

Economic indicator

The US-China tech war has led to significant impacts on manufacturers, resulting in a shift from China to Vietnam. The escalating trade tensions between the two countries, coupled with increasing tariffs and export controls, have created a challenging environment for tech companies reliant on Chinese manufacturing. As a result, many manufacturers have started diversifying their supply chains by moving production to Vietnam.

The U.S – China tech war implication on manufacturer shifting to Vietnam

The U.S – China tech war overview

The tech war between China and the US is a multifaceted conflict driven by differing political and economic systems and competing technology visions. Rising trade tensions, export controls, and restrictions on tech companies have created uncertainty and disrupted supply chains. This conflict introduces risks to financial performance and market growth, impacting investment decisions and future prospects for tech companies. Investors and businesses need to carefully monitor developments and adapt strategies to navigate the evolving landscape of this tech war.

The consequences of the U.S – China tech war

The tech war between the US and China has had a number of consequences, both for the two countries and for the global economy. Vietnam will also be affected by the tech war in both positive and negative ways. The Vietnamese government is aware of the risks posed by the tech war, and is taking steps to mitigate them by working to develop its own tech industry, and is encouraging businesses to invest in research and development. This will help Vietnam to become less reliant on foreign technology in the future.

The outlook of the U.S – China tech war

The technological rivalry between China and the United States is likely to persist for many years to come. Both countries are pouring significant resources into technology, and they are both eager to be the world's leading technological power. This competition is likely to lead to new innovations, but it is also likely to increase tensions and risks.

Contents

I. The U.S – China tech war overview	1
II. The consequences of the U.S – China tech war ...	3
III. The outlook of the U.S – China tech war	6
Macro scorecard	7

Research Dept

researchdept@kisvn.vn

I. The U.S – China tech war overview

The tech war between China and the US is a multifaceted conflict driven by differing political, economic systems, and competing technology visions. In recent years, both countries have escalated their actions to limit technology exchange. The US imposed sanctions on Chinese tech firms like Huawei and restricted sensitive technology exports to China. Conversely, China has increased regulations on foreign tech companies and promoted its domestic tech industry. These actions have significant implications for global trade and investment in the tech sector. Here are some key reasons that have contributed to this conflict:

National Security Concerns: National security has been a significant driver of the tech war. The U.S. government has raised concerns about potential espionage and cyber threats associated with Chinese technology companies. They worry that Chinese firms could provide backdoors or vulnerabilities in their products, compromising critical infrastructure or sensitive data.

Intellectual Property Theft: The U.S. has accused China of engaging in intellectual property theft, including cyber-enabled theft of trade secrets and forced technology transfers. This has led to allegations that Chinese companies benefit from stolen or unfairly acquired technology, giving them an advantage in global markets.

Geopolitical Competition: The tech war is also intertwined with broader geopolitical competition between the U.S. and China. Technology dominance has become a key aspect of economic and military power, and both countries seek to establish themselves as leaders in emerging technologies. This competition has fueled tensions and rivalries in various tech sectors.

Trade Imbalance: The significant trade imbalance between the U.S. and China, with a focus on technology and manufacturing, has contributed to the tech war. The U.S. views China's technological advancements as a threat to its economic interests and competitiveness. Tariffs and trade restrictions have been used as tools to address this trade imbalance.

Data Security and Privacy: Concerns about data security and privacy have played a role in the tech war. The U.S. has raised issues regarding China's cybersecurity laws, which require companies to provide access to data and cooperate with intelligence agencies. The U.S. fears that Chinese companies could compromise data privacy and security, posing risks to individuals and businesses.

The escalating US-China tech war has significant implications for global markets and the technology sector. Rising trade tensions, export controls, and restrictions on tech companies have created uncertainty and disrupted supply chains. This conflict introduces risks to financial performance and market growth, impacting investment decisions and future prospects for tech companies. Investors and businesses need to carefully monitor developments and adapt strategies to navigate the evolving landscape of this tech war.

Table 1: US – China Tech War Key Milestones

Milestones		Details
May-15	Made in China 2025 Plan	China releases its Made in China 2025 plan, which outlines the country's ambitious goals for technological self-sufficiency.
Jul-18	Trade War and Tariffs	US imposed tariffs on \$34 billion worth of Chinese goods, triggering a trade war.
Dec-18	Huawei CFO Arrest	Meng Wanzhou, the Chief Financial Officer (CFO) of Huawei, was arrested in Canada at the request of the US.
May-19	Export Controls and Entity List	US Department of Commerce added Huawei Technologies Co. Ltd. to its Entity List, effectively restricting its access to American technology.
Aug-20	Clean Network Program	US government launched the Clean Network program, aimed at safeguarding US telecommunications networks from "untrusted" Chinese technologies.
Aug-20	TikTok and WeChat Bans	Trump administration issued executive orders to ban popular Chinese-owned social media apps TikTok and WeChat, citing national security concerns.
Sep-20	Semiconductor Industry Competition	US Commerce Department imposed export restrictions on Semiconductor Manufacturing International Corporation (SMIC), a leading Chinese chipmaker, citing concerns over military use.
Jun-21	Geopolitical Tech Alliances	The Quadrilateral Security Dialogue (Quad) between the US, India, Japan, and Australia, has focused on technology cooperation and supply chain resilience.
Jun-21	US Restrictions on Chinese Apps and Investments	President Biden revoked the bans on TikTok and WeChat but replaced them with an executive order requiring a review of apps with ties to "foreign adversaries."
May-22	Meeting on trade & technology	The US and China hold their first high-level meeting on trade and technology since the Biden administration took office. The meeting ends without any major breakthroughs, but the two sides agree to continue discussions.
Jun-23	US's Entity List Expanded	The US Commerce Department adds 33 Chinese companies to its Entity List, including Hikvision and Dahua Technology, two major manufacturers of surveillance equipment.

II. The consequences of the U.S – China tech war

The tech war between the US and China has had a number of consequences, both for the two countries and for the global economy. Some of the key consequences include.

A. DOWNSIDE

A slowdown in global innovation:

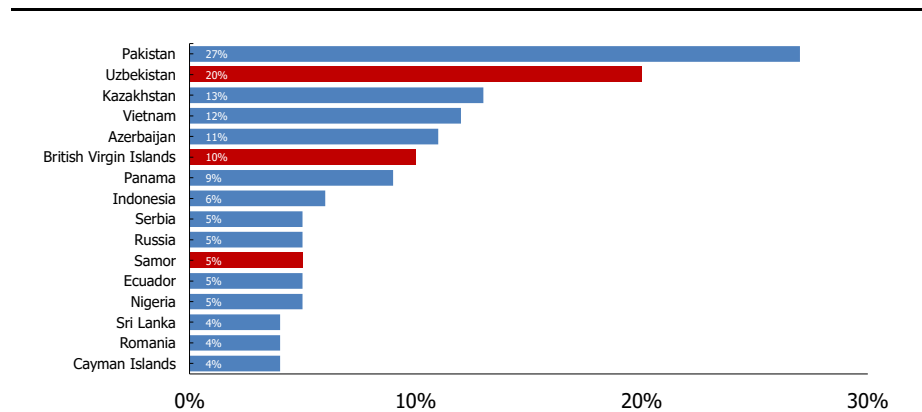
The tech war has also led to a slowdown in global innovation. This is because both countries are now more focused on protecting their own technological capabilities, rather than on collaborating on new innovations.

Increased economic and political tensions between the two countries and other countries.

The tech war has led to increased tensions between the United States and China, both economically and politically. This has made it more difficult for the two countries to cooperate on other issues, and has also raised the risk of a military conflict.

Firstly, the ongoing tech war has resulted in escalated prices for consumers in both countries. This is primarily due to tariffs that have raised the expenses of imported goods from each nation. Additionally, it has hindered economic growth in both the United States and China by creating obstacles for businesses operating in either country.

Figure 1. Tech subsidiaries at risk in a tech war between China and the U.S



Source: Investment Monitor, KIS

*Red color: China's main subsidiary, Blue color: the U.S main subsidiary

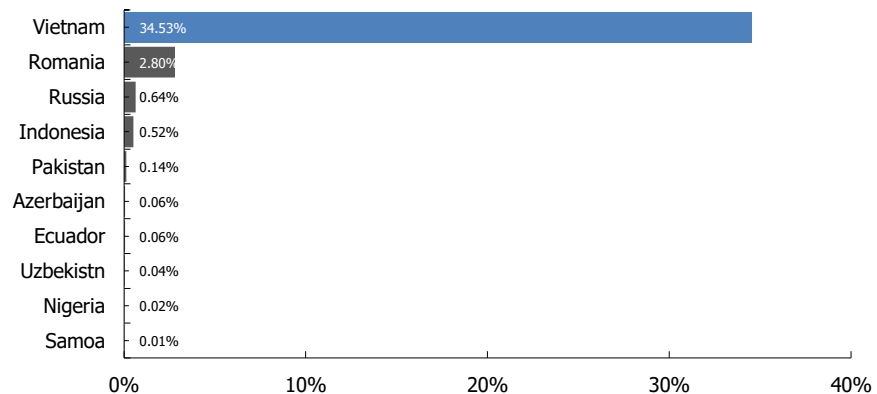
Pakistan and Vietnam could suffer the most in the US-China tech war

Pakistan, in particular, would experience negative consequences for its tech industry if a significant division between US and Chinese tech were to occur. Currently, Pakistan hosts 15 foreign tech subsidiaries, with five being American and four Chinese. Aligning with the US could jeopardize over a quarter (more

than 25%) of the country's foreign tech operations, while siding with China would put approximately one-third (around 33%) at risk.

In contrast, **Vietnam heavily relies on high-tech exports**, which account for more than a third (34%) of its annual product. Among the 99 foreign tech subsidiaries in Vietnam, there are 12 Chinese and 27 American companies. Therefore, regardless of the outcome, Vietnam is likely to be significantly affected as a major loser in a tech war between the two superpowers.

Figure 2. High-tech exports as a percentage of GDP



Source: Investment Monitor, KIS

**Countries are considered at high risk if >5% of their foreign tech subsidiaries belong to parent companies based in the non-dominant superpower.*

According to a 2021 report by the World Economic Forum, Vietnam ranked 6th out of 137 countries in the Global Competitiveness Index's "Technology Index". This index measures the ability of countries to adopt and use new technologies to improve their productivity and competitiveness.

Vietnam's high level of tech dependency makes it vulnerable to disruptions in the global tech supply chain. For example, if there were a conflict between the U.S and China, Vietnam could be affected if China were to restrict the supply of technology to Vietnam.

In addition to these factors, Vietnam is also a major exporter of tech products, such as smartphones, tablet, wearable devices, displays. This means that a tech war between China and the U.S could also have a significant impact on Vietnam's export sector.

The Vietnamese government is aware of the risks posed by the tech war, and is taking steps to mitigate them by working to develop its own tech industry, and is encouraging businesses to invest in research and development. This will help Vietnam to become less reliant on foreign technology in the future.

Increased fragmentation: The tech war has also led to increased fragmentation in the global technology market. This is because both countries are now trying to build their own independent technology ecosystems, which is making it more difficult for companies to operate across borders.

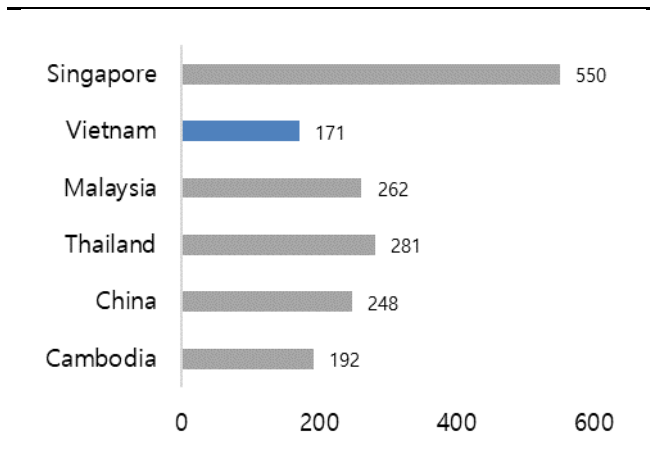
A shift in the global balance of power. The tech war is also likely to lead to a shift in the global balance of power. As China continues to invest in its technology sector, it is becoming a more powerful player in the global

technology market. This could eventually lead to China becoming the dominant technological power in the world.

B. UPSIDE

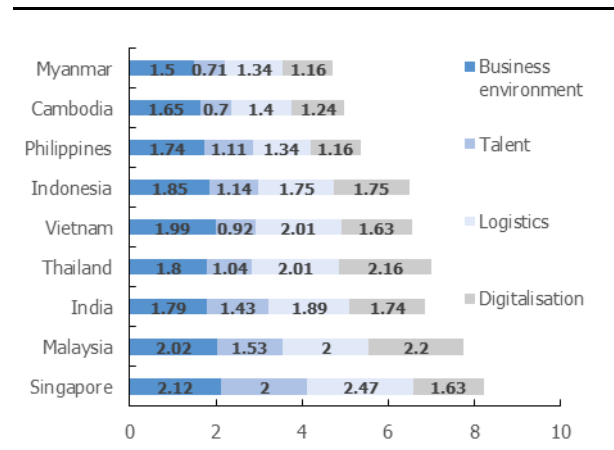
In recent years, an increasing number of multinational firms have been diversifying their manufacturing outside of China. This is due to a number of factors, including China's Zero-COVID policy and the US-China trade war. Vietnam is seen as an attractive alternative to China because it offers many of the same advantages as follows.

Figure 3. Labor cost in ASEAN manufacturing countries



Source: Asia briefing, KIS

Figure 4. Country competitiveness scorecard



Source: TMX Global, KIS

- Low wages: Vietnam's factory wages are about one-third those in China, making it a cost-effective destination for manufacturing.
- Skilled workforce: Vietnam has a large and growing workforce that is well-educated and skilled in manufacturing.
- Close proximity to Asia's supply chains: Vietnam is located in Southeast Asia, which is home to a number of major manufacturing hubs. This makes it easy for businesses to source components and materials from neighboring countries.

Overall, Vietnam is a competitive destination for Foreign Direct Investment (FDI). It offers a number of advantages that make it an attractive option for businesses looking to manufacture products in Asia. Therefore, Vietnam is among countries that has benefited from the "China+1" strategy.

Vietnam can earn a number of things from the China+1 strategy, including:

- Foreign direct investment (FDI): As multinational companies diversify their manufacturing away from China, they are increasingly looking to Vietnam as an attractive destination. This has led to a significant increase in FDI in Vietnam in recent years.
- Jobs: The increase in FDI has led to the creation of millions of jobs in Vietnam. This has helped to reduce poverty and improve the standard of living for many Vietnamese people.
- Exports: Vietnam's exports have also benefited from the China+1 strategy. As multinational companies move their manufacturing to

Vietnam, they are also increasing their purchases of Vietnamese goods and services.

- **Technology:** The China+1 strategy is also helping to transfer technology to Vietnam. As multinational companies set up manufacturing operations in Vietnam, they are bringing with them their expertise and knowledge. This is helping to boost Vietnam's technological capabilities.
- **Economic growth:** The China+1 strategy is having a positive impact on Vietnam's economy. The increase in FDI, jobs, exports, and technology is helping to boost economic growth.

Overall, the China+1 strategy is a major opportunity for Vietnam. This is all having a positive impact on Vietnam's economy.

III. The outlook of the U.S – China tech war

The tech war between China and the US is likely to continue for many years to come. Both countries are investing heavily in technology, and they are both determined to be the leading global tech power. This competition is likely to lead to further innovation, but it is also likely to increase tensions and risk.

Increased focus on artificial intelligence: AI is a key area of competition between China and the US. Both countries are investing heavily in AI research and development, and they are both looking to develop AI-powered weapons and other military technologies.

Increased focus on cyberwarfare: Cyberwarfare is another key area of competition between China and the US. Both countries are engaged in cyber espionage and attacks against each other, and they are both developing new cyberwarfare capabilities.

Shift in the global balance of power: The tech war between China and the US is likely to lead to a shift in the global balance of power. China is rapidly catching up to the US in terms of technological capabilities, and it is possible that China will eventually become the leading global tech power.

Geopolitical Alliances and Partnerships: Both China and the U.S. will seek to build alliances and partnerships to strengthen their positions. The U.S. will likely continue efforts to rally like-minded countries to form technology alliances and address concerns about Chinese tech influence. China, on the other hand, will strive to strengthen ties with countries that can provide access to critical technologies or markets.

Regulatory Scrutiny: The tech war is likely to lead to increased regulatory scrutiny and tighter controls on technology transfers, data flows, and intellectual property protection. Governments will seek to safeguard national interests, protect sensitive technologies, and ensure data privacy and security. This may result in stricter regulations, export controls, and more stringent cybersecurity measures.

Macro scorecard

	23-Jan	23-Feb	23-Mar	23-April	23-May	2Q22	3Q22	4Q22	1Q23	2019	2020	2021	2022
Real GDP growth (%)						7.72	13.67	5.92	3.21	7.03	2.91	2.58	8.02
Registered FDI (USD bn)	1.66	1.41	2.35	3.43	1.98	5.12	4.67	8.96	5.45	38.02	28.53	31.15	27.72
GDP per capita (USD)										3,398	3,521	3,725	4,110
Unemployment rate (%)						2.32	2.28	2.32	2.25	2.25	2.48	3.22	2.32
Export (USD bn)	25.08	25.88	29.57	27.54	29.05	96.83	96.48	89.50	79.17	263.6	282.7	335.7	371.85
Import (USD bn)	21.48	23.58	28.92	26.03	26.81	97.58	90.71	85.07	75.10	254.4	263	331.1	360.65
Export growth (%)	(21.28)	10.97	(14.78)	(17.15)	(5.86)	21.02	17.22	(6.07)	(11.90)	8.16	7.02	18.74	10.61
Import growth (%)	(28.92)	(6.65)	(11.10)	(20.54)	(18.44)	15.72	8.12	(3.90)	(14.67)	7.41	3.81	25.9	8.35
Inflation (%)	4.89	4.31	3.35	2.81	2.43	2.96	3.32	4.41	4.18	2.79	3.24	1.84	3.15
USD/VND	23,449	23,785	23,471	23,465	23,477	23,139	23,712	23,633	23,471	23,173	23,126	22,790	23,650
Credit growth (%)	0.65	0.31	1.96	3.04	3.04	8.51	10.47	12.87	1.61	13.75	12.17	12.97	12.87
10Y gov't bond (%)	4.59	4.39	3.24	3.21	3.28	3.38	4.39	5.08	3.54	3.37	2.01	2.11	5.08

Source: GSO, Bloomberg, FIA, IMF

VIET NAM

JAE HEUNG LEE, Business Director (jhlee@kisvn.vn +8428 3914 8585 - 1466)
UYEN LAM, Head of Institutional Brokerage (uyen.lh@kisvn.vn +8428 3914 8585 - 1444)
KIS Vietnam Securities Corporation
3rd floor, 180-192 Nguyen Cong Tru, Nguyen Thai Binh Ward, District 1, Ho Chi Minh City.
Fax: 8428 3821-6898

SOUTH KOREA

YEONG KEUN JOO, Managing Director, Head of International Business Division (ykjoo@truefriend.com, +822 3276 5157)
PAUL CHUNG, Sales Trading (pchung@truefriend.com +822 3276 5843)
27-1 Yoido-dong, Youngdeungpo-ku, Seoul 150-745, Korea
Toll free: US 1 866 258 2552 HK 800 964 464 SG 800 8211 320
Fax: 822 3276 5681~3
Telex: K2296

NEW YORK

DONG KIM, Managing Director (dkim@kisamerica.com +1 212 314 0681)
HOON SULL, Head of Sales (hoonsull@kisamerica.com +1 212 314 0686)
Korea Investment & Securities America, Inc.
1350 Avenue of the Americas, Suite 1110
New York, NY 10019
Fax: 1 212 314 0699

HONG KONG

GREGORY KIM, Managing Director, Head of HK Sales (greg.kim @kisasia.com +852 2530 8915)
Korea Investment & Securities Asia, Ltd.
Suite 2220, Jardine House
1 Connaught Place, Central, Hong Kong
Fax: 852-2530-1516

SINGAPORE

ALEX JUN, Managing Director, Head of Singapore Sales (alex@kisasia.com.sg +65 6501 5602)
CHARLES AN, Sales (alex.jun@kisasia.com.sg +65 6501 5601)
Korea Investment & Securities Singapore Pte Ltd
1 Raffles Place, #43-04, One Raffles Place
Singapore 048616
Fax: 65 6501 5617

LONDON

Min Suk Key, Managing Director (peterkey@kiseurope.com +44 207 065 2766)
Korea Investment & Securities Europe, Ltd.
2nd Floor, 35-39 Moorgate
London EC2R 6AR
Fax: 44-207-236-4811

This report has been prepared by KIS Vietnam Securities Corp. and is provided for information purposes only. Under no circumstances is it to be used or considered as an offer to sell, or a solicitation of any offer to buy. While all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, we make no representation as to its accuracy or completeness and it should not be relied upon as such. This report is provided solely for the information of professional investors who are expected to make their own investment decisions without undue reliance on this report and the company accepts no liability whatsoever for any direct or consequential loss arising from any use of this report or its contents. This report is not intended for the use of private investors.

Copyright © 2020 KIS Vietnam Securities Corp. All rights reserved. No part of this report may be reproduced or distributed in any manner without permission of KIS Vietnam Securities Corp.