): Global and Chinese Overview of Swine Supply and Demand," *China Futures Association*, August 3, 2023, https://www.cfachina.org/servicesupport/analygarden/ncpl/sz1/202308/P020230809521516643511.pdf.

13 CK Tan, "China Battles 'Porkflation' as Price of Popular Meat Soars," *Nikkei Asia*, September 11, 2022, https://asia.nikkei.com/Economy/Inflation/China-battles-porkflation-as-price-of-popular-meat-soars.

14 "Why Has the Pork Price Been Consistently Low?," *Xinhua*, January 25, 2024, http://www.xinhuanet.com/fortune/20240125/876c6a-02c0204a83ae97cfe030d-477ab/c.html.

In the present conditions, the evidence of goods and services deflation points not to a demand malaise but to overshooting supply capacity in the context of demand growth.

The Social Capital Restructure

One area where demand is not growing is residential real estate. Real estate asset prices have fallen. If anything, this is a more standard case of asset value deflation (as opposed to goods and services price deflation) as described in the BIS paper. To say that China's residential real estate sector has been in relative contraction is not controversial. This issue is, what are we to make of it considering the wider analysis of dual circulation and the new development patterns?

Residential real estate's contribution to GDP grew significantly during the 2010s. Rapid and expansive urbanization underpinned the sector's boom. At its peak, the sector and its associated activities accounted for an estimated 30% of China's GDP.[15] The relationship between the residential real estate sector and credit markets was to emerge as an area of concern by 2016/2017. Coming off the back of major clampdowns on the peer-to-peer finance sector at that time,[16] the banking authorities were cognizant of the risks in the credit cycle that could be unleashed as a result of excessive real estate-associated leverage. This was one of the core lessons from the GFC. During 2015-2018, the average annual increase in real estate credit was around 20%.[17] By way of contrast, the annual rate of growth for manufacturing credit was 2.8%.[18] In late 2017, the then Governor of the People's Bank of China, Zhou Xiaochuan, raised explicitly the risk of a "Minsky Moment."[19] At the same time, Chinese President Xi Jinping observed that "housing is for living in, not for speculation."[20] Efforts to rein in property-secured credit were on the cards. Credit growth rates toward the property sector were eventually curtailed. Real estate development loans grew 1.5% year-on-year at the end of 2023, compared to 3.7% for the previous year.[21]

Aside from concerns about a financial crisis à la Minsky's financial instability hypothesis, and social problems of housing affordability, the relatively dominant role of the residential property sector was also creating what could be called "Dutch Disease," drawing resources away from other branches of industry. As growth in credit to real estate

15 Zongyuan Zoe Liu and Daniel Stemp, "The PBoC Props up China's Housing Market," *Council on Foreign Relations*, March 21, 2023, https://www.cfr.org/blog/pboc-props-chinas-housing-market.

16 Hu Yue and Denise Jia, "China's 4-Year Crackdown Leaves Just Three P2P Lenders Standing," *Caixin Global*, November 7, 2020, https://www.caixinglobal.com/2020-11-07/chinas-3-year-crackdown-leaves-just-3-p2p-lenders-standing-101624086.html.

17 Zhen You, "In 2018, the Outstanding Balance of Personal Housing Loans in China Was 25.75 Trillion Yuan," *Zhiyan Consulting*, January 2, 2020, https://www.chyxx.com/industry/202001/824703.html.

18 "China Loan: Manufacturing," CEIC, accessed February 23, 2024, https://www.ceicdata.com/en/china/loan-by-industry/loan-manufacturing.

19 Ming Zhang, "Will the Chinese Economy Face a Minsky Moment?," *Caixin*, November 7, 2017, https://zhang-ming.blog.caixin.com/archives/171192.

20 Yuan Gao, "Housing Should Be for Living in, Not for Speculation, Xi Says," *Bloomberg*, October 18, 2017, https://www.bloomberg.com/news/articles/2017-10-18/xi-renews-call-housing-should-be-for-living-in-not-speculation.

21 Clare Jim and Ziyi Tang, "New China Property Financing Measures Set to Be Tested by Banks' Cautious Approach," Reuters, February 4, 2024, https://www.reuters.com/markets/asia/new-china-property-financing-measures-set-be-tested-by-banks-cautious-approach-2024-02-02/.

development was curtailed, credit growth to high-tech manufacturing began to pick up the slack. China is now the world's fastest growing robot market. According to the International Federation of Robotics, China overtook the US for the first time, to become the world's fifth most automated country in 2021.[22] This shift "up the technology ladder" has been accompanied by national and corporate investments in data transmission and computational capabilities. Capacity expansion has also been seen in green technology and renewable energy specifically. In 2023, China added 200 GW+ of solar generation capacity and a further 300 GW of solar manufacturing capacity. Clean energy industries encompassed 40% of China's GDP growth in 2023.[23]

Outlook

The International Monetary Fund's January 2024 global outlook projected overall global economic growth to be sluggish at 3.1%. The picture, however, is uneven. Advanced economies are expected to grow at 1.5%, with the US projected to grow at 2.1%. Emerging and developing economies are expected to pick up the slack globally with 4.1% of growth rate. India (6.5%) and China (4.6%) are the standouts. Sub-Saharan Africa is also a region of above-average economic activity (3.8%). Nigeria (3.0%), Saudi Arabia (2.7%), Mexico (2.7%), and Russia (2.6%) are also noteworthy.[24]

China's economy is expected to contribute some 30% to global growth, more than the contributions of India and the US combined. China's economic structure is in flux. The evidence points to an ongoing restructuring of the social capital aimed at increasing productive capacity in high-tech value adding, with strong enabling inputs from renewable energy and digitization. The trade-off is a policy-induced reduction in the relative contribution of real estate to overall economic activity. This has been a necessary structural reform to address Dutch Disease impediments to growth and militate risks of a Minsky Moment.

Household income growth and consumption demand remains robust. Evidence of deflation is a function not of a collapse in aggregate demand, but rather, supercharged supply side growth in a highly competitive environment. China will continue to be the biggest trading partner of over 140 nations in the world, but this does not imply that

22 "China Overtakes USA in Robot Density," *International Federation of Robotics*, December 5, 2022, https://ifr.org/ifr-press-releases/news/china-overtakes-usa-in-robot-density.

23 Lauri Myllyvirta et al., "Analysis: Clean Energy Was Top Driver of China's Economic Growth in 2023," *Carbon Brief*, January 25, 2024, https://www.carbonbrief.org/analysis-clean-energy-was-top-driver-of-chinas-economic-growth-in-2023/.

24 International Monetary Fund, *World Economic Outlook Update*, January 2024, https://www.imf.org/en/Publications/WEO/Issues/2024/01/30/world-economic-outlook-update-january-2024.

its economic model is undergirded by over-capacity for which external markets act as "safety valves" or "dumping grounds." On the contrary, it is clear that just as productive capacity grows, so too does the domestic market.

In a recent speech at the World Economic Forum, Chinese Premier Li Qiang observed that over the next decade, China's middle class is expected to double from 400 million to 800 million.[25] This is what's meant by the notion of the domestic market being the "mainstay." At the same time, the interaction of domestic market growth together with new trade and investment flows is expected to create a new development pattern focused on harnessing finance to support productivity growth and decarbonization of economic activity while driving development globally.

25 Dan Steinbock, "Chinese Economy Still Has Much Potential," *China Daily*, January 18, 2024, https://www.chinadaily.com.cn/a/202401/18/WS65a8e4efa3105f21a507d11b.html.

Smearing China's Economy Cannot Save Western Economies

Ding Yifan

• Senior Fellow of Taihe Institute

China's economic growth seemed unsatisfactory in 2023. Western media ran multiple campaigns to further discredit China's economy. Many analysts picked up theories implying China's economic growth is hitting a ceiling, heading towards a wall, or even on the verge of collapse. Despite these narratives and hurdles, China's economic growth in 2023 remains significant, accounting for nearly one-third of total global economic growth.[1]

Smearing China to Save the West

China's economy encountered unprecedented difficulties due to internal and external factors in 2023. Internally, China underestimated the economic damage caused by the COVID-19 pandemic, which led to increased bad debts, particularly for small and medium sized enterprises. To address this, the banking system enforced debt repayment and bankruptcy programs. The surge in bad debts caused by bankruptcies made banks more aggressive in collecting debts from companies, inducing a vicious cycle. Externally, the economic downturn in developed countries further exacerbated the situation, particularly demonstrated by the decline of China's export orders.

Western economies are experiencing the harsh realities of growth recovery, including low ebbs in the growth cycle, bottlenecks in new

1 "China Willing to Be Stabilizing Force for Global Growth: FM," *Xinhua*, February 18, 2024, https://english.news.cn/20240218/f2384faa546c49298f3e33101a664569/c.html.

technology development, and the end of a loose monetary policy. Rising capital costs pose challenges for new tech firms looking to secure funding. Adding to the complexity, some politicians in the United States and Europe are advocating for decoupling from China. Subsequently, the language around decoupling has shifted to "de-risking," but the context and intent remains the same. The objective remains to distance the West from China's manufacturing sector. To an extent, China's export market will find it hard to regain the previous level of eminence it held in the global market for the foreseeable future.

To combat economic stagnation, Western institutions attempted to smear the Chinese economy. The Federal Reserve and the European Central Bank raised interest rates, widening interest rate differentials between China and the West, and fueling rumors suggesting that peak investment opportunities in China had passed. This narrative aims to divert more Chinese capital to the United States and Europe. If we look at capital flight from China to the West, the current round of negative campaigning from the United States and Europe has had an effect. Compared with previous years, there has been a significantly increased outflow of portfolio investment in 2023, with notable fund outflows also observed in the Hong Kong stock market. Capital outflows have intensified depreciation pressure on the RMB, causing unease among wealthy Chinese investors and accelerating the capital flight trend from China.

Decoupling from China Won't Save the West.

The United States and Europe are pursuing a geopolitical rivalry with China by distancing themselves from China and impeding China's accelerated development through market leveraging. However, in the not-so-distant past, in the golden age of globalization, large multinational companies centered their global supply chains around China. Presently, it is still challenging to exclude China from the global supply chain.

Discussing Donald Trump's threat to raise tariffs by 60% on Chinese exports in the US, some CEOs of American companies joked that such a move could be a shock therapy moment for the US economy. Even the CEO of Raytheon, a powerful US military-industrial complex player, said that they could not afford to decouple from China, because Raytheon had several thousand suppliers in China.[2]

2 Sylvia Pfeifer, "'We Can De-Risk but Not Decouple from China, Says Raytheon Chief," *Financial Times*, June 19, 2023, https://www.ft.com/content/d0b94966-d6fa-4042-a918-37e71eb7282e.

Studies carried out by US scholars revealed that although exports from Mexico, certain Southeast Asian, and South Asian countries to the United States increased significantly, these trades were an extension of Sino-US trade. As these countries increased their exports to the United States, China's exports to these "middleman" nations also witnessed substantial growth. To avoid the high tariffs imposed by the United States, many Chinese companies have relocated parts of their supply chains to those countries. However, it is impossible to find all required parts and components needed locally, so Chinese companies cannot but continue to purchase goods from traditional upstream Chinese suppliers. This approach actually increases costs, reduces efficiency, and, to some extent, exacerbates inflationary pressure on the United States and Europe.

Another "Nixon's Default" Is Impending.

US Treasury Secretary Janet Yellen and US Commerce Secretary Gina Raimondo's consecutive visits to China essentially aimed to increase Chinese purchases of US financial products, including US Treasury bonds, in exchange for lower US tariffs. However, US financial products present greater risk at present due to escalating political and economic uncertainties. After the Ukraine crisis broke out, the United States and Europe froze the financial assets of Russia's central bank and threatened to confiscate them to compensate for Ukraine's war losses. The assets of some wealthy Russians in the United States were also confiscated, despite that many of them had believed sincerely in the free market economy of the US.

As the United States regards China as its biggest threat, does China still have an incentive to continue buying large amounts of American financial assets? In addition, the US debt has risen rapidly enough that overseas investors may question whether the US will be able to pay off these debts in the future. The book *This Time Is Different: Eight Centuries of Financial Folly* by Reinhart and Rogoff explains that inflation and currency devaluation are the only options when a country's debt becomes too heavy.[3] The United States and Europe have used this maneuver for the past 800 years. The most recent modern example was Nixon's US default in 1971, leading to the collapse of the Bretton Woods system and a sharp depreciation of the US dollar. Western European

3 Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2008).

countries and Japan, which held large amounts of US national debt, paid a heavy price during this period. Therefore, some economists evaluate the short-term rebound of the US economy as a "flashback before death," because this spike came at the expense of a large fiscal deficit and a sharp increase in debt. Drawing parallels to the dollar crisis in 1971, which was directly related to the United States' involvement in the Vietnam War starting in 1965, the current surge in US debt is related to a sharp increase in US military spending. The Biden administration wants to provide Ukraine and Israel with a steady stream of weapons. The looming questions are: How long will it take for the United States to face a debt crisis? How should the world cope with this incumbent disaster?

Rebound 2.0: Economic Recovery Amidst Global Tensions

Matt Liu Dingyang

• Expert on Consumer Electronics

The Macro Environment

In 2019, Wang Xing, Founder of Meituan, stated, "This year is the worst in the past ten years, but the best in the next ten."[1] It was a sensationalizing statement doubted by many at the time. Most also assumed this did not apply to stakeholders of export businesses. In hindsight, the impact of the past few years, combined with the COVID pandemic, indicated this comment may have some merit.

When the US Federal Reserve stated there was a strong possibility of interest rate cuts in 2024, bankers and investors from Wall Street demonstrated bullish confidence evidenced by the increased S&P 500 index at the end of 2023. In addition, many Chinese consumer electronics vendors, including small business owners on Amazon Seller Central, joined the celebration as their fiscal performance received support from major partners like Walmart, Costco, Best Buy, and other US retail giants. These events could indicate that demand is recovering or at least not set for further decline. Analysis from some consulting firms and associations including the Conference Board indicates that the 2024 US growth rate will likely max at about two percent, similar to that of 2022.[2]

1 "Meituan's Founder Wang Xing Discusses the 'Better Decade': The Next Two Years Will Lay the Foundation for the Situation in the Decade Ahead," *Sina*, November 15, 2019, https://tech.sina.com.cn/i/2019-11-05/doc-iicezzrr7357401.shtml.

2 Erik Lundh, "Economic Forecast for the US Economy," *The Conference Board*, February 7, 2024. https://www.conference-board.org/research/us-forecast.

While US business owners are gearing up for the expected easing measures from the Federal Reserve, their counterparts in China maintain a sense of trepidation despite the ongoing economic recovery. This uncertainty arises from challenges related to three well-known pillars that have contributed to prosperity over the past twenty years: exports, consumption, and investment. As supply chains are forced to relocate outside China, neither publics nor business entities are interested in utilizing real estate as a mechanism for boosting or maintaining asset value. Losing this investment vehicle may cause individuals who would otherwise have benefited from potential government infrastructure investments to be reluctant to reinvest their wealth. When economic circulation stagnates, it is irrational to assume that economic activity can be restored to its prior state.

Trends in Recovery

The contemporary world has historically shown a cycle when recovering from financial crises. The United States historically resorts to quantitative easing policies to stimulate investment and consumption, leading to an increase in demand for Chinese products. This stimulates Chinese exporters, who in turn trigger economic and financial boosts for the US. Humans are emotional beings, and as they perceived this cycle, confidence would blossom across the market and within consumer mindsets. This occurred not only in the US and China, but also across the rest of the world. However, the current iteration may develop in another direction.

Since the post-Obama era and Donald Trump's presidency, there has been no indication that the historical economic recovery script would repeat itself. The last time Republicans and Democrats had aligned attitudes toward China was during the Cold War. Such a trend entirely disables the usual recovery cycle, resulting in doubt and anxiety about whether the world can "return to normalcy." The commitment of US policymakers and lawmakers to relocate the semiconductor supply chain out of China further underscores this shift. Additionally, multiple well-known American retailers are endeavoring to transfer their white label supplies (a large portion of their regular purchases) to Mexico, Southeast Asia, India, and others, replacing Chinese vendors. Bear in mind that these white labels do not necessarily represent high-tech related products.

Though some may argue the historical cycle could emerge again if the supply chain transfers are completed, it is probably not judicious to conclude that new vendor countries will be able to support the demanded supply capacity quickly or efficiently. A reliable supply chain relies heavily on the preparation of infrastructure in proximity, such as highways to upstream supplies and raw materials. The complexity of this project is such that time frame predictions for both transfer completion and achievement of comparable efficiency, scale, and quality are impossible. At the very least, this is not achievable in 2024.

Conclusion and Analysis

An unprecedented and ever-changing situation has been presented, making it clear that the current issues confronting the world cannot be resolved in the traditional manner. However, though there is often light at the end of the tunnel, exact solutions to these issues may exist beyond our immediate ability to intuit and predict.

Recall what happened in the late 2000s in the high-tech sector, as the world prepared to celebrate and embrace 3G technology. Telecom carriers suddenly realized that very few existing users were willing to pay for the video call service they had developed. In other words, the payback period on their multi-billion dollar investment in 3G infrastructure was unknown. This uncertainty was compounded by events like Occupy Wall Street and the 2008 financial crisis. Many initially thought 3G innovation would end up just being limited mobile broadband service until Apple convinced consumers to embrace iPhones and iPads, leading the world into the new era of "mobile internet." This innovation ended the reign of Nokia, Motorola, and other then-mobile giants, but it also brought 20 years of prosperity to multiple sectors. In 2010, few would have believed livestreaming on social media could be a means of making a living. However, livestreaming is now a fully saturated industry that created several generations of billionaires in China, not to mention millions of professionals surrounding them.

If we zoom out and shift our focus to the present, there are many factors and issues that resemble those in the late 2000s and early 2010s. For example, as the macro environment was recovering from the fallout of the dotcom crash in the early 2000s, the world is now trying to figure out a method to overcome the economic aftershocks of the pandemic. Additionally, for a decade, China and the US have been endeavoring to reform geopolitical balance, resulting in severe inflation and price fluctuations of raw materials like oil. However, neither then nor now lacks innovation or the potential growth engine derived from it. It is fair to compare AI technologies with mobile internet since both innovations are disruptive enough to lift the productivity and communications to another level. What the world needs to do at this moment is to double down on innovation to develop and explore new technological opportunities from every possible perspective.

The tricky part of this resolution, if you would like to call it that, is that the US and China no longer collaborate to address challenges. Unfortunately, the international environment is no longer the same. The cooperative economic globalization of the 2000s and 2010s, which greatly shortened lead times needed to reverse economic road bumps, no longer exists. Increasingly competitive China-US relations have led to a breakdown of previously effective fail-safe mechanisms. The new competitive mentality might eventually create enough traction to bring the global economy back on track, though an enormous amount of waste would be generated as a side effect of this pivot.

In both the long and short term, entrepreneurs and financial players should not lose confidence in the face of unprecedented challenges. In uncertain times, it is incumbent to remain calm and learn from the past, and discover new, cooperative routes to recovery.

Youth

Voices

AI, Innovation, Regulation, and the Future of the Labor Force

Evan Hill

- TI Youth Observer

Defining "AI"

Artificial Intelligence (AI) has become a popular buzzword for a group of diverse technologies lumped together as a singular concept based on their functions. While it can be tempting to jump on the bandwagon, it is more rewarding and technically accurate to understand these individual technologies for what they truly are.

Most AI programs familiar to the public are better defined as generative large language models (LLMs) capable of sorting and outputting multiple types of natural language. LLMs are not alive, sentient, or capable of understanding inputs and outputs. They are simply highly effective word matching systems. These programs evaluate massive datasets and generate a "Frankenstein" output based upon them. They excel at replicating successful results by utilizing large sets of data rather than actually comprehending the content.

LLMs consist of two basic components - a large-scale generative system, typically based on the transformer architecture proposed by Google in 2017, and a massive curated dataset used to "teach" the LLM. The transformer architecture is well-known and accessible, but acquiring training data often poses a challenge.

While distinguishing what constitutes an AI may seem mundane, it is important to understand the underlying technical fundamentals in a market that has been caught up in hype cycles. In fact, starting from 2024, almost every startup seems to include some language about AI in their pitch deck. Although many of the new players and technologies in the LLM field are interesting and innovative, the loose definition of "AI" has allowed certain entities to repackage inferior technologies with outputs superficially similar to those produced by LLMs as AI products.

The EU AI Act

In response to the popularization of LLMs and the presence of irresponsible actors in the field, the EU unrolled a proposed AI Act aimed at mitigating security risks associated with this emerging technology.[1] Regulating AI is a good and necessary idea, but effective regulations require a top-down understanding of the industry, and strategic insight into how both public and private entities will react to these restrictions, including consideration of realistic enforcement options.

The General Data Protection Regulation (GDPR) is an excellent example of a poorly conceived regulation aimed in the right direction.[2] Though the GDPR has evolved since its inception into a more effective tool, the initial act fundamentally misunderstood the objectives and technical methodologies involved. This led to near infinite exploitation of loopholes as first and third parties harvested data with impunity, using methods not banned or enforceable by the GDPR. The GDPR was eventually reworked into a much more enforceable regulation. Paradoxically, tightening the GDPR also created problems - the limitations and legislative burden of operating in Europe caused key industries to pull investment from the market.

There are valid criticisms of the AI Act, but it is worth acknowledging that it is not completely negative. Cynical Luddites and partisan geopolitics may have played a role in its creation, but the act does tackle some key issues. Certain important items, including automated educational systems, untargeted scraping of facial images, and use of LLMs in legal mechanisms, are addressed.

Unfortunately, despite some upsides, the AI Act still raises concerns. The

1 European Commission, *Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL LAYING DOWN HARMONISED RULES ON ARTIFICIAL INTELLIGENCE (ARTIFICIAL INTELLIGENCE ACT) AND AMENDING CERTAIN UNION LEGISLATIVE ACTS,* April 21, 2021, https://artificialintelligenceact.eu/wp-content/uploads/2024/01/AI-Act-FullText.pdf.

2 European Parliament and Council of the European Union, *Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (Text with EEA relevance)*, April 27, 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679&qid=1708487552252.

act is fundamentally constructed by sorting broadly defined activities within the AI sphere into different risk categories, many of which could theoretically be leveraged against almost any LLM entity due to the rather broad and non-technical definitions provided. As Daniel Castro, Vice President of the Information Technology & Innovation Foundation (ITIF), stated, "Given how rapidly AI is developing, EU lawmakers should have hit pause on any legislation until they better understand what exactly it is they are regulating... Acting quickly may give the illusion of progress, but it does not guarantee success."[3]

There are ultimately two likely outcomes for the 258-page regulation. The first assumes laxer enforcement and could resemble the ill-fated early GDPR, where entities exploited loopholes and broad definitions to do as they please. The second is a scenario where broad definitions are enforced vigorously, necessitating weaker operations and imposing significant financial and legal burdens on entities within the EU, leading to an environment where entities may decide to simply go elsewhere. The EU AI Act was built to be a sledgehammer, yet the construction of such a crude and forceful instrument may create more problems than it solves when applied to a nuanced and technical situation.

AI and the Labor Economy

Techniques and legislation aside, the question on many people's minds is how LLM technology will affect the workforce. When contemplating potential LLM impacts, it is important to note that there is a general lack of understanding in the field of AI, even amongst IT workers,[4] which opens opportunities in itself.

Many view AIs as competitors to human labor. To some extent, this is true, but for every challenge that emerges, opportunities also arise. Automations have developed fundamentally differently than many people expected. The initial pervading belief within the automation industry was that general-purpose automatons would supplant blue-collar jobs before they began to take over white-collar work. This was very wrong in hindsight. Though currently white-collar fields are experiencing the most displacement, many traditional blue-collar roles in fields including transportation, construction, hospitality, and food and beverage should expect similar transitions as technology evolves.

3 David Meyer, "A Lot of People Aren't Happy With Europe's New AI Act," *Fortune*, December 11, 2023, https://fortune.com/2023/12/11/eu-ai-act-criticism-tech-lobbyists-digital-rights/.

4 Craig Hale, "Barely Any IT Professionals Say They Actually Know How AI Tools Work," *TechRadar*, December 18, 2023, https://www.techradar.com/pro/barely-any-it-professionals-say-they-actually-know-how-ai-tools-work.

The foreseeable future will be dynamic, and the rapid acquisition of new technical skills will be a new requirement for present and future generations as fields evolve. Fields will not disappear, as automations require substantial human oversight, but the workers of today and tomorrow may need to acquire different skill sets than ones that traditionally mattered.

Fields in Depth

Though the general adage of "adapting to the times and picking up technical skills" is good shorthand advice for addressing current automation-induced job displacement, there are nuances and specifics within each field. While it is difficult to predict the exact timing and trajectory for specific fields, some general trends regarding AI can be identified.

Programming is expected to be devastated by LLM adoption. Generative LLMs are surprisingly good at churning out code and will only improve further. Many low-level programming tasks can be performed more effectively and efficiently by programs like GitHub Copilot than by amateur developers.[5] Programming will remain an important and valuable field, but the skill and specialty ceiling will rise considerably. It will evolve into a field that focuses less on writing code and more on visualized problem-solving (as many argue that high-level software engineering already does). Web developers, app builders, and programmers who implement other "solved" applications should transition to more unique areas where they can implement original solutions.

Marketing, PR, and advertising will experience tremendous disruption as the fundamental skill sets required to excel in these fields change. Traditionally, these fields have employed many copywriters and graphic designers who now no longer provide the value they once did. These fields are likely to shift into analytical and data science adjacent fields where the ability to evaluate and manage audiences is valued over the ability to personally manufacture creative materials. The modern world has long since evolved into a "choice economy," where consumers take sustenance for granted and seek comfort and self-expression, which bodes well for these fields even if the underlying skill sets change.

5 "GitHub Copilot · Your AI Pair Programmer," GitHub, accessed February 21, 2024, https://github.com/features/copilot.

Journalism has been experiencing something of a crisis for a while as the industry struggles to transition from a physical medium that sustained for over a century. The current most profitable model for journalism revolves around collecting ad revenue from digital traffic, which has affected the genre of articles that make the most financial sense to publish. Ironically, the introduction of LLMs may help restore profitability in journalism, but it is more likely that we will see smaller mixed AI/human teams that are overseen by a much smaller editorial team. The industry will persist but undergo shifts as fewer people are needed.

Financial services will be disrupted tremendously as automation, digitization, and the resultant increased transparency reduce workloads. Algorithmic trading already exists, and many financial analysts are likely to evolve into roles more similar to quants than front office traders. Financial modeling and financial product design will benefit greatly from predictive algorithms that are statistically superior to human-only input. The fundamental skills needed to succeed in financial services will shift from being people-centric to technology-centric. Fields like auditing may be disrupted immensely.

The evolution of the legal field is likely to vary greatly from country to country. It is plausible, both from a technical standpoint and based on the language contained in the EU AI Act, that at least some parts of the legal field will be disrupted by LLMs. Implementation and government controls on this are expected to be extremely tight for several security and public relations reasons, but it is plausible that some countries may be able to automate, assist with, and/or expedite certain aspects of tedious legal proceedings including contract reviews and digital filing. While it is unlikely that these changes will be evenly distributed due to technological disparities and differences in legal systems, it can be expected that some more developed nations will begin rolling out LLMs in limited support roles for some legal functions.

Blue-collar fields, although not immediately under threat, are likely to experience significant displacements in the near future. Self-driving cars and automation technologies that enable them are set to drop soon. Industries like trucking and transportation will undergo immediate changes. General purpose automatons, including fully robotic kitchens, will also be large employment displacers. Despite this, there will be a high demand for work centered around maintaining, fixing, and updating automatons in terms of hardware and software.

Conclusion

It can be easy to assume a pessimistic Luddite stance against new technology, especially when innovations disrupt the workforce. Despite these challenges, it is incumbent that a measured approach be taken when new technology arises. While LLMs have rendered some jobs obsolete, they will create different opportunities that require alternative skill sets. Like the invention of the automobile and mechanized farming equipment, for each job lost, new niches will be created. The requirements and systems change, but one thing remains constant - those who persevere and acquire meaningful skills will flourish.

About this volume

TI Observer would like to thank the following individuals for their time and insights.

Commentators

Warwick Powell

- Senior Fellow of Taihe Institute

Ding Yifan

- Senior Fellow of Taihe Institute

Matt Liu Dingyang

- Expert on Consumer Electronics

Evan Hill

- TI Youth Observer

TIO Executive Committee

Taihe Institute

www.taiheinstitute.org/en

太 和 智 库
Taihe Institute

Taihe Institute

Address

23/F, ShunMaiJinZuan Plaza,
A-52 Southern East Third Ring Road,
Chaoyang District, Beijing

Postcode

100022

Telephone

+86-10-84351977

Fax

+86-10-84351957